THE FUTURE OF THE LEADER-MEMBER EXCHANGE THEORY

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THE FUTURE OF THE LEADER-MEMBER EXCHANGE THEORY

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Table of Contents

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EDITORIAL
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Editorial: The Future of the Leader-Member Exchange Theory

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Keywords: leader-member-exchange, leadership patterns, antecedents of LMX, outcomes of LMX, LMX as moderator or mediator variable

Editorial on the Research Topic

The Future of the Leader-Member Exchange Theory

In considering the Frontiers Research Topic "The Future of Leader-Member Exchange Theory" we present a retrospective overview of the key topics and organizing themes across the multiple articles within this special issue of Frontiers in Psychology.

There is no doubt we live in trying times because of effects related to the lingering COVID-19 pandemic. Accordingly, the difficulties related to life at work, both in traditional offices and when working remotely and online, has increased the importance of organizational leaders in mitigating the effects of dysfunctional workplace environments, and in compensating for incomplete or developing workplace systems. In addition, we find the workforce in today's world more diverse in terms of culture and respective value orientations, personality traits, and other individual differences. However, less is known about the effects of individuals' dispositional differences on LMX (e.g., Maslyn et al., 2017). In addition, even less is known about the effects of cultural and demographic parameters on leader–member interrelations, and their impact on job performance. We expect that such diversity will only increase as the continuing effects of COVID-19 change national and international economies, and the composition of the workforce, in unexpected ways.

One proposition underlying leader-member exchange (LMX) theory is that managers tend to employ different management styles for each of their subordinates [Graen and Uhl-Bien, 1995; see also Waismel-Manor et al. (2010)]. In turn, each specific relationship and corresponding management style induces corresponding differential responses and attitudes in subordinates, including different performance behaviors (Ilies et al., 2007).

Within this Frontiers Research Topic special issue, there are 13 articles that address these very timely phenomena. Based on comprehensive reading of these articles, we suggest that four themes or meta-narratives can be used to organize the research within this special issue of Frontiers in Psychology.

First, we have several authors who present refinements and ideas that consider types of leader-member exchange. Andersen et al. present work that considers the underpinning theoretical perspective of social exchange by presenting descriptions of social-based leader-member exchange and economic-based leader-member exchange as types of sub-constructs. Second, Zhou et al. present the concept of "currencies of exchange" as a way of viewing manifestations of LMX. Here, social currency and work-related currency are the types of exchange constructs that actualize leader-member exchange.

In addition, there are a host of papers, which discuss the role of covariate constructs that play vital roles in how LMX is manifested in workplace environments. Within this issue, constructs as diverse as knowledge sharing behavior (Hao et al., 2019), and various levels of work engagement involving psychological empowerment and psychological withdrawal behavior (Aggarwal et al.),

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appear as critical behaviors related to leader-member exchange. In respect to individual differences found among employees, this Research Topic includes articles that highlight and add to the literature concerning the critical roles of organizational justice perceptions (Tziner et al., 2012; Fein et al., 2013; Shkoler et al., 2021; Tziner et al.), locus of control (Robert and Vandenberghe), and leader communication styles (Brown and Paz-Aparicio), which have been used to extend the efficacy of leader-member exchange in its association with valued organizational phenomena and outputs.

A third focus of papers within this special issue concerns negative workplace behaviors such as counterproductive work behavior, as well as unethical intentions both from the pro-employee and pro-leader perspectives. Capitalizing on reciprocity theory (Gouldner, 1960), employees in good or bad relationships with their managers (i.e., with high or low LMX) will feel obliged or reluctant to reciprocate mutually to these respective relationships [see also Adams (1965)]. Thus, high- or low-quality LMX results in correspondingly high or low levels of mutual trust, respect, and commitment. Accordingly, subordinates with high LMX relations are likely to receive more rewards (both formal and informal) than their colleagues with lower LMX relations. These benefits include tangible resources, career opportunities, and emotional support (including emotional encouragement), and enhanced feedback (Graen and Uhl-Bien, 1995; Zagenczyk et al., 2015). Consequently, high LMX employees are more likely to engage in more positive behaviors, while those low on LMX will be more prone to negative behaviors (Tziner et al., 2010; Breevaart et al., 2015). Conversely, and in respect to enlarging the network of constructs investigated in this study, it is important to note that poor relations between managers and their employees will almost certainly result in reciprocal counterproductive behavior (Chernyak-Hai and Tziner, 2014). In this issue, counterproductive work behaviors are related to valued organizational outcomes *via* profiles with differing levels of emotional intelligence, as well as cultural value orientations and LMX (Tziner et al.). In respect to negative workplace behaviors, positive and negative reciprocity also occurs as a fundamental construct linked to pro-leader and pro-self-orientations of unethical behavior (Skinner et al., 2018; Vriend et al.) and such forms of reciprocity can also be linked to other global performance dimensions (Fein, 2009).

Finally, there are a number of papers that relate to the focal role of leader-member exchange as a mediating construct. While LMX's role as a potential mediator of workplace misbehaviors has been investigated (e.g., He et al., 2017), most previous studies have emphasized contextual-level or job-level predictors (e.g., He et al., 2017; Sharif and Scandura, 2017). Specifically, we see in this issue that leader-member exchange is critical in linking job insecurity to job satisfaction and turnover intention (Di Stefano et al.), as well as in lowering the tendency of employees to engage in counterproductive work behaviors (Götz et al.; Tziner et al.).

In summary, this issue includes several important contributions to the literature that may be arranged according to these four themes.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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How Leader-Member Exchange Affects Knowledge Sharing Behavior: Understanding the Effects of Commitment and Employee Characteristics

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Although leadership is considered a key factor in affecting employees' knowledge sharing behavior (KSB), previous literature has mainly focused on the direct relationship between it and KSB, neglecting the mediators and moderators in this relationship. To address this issue, this study explores when and how leader-member exchange (LMX) promotes KSB by examining affective commitment (AC) as mediator and employee general self-efficacy (GSE) and internal locus of control (ILOC) as boundary conditions. In addition, although these two positive self-view variables (i.e., GSE and ILOC) both exhibit positive effects on various work-related outcomes, based on self-verification theory, we posit that they may exhibit different moderating effects in the LMX–AC–KSB relationship. We empirically validated this moderated mediated model using data collected from 231 supervisor–subordinate pairs from an information technology company in China. The results show that GSE amplifies the mediated relationship between LXM and KSB via AC, but ILOC weakens this mediated relationship. Our study elucidates when and how LMX can effectively facilitate KSB and sheds new and nuanced light on the conceptual distinction between GSE and ILOC. The results of this study might direct managers how to develop relationships with their subordinates and how to maximally facilitate subordinates' KSB.

Keywords: leader-member exchange, affective commitment, general self-efficacy, internal locus of control, knowledge sharing behavior

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INTRODUCTION

Organizational knowledge can help organizations underpin competitive advantages and is difficult to imitate or replaced by third parties (Cabrera et al., 2006). Thus, it is considered a worthy, scarce, and highly strategic resource which deserves a great deal of managers' diligent attention (Lee et al., 2018; Hao et al., 2019). In the past few decades, various knowledge management systems or technologies have been designed to facilitate knowledge sharing among employees (Cabrera et al., 2006). However, scholars are gradually realizing that the major barriers preventing companies from effectively managing knowledge reside in people rather than in technologies (Lin, 2007; Pee and Min, 2017; Lee et al., 2018). People resist sharing their expertise because knowledge sharing

behavior (KSB) usually demands high costs from and imposes risks on them, which may put them in a situation called the KSB dilemma (Cabrera and Cabrera, 2002; Ardichvili et al., 2003; Pee and Lee, 2015). On the one hand, when sharing knowledge, people need to convert their specialized knowledge and unique skills into an understandable and applicable form for the receivers, and this process may take more time and energy (Pee and Lee, 2015; Hao et al., 2019). On the other hand, as the saying "possession is nine-tenths of the law" indicates, employees may not elect to share their idiosyncratic thoughts and experiences with colleagues to keep their individual power and competitive advantages (Jeung et al., 2017; Lee et al., 2018). In this regard, stimulating employees' KSB is considered a challenging job, unless the sharing process can generate greater benefits, such as in an individual benefit, i.e., self-interest, personal gain (Wasko and Faraj, 2000; Pee and Lee, 2015); a group benefit, i.e., reciprocal behaviors, relationships with others (Ko et al., 2005; Chae et al., 2015); or an organizational benefit, i.e., organizational gain, organizational support (Bock et al., 2005; Jeung et al., 2017).

According to this principle, a number of studies on knowledge sharing that draw on the exchange and reciprocity theories, such as the leader–member exchange (LMX) theory (Graen et al., 1977), have occurred. In fact, researchers have long been interested in how leadership can affect KSB. Different types of leadership or different levels of LMX might show different effects on employees' KSB. For example, some researchers found that empowering leadership can effectively facilitate employees' KSB by positively affecting their attitudes toward KSB (Xue et al., 2011). Liu and Li (2018) found that perceived team goal commitment and perceived team identification both mediate the positive relationship between transformational leadership and KSB. Lee et al. (2018) study revealed a negative relationship between abusive supervision and KSB. Some researchers also found that different levels of LMX differently affect employees' KSB (Su et al., 2013). Despite the growing body of studies on this issue, there is unresolved ambiguity about the nature of this relationship (Carmeli et al., 2013). First, most researchers have focused solely on the direct correlation between LMX and KSB (Kim et al., 2017), neglecting the intermediate psychological processes underlying the relationship. Second, although high-quality LMX may cultivate a favorable social context for employees (Carmeli et al., 2011), different people may evaluate this situation in different manners (Kim et al., 2017), echoing the interactionist approach, in which personal characteristics and contextual factors jointly affect individual's behaviors (e.g., Abbas et al., 2015; Pee and Min, 2017; Lee et al., 2018). Third, most previous studies on the relationship between leadership and employee outcomes are established and widely practical in the western context (Law et al., 2000). Some scholars contended that these motivation models may not work equally in the Chinese culture (e.g., Hofstede, 1993). Particularly, in China, there is a special form of interpersonal relationship between leaders and followers called workplace *guanxi*, referring to interpersonal bonds that can create specific expectations and duties (Law et al., 2000). *Guanxi* plays an important role in affecting the exchange of personal resources and information in China (Wang et al., 2012). Thus, it is crucial to uncover the complex mechanism underlying the LMX–KSB relationship in the Chinese context.

In the current study, we select affective commitment (AC) as a mediator and two individual characteristics [i.e., general self-efficacy (GSE) and internal locus of control (ILOC)] as moderators. The rationale for selecting AC as a mediator is twofold: First, AC is the most analyzed form of organizational commitment (Gaudet and Tremblay, 2017), and it has already been considered a mediator in explaining the relationship between leadership and employee behaviors in many studies (e.g., Chang et al., 2015; Gupta et al., 2016; Gaudet and Tremblay, 2017; Jeung et al., 2017). Second, the commonly accepted job experience-attitude-behavior sequence (Zhao et al., 2007; Gupta et al., 2016) shows that positive work experiences (such as high-quality LMX) are viewed as affective events, and affective reactions (such as AC) that lead to effectiveness outcomes (such as KSB) are the proximal consequences of these experiences. This argument indicates that AC might be a suitable mediator in explaining the LMX–KSB relationship.

The current study assigns GSE and ILOC as personal moderators for three reasons. First, there has been sufficient research on the relationship between Big-Five personality and KSB (e.g., Barrick and Mount, 1991; Hao et al., 2019), but little attention has been assigned on how the other personality constructs, such as core self-evaluation traits, affect KSB (Judge and Bono, 2001). Second, GSE and ILOC are two key elements of the core self-evaluations traits (Judge et al., 1997). Many studies have demonstrated that these variables can affect individuals' reactions to different leader behaviors (e.g., Ehrhart and Klein, 2001; Chen et al., 2016). Third, according to self-verification theory (Swann, 2011), although GSE and ILOC are positively related and demonstrate similar effects on various outcomes (Judge et al., 1997; Judge and Bono, 2001), they "orient people toward different aspects of the information embedded in the [same] context: competence for [GSE] and source of influence over personal outcomes for [ILOC]" (Chen et al., 2016, p. 125). In this regard, these two similar constructs may result in distinct reactions to the effects of LMX which piques our interest in exploring the different moderating effects of GSE and ILOC on the LMX-KSB relationship.

To simultaneously uncover the complex mechanism underlying the LMX–KSB relationship and to further advance the theories about the joint effects of contextual factors and personal characteristics, we develop a theoretical model in which diverse employee characteristics differentially moderate the influence of LMX. Specifically, the current study examines the mediating effects of AC and the different moderating roles of GSE and ILOC (see **Figure 1**). Our research may contribute to the exist literature in the following three ways: First, this study elucidates when and how LMX can effectively facilitate KSB; that is, examining if KSB could be a result of employees' increasing AC induced by the high-quality LMX they experienced. Second, our study extends the person-context interactionist perspective by exploring the different moderating effects of two personal characteristics (i.e., GSE and ILOC) on the LMX–AC–KSB relationship. Third, the current study sheds new and nuanced

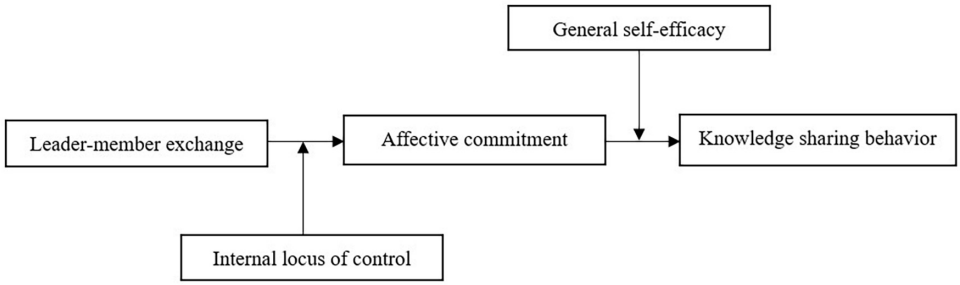

FIGURE 1 | Research model.

light on the conceptual distinction between GSE and ILOC – two highly parallel, core self-evaluations variables.

THEORY AND HYPOTHESES

LMX and KSB

Knowledge sharing behavior is defined as individuals transforming their work-relevant ideas, experience and suggestions into understandable and applicable forms for the knowledge receivers (Hao et al., 2019; Kim, 2019). In work settings, KSB can be considered one of the extra-role behaviors such as organizational citizenship behavior (OCB) because these behaviors are not formally prescribed by organizations, difficult to measure, and problematic to formally appraise (Love and Forret, 2008; Edú-Valsania et al., 2016). However, KSB often demands higher costs from or poses greater risks to individuals than other discretionary behaviors. First, KSB goes beyond the simple communication of information and representation of tasks and procedural message (Carmeli et al., 2011). Rather, it is a process involving sharing, teaching, and learning, which may cost individuals' valuable time that might be used in other tasks (Jeung et al., 2017). Second, sharing their specialized knowledge and unique skills may make people less competitive (Kim et al., 2017). In this regard, people may refuse to share their unique expertise with others, despite its contribution in enhancing organizational competitiveness (Lee et al., 2018). To solve this issue, some scholars point out that leaders in organizations are in positions to help their followers overcome this resistance (Carmeli et al., 2011). They argue that leaders can cultivate a social context in which employees can not only obtain sufficient KSB mentoring but also effectively improve their sharing intentions (Carmeli et al., 2011).

One of these social contexts is LMX, which is defined as "the dyadic exchange relationship between supervisors and employees" within an organizational work unit (Kim et al., 2017, p. 152). Graen et al. (1977) pioneered the introduction of LMX using role-playing theory. Later, some scholars studied LMX based on the reciprocity continuum (Schriesheim et al., 1999). Recently, scholars are focusing on the social exchange perspectives (e.g., Casimir et al., 2014; Kim et al., 2017), in which LMX relationships are grossly divided into two categories: "low-quality" and "high-quality." Furthermore, the quality of LMX depends on how leaders interact with their followers. Low-quality LMX appears when leaders and their followers rarely communicate with and distrust each other whereas high-quality LMX occurs when there is a social exchange between leaders and employees; that is, the exchange happens beyond the employment contract (Graen et al., 1977; Graen and Uhl-Bien, 1995; Casimir et al., 2014). In a high-quality LMX relationship, a mutually trustworthy, motivated, and favorable climate can be constructed between leaders and employees. In addition, an employee who experiences high-quality LMX usually involves in more decision-making processes, fewer task-related problems, and is more incline to undertake organizational responsibilities (Casimir et al., 2014). Thus, high-quality LMX may help employees generate positive work experience, prompting them to go beyond requirements and to exhibit more voluntary behaviors, such as KSB (Casimir et al., 2014; Kim et al., 2017). Scholars also suggest that high-quality LMX can stimulate subordinates to internalize organizational goals; in other words, employees will focus on collective benefits rather than to individual benefits (Carmeli et al., 2011; Su et al., 2013). Thus, the risks and costs accompanying KSB will be alleviated, which, in turn, elevates KSB.

The above arguments are reflected in previous studies. For example, Li et al. (2014) argued that high-quality LMX may make workers feel committed, loyal and collectivistic, which leads to higher-levels of KSB. Some researchers also stated that in order to obtain desired outcomes from high-quality LMX, followers may pay more attention to the interests of the collective, which may facilitate them to perform more beneficial behaviors, such as KSB (Sharifkhani et al., 2016). In addition, Anand et al. (2018) suggested that employees may reciprocate their leaders' favorable treatment by performing more discretionary behaviors, such as courtesy behaviors, altruistic behaviors or helping behaviors. Taking all this together, we hypothesize that:

H1: LMX is positively related to KSB.

The Mediating Role of AC

Affective commitment, which is defined as employees' emotional attachment to, identification with, and involvement in an organization (Meyer and Allen, 1991), has become the most analyzed form of organizational commitment (Gaudet and Tremblay, 2017). A high sense of commitment to an organization

usually helps an employee identify with this company's core values and main goals (Casimir et al., 2014). Through this identification process the employee can generate proud feeling of being part of this organization. Employees' emotional attachment to an organization can be enhanced by numerous factors. For instance, organizational justice (Karriker and Williams, 2009), job designs (Currivan, 1999), supportive leadership (Joo, 2010), and intrinsic and extrinsic rewards (O'Driscoll and Randall, 1999) have all been found to positively affect employees' AC. Among these commonly identified antecedents, the one most strongly associated with AC may be leadership, especially high-quality LMX (Casimir et al., 2014; Jeung et al., 2017; Curtis and Taylor, 2018).

Scholars explain the LMX–AC relationship by the following two lines of theories: First, employees with high-quality LMX tend to obtain more emotional and material support from their leaders and organizations than the others (Jeung et al., 2017). This positive treatment may create a feeling among subordinates of an obligation to pay back the favorable treatment they have received. Drawing on the social exchange theory (Blau, 1964) and the promise of reciprocation (Gouldner, 1960), employees will satisfy their indebtedness by generating a greater emotional bond with the organization. Second, high-quality LMX meet various socioemotional needs of employees, such as affiliation, esteem, approval, and emotional support, thereby creating favorable working conditions (Rhoades et al., 2001). In this case, employees prefer to incorporate organizational membership and role status into their social identities, generate a feeling of belonging to the organization, and foster emotional attachment to the organization (Casimir et al., 2014; Jeung et al., 2017). In line with these theories, we assume that high-quality LMX contributes to facilitating AC.

In nature, KSB is a voluntary activity that is fundamentally unobservable by others (Curtis and Taylor, 2018). Therefore, the organization usually cannot impose external controls on employees or require them to share their knowledge. In this regard, individuals share their valuable expertise only when they are willing to do so, to benefit others or the organization (Jeung et al., 2017). Individuals who have high levels of AC tend to view the organization as an extended family and the organization's problems as their own (Meyer and Herscovitch, 2001; Casimir et al., 2014). As a result, a great sense of commitment to an organization can help to overcome the KSB dilemma, as individuals pay more attention to the goals of the organization and the collective welfare of other members rather than emphasizing solely on their own costs and benefits (Cabrera and Cabrera, 2002; Pee and Lee, 2015). Furthermore, some scholars also state that when individuals build strong emotional bonds with an organization, they may even believe that the organization has the right to their knowledge (Jarvenpaa and Staples, 2001). In support of these arguments, previous studies have consistently demonstrated positive relationship between AC and KSB. For example, from a commitment-trust theory perspective, Hashim and Tan (2015) demonstrated that an individual's commitment to his/her organization positively affects his/her continuous knowledge sharing intention. Van Den Hooff and De Ridder (2004) stated that AC is an essential part of a knowledge sharing culture. Moreover, some scholars argued that attitudinal predictors, such as AC, were considered the most consistent factors facilitating employees' OCB or other extra-role behaviors (Ng and Feldman, 2011).

Following these studies, the current study assumes that employees experiencing high-quality LMX can develop stronger emotional attachments to the organization. Consequently, they are incline to share their expertise with colleagues to help the organization, thereby promoting its effectiveness. In other words, the present study implicitly constructs a model in which AC plays mediated role in the LMX–AC relationship. Thus, we posit the following hypothesis:

H2: The relationship between LMX and KSB is mediated by AC.

The Moderating Role of GSE and ILOC

To further investigate the complex mechanism between LMX and KSB, we draw on the person–context interactionist perspective (Pee and Min, 2017; Hao et al., 2019), to explore the moderating effects of employee characteristics. Judge et al. (1997) proposed a higher order construct that they termed "core self-evaluations traits," defined as a fundamental appraisal of one's effectiveness, worthiness, and capability as a person. This construct includes four well-established traits (Judge et al., 1997): self-esteem, neuroticism, GSE, and ILOC. Among these, the present study focuses on GSE and ILOC – two conceptually similar constructs, both reflecting individuals' belief that they are in control of their own success (Chen et al., 2016). Despite their common ground, GSE and ILOC emphasize different aspects: that is, GSE highlights individuals' belief in their capacities in dealing with various tasks (Bandura, 1989, 1997), whereas ILOC focuses on the belief that internal factors (e.g., tenacity, effort, and talent), instead of external elements (e.g., environment, luck, and help from others), determine their performance (Rotter, 1966).

According to self-verification theory (Swann, 2011), individuals are strongly motivated to accept experiences that consistent with their preconceived notions, and to avert the disconfirmation experiences. Bosson and Swann (1999) argued that different types of positive self-views may related to different reactions. GSE and ILOC represent different types of positive self-views. GSE is a type of self-competence variable which is related to self-competence feedback, whereas ILOC represents a type of self-liking variable that is related to self-liking feedback. In this regard, we propose that people with high levels of GSE or ILOC may focus on different aspects of the information embedded in LMX and generate different kinds of feedback. These different self-verification processes can lead to different moderating effects for GSE and ILOC.

The Positive Moderating Effect of GSE on LMX–AC–KSB

As we have posited, high-quality LMX can enhance employees' emotional bonds with the organization, which in turn creates a strong "reason to" exhibit more KSB. However, some scholars argued that only having a "reason to" share knowledge is not enough. There is another pivotal determinant for KSB: a "can do" attitude, or an individual's feeling of being able to perform such

behavior (e.g., Hsu et al., 2007; Raub and Liao, 2012). They further suggest that fundamental to such a "can do" attitude is GSE.

General self-efficacy, which is considered a relatively stable, idiosyncratic construct (Pan et al., 2011), refers to an individual's belief in his/her overall competence or ability to perform across a variety of situations (Judge et al., 1998). Drawing on Bandura's (1997) theory, an individual's choice behaviors, feelings of stress and anxiety, efforts to overcome problems, and job performance are all influenced by GSE. Here, we predict that the "can do" factor – namely, GSE – can interact with and strengthen the positive effect of the "reason to" factor. Thus, despite individuals develop strong emotional attachments to the organization and sincerely want to perform more discretionary activities, if the "can do" factors are missing – that is, if they doubt their ability to execute such activities successfully, individuals may not likely to proactively exhibit such discretionary behaviors, particularly KSB. Accordingly, the effects of AC on KSB will be significantly weakened for employees with lower GSE. On the contrary, potential knowledge contributors with higher GSE tend to feel less anxious and more competent and confident than individuals with lower GSE (Pan et al., 2011). Self-verification theory suggests that self-efficacious individuals are more attentive to other motivational factors and respond to them more positively in terms of exhibiting more interest in helping the organization succeed. Consistent with this view, employees who are highly involved in and identify with the organization, coupled with their higher GSE, will exhibit as much KSB as they can. In other words, we predict that the effect of AC on KSB should be stronger for self-efficacious individuals. Thus, we propose the following hypothesis:

H3a: Employee' GSE moderates the positive relationship between AC and KSB, such that the higher the level of GSE, the stronger the relationship.

According to the previous literature, if a moderator alters the path from an independent variable to a mediator or the path from a mediator to the dependent variable, that same moderator then impacts the entire mediated relationship (Edwards and Lambert, 2007). In our case, the significant moderation of the link between AC and KSB by GSE, together with the mediated relationship between LMX and KSB via AC, a moderated mediation model thus arises typically.

As already explained, self-efficacious subordinates are more likely to perceive the positive psychological situations created by high-quality LMX and react more positively. Thus, high-quality LMX is more effective in stimulating these employees to contribute more KSB by elevating their emotional bonds with the organization. In this regard, AC plays a more important mediating role in transmitting the effect of LMX on KSB for employees high in GSE. Conversely, individuals who have low GSE are less attentive to favorable treatments or psychological situations (Giesler et al., 1996). They may not exhibit as much KSB as expected even when they build a strong emotional bond with the organization. Thus, we argue that the positive effect of LMX on KSB via AC may be weaker for those individuals who are low in GSE. Taken together, we develop a moderated mediation model, in which high-quality LMX is positively and indirectly affect employees' KSB via AC, with this indirect effect contingent on employees' GSE. Thus, we propose the following:

H3b: Employees' GSE moderates the mediated relationship of LMX with KSB through AC, such that the higher the level of GSE, the stronger the relationship.

The Negative Moderating Effect of ILOC on LMX-AC-KSB

Locus of control refers to the extent to which an individual believes that he/she can control his/her own fate (Rotter, 1966; Ng et al., 2006). Rotter (1966) differentiates this construct into two categories: ILOC and external locus of control (ELOC). Internal individuals usually believe that they can control over their fate and usually perceive a strong linkage between their behaviors and its consequences, whereas externals feel powerless and usually attribute what happens to them to factors beyond their control (Ng et al., 2006; Aubé et al., 2007). According to Ng et al. (2006) meta-analysis, ILOC shows positive effects on a wide range of work outcomes (e.g., well-being, motivation, and behavioral orientation). However, the current study will focus on ILOC's negative effect: that is, high-ILOC people are relatively "immune" or not responsive to external reinforcement (Phares, 1965). These people believe that their personal traits such as talent and tenacity play more important roles in affecting their personal outcomes than external factors such as high-quality LMX.

High-quality LMX implies that favorable relationships between leaders and subordinates (e.g., getting support, praise, and recognition from leaders) are important factors in affecting subordinates' outcomes (Casimir et al., 2014). This information disconfirms high-ILOC individuals' belief that they can control over their personal outcomes. According to self-verification theory (Swann, 2011), high-ILOC individuals would neglect or be immune to positive information embedded in high-quality LMX, thereby attenuating the effect of LMX on their psychological reactions, such as AC, to the organization. In addition, individuals who have an ILOC feel they are able to control over their outcomes, they are likely to ascribe their rewards and punishment to their own actions rather than to the relationship with their leaders (Aubé et al., 2007). For example, they may consider their promotion as proof of personal ability rather than as an incentive from their leaders. Thus, ILOC may reduce the perception of gratitude and obligation to the organization, which weakens the positive effect of high-quality LMX on AC. In fact, previous studies demonstrate similar findings that positive external factors, such as leader consideration and charismatic leadership (e.g., Abdel-Halim, 1980; De Hoogh and Den Hartog, 2009), have less positive effects, and negative external factors, such as conflict and work stress (e.g., Krause and Stryker, 1984; Dijkstra et al., 2011), have less negative effects on high-ILOC individuals. Thus, we posit that employees with high ILOC are less attentive to the positive impact of high-quality LMX, rendering high-quality LMX less effective in promoting their AC.

In contrast, people who have an ELOC usually hold the belief that events are out of their control and put themselves in passive

positions in regard to external environments (Ng et al., 2006). They are more sensitive to external factors and prefer to attribute personal outcomes to the environment or powerful others, such as their leaders (Chiu et al., 2005). In this regard, these people would pay more attention to high-quality LMX because they believe that their outcomes are dependent on these factors. Thus, when they feel that they are getting along well with their leaders, they are likely to show their gratitude toward the organization and to develop higher level of AC. At the empirical level, Chiu et al. (2005) study and Aubé et al. (2007) study both showed that ILOC weakens the positive relationship between leadership and AC whereas ELOC magnifies this relationship. Following these studies, we hypothesize that:

H4a: Employees' ILOC moderates the positive relationship between LMX and AC, such that the higher the level of ILOC, the weaker the relationship.

Assuming that ILOC moderates the association between LMX and AC, it is also likely that ILOC will thus conditionally affect the indirect effects of LMX on KSB, just as in the theoretical assumption described in H3b, demonstrating a pattern of moderated mediation between these variables. As already explained, people high in ILOC are likely to attribute their outcomes to their own efforts, neglecting the external factors, such as high-quality LMX, that would substitute for the effect of high-quality LMX on AC. Because their emotional bonds with the organization are weak, their discretionary behaviors, such as KSB, will be not conspicuous. Conversely, low-ILOC individuals tend to pay more attention and react positively to high-quality LMX, making it more influential in strengthening their AC and KSB. In this regard, AC plays a more important mediating role in the LMX–KSB relationship. According to the above analysis, the following hypothesis is established:

H4b: Employees' ILOC moderates the mediated relationship of LMX with KSB through AC, such that the higher the level of ILOC, the weaker the relationship.

RESEARCH METHODS

Sample and Procedures

Data were collected from employees working in an information technology (IT) company in China. This organization is a medium-sized internet company which has about 1000 workers. Of the workers, 74% are male, 93% have a bachelor degree or above, and the average age are 32.4 years. There are about 40 project teams in this company. Each team has 1 or 2 team leaders and about 10–15 team members. These team leaders and members work together on specific tasks and they communicate frequently with each other. Thus, the supervisors know their subordinates' behaviors well. The survey participants we selected were all from these project teams. Thus, this organizational context in our survey is suitable for exploring the relationship between LMX and KSB among employees.

We first asked our coordinators from this company to provide a list of supervisor–subordinate pairs. One team leader in a project team were asked to evaluate several team members. Before distributing questionnaires, we randomly assigned an identification number to a supervisor–subordinate pair, thus the supervisor's evaluation could match with their subordinate's response. In addition, the participants were informed that their participations were voluntary and anonymous, and the data was confidential. The coordinators distributed separate questionnaires to the supervisors and their subordinates. The supervisors needed to evaluate the KSB of their subordinates, and the subordinates needed to rate LMX, AC, GSE, and ILOC. In addition, the supervisors and subordinates were asked to fill the questionnaires in different places. When they finished rating, the completed questionnaires were returned in sealed envelopes. The coordinators distributed 300 sets of questionnaires. After a month, 231 completed questionnaires of matched supervisor–subordinate pairs were collected, for a response rate of 77%. The average age of supervisor sample was 35.2 years (SD = 7.34), and 81.4% were male. Some 93.5% had a bachelor's degree or higher, and respondents had an average tenure with this company of 11.2 years (SD = 4.71). The subordinates sample had an average age of 29.2 years (SD = 5.47), and 68% were male. Some 93.1% had a bachelor's degree or higher, and respondents had an average tenure with this company of 5.3 years (SD = 2.43).

Measures

All measures were adopted from previously published papers. The Chinese version of the measures were developed by adopting back translation procedures. Unless otherwise informed, all items were rated on a five-point Liker-type scale with 1 indicating "strongly disagree" and 5 indicating "strongly agree."

Leader-member exchange was measured using Graen and Uhl-Bien's (1995) seven-item scale. This scale was used to evaluate the mutual respect between leaders and followers. A sample item for this scale was, "I have an excellent working relationship with my supervisor." In the present study, the internal reliability was 0.87.

Items for measuring AC were adapted from Rhoades et al. (2001) six-item scale. This scale was used to assess the extent to which an employee is affectively committed to the organization. A sample item was, "I feel a strong sense of belonging to my organization." In the present study, the internal reliability was 0.93.

General self-efficacy was measured using an eight-item scale developed by Chen et al. (2001). A sample item was, "I will be able to achieve most of the goals that I have set for myself." In the present study, the internal reliability was 0.89.

We used an adapted version of a sixteen-item scale developed by Spector (1988) to assess employees' levels of ILOC. This scale measures participants' generalized control beliefs in their work outcomes, of which eight items were used to evaluate ILOC. We adopt these eight items to measure ILOC. A sample items was, "Most people are capable of doing their jobs well if they make the effort." In the present study, the internal reliability was 0.83.

Subordinates' KSB was evaluated by their immediate supervisors and measured using seven items developed by Lee et al. (2018). A sample item was, "The subordinate freely provides other members with hard-to-find knowledge or

specialized skills." In Lee et al.'s (2018) study, the coefficient alpha for this scale was 0.96. In the present study, the internal reliability was 0.90.

In line with previous recommendations (Kim et al., 2017), the demographic variables such as age, gender, education and tenure were used as controls in this study.

Data Analysis

Measurement Model

Before testing the hypotheses, we first examined the convergent validity and discriminant validity of this model. The results (see **Table 1**) show that the factor loadings ranged from 0.71 to 0.87; the lowest average variance extracted (AVE) was 0.51; the lower limit of composite reliability (CR) was 0.88; and the Cronbach's α of the scales were from 0.83 to 0.93. Moreover, the means, standard deviations, and intercorrelations of the studied variables are presented in **Table 2**. We can find that the square root of each construct's AVE is greater than other correlation coefficients for the construct. Taken together, according to Fornell and Larcker (1981) suggestions, our model had acceptable convergent validity and discriminant validity.

Hypotheses Testing

The hierarchical regression results are shown in **Table 3** (in this table "M" represents "Model"). Consistent with H1, the results show that LMX is positively related to KSB (M6; $\beta = 0.27$, $p < 0.01$). We adopted Baron and Kenny's (1986) three-step method to test the mediating effect of AC. First, the result of the H1 show that the independent variable (i.e., LMX) significantly affect the dependent variable (i.e., KSB). Second,

TABLE 1 | Convergent validity and reliability analysis.

Constructs	Number of items	Factors loading range	Composite reliability (CR)	Average variance extracted (AVE)	Cronbach's α
LMX	7	0.71–0.81	0.90	0.53	0.87
AC	6	0.74–0.87	0.94	0.71	0.93
GSE	8	0.72–0.84	0.91	0.54	0.89
ILOC	8	0.71–0.78	0.88	0.51	0.83
KSB	7	0.78–0.84	0.93	0.64	0.90

N = 231.

TABLE 2 | Correlation between constructs.

Variables	Mean	SD	AVE	1	2	3	4	5
(1) LMX[a]	3.71	0.62	0.53	(0.73)				
(2) AC[a]	3.82	0.56	0.71	0.32**	(0.84)			
(3) GSE[a]	3.97	0.89	0.54	0.25**	0.29**	(0.73)		
(4) ILOC[a]	3.83	0.73	0.51	0.27**	0.28**	0.69**	(0.71)	
(5) KSB[b]	3.68	0.69	0.64	0.30**	0.37**	0.35**	0.14**	(0.80)

*N = 231. **p < 0.01. Square roots of AVE are displayed on the diagonal in parentheses. [a]These variables were measured from focal employees; [b]managerial rating.*

TABLE 3 | Hierarchical regression results.

Variables		AC				KSB						
		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11
Controls	Age	0.06	0.05	0.04	0.04	0.05	0.03	0.02	0.03	0.03	0.03	0.03
	Gender[a]	−0.03	−0.04	−0.02	−0.03	−0.02	−0.01	−0.02	−0.01	−0.02	−0.02	−0.02
	Education[b]	0.09	0.08	0.05	0.04	0.12**	0.07	0.05	0.07	0.07	0.07	0.07
	Tenure	−0.04	−0.03	0.01	0.02	−0.01	−0.01	−0.03	−0.01	−0.01	−0.01	−0.01
IDV[c]	LMX		0.33**	0.24**	0.27**		0.27**	0.06				0.11*
Mediator	AC							0.35**	0.38**	0.21**	0.19**	0.22**
Moderator	GSE									0.24**	0.27**	0.25**
	ILOC			0.16**	0.11**							0.07
Interaction	AC × GSE										0.22**	0.09
Item	LMX × ILOC				−0.19**							−0.17**
	R^2	0.02	0.11**	0.18**	0.28**	0.04*	0.12**	0.17**	0.15**	0.22**	0.28**	0.31**
	ΔR^2		0.09**	0.07**	0.10**		0.08**	0.05**	0.11**	0.07**	0.06**	0.03*

*N = 231. M represents Model; [a]Gender: male = 1, female = 0; [b]Education: high school or less = 1, bachelor's degree = 1, master's degree or higher = 3; [c]IDV, Independent variable; *p < 0.05; **p < 0.01.*

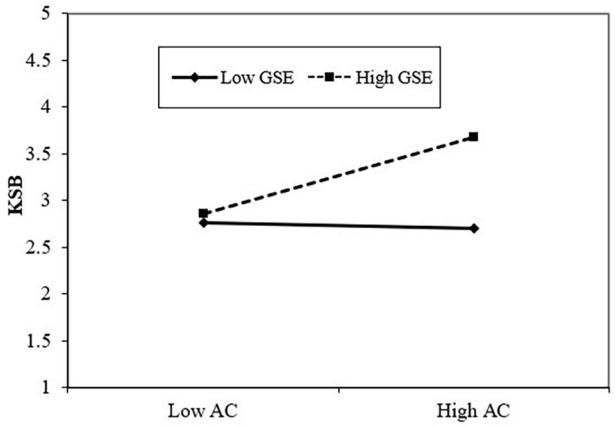

FIGURE 2 | Interaction effect of AC and GSE on KSB.

the results (**Table 3**, M2) show that LMX is positively related to AC (β = 0.33, $p < 0.01$). Finally, when both LMX and AC were entered into the regression model, the contribution of LMX became insignificant (M7; β = 0.06, *ns*), but the contribution of AC was significant (M7; β = 0.35, $p < 0.01$). Thus, the results suggested that the effect of LMX on KSB is fully mediated by AC.

To further test the mediation effect, following Preacher and Hayes's (2008) suggestion, a bias-corrected 95% confidence interval (CI) with 5,000 samples was conducted to test the significance of the estimated indirect effect. The bootstrapping results showed that the indirect effect of LMX on KSB via AC was significant (Estimate = 0.09, SE = 0.04, CI [0.03, 0.18]). Collectively, H2 was supported.

To test the different moderating effect of GSE (H3a), we first mean-centered all the predictors to reduce multicollinearity (Aiken et al., 1991). Then KSB was regressed on the controls, AC, GSE and the interaction terms (AC × GSE). M10 of **Table 3** shows that the interaction term (AC × GSE) was positively associate with KSB (β = 0.22, $p < 0.01$), suggesting that GSE magnified the positive effect of AC on KSB. Furthermore, in order to better understand the moderating effect, we plotted this moderating effect and conducted a simple slope test. The results (see **Figure 2** and **Table 4**) showed that when GSE was high, AC was significantly related to KSB ($B = 0.34$, $p < 0.01$), whereas when GSE was low, the AC–KSB relationship was no longer significant ($B = -0.04$, *ns*). H3a is thus supported.

We adopted the same method to test H4a. AC was regressed on the controls, LMX, ILOC and the interaction terms (LMX × ILOC). M4 of **Table 3** shows that the interaction term (LMX × ILOC) was negatively related to AC (β = −0.19, $p < 0.01$), revealing that ILOC attenuated the positive effect of LMX on AC. We also plotted this moderating effect and conducted a simple slope test. The results (see **Figure 3** and **Table 4**) demonstrated that when ILOC was low, LMX was significantly related to KSB ($B = 0.31$, $p < 0.01$), whereas when ILOC was high, the LMX–AC relationship was no longer significant ($B = 0.03$, *ns*). Thus, H4a is supported.

TABLE 4 | Summary of the simple slope tests.

Moderator levels	*B*	SE	*t*	*p*
Low GSE	−0.04	0.03	0.88	0.381
High GSE	0.34	0.07	4.23	<0.001
Low ILOC	0.31	0.05	3.91	<0.001
High ILOC	0.03	0.02	0.76	0.449

Low refers to one SD below the mean; High refers to one SD above the mean; SE refers to standard error.

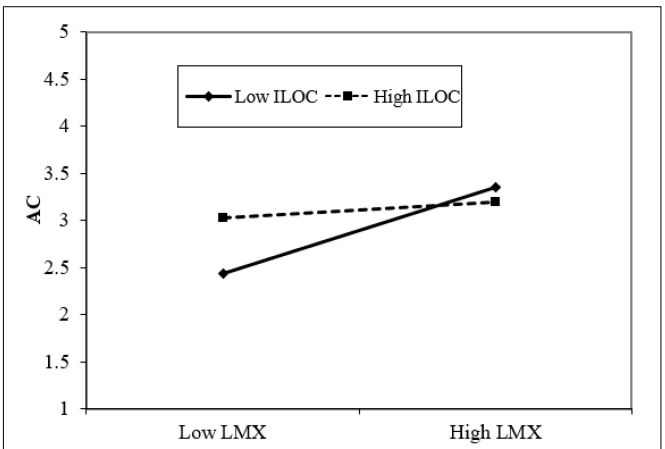

FIGURE 3 | Interaction effect of LMX and ILOC on AC.

TABLE 5 | Moderated mediation results for KSB across levels of GSE and ILOC.

Moderator levels	Conditional indirect effect	SE	95% CI	
			Lower	Upper
Low GSE	−0.01	0.02	−0.05	0.02
High GSE	0.21	0.06	0.09	0.45
Low ILOC	0.16	0.04	0.06	0.38
High ILOC	0.03	0.02	−0.03	0.07

Low refers to one SD below the mean; High refers to one SD above the mean; SE refers to standard error; CI refers to confidence interval; Bootstrap sample size = 5,000.

We adopted Preacher et al. (2007) SPSS macro to examine the conditional indirect effects of LMX on KSB via AC at two values of the moderators (i.e., GSE and ILOC). We set high and low levels of the moderators at one SD above and below each moderator's mean value, respectively. The results (see **Table 5**) show that the indirect effect of LMX on KSB via AC was conditional upon the levels of GSE and ILOC. The indirect effects were significant and stronger at a high level of GSE (Estimate = 0.21, SE = 0.06, CI [0.09, 0.45]) and a low level of ILOC (Estimate = 0.16, SE = 0.04, CI [0.06, 0.38]), but was insignificant and weaker at a low level of GSE (Estimate = −0.01, SE = 0.02, CI [−0.05, 0.02]) and a high level of ILOC (Estimate = 0.03, SE = 0.02, CI [−0.03, 0.07]). These results thus support H3b and H4b.

DISCUSSION AND CONCLUSION

Knowledge sharing behavior allows organizations' knowledge-based resources flow fluently and frequently, helps workers build on prior experience, and improves organizations' contingency power (Hao et al., 2019); it is thus pivotal for organizational effectiveness and competitiveness. The exchange relationships between leaders and subordinates is considered an important source of determinants in predicting employees' levels of KSB effort. Based on the person–situation interactionist perspective, the current study developed a moderated mediation model to explicitly answer the question of when and how LMX elevate subordinates' KSB. Our results showed that AC fully mediates the positive relationship between LMX and KSB. Moreover, this mechanism is differently moderated by employee characteristics (i.e., GSE and ILOC). Specifically, GSE enhances the positive relationship between LMX and KSB via AC, whereas ILOC attenuates this mediating effect. These findings have implications for both theory and practice.

The theoretical contribution of this study is fourfold: First, although leadership has been considered a significant factor in affecting employee KSB, most prior papers have only emphasized the important role of leaders (e.g., Curtis and Taylor, 2018; Lee et al., 2018), neglecting the reactions of subordinates. They claim that various sorts of leadership can construct different climates in which employees exhibit different levels of KSB efforts. This argument may be unjustified. If followers are unable to develop comprehensive exchanges with their leaders, they may not accurately perceive these climates, resulting in markedly decreased effects. The current study emphasizes the LMX relationship, which not only consists of the behaviors of leaders but also highlights the reactions of subordinates. For instance, in high-quality LMX relationships, leaders are attentive to and supportive of their subordinates, while the subordinates are committed to and generate favorable attitude toward both the leaders and the organization (Dansereau et al., 1975). We argue that under this situation, employees will exhibit more extra-role behaviors, particularly KSB, for the organization. The result showed in **Table 3** supports our assumption, showing a significantly positive relationship between high-quality LMX and KSB. In this regard, our study extends the current leadership–outcomes literature by (a) paying more attention to the reactions of followers and (b) adding new empirical evidence on the positive effects of LMX on various work outcomes.

Second, most previous studies assigned relatively little attention to the "black box" of the LMX–KSB relationship (Casimir et al., 2014; Kim et al., 2017). Our findings reveal that an employee's emotional bond with the organization (i.e., AC to the organization) fully mediates the positive relationship between LMX and KSB, which offers a credible description of the above "black box." While it has been suggested that high-quality LMX could elevate AC (Islam et al., 2013) and that employees' emotional bonds with the organization could be an important antecedent in predicting KSB levels (Jeung et al., 2017), the current study introduces AC as a pivotal psychological mechanism (i.e., mediator) linking LMX to KSB. According to social exchange theory, the finding that LMX indirectly affects employees' KSB via AC suggests that employees who develop strong AC to their organizations, induced by high-quality LMX, are inclined to participate in more extra-role behaviors, such as KSB, as a way of repaying the positive treatment they have received from their leaders. The above results can enhance our understanding of why high-quality-LMX employees contribute more to their organization than those with low-quality LMX. In addition, our study also reveals a direct positive association between AC and KSB. As far as we are aware, few studies have investigated psychological factors as determinants of KSB. Thus, why and when emotional and psychological factors determine KSB may provide a fertile ground for future research.

Third, although many researchers have highlighted the importance of the person–situation interactionist approach in studying employees' work-related outcomes (e.g., Su et al., 2013; Zhou and Hoever, 2014; Hao et al., 2019), little research using this approach can be found in the KSB domain. Researchers of KSB (e.g., Seba et al., 2012; Papadopoulos et al., 2013; Marouf and Alrikabi, 2015) have predominantly chosen either an individual or a situational perspective, with few combining these two perspectives. The current study explicitly investigates the moderating role of employee characteristics (i.e., GSE and ILOC) in the indirect effect of LMX on KSB through AC. The findings reveal that the processes involved in transmitting high-quality LMX to KSB through AC seem to mainly improve the performance of employees who have high GSE and low ILOC. In effect, high-GSE individuals who also develop high AC to the organization induced by high-quality LMX, reap more benefits in terms of KSB, perhaps because their competence-oriented personalities have enabled them to pay attention to and react more actively to the optimal environment, increasing the likelihood of contributing more beneficial behaviors to the organization, such as KSB. However, high-ILOC employees who pay more attention to their own efforts may ignore the positive treatments received from high-quality LMX, decreasing the likelihood of building high levels of AC to the organization, which in turn results in less engagement in KSB. Thus, our study provides theoretical accounts and empirical evidence of how and why GSE and ILOC, two positive self-view constructs, show opposite moderating effects on the impact of high-quality LMX – a positive situation construct – on KSB through AC. In this regard, our findings advance the person–situation interactionist approach in KSB field, not only by offering new empirical results but also by delineating the different processes that produce different patterns of interactions.

Finally, the opposite moderating effects of GSE and ILOC demonstrated in our study shed new and nuanced light on the conceptual distinction between these two similar variables. In Judge's and Bono's meta-analysis, they found that self-esteem, GSE, ILOC, and emotional stability are all positively related to job-related outcomes (e.g., satisfaction and performance). They suggested that these positive self-concepts can construct a high-order variable to better predict job-related outcomes (Judge et al., 2003). Despite the simplification merit of this

approach, it may lose sight of the nuanced differences among these traits. Some scholars have noticed this problem and found that GSE and self-esteem affect task performance via different motivational processes (Chen et al., 2004). In addition, De Hoogh and Den Hartog's (2009) study showed that ILOC and emotional stability differently moderated the effects of leader behavior on burnout. The current study extends this line of research by applying self-verification theory to explicate the opposite self-verification processes regarding to the two similar elements of core self-evaluations (i.e., GSE and ILOC) and further reveals different moderating effects of these two traits. Thus, our study provides new theoretical insight into the conceptual difference between GSE and ILOC.

Our study also offers several useful practical implications. First, the quality of the relationships between leaders and subordinates could be an important determinant predicting employees' voluntary behaviors (e.g., KSB). Nowadays, many organizations have invested in knowledge management systems; however, the effectiveness of their efforts could be tiny when the leaders and subordinates are experiencing low-quality relationships. The positive relationship between high-quality LMX and KSB suggests that more time and effort should be invested in training programs that can help both leaders and followers understand the importance of high-quality LMX and equip them with useful skills (e.g., social skills) to build good relationships with each other. In addition, the mediating effects of AC in the LMX–KSB relationship suggests that organizations should pay more attention to employees' psychological mechanisms through which high-quality LMX elevates KSB. Thus, supervisors should take the initiative to perform some actions such as showing concern for subordinates' feelings and needs, valuing their efforts and contributions, and creating ongoing informative feedback for them to enhance their AC to the organization.

The contrasting moderating effects of GSE and ILOC in the LMX–AC–KSB relationship suggest that managers should build flexible relationships with their followers who have different self-evaluations. Managers should be trained to discern the level of GSE and ILOC of their followers by observing their daily behaviors. Moreover, systematic personality tests should be conducted to better understand the subordinates' levels of GSE and ILOC. Such information can help managers decide how to develop different relationships with different subordinates, so that high-quality LMX can maximally facilitate KSB. For employees who consider themselves efficacious, managers should communicate with them clearly and frequently to confirm their mastery self-view, enhancing their desire to exhibit KSB. With respect to high-ILOC employees, the leader's role in affecting a subordinate's outcomes within a high-quality LMX relationship should be downplayed so that these people do not feel a loss of personal control.

Our study also has some no limitations. First, ratings for LMX, AC, GSE, and ILOC were collected from the same source (i.e., employees). Although we tried to minimize the common method bias and enhance the objectivity of the data by measuring KSB using a different source (i.e., supervisors), these problems still cannot be entirely ruled out. For example, in the Chinese culture, *guanxi* is an important factor affects how followers exchange with their leaders (Wang et al., 2012). Many Chinese workers may focus more on developing "upward" relationships with their leaders and be less willing to invest in "downward" associations with their subordinates (Kim et al., 2015). In this respect, measuring LMX solely from the perspective of subordinates may cause bias. Future studies should then complement subordinate-assessed LMX with supervisor ratings, as well as supervisor–subordinate agreement on LMX. Second, our study adopts a cross-sectional research design which may prevent us from explaining the determinations of causality among the variables explicitly. Conducting a longitudinal study or experimental study can provide stronger evidence for the causal relationships in the proposed model. For example, it would be interesting to investigate whether LMX quality changes over time and how this change affects employees' AC and KSB. Third, our data were collected from a single IT company in a single cultural context. This sample may hinder the generalizability of our findings to other fields in other cultural contexts (e.g., Western societies). Therefore, we would advocate replicated studies that use data from multiple organizations with different job types in different cultural contexts in the future. Furthermore, because our study is focused, many other personal characteristics and organizational factors that may influence the key variables in our study are not incorporated. Adopting other individual factors such as exchange ideology (Kim et al., 2017) and other organizational aspects such as organizational justice (Lee et al., 2018) as moderators might be encouraged in future studies.

DATA AVAILABILITY STATEMENT

The datasets generated for this study will not be made publicly available. The datasets are available only with the permission of the surveyed organization.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Institutional Review Board (IRB) of the School of Labor and Human Resources, Renmin University of China with written informed consent from all subjects. All subjects gave written informed consent in accordance with the Declaration of Helsinki.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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Leader–Member Exchange, Work Engagement, and Psychological Withdrawal Behavior: The Mediating Role of Psychological Empowerment

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Perceptions of psychological empowerment play a vital role in the way an individual perceives things at the workplace. In spite of this, there is scant research on the antecedents and consequences of psychological empowerment. This study is an attempt to fill this gap by analyzing the mediating role of psychological empowerment on the relationship between its antecedents (leader–member exchange) and its consequences (work engagement and psychological withdrawal behavior). Data were collected from 454 employees working in the Research and Development (R&D) departments of the information technology (IT) and pharmaceutical sectors operating in India. Results suggest that employees who have a high-quality relationship with their leader have high psychological empowerment, they are highly engaged at work, and their psychological withdrawal behavior is also low. In addition to this, high levels of psychological empowerment have a positive impact on their engagement toward work, which further leads to a low psychological withdrawal behavior. The theoretical and practical implications of these results are discussed.

Keywords: leader–member exchange, psychological empowerment, work engagement, psychological withdrawal behavior, structural equation modeling, research and development

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INTRODUCTION

In recent years, leader–member exchange (LMX) has gained a lot of attention from researchers because of its consequences on employees' work performance (Epitropaki et al., 2016; Schwepker, 2017; Siyal and Peng, 2018). LMX is one of the most prominent theories that deal with the dual relationship between a leader and the subordinates (Graen and Wakabayashi, 1994; Brower et al., 2000; Pellegrini et al., 2010). The underlying premise of this theory is that leaders develop a diverse relationship with their subordinates ranging from low (out-group) to high (in-group) quality (Graen and Wakabayashi, 1994; Green et al., 1996; Brower et al., 2009; Dulebohn et al., 2012). A high-quality LMX leads to a higher level of information exchange, trust, competence, commitment, role clarity, greater job satisfaction, and lower job stress (Wang and Yi, 2011; Chernyak-Hai and Tziner, 2014; Martin et al., 2016; Lebrón et al., 2018). On the other hand, a low-quality LMX

leads to a low level of interaction, limited support, formal relations, counterproductive behavior, psychological withdrawal behavior, employee turnover, lower level of job satisfaction, and higher job stress (Harris et al., 2005; Wang and Yi, 2011; Lebrón et al., 2018).

According to LMX, leaders evaluate their subordinates based on multiple parameters such as agreeableness, competence, conscientiousness, locus of control, neuroticism, extraversion, openness, and positive, and negative affectivity (Erdogan and Liden, 2002; Dulebohn et al., 2012; Clarke, 2016; Inanc, 2018). On the other hand, leaders are judged on the basis of contingent reward behavior, transformational leadership, supervisor's expectation of followers, agreeableness, and extraversion (Judge and Piccolo, 2004; Anand et al., 2011; Bedi et al., 2016). While looking at the importance of the dyadic relationship between employee and employer, the present study is an attempt to identify the mediating impact of psychological empowerment on the relationship between LMX and its outcome of work engagement and psychological withdrawal behavior of employees working in the Research and Development (R&D) departments of the information technology (IT) and pharmaceutical sectors.

Psychological empowerment is one of the significant consequences of high-quality LMX. Psychological empowerment is defined as an "intrinsic task motivation reflecting a sense of self-control in relation to one's work and an active involvement with one's work role" (Seibert et al., 2011, p. 981). It is an important component of workplace empowerment constituting intrinsic task motivation or employee rewards underlying the strengthened working conditions (Aggarwal et al., 2018a; Laschinger et al., 2009). Employees' empowerment in any organization further results in allocating meaningful work, self-efficacy, self-determination, and competence, which are the major elements of psychological empowerment (Aryee and Chen, 2006; Harris et al., 2009; Aggarwal et al., 2019b). These elements reflect employees' orientation toward their jobs and are associated with positive results. From the empirical evidence, it has been found that both LMX and psychological empowerment are positively related to organizational behavior (Schermuly and Meyer, 2016; Hu et al., 2018). The other important consequence of high-quality LMX is work engagement (Radstaak and Hennes, 2017; Lebrón et al., 2018; Kapil and Rastogi, 2019). Macey et al. (2011, p. 5) defined work engagement as a "psychic kick of immersion, striving, absorption, focus, and involvement." According to Breevaart et al. (2015, p. 755), "Engaged employees have high levels of energy, are enthusiastic about, inspired by, and proud of their work, and feel like time flies when they are working." It involves investing "hands, head, and heart" inactive, full work performance (Agarwal et al., 2012). There is a higher tendency that the employees who experience high-quality relationships at their workplace feel psychologically safe (Halbesleben, 2010; Gruman and Saks, 2011). The sense of psychological safety further enhances employees' work engagement (Lonsdale, 2016; Garg and Dhar, 2017). In this study, the authors claim that high-quality LMX is positively related to work engagement.

Despite being a heavily researched area, there are very few efforts by previous researchers to identify the relationship between high-quality LMX and psychological withdrawal behavior (Martin et al., 2016; Lebrón et al., 2018). Lehman and Simpson (1992) described psychological withdrawal behavior as "an aggregate of neglect behaviors at work and has been reported to be negatively related to performance." Withdrawal behaviors refer to a "set of attitudes and behaviors seen in employees whose job performance has deteriorated" (Shapira-Lishchinsky and Even-Zohar, 2011, p. 429). A high-quality relationship enhances a sense of freedom and delegates power from superiors to their subordinates, which ultimately helps in reducing employees' withdrawal behavior (Dollard and Idris, 2017; Landells and Albrecht, 2017). Therefore, the authors attempt to expand this line of research by claiming that high-quality LMX leads to low psychological withdrawal behavior.

The purpose of this study is to add new knowledge to the existing literature of organizational behavior by examining how the quality of LMX affects psychological empowerment which further affects the employees' level of engagement toward the organization and their psychological withdrawal behavior. The present study is the first of its kind to explore the LMX, psychological empowerment, work engagement, and psychological withdrawal behavior altogether.

THEORETICAL FRAMEWORK

There is an increasing trend among organizational researchers to study the effect of LMX on various work-related consequences (Dulebohn et al., 2012; Schermuly and Meyer, 2016). According to Graen and Uhl-Bien (1995), the LMX theory is a relationship-based approach to leadership in which leaders develop varying relationships with their followers based on their exchanges and interactions. A leader develops either high or low dyadic relationships with his/her subordinates (Tabak and Hendy, 2016; Chernyak-Hai and Rabenu, 2018). The basis of LMX is that "dyadic relationships and work roles are developed and negotiated over time through a series of exchanges between the leader and member" (Bauer and Green, 1996, p. 1538). These subdimensions of LMX are correlated to such an extent that "they can be tapped into with the single measure of LMX" (Graen and Uhl-Bien, 1995, p. 237). Hence, in the present research, we consider LMX as unidimensional rather than multidimensional (Bernerth et al., 2007; Schermuly and Meyer, 2016). High LMX indicates mutual respect, likings between both the parties, and positive interaction with the followers, which go beyond the formal job description (Nahrgang et al., 2009). In contrast, subordinates who perform only in accordance with the prescribed employment contract are characterized as "out-group" with limited reciprocal trust and support and few rewards from their supervisors (Deluga, 1998). According to relative deprivation theory, whenever followers face discrepancies under low LMX, there are two possibilities. Firstly, look ahead for self-improvement comparing the others, and secondly, follow the actions of counterproductive work

behavior such as psychological withdrawal behavior (Crosby, 1976; Bolino and Turnley, 2009; Shkoler and Tziner, 2017; Lebrón et al., 2018). Employees under low LMX encounter a low scope of psychological empowerment and low job satisfaction. The three moderators in deprivation are first, limited interaction of employee for LMX support and development; second, follower self-efficacy; and third, assessment of leader and follower relationship by the leader.

HYPOTHESES DEVELOPMENT

Leader–Member Exchange and Psychological Empowerment

LMX emerged as a positive organizational factor and has drawn the attention of the researchers to understand the supervisors' and subordinates' relationship (Cropanzano and Mitchell, 2005). High LMX supports the organizational culture by building trust, sharing of information, resources, rewards, loyalty, and openness (Erdogan et al., 2006; Asgari et al., 2008; Chernyak-Hai and Rabenu, 2018). Employees under high LMX express themselves better in the organization, have a greater sense to work context and a positive attitude to accept the work challenges, and show innovativeness. Employees who perceive their relationship with the leader as high perform better than employees who have a low dyadic relationship with the leader and have a strong ability to adapt to changes (Liden et al., 2000; Chen and Klimoski, 2003; Carson and King, 2005). Previous research has shown that high LMX leads to high psychological empowerment among the employees (Hill et al., 2014; Wang et al., 2016; Newman et al., 2017; Hu et al., 2018). This leads to the first hypothesis.

H1: Leader–member exchange positively impacts psychological empowerment

Leader–Member Exchange and Work Engagement

LMX enhances the work engagement of the employees by the characteristics of vigor, dedication, and absorption (Schaufeli et al., 2006; Halbesleben, 2010; Christian et al., 2011; Sharoni et al., 2015; Rabenu et al., 2019). There is an enhancement in the level of work engagement and job performance when employees frequently interact with their supportive leader, which further leads to a better job design, organizational culture, and resource distribution (Attridge, 2009; Bakker and Xanthopoulou, 2009). A high-quality dyadic relationship makes the supervisor look ahead for numerous interactions with subordinates, get attached emotionally with them, and provide them psychological empowerment, which further leads to a high work engagement (Tabak and Hendy, 2016). Work engagement is a motivational concept because it makes the employees struggle hard for challenging goals and gives them the inspiration to succeed in them (Leiter and Bakker, 2010). Prior research findings have shown a positive relationship between LMX and work engagement (Agarwal et al., 2012; Runhaar et al., 2013; Burch and Guarana, 2014; Matta et al., 2015; Garg and Dhar, 2017).

H2: Leader–member exchange positively impacts work engagement

Leader–Member Exchange and Psychological Withdrawal Behavior

There is a scarcity of research on the relationship between LMX and psychological withdrawal behavior (Martin et al., 2016; Lebrón et al., 2018). Despite the fact that the role of LMX is very vital in controlling psychological withdrawal behavior. Low LMX leads to poor interaction between leaders and followers, poor leadership support, and a high level of stress among employees, frustration, violations, and negative affectivity (Griffeth et al., 2000; Glasø and Einarsen, 2006). Employees under withdrawal behavior exhibit low morale, feel stressed, and realize the work pressure negatively (Shapira-Lishchinsky and Rosenblatt, 2009). Psychological withdrawal behaviors can be traced as willful lateness (Blau et al., 2004), intent to leave, and absenteeism (Koslowsky, 2009; Biron and Bamberger, 2012). Psychological withdrawal behavior describes the employees' behavior and attitudes responsible for the low level of job performance at the workplace (Johns, 1997; Shaw et al., 2005; Kaplan et al., 2009; Shapira-Lishchinsky and Rosenblatt, 2010). A low level of the social exchange relationship between leader and followers lowers down the employees' performance, commitment, and the job satisfaction level of the employees at the workplace (Rhoades and Eisenberger, 2002).

H3: Leader–member exchange negatively impacts psychological withdrawal behavior

Psychological Empowerment and Work Engagement

Psychological empowerment comprises four elements, namely, meaning, competence, self-determinations, and impact (Sparrowe, 1994; Kirkman and Rosen, 1999; Siegall and Gardner, 2000). Previous literature has manifested that psychological empowerment has a positive impact on work engagement of the employees (Paré and Tremblay, 2007; Bakker and Leiter, 2010; Stander and Rothmann, 2010; Seibert et al., 2011; Wang and Liu, 2015; Al-Maamari et al., 2017). Alzyoud et al. (2015) state that higher work engagement enhances the commitment and job satisfaction among the employees and reduces employee absenteeism at the workplace. Job Demands–Resources model also states that employees are found to be more engaged at the work that offered empowerment in psychological conditions such as organization culture, job enrichment, and opportunity to work under supportive leadership (Bakker et al., 2014). Therefore, it was hypothesized that:

H4: Psychological empowerment positively impacts work engagement

Psychological Empowerment and Psychological Withdrawal Behavior

Under psychological withdrawal behavior, employees tend to depart themselves from their respective workplace and they have a negative attitude toward their work. These negative

attitudes include turnover intentions, intentional absenteeism, and lateness at their workplace (Johns, 1997; Shapira-Lishchinsky and Rosenblatt, 2010; Shapira-Lishchinsky and Tsemach, 2014). Employees under psychological withdrawal behavior influence other employees to contribute lesser efforts at the workplace, and such employees were also found frequently switching jobs (Hoendervanger et al., 2019). Therefore, it is important to understand the factors that affect the employees' psychological withdrawal behavior in the organizational context. One such important factor that affects the psychological withdrawal behavior is psychological empowerment (Dewettinck and van Ameijde, 2011; Shapira-Lishchinsky and Tsemach, 2014; Bester et al., 2015). When employees are able to positively impact the working conditions at their workplace ("impact" sub-factor of psychological empowerment), when employees are competent to perform their respective jobs ("competence" sub-factor of psychological empowerment), when employees are free in taking their own decisions ("self-determination" sub-factor of psychological empowerment), and when employees perceive their job as meaningful ("meaning" sub-factor of psychological empowerment), in that scenario, it is more likely that their attachment toward the workplace and work will be high (Shapira-Lishchinsky and Tsemach, 2014). Therefore, when the individual is psychologically empowered, he/she shows high job satisfaction and negligible psychological withdrawal behavior (Fook et al., 2011). Therefore, it was hypothesized that:

H5: Psychological empowerment negatively impacts psychological withdrawal behavior

Work Engagement and Psychological Withdrawal Behavior

Psychological withdrawal behavior may prone the employee to show laziness or lack of intense thinking on the job (Pinder, 2008). The disengaged employee with withdrawal behavior can cause loss to the organization in billions of rupees every year (Rosch, 2001; Berry et al., 2012). According to Gallup's survey 2011–2012 (Crabtree, 2013), the global percentage of engaged employees in the organization is found to be at 13%, which is very alarming. Previous research shows a significant relationship between work engagement and psychological withdrawal behavior (Malinen et al., 2013; Shusha, 2013; Huang et al., 2016; De Simone et al., 2018). Therefore, it is essential to understand the relationship between work engagement and psychological withdrawal behavior in the workplace.

H6: Work engagement negatively impacts psychological withdrawal behavior

Psychological Empowerment as a Mediator

Recent research work in organizational behavior has focused on examining the mediating role of psychological empowerment in different workplace relations (Schermuly and Meyer, 2016; Hu et al., 2018). Prior research has shown that the quality of the relationship between leader and follower affects the level of psychological empowerment perceived by the followers (Harris et al., 2009; Hill et al., 2014). Leader's ease of availability and his/her supportive behavior helps in improving the psychological empowerment of the employees (Hu et al., 2018). Furthermore, this psychological empowerment leads to various organizational consequences such as high work engagement (Wang and Liu, 2015; Al-Maamari et al., 2017) and low psychological withdrawal behavior (Colquitt et al., 2014; Lorinkova and Perry, 2017). The role of the social exchange relationship between leader and subordinate was found imperative to enhance the work engagement (Carasco-Saul et al., 2015; Galperin et al., 2017). Literature states that few researchers explore the significant positive indirect relationship of LMX and work engagement in the presence of mediating variable employee empowerment (De Villiers and Stander, 2011; Mendes and Stander, 2011). Empowering the employee improves the job outcomes and work engagement because the leader shares the powers with the employees (Vecchio et al., 2010; Tuckey et al., 2012; Wang et al., 2016) such as delegation of authority and giving them opportunities to participate in the decision-making process (Zhang and Bartol, 2010). Researchers also found the positive significant relationship between LMX and employee empowerment and explained that employee empowerment can be a mediator between LMX and job outcome variables such as work engagement, employee satisfaction, job performance, and innovative behavior (Dulebohn et al., 2012; Zhou et al., 2012; Schermuly and Meyer, 2016; Ciftci, 2019). Hence, it becomes important to examine the relationship between LMX and work engagement of employees in the presence of psychological empowerment as mediator.

H7a: Psychological empowerment mediates the relationship between leader–member exchange and work engagement

Fong and Snape (2015) explained that the psychological empowerment of employees affects the individuals' attitudes and behavior in an organization. Previous research shows the positive effect of LMX on psychological empowerment, intrinsic motivation, and job performance of employees (Arnolds and Boshoff, 2000; Avolio et al., 2004; Zhang and Bartol, 2010). Further, some researchers also found that the relationship between effective leadership, LMX, absenteeism, and emotional exhaustion is mediated by psychological empowerment (Frooman et al., 2012; Kim and Beehr, 2018). In addition to this, employee withdrawal behavior is linked directly to high investment costs in the organization (Berry et al., 2012; Hancock et al., 2013). Low level of LMX can be a responsible factor for a low level of social interactions between the leader and the followers, which further leads to a lower level of interest among employees and turn them to show the withdrawal behavior such as absenteeism and turnover intention (Bolino and Turnley, 2009; Portoghese et al., 2015). Hence, it is necessary to understand the indirect effect of LMX on employee withdrawal behavior in the presence of mediator as employee empowerment.

H7b: Psychological empowerment mediates the relationship between leader–member exchange and psychological withdrawal behavior

METHODS

Participants and Procedures

The data were collected from employees engaged in the R&D department, working in the IT sector and pharmaceutical sector operating in different cities in India, namely, Chandigarh, Delhi (and its extended suburbs Gurugram, Noida, and Ghaziabad), and Bangaluru. The participants were assured about the confidentiality of their data and data were taken from those employees who were interested in filling the questionnaire. No incentive was given to any employee for filling the questionnaire. Data were collected by administering a structured questionnaire to 1,163 employees through off-line mode out of which 454 usable questionnaires were received for final analysis with a response rate of 39.03%. The rest of the 709 questionnaires were not included in the final analysis due to either missing data or unengaged responses. These employees were working in lower- or middle-level management with designations such as business analyst, technical lead, product manager, subject matter expert, senior executive, executives, manager innovation, and associate manager. Out of these 454 respondents, 61.24% of the employees (n = 278) were males and 38.76% of the employees were females (n = 176). The average age of the respondents was 36.1 years, and the range of the age varies from 24 to 58 years. Furthermore, the average experience of the employees was 4.8 years with a standard deviation of 4.60 years. The majority of the respondents were married (71.15%), and 131 employees (28.85%) were unmarried.

The researchers selected IT and pharmaceutical companies as it is among the fastest growing sectors of India. It is expected that by 2020, India's national policy related to IT aims to make India a global IT hub. Further, by 2020, it is expected that the pharmaceutical and health care sector will contribute US$ 55 billion as revenue[1]. These are the two sectors in India where the R&D share is high. There are many motives to select the R&D department for the present study. R&D competencies have emerged as one of the primary attributes that help organizations to differentiate on the basis of an organization's performance (Teece, 1982; Bettis and Hitt, 1995; Nerkar and Paruchuri, 2005). The globalization of markets, the regionalization of scientific expertise, and the rapid change in technologies are forcing technology-oriented companies to continuously develop their R&D departments (Nixon, 1998; Gassman and Von Zedtwitz, 1999; Dushnitsky and Lenox, 2005; Mittal et al., 2019). In response to these challenges, modern organizations are appropriately developing R&D setups to enhance their skills that are essential for an organization's success. Furthermore, leaders managing R&D teams face complex situations because of their dual responsibilities, i.e., firstly, they have to assist team members in developing their own competencies; secondly, they are also accountable for attaining results within several operational constraints (Frischer, 1993; de Weerd-Nederhof, 2000; Stoker et al., 2001; Pieterse et al., 2010). To understand the role of leaders in positively shaping an individual's and organization's performance, it becomes imperative to understand how leaders develop a relationship at various stages with their subordinates.

The selection of statistical tools and the characteristics of the research under consideration determine the adequate sample size for any research (Aggarwal et al., 2018a). Structural equation modeling (SEM) requires a relatively large sample size as SEM is sensitive to the magnitude of the sample (Schumacker and Lomax, 1996; Siddiqui, 2013). Therefore, we require a large sample size in the present study as we have used SEM for analyzing the proposed hypothesized relationships. Different authors have proposed different methods to determine the sample size (Aggarwal et al., 2018b). For example, some authors have proposed that the sample should be determined on the basis of distinct parameters in a model (Bentler and Chou, 1987; Bagozzi and Yi, 1988; Bollen, 1989; Hair et al., 1998; Kline, 1998). According to these, for each parameter, there must be at least five respondents. In the current study, there are 44 distinct parameters and we collected the data from 454 participants, which show that we have at least 10 respondents per parameter.

Measures

Leader–Member Exchange

The subordinates were asked to rate their relationship with their immediate supervisor by using a seven-item questionnaire developed by Graen and Uhl-Bien (1995). These seven questions were asked on a five-point Likert scale anchoring from (1) strongly disagree to (5) strongly agree. The sample items consist of "Do you know where you stand with your leader? Do you usually know how satisfied your leader is with what you do? Regardless of how much formal authority he/she has built into his/her position, what are the chances that your leader would use his/her power to help you solve problems in your work? The value of the reliability coefficient for the LMX scale was 0.90.

Psychological Empowerment

The perceptions of psychological empowerment were measured with the scale developed by Spreitzer (1995). The scale consists of 12 items, and it is divided into four subscales, namely, competence, impact, self-determination, and meaning. Each subscale consists of three items which were measured on a five-point Likert scale. The sample items consist of "The work I do is very important to me (Meaning), I am self-assured about my capabilities to perform my work activities (Competence), I have considerable opportunity for independence and freedom in how I do my job (Self-Determination), I have a great deal of control over what happens in my department (Impact)." The results of the confirmatory factor analysis (CFA) supported a four-factor model of psychological empowerment such that χ^2 = 92.138, df = 48, $p > 0.001$, χ^2/df = 1.923 $\leq$ 3, root mean square residual (RMR) = 0.051 $\leq$ 0.08, root mean square error of approximation (RMSEA) = 0.045 $\leq$ 0.08, adjusted goodness of fit index (AGFI) = 0.946 $\geq$ 0.90, comparative fit index (CFI) = 0.987 $\geq$ 0.90, goodness of fit index (GFI) = 0.967 $\geq$ 0.80. Cronbach's alpha of four dimensions of

[1]https://www.ibef.org/industry/research-development-india.aspx

psychological empowerment was competence (0.869), impact (0.888), self-determination (0.818), and meaning (0.937). The overall scale reliability was 0.836, which is more than the cutoff value of 0.7.

Work Engagement

In order to measure the level of work engagement of the employees, a 17-item scale developed by Schaufeli et al. (2002) was applied. The scale is divided into three subscales, namely, vigor (six items), dedication (five items), and absorption (six items). The sample items consist of "When I get up in the morning, I feel like going to work (Vigor), I find the work that I do full of meaning and purpose (Dedication), When I am working, I forget everything else around me (Absorption)." IT was measured on a five-point Likert scale. An employee is said to have a high level of work engagement when he/she got a high score on these three dimensions. The results of the CFA supported a three-factor model of work engagement such that $\chi^2 = 283.577$, $df = 114$, $p > 0.001$, $\chi^2/df = 2.488 \leq 3$, GFI = $0.932 \geq 0.80$, CFI = $0.959 \geq 0.90$, AGFI = $0.908 \geq 0.90$, RMSEA = $0.057 \leq 0.08$, RMR = $0.073 \leq 0.08$. The Cronbach's alpha of three dimensions of work engagement was vigor (0.897), dedication (0.876), and absorption (0.874). The overall scale reliability was 0.861, which is more than the cutoff value of 0.7.

Psychological Withdrawal Behavior

The perceptions of the psychological withdrawal behavior of the employees were measured through the eight-item scale developed by Lehman and Simpson (1992). A five-point Likert scale was used to measure the intensity of agreement and disagreement of the respondents toward a particular statement. The sample item consists of "In the last 12 months, how often have you" "...Thoughts of being absent, Chat with coworkers about nonwork topics, Left work station for unnecessary reasons, Put less effort into job than should have." The Cronbach's alpha for this scale was 0.915.

DATA ANALYSIS

Before analyzing the data, first, we performed a preliminary analysis for checking the suitability of the data. Then, we ran exploratory factor analysis to extract unrelated factors. After extracting the factors, we followed the two-step statistical analysis approach specified by Anderson and Gerbing (1988). In this, first, the CFA was performed to check the reliability and validity of the factors through the measurement model. Second, the proposed hypothesized relationships were tested using structural equation modeling.

Preliminary Analysis

In the first step, with the help of Microsoft Excel, the data were checked for missing responses. The missing data were replaced with the arithmetic mean by following a simple imputation procedure (Byrne, 2010). The missing data were not an issue in the present study as they do not surpass 5% (Tabachnick and Fidell, 1996). In the second step, the data were checked for multivariate outliers using Mahalanobis Distance (D^2) for each case (Byrne, 2010). There was no issue of multivariate outliers in the current study. The kurtosis and skewness were also checked to test the normality assumption, and the observed values do not exceed between +2 and -2 as recommended by Garson (2012).

Common Method Bias

As the research design of the present study was cross-sectional and we collected the data from the respondents through the self-reported method, therefore, there might be an issue of common method bias (CMB) (Podsakoff et al., 2003). Therefore, in order to reduce the effect of CMB, firstly, the researchers selected observed variables in such a way that it incorporates reverse item questions which is an effective way of reducing CMB. Secondly, the researchers collected the data in such a way that at one point in time, only independent variables were measured ("Leader–Member Exchange"). With a gap of a fortnight, the researchers measured mediator ("Psychological Empowerment") and dependent variables ("Work Engagement and Psychological Withdrawal Behavior"). When we gather the data in such a way, it potentially reduces the effect of CMB (Atwater and Carmeli, 2009). However, there still might be the effect of CMB in the data as we have collected the data at one point of time from the respondents in the case of the mediator and dependent variables. Therefore, to test it statistically, we performed Harman's single-factor analysis (Shkoler and Tziner, 2017; Manohar et al., 2019). All the manifested variables were a constraint to unrotated one single factor using exploratory factor analysis (EFA) in SPSS 20.0 software. The single factor so generated exhibited a variance of 18.24%, which was lower than 50% total variance of the scale. This indicated the absence of CMB.

RESULTS

Exploratory Factor Analysis

According to Cautin and Lilienfeld (2015), in order to have a scientifically justified outcome of CFA, a researcher should select the manifested variables in a measurement model based on the results of EFA. Therefore, EFA was applied on 44 statements by using the maximum likelihood extraction method based on eigenvalues greater than 1 (Henson and Roberts, 2006). In order to have distinct discrepancies among statements, we have selected maximum likelihood estimation. Further, the varimax method of orthogonal rotation was used to extract the factors. Prior to the extraction of factors, appropriateness of EFA was tested by assessing the values of Kaiser–Meyer–Olkin (KMO) and Bartlett's test of sphericity. Results show that the value of KMO (0.864), which is more than the cutoff value of 0.6 (Kaiser and Rice, 1974), is significant at 0.01 level of the confidence interval. Further, the results of the EFA showed that all the variables have a standardized factor loading of more than 0.5 (Guadagnoli and Velicer, 1988). The results of EFA render 11 distinct factors that were labeled as "Leader–Member Exchange, Competence, Impact, Self-Determination, Meaning, Psychological Withdrawal Behavior, Vigor, Dedication,

and Absorption." Apart from this, none of the extracted factors explained substantially large variance. This is the indication that in the current study, there is no problem with CMB. Further, the results of total variance extracted showed that cumulatively, these 11 factors explain 70.15% of variance, which is more than the minimum acceptable critical value (Costello and Osborne, 2005).

The first factor was labeled as "Psychological Withdrawal Behavior." It consists of eight items, and the reliability estimation of this construct came out to be 0.915. The second construct was labeled as "Leader–Member Exchange." It consists of seven items, and the reliability estimation of this construct was 0.900. The third construct was labeled as "Vigor." It consists of six items, and the reliability estimation of this construct was 0.897. The fourth construct was labeled as "Absorption." It again consists of six items, and the value of reliability estimation of this construct was 0.874. The fifth construct was labeled as "Dedication." It consists of five items, and the value of reliability estimation of this construct was 0.876. The sixth construct was labeled as "Meaning." It consists of three items, and the reliability estimation of this construct was 0.937. The seventh construct was labeled as "Impact." It consists of three items, and the value of reliability estimation of this construct was 0.888. The eighth construct was labeled as "Competence." It consists of three items, and the reliability estimation of this construct was 0.869. The ninth construct was labeled as "Self-Determination." It consists of three items, and the reliability estimation of this construct was 0.818. The results of the CFA were used to test the discriminant and convergent validity of the proposed hypothesized model.

Confirmatory Factor Analysis

The reliability and construct validity of the latent variables were tested to confirm the adequacy of the measurement model. The construct validity of the model was measured through discriminant validity and convergent validity (Hair et al., 2006). In order to establish the discriminant validity, the model fit values of the hypothesized nine-factor model were compared with their competing conceptual model. The model fit value of the nine-factor model showed superior model fit values as compared to its competing models.

Results of **Table 1** showed that the model fit value of hypothesized nine-factor model (Model 1) was significantly superior [χ^2 = 1,405.45, df = 866, $p > 0.001$, $\chi^2/df = 1.62 \leq 3$, RMSEA = 0.037 $\leq$ 0.08, p of close fit (Pclose) = 1.00; Standardized root mean square residual (SRMR) = 0.044 $\leq$ 0.08; non-normed fit index (NNFI) = 0.949 $\geq$ 0.90; CFI = 0.953 $\geq$ 0.90, GFI = 0.872 $\geq$ 0.80; expected cross-validation index (ECVI) = 3.65] than that of model 2 ($\Delta\chi^2$ from Model 1 = 1,613.40, $p < 0.001$). Results of **Table 1** manifested that the model fit value of model 3, model 4, model 5, model 6, model 7, and in last model 8 showed poor model fit values as compared to model 1. Consequently, model 1 was retained for the final analysis with nine factors.

The convergent validity can be assessed by evaluating whether the standardized factor loadings of each statement are significant at its assigned factor or not (Anderson and Gerbing, 1988). The results of the measurement model showed that all the statements have standardized factor loading values above the specified criterion of 0.7 (Hair et al., 2010) and were also significant at $p < 0.01$ (Hair et al., 1998). Therefore, the present measurement model fulfills the conditions of convergent validity. In addition to this, convergent validity was assessed by the procedure specified by Hair et al. (2010), which states that the value of composite reliability (CR) of each factor should be greater than average variance extracted (AVE), and AVE should be greater than or equal to 0.5 (Fornell and Larcker, 1981). Results of the measurement model showed that all the factors have AVE more than 0.5, the value of CR for all the constructs is more than 0.7, and the value of CR is greater than AVE for each construct. This shows that the present measurement model has good convergent validity (Dhaliwal et al., 2019; Mittal et al., 2020). Further, the discriminant validity was checked by two methods. The first method states that the correlation values among the factors should be below the cutoff value of 0.85 (Kline, 2015). The second method states that the value of the square root of AVE for each factor should exceed the value of the correlation of that construct with other constructs in the model (Fornell and Larcker, 1981). The results of the measurement model fulfill both of these criteria, thereby proving the evidence of discriminant validity in the measurement model (**Table 2**). The results of **Table 2** revealed that all the constructs have a high internal consistency as the value of CR estimation for all the constructs is higher than 0.7 (Nunnally, 1978).

Descriptive and Correlation Analysis

The results of **Table 3** depicted the descriptive, correlation, and reliability coefficients. Results showed that there is a significant negative relationship between LMX and psychological withdrawal behavior ($r = -0.745$, $p < 0.01$). It means that if an employee falls under the in-group category, then the withdrawal behavior among the employee reduces. Results showed that there is a significant positive relationship between LMX and psychological empowerment ($r = 0.504$, $p < 0.01$).

In addition to this, results showed that LMX has a significant and positive relationship with work engagement ($r = 0.682$, $p < 0.01$). It means that a high-quality relationship between leader and members has a positive impact on employees' work engagement. Psychological withdrawal behavior has a significant and negative relationship with psychological empowerment ($r = -0.545$, $p < 0.01$), such that high perceptions of psychological empowerment will lead to low levels of psychological withdrawal behavior among the employees. A similar type of result was observed in case of psychological withdrawal behavior and work engagement. Results showed a significant and negative relationship between psychological withdrawal behavior and work engagement ($r = -0.737$, $p < 0.01$), and the strength of the relationship is also strong. It means that as the work engagement among the employees increases, there is a reduction in the withdrawal behavior among employees. Finally, the results of the correlation analysis revealed that there is a significant positive relationship between psychological empowerment and work engagement ($r = 0.462$,

$p < 0.01$). It means that as the employee feels empowered at his/her workplace, his/her engagement toward work increases.

Structural Model

In the present study, researchers have used the structural equation modeling technique to test the hypothesized relationships between psychological empowerment, LMX, work engagement, and psychological withdrawal behavior (see **Figure 1**). The benefit of using structural equation modeling technique is that it allows multi-construct variables to be treated as one single latent variable and use the scale means of its sub-facets as its measurement indicators in the path analysis (Aryee and Chen, 2006; Iacobucci, 2008; Schermuly et al., 2013). Therefore, in the present study, the loadings of the four sub-factors of psychological empowerment (meaning, competence, self-determination, and impact) and three subdimensions of work engagement (vigor, dedication, and absorption") capture the gestalt of psychological empowerment (Spreitzer, 1995) and work engagement (Schaufeli et al., 2002) in the context of our sample.

The researchers have also controlled certain demographical variables such as gender, educational qualification, age, marital status, and length of service (Aggarwal et al., 2019a). The critical ratio values rendered by regression estimates were utilized to test the relationship between two variables (Biswas et al., 2006). A critical ratio (t-value) $\geq$ 1.96 but smaller than 2.58 indicates that the relationship between two variables is significant at 95% confidence interval, whereas if the value of critical ratio is greater than 2.58, then it means that the relationship between two variables is significant at 99% of the confidence interval.

TABLE 1 | Comparison of measurement models.

Model	Description	χ^2	df	χ^2/df	CFI	GFI	RMSEA	$\Delta\chi^2$ from Model 1	Δdf
Model 1	Hypothesized	1405.45	866	1.62	0.953	0.872	0.037	–	–
Model 2	Eight factor[a]	3018.85	874	3.45	0.813	0.687	0.074	1613.40***	8
Model 3	Seven factor[b]	4424.94	881	5.02	0.691	0.592	0.094	3019.49***	15
Model 4	Six factor[c]	5081.84	887	5.73	0.634	0.550	0.102	3676.39***	21
Model 5	Five factor[d]	6649.44	892	7.455	0.498	0.461	0.119	5243.99***	26
Model 6	Four factor[e]	5301.58	896	5.92	0.616	0.579	0.104	3896.13***	30
Model 7	Three factor[f]	6547.29	899	7.28	0.508	0.519	0.118	5141.84***	33
Model 8	Two factor[g]	8440.29	901	9.37	0.343	0.420	0.136	7034.84***	35

*[a]Eight factor: psychological withdrawal behavior and leader-member exchange combined. [b]Seven factor: psychological withdrawal behavior, leader-member exchange and vigor combined. [c]Six factor: psychological withdrawal behavior, vigor, dedication and absorption combined. [d]Five factor: psychological withdrawal behavior, leader-member exchange, vigor, dedication and absorption combined. [e]Four factor: vigor, dedication and absorption combined and competence, impact, self-determination and meaning combined. [f]Three factor: vigor, dedication, absorption, competence, impact, self-determination and meaning combined. [g]Two factor: vigor, dedication, absorption, competence, impact, self-determination, meaning, psychological withdrawal behavior combined ***p < 0.001.*

TABLE 2 | Reliability and validity of the measurement model.

	CR	AVE	1	2	3	4	5	6	7	8	9
Absorption	0.88	0.54	**0.74**								
LMX	0.90	0.56	0.2	**0.75**							
Competence	0.87	0.69	0.13	0.14	**0.83**						
Impact	0.88	0.73	0.3	0.2	0.26	**0.85**					
Self	0.82	0.61	0.11	0.11	0.13	0.2	**0.78**				
Meaning	0.94	0.84	0.34	0.28	0.32	0.57	0.17	**0.92**			
PWB	0.92	0.57	−0.07	−0.14	−0.12	−0.09	−0.01	−0.03	**0.76**		
Vigor	0.89	0.59	0.27	0.13	0.16	0.17	0.11	0.19	−0.18	**0.77**	
Dedication	0.88	0.59	0.25	0.23	0.09	0.14	0.07	0.28	−0.36	0.25	**0.77**

1(Absorption); 2(Leader-Member Exchange); 3(Competence); 4(Impact); 5(Self-Determination); 6(Meaning); 7(Psychological Withdrawal Behaviour); 8(Vigor); 9(Dedication). Bold diagonal values represent square root of respective AVE and off-diagonal values are inter-construct correlation. CR represent Composite Reliability.

TABLE 3 | Descriptive statistics, correlation and reliability.

Factors	Mean	*SD*	1	2	3	4
Leader-member exchange	3.016	0.703	**(0.900)**			
Psychological withdrawal behavior	2.873	0.99	−0.745**	**(0.915)**		
Psychological empowerment	4.054	0.893	0.504**	−0.545**	**(0.859)**	
Work engagement	4.032	0.844	0.682**	−0.737**	0.462**	**(0.861)**

*Off-diagonal values are inter-construct correlation; **p < 0.01. Bold values represent reliability coefficients of the corresponding construct.*

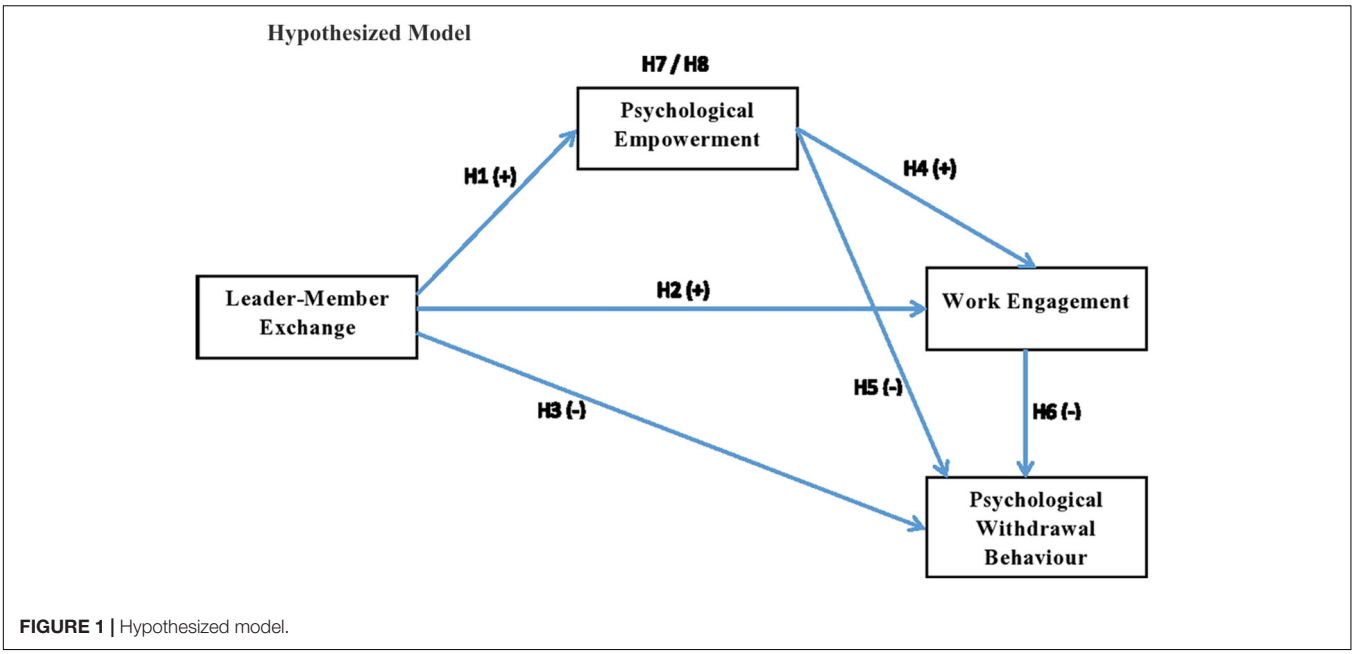

FIGURE 1 | Hypothesized model.

In order to test the problem of endogeneity, we run the proposed structural model in reverse order. The results of the model fit of this reversed model depicts the value of $\chi^2 = 304.883$, $df = 14$, $p > 0.001$, $\chi^2/df = 21.777$; RMSEA = 0.214, Pclose = 0.00; SRMR = 0.1314; NNFI = 0.679 $\geq$ 0.90; CFI = 0.840; GFI = 0.866. The results of the model fit shows that the proposed structural model is having a better model fit than a reversed model ($\chi^2 = 39.9$, $df = 15$, $p > 0.001$, $\chi^2/df = 2.66$; RMSEA = 0.042, Pclose = 1.00; SRMR = 0.051; NNFI = 0.923 $\geq$ 0.90; CFI = 0.934; GFI = 0.896).

The results of **Table 4** showed that there is a significant positive effect of LMX on the perceptions of the psychological empowerment of the employees (β = 0.504, critical ratio = 12.431). Hence, H1 was accepted. Results of the path analysis also showed that there is a significant positive impact of LMX on work engagement (β = 0.599, critical ratio = 15.387). Therefore, H2 was accepted. In addition to this, results of **Table 4** showed that the quality of LMX has a negative impact on the psychological withdrawal behavior of the employees (β = −0.628, critical ratio = −18.180), and H3 was accepted. The results of **Table 4** showed that psychological empowerment has a positive impact on the work engagement of the employees (β = 0.165, critical ratio = 4.242). Hence, H4 was accepted. The results of **Table 4** showed that there is a significant and negative relationship between psychological empowerment and psychological withdrawal behavior (β = −0.230, critical ratio = −6.658). Therefore, H5 was accepted. Last, the results of the structural model showed that work engagement has a negative impact on employees' psychological withdrawal behavior (β = −0.776, critical ratio = −39.050). Therefore, H6 was accepted.

In the present study, the bootstrapping technique with a bias-corrected confidence interval at 95% confidence level with resampling at 2,000 was used to examine the mediating role of psychological empowerment on the proposed relationships. This method states that the standardized indirect effect is considered statistically significant when bias-corrected confidence interval (lower bound and upper bound) does not contain zero (Shrout and Bolger, 2002; MacKinnon et al., 2007). The results of **Table 5** show that psychological empowerment mediates the relationship between LMX and work engagement. In addition to this, the results of the bootstrapping analysis revealed that

TABLE 4 | SEM standardized coefficients.

	Relationship	Std β	*t*-value	Decision
H1	Leader-member exchange → Psychological empowerment	0.504	12.431***	Accepted
H2	Leader-member exchange → Work engagement	0.599	15.387***	Accepted
H3	Leader-member exchange → Psychological withdrawal behavior	−0.628	−18.180***	Accepted
H4	Psychological empowerment → Work engagement	0.165	4.242***	Accepted
H5	Psychological empowerment → Psychological withdrawal behavior	−0.230	−6.658***	Accepted
H6	Work engagement → Psychological withdrawal behavior	−0.776	−39.050***	Accepted

***$p < 0.01$.

TABLE 5 | SEM bootstrapping confidence intervals (95% CI, 2,000 resamples).

	Relationship	Direct effect	*p*-value	Indirect effect	*p*-value	Mediation
H7	Leader-member exchange → Psychological empowerment → work engagement	0.599	0.001	0.083	0.002	Partial
H8	Leader-member exchange → Psychological empowerment → Psychological withdrawal behavior	-0.628	0.001	-0.116	0.002	Partial

Source: Author's Compilation.

psychological empowerment mediates the relationship between LMX and psychological withdrawal behavior. Therefore, in order to have a harmonious relationship in the working environment, employers should focus on activities that enhance the feeling of psychological empowerment among the employees.

DISCUSSION

Results of the study manifested that LMX positively impacts psychological empowerment such that employees with high dyadic relationships perceive a high level of psychological empowerment, whereas employees with low dyadic relationships perceive a low level of psychological empowerment. It means that employees who perceive that they have a high-quality relationship with their leader/manager perceive high levels of competence, impact, self-determination, and meaning (Liden et al., 2000; Gomez and Rosen, 2001; Aryee and Chen, 2006; Laschinger et al., 2007; Harris et al., 2009; Zhong et al., 2011; Hill et al., 2014; Schermuly and Meyer, 2016). In addition to this, results showed that LMX affects work engagement positively. It means that in-group members showed a high level of work engagement as compared to out-group members. The finding of the present study is in line with prior research (Li et al., 2012; Burch and Guarana, 2014; Breevaart et al., 2015; Gutermann et al., 2017). Further, results showed that LMX affects the employees' withdrawal behavior in a negative manner such that for employees who are part of the in-group, their perceptions toward psychological withdrawal behavior are less as compared to out-group members. The cause for such type of relationship might be because employees with high dyadic relationships receive a high level of benefits, emotional support, and trust as compared to employees who are not part of the in-group (Dansereau et al., 1975; Dienesch and Liden, 1986). On the contrary, out-group members develop negative feelings toward their leaders. As their leader gives fewer benefits, they have less communication and show less amount of trust in out-group members (Schneider, 1987). Therefore, out-group members develop negative feelings toward their leaders. As the relationships between leader and out-group members are not congenial, therefore the members of the out-group will try to avoid this relationship either by reducing the interaction with the leader or by withdrawing from the job. Results of the path analysis showed that psychological empowerment positively impacts employees' work engagement, such that when an employee perceives the high level of psychological empowerment at the workplace, his/her engagement toward the work will be high. On the contrary, if an employee perceives a low level of psychological empowerment, in that case, the work engagement of the employee will be less. The results of the present study are in line with prior research which states a positive relationship between psychological empowerment and work engagement (Stander and Rothmann, 2010; De Villiers and Stander, 2011; Bhatnagar, 2012; Ugwu et al., 2014; Moura et al., 2015). Previous research found that employees were highly engaged when they perceive psychological safety and meaningfulness at their workplace (Kahn, 1990; Saks, 2008). Similarly, Cho et al. (2006) stated that an empowered employee mostly found meaning at the workplace and at the same time he/she is highly motivated. Further, this motivation at the workplace helps the empowered employee to achieve organizational effectiveness by working at his/her goals which are related to the job (Kanter, 1979). On the contrary, when an employee does not feel empowered at the workplace, then it results in a low level of commitment, less employee engagement, intrinsic motivation, job satisfaction, high level of turnover intentions, withdrawal behavior, and burnout (Cho et al., 2006; De Villiers and Stander, 2011; Bhatnagar, 2012; Lee, 2015; Moura et al., 2015; Wang and Liu, 2015; Aggarwal et al., 2018a). Zhang and Bartol (2010) suggested that empowering leadership in the workplace will result in a creative, intrinsic, motivated, and engaged employee. Therefore, an employer should focus on empowering the employees at the workplace as it has various positive and negative consequences that affect both employee and organizational performance. The result of the path analysis showed that there is a negative relationship between psychological empowerment and employees' psychological withdrawal behavior, such that employees with high perceptions of psychological empowerment at the workplace will have fewer chances of withdrawal behavior as compared to employees who perceive a low level of psychological empowerment. The finding of the present study is in line with previous empirical work (Shapira-Lishchinsky and Rosenblatt, 2010; Shapira-Lishchinsky and Tsemach, 2014). Seibert et al. (2011) found that high perceptions of psychological empowerment have a negative impact on the turnover intention of the employees. Erdogan and Bauer (2009) conducted a study on 244 sales associates working in 25 Turkish retail stores. The results of the study showed that psychological empowerment was negatively associated with voluntary turnover and intention to leave. A similar type of result was replicated in Fook et al. (2011) study, which showed a negative association between psychological empowerment and employees' withdrawal intentions. Negative attitudes toward work such as intention to leave, spending work time on personal matters, intentionally reducing the work efforts, voluntary absenteeism, and lateness are all subdimensions of psychological withdrawal behavior

(Koslowsky, 2009; Shapira-Lishchinsky and Rosenblatt, 2010; Biron and Bamberger, 2012; Erdemli, 2015). Therefore, it is important to study those factors that affect psychological withdrawal behavior so that corrective actions could be taken.

IMPLICATIONS

The present study contributes extensively to the area of psychological withdrawal behavior as the authors were not able to find a single study that examines all the four variables (LMX, psychological empowerment, work engagement, and psychological withdrawal behavior) in one study that too in research and development context. Results of the present study postulated that the relationship between subordinates and supervisor plays a vital role in affecting organizational and individual-level outcomes such as perceived organizational support (Kath et al., 2010), organizational citizenship behavior (Kim et al., 2010; Sun et al., 2013; Aggarwal and Singh, 2016; Singh et al., 2020), organizational commitment (Lo et al., 2010; Le Blanc and González-Romá, 2012; Saeed et al., 2014), psychological empowerment (Aryee and Chen, 2006; Laschinger et al., 2007; Hill et al., 2014; Schermuly and Meyer, 2016), job satisfaction (Loi et al., 2014; Li et al., 2018), work engagement (Li et al., 2012; Runhaar et al., 2013; Breevaart et al., 2015), and turnover intentions (Harris et al., 2014; Li et al., 2018). According to the LMX theory, relationships are built over time through positive exchanges that produce loyalty, mutual respect, and high performance (Graen and Uhl-Bien, 1995; Liden et al., 2006). Therefore, leaders must pay the utmost attention to maintain a harmonious relationship with their employees. However, in this present competitive business environment where supervisors have generally large spans of control, it becomes difficult for the supervisors to have a harmonious and high-quality relationship with each and every member. This results in a jeopardized situation for a manager, where he/she has fewer opportunities to interact with his/her subordinates and fewer chances of reciprocating to the efforts of a subordinate. Therefore, the results of the present study can help a manager in reducing the negative feelings among employees and enhance the positive feelings related to work and organization. The results of the present study are consistent with the past studies which state a positive relationship between high-dyadic relationships and psychological empowerment (Brunetto et al., 2012; Schermuly and Meyer, 2016; Srivastava and Dhar, 2016). When an employee feels highly empowered in terms of meaning at his/her workplace, then the employee feels more confident in his/her capabilities and try to achieve the self-actualization level (Gerstner and Day, 1997; Gomez and Rosen, 2001). In a high-quality LMX relationship, generally, there is a sense of mutual trust and respect among leaders and members. The leader in return enhances the empowering working conditions for them such as giving scare resources, flexibility in decision making, etc. This suggests that a positive working relationship is necessary to optimize the value of these empowering strategies for managers. This high dyadic and empowering situation at the workplace further results in high work engagement and low psychological withdrawal behavior. The present study also contributes to the existing literature as this study examines the work engagement and psychological empowerment as a multilevel framework and how the quality of a dyadic relationship affects these two dependent variables. Further, the results of the present study revealed that psychological empowerment mediates the relationship between LMX and work engagement. It means that the type of leadership style experienced by an empowered subordinate will lead to more control at the workplace and enhance his/her intrinsic motivation, which further resulted in a high level of engagement by the subordinate. As an intrinsic source of motivation, the experience of empowerment enhances levels of job satisfaction and work engagement and reduces psychological withdrawal behavior. In addition to this, the results of the present study showed that psychological empowerment mediates the relationship between LMX and psychological withdrawal behavior. It means that when an employee has a high-quality relationship with his/her supervisor and he/she feels empowered at the workplace, then the intensity of psychological withdrawal behavior will be less. Therefore, a manager must pay utmost attention to developing high-quality relationships with most of the employees, and the policies of the management must be in such a way that they empower the employees. As India is a society with both individualistic and collectivistic traits, therefore, the findings of the present study can be generalized to other countries.

LIMITATIONS

Although the current study has given valuable information pertaining to the variables under consideration, still, there are some limitations of this study, and we need to take care of these limitations while generalizing the results of the current study. The first limitation is related to the way of collecting the data. As in the current study, the data were collected through the self-reported method. Therefore, there might be an issue of CMB. In order to handle this limitation, we have collected the data in two phases. At the first point of time, we collected the data for the independent variables, and at the second point of time, we collected the data for the mediator and dependent variables. Apart from this, the CMB is not a major concern in those studies which make use of well-designed multi-factor statements (Spector, 1987). Although researchers tried their best to minimize the effect of CMB, each remedy has its own disadvantages (Podsakoff et al., 2003). The second limitation is related to the use of a quantitative method of analyzing the data. Future researchers could use both quantitative and qualitative analyses to get more insight into the current topic. Third, there might be some other important variables (mediator/independent variables) that would have affected the psychological withdrawal behavior. Future researchers could expand the current model by taking more variables under study. Fourth, the current study has taken psychological empowerment and work engagement in the second order. In prior literature, the majority of the researchers have taken these variables in the second order. The future

researchers could take these variables as a multidimensional construct in order to have a deeper understanding of the relationship. As the results of the present research are based on the responses given by respondents through the self-reported method, there might be a chance that they might have given socially acceptable answers. Therefore, this raises a concern for the validity of the questionnaire used in the present research (Bennett and Robinson, 2000). Further, the present research was conducted at one point in time. Therefore, in order to have more concrete results, a longitudinal study is required especially in terms of LMX as it is dynamic in nature. In addition to this, the current research has used a shorter version of LMX, although well established in prior literature, this might lead to biases in the results at large. Future researchers could use a fuller version of the variables used in the present research.

CONCLUSION

This study tried to explore the psychological withdrawal behavior model in R&D employees and pinpoints the importance of the behavioral and organizational factors affecting the behavior of the employees working in public and private sectors. The findings of the current study proposed that the organizations must reconsider and revise their existing policies related to employees in such a way that they empower the employees and give a fair chance to develop a good interpersonal relationship not only with peer groups but also with their immediate supervisor as the quality of the relationship with the supervisor has severe consequences at the individual and organizational levels. Finally, the current study uses a rigorous methodology in collecting the data and used SEM to analyze the data. Therefore, the results of the present study are accurate and reliable, which can be further generalized to a large extent.

DATA AVAILABILITY STATEMENT

The datasets for this article are not publicly available because the data is still being used for additional research. Requests to access the datasets should be directed to the corresponding author.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

AUTHOR CONTRIBUTIONS

AA has conceptualized the topic, written the Research Methodology section, done the formal data analysis, and interpretation part of the data analysis section. PC has written the theoretical framework and hypotheses development of the manuscript. DJ has written the Introduction section. AM has written the Implications, Limitations, and Conclusion sections.

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Different Workplace Currencies and Employee Voice: From the Multidimensional Approach of Leader–Member Exchange

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Building upon social exchange theory and the current voice research, we posit that employee workplace "currencies of exchange" with the leader (i.e., social currency and work-related currency) are key predictors of employee promotive and prohibitive voice. Furthermore, we distinguish between the different roles of social currency and work-related currency in predicting promotive and prohibitive voice, respectively. More importantly, this study further explores the moderating effects of two important individual characteristics, psychological safety and power distance orientation, on the relationships between currencies and voice. We randomly sampled 598 Chinese employees via an online survey platform to test our hypotheses. Our results show that both social currency and work-related currency are determinants of promotive voice and prohibitive voice. Moreover, the boundary conditions for the two kinds of currencies are different. Specifically, employee psychological safety strengthens the influence of social currency on both types of employee voice, while employee power distance orientation could only amplify the relationship between work-related currency and promotive voice. Our research provides important implications for both theory and practice. Limitations and future directions are also discussed.

Keywords: leader–member exchange, social currency, work-related currency, promotive voice, prohibitive voice

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INTRODUCTION

Great changes have taken place in the business world during recent years. In order to survive in the progressively competitive environment, organizations have to be increasingly adaptive to changes. This requires proactive behaviors and contributions from every employee in the organization (Fuller et al., 2006). To this point, Morrison (2011) summarized the importance of voice and noted that the extent to which employees are willing to express their concerns and offer their suggestions about key issues can have a critical impact on operating performance and organizational survival. In view of the increasingly uncertain and complex business environment in recent years, voice has drawn numerous scholarly attention (e.g., Burris et al., 2013; Bashshur and Oc, 2015; Hilverda et al., 2018; Qian et al., 2018; Gao and Jiang, 2019).

Voice emphasizes the expression of constructive challenge for the benefit of organizations (Van Dyne and LePine, 1998). Employees communicate ideas and opinions about work-related issues.

They make suggestions that are intended to improve organizational performance (Van Dyne et al., 2003; Morrison, 2011). Because of differences in the contents, Liang et al. (2012) proposed that there are two types of voice: promotive voice and prohibitive voice. Promotive voice refers to the expressions of new ideas and suggestions to improve efficiency (Liang et al., 2012, p. 71). Prohibitive voice is mainly related to the communication about existing problems which are harmful to the organization (Liang et al., 2012, p. 72). While this conceptual approach emphasizes different facets of voice, scholars suggest that research in this vein should continue to explore the antecedents of promotive voice and prohibitive voice in a more fine-grained manner (Liang et al., 2012; Morrison, 2014).

Furthermore, most existing studies focus on the different dispositional predictors of the two different types of voice (Lin and Johnson, 2015; Kakkar et al., 2016; Chamberlin et al., 2017; Huang et al., 2018). However, voice is one behavior that is sensitive to situational factors which tie closely with social interactions across different contexts (Kakkar et al., 2016). Individuals develop different patterns of interactions with others at the workplace (Ferris et al., 2009; LePine et al., 2012). Their relationships with the leaders can have a critical impact on voice behavior because the leader is one of the most important channels of speaking up (Withey and Cooper, 1989; Detert and Burris, 2007). Therefore, we draw from social exchange theory and aim to offer more explanation as to how and when individuals engage in promotive and prohibitive voice. Specifically, we focus on the different roles of employees' social and work relationship with leaders in predicting the different kinds of voice behavior.

In light of the development in the leader–member exchange (LMX) literature (Dienesch and Liden, 1986; Graen and Uhl-Bien, 1995), it is worth noting that scholars started to explore the predictors of voice through the lens of LMX (e.g., Bhal and Ansari, 2007; Burris et al., 2008; Van Dyne et al., 2008; Botero and Van Dyne, 2009). Most prior studies suggest that better-quality relationships, in general, promote voice (e.g., Botero and Van Dyne, 2009; Morrison, 2011). This is because employees feel more comfortable to offer suggestions when they have good relationships with the leader (Stamper et al., 2009). As this research progresses, however, scholars started to challenge the notion that subordinates are always more willing to speak up when a high LMX is in place (Burris, 2012; Bernerth et al., 2016). In their recent review, Carnevale et al. (2017) noted that the underlying mechanism between LMX and voice is more complex. In fact, some have reported a curvilinear relationship between LMX and voice (Carnevale et al., 2019), and some even argued that a good relationship with the leader may hinder a subordinate's desire to tell the truth in order to maintain a harmonious relationship with the leader (Morrison and Milliken, 2000; Milliken et al., 2003; Burris, 2012). In spite of these mixed findings in existing research, viewing LMX as a unidimensional construct does not allow us to explore the roles of distinct contents of exchange in explaining different kinds of employee voice behavior. In other words, little is known about the different effects of various aspects of exchange on promotive voice vs. prohibitive voice.

In order to uncover the complex relationship between LMX and voice, we adopt the multidimensional approach of LMX (Liden and Maslyn, 1998; Maslyn and Uhl-Bien, 2001). Specifically, Liden and Maslyn (1998) proposed that LMX development involves different "currencies of exchange" – affect, loyalty, professional respect, and contribution – and they developed the multidimensional measure of LMX (labeled LMX-MDM). By using these dimensions, Maslyn and Uhl-Bien (2001) further proposed that affect, loyalty, and professional respect can be categorized as social currencies, while contribution refers to work-related currency. These two kinds of currencies are related to different aspects of exchange relationships. Whereas work-related currency stands for the interactions on job-related issues, social currency denotes non-job-related interactions (Bhal and Ansari, 2007). Not only do social and work-related currencies represent different dimensions of LMX; they may also lead to different behaviors and outcomes (Bhal and Ansari, 2007). Integrating research on dimensionality of LMX and voice can therefore allow us to further unpack the distinct influences of different kinds of interactions embedded in LMX on employee promotive and prohibitive voice.

Furthermore, we aim to further contribute to this research by exploring the boundary conditions of social currency and work-related currency in predicting promotive and prohibitive voice, respectively. We focus on two important individual characteristics: psychological safety and power distance orientation, and we examine the extent to which these individual factors may affect employee voice behavior in conjunction with relational predictors. This is because the extent to which individuals are willing to share their opinions or express their concerns about existing issues is contingent upon their perceived risks of being punished or misunderstood (Detert and Burris, 2007; Liang et al., 2012) and their sensitivity to changes in the *status quo* and leader behavior (Eylon and Au, 1999; Daniels and Greguras, 2014). The exploration of these moderators can help us better understand the interactive effects of both relational factors and individual factors on voice.

In summary, we hope to advance the understanding of how and when employees engage in promotive and prohibitive voice by taking the multidimensional LMX perspective and exploring the influences of social and work-related currencies on the two kinds of voice. We also posit that the effects of social and work-related currencies on promotive and prohibitive voice are contingent upon the consideration of psychological safety and power distance orientation. In doing so, we contribute to both LMX literature and voice research by shedding new light on the underlying mechanisms regarding how various aspects of employees' relationships with leaders affect their voice behavior in separate ways while taking into account their dispositional characteristics. To address these issues, we conducted an online survey and randomly sampled 598 Chinese employees from a registered participant pool. **Figure 1** depicts our theoretical framework.

This paper is organized as follows. First, we review the literature on promotive and prohibitive voice and develop theoretical arguments that predict these two kinds of voice through the multidimensional LMX perspective. Second, we

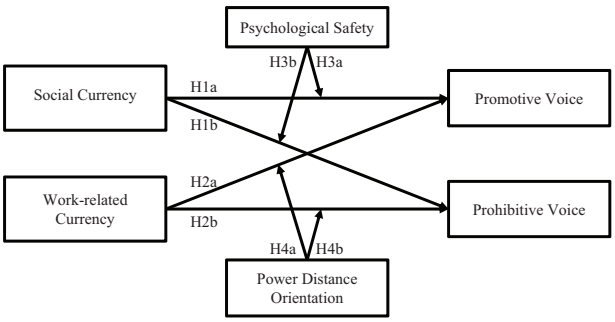

FIGURE 1 | The theoretical model of our research.

develop hypotheses regarding how psychological safety and power distance orientation moderate these relationships. Next, we describe our research design and empirical results. We then discuss the theoretical contributions and practical implications of this study. Limitations and promising future research directions are also addressed.

THEORY AND HYPOTHESES

Voice as Both Promotive and Prohibitive

Voice is the "discretionary communication of ideas, suggestions, concerns, or opinions about work-related issues with the intent to improve organizational or unit functioning" (Morrison, 2011, p. 375). However, studies have also considered the possibility that voice can simultaneously be a self-serving behavior that helps employees promote a positive self-image in front of others (Burris, 2012; Klaas et al., 2012; Morrison, 2014; Weiss and Morrison, 2019). Despite these different motives, voice has mostly been viewed as favorable to the workplace at different levels. At the firm level, voice can lead to an improved decision-making process (Morrison and Milliken, 2000) and better organizational performance (Gittell et al., 2004; Bryson et al., 2013). At the team level, voice is positively related to team innovation (Dreu, 2002) and performance (Dooley and Fryxell, 1999). At the individual level, research shows that voice can lead to higher affective commitment (Thomas et al., 2010), better physical and mental health (Cortina and Magley, 2003; Morrison, 2011), and lower voluntary turnover (Spencer, 1986). Given the benefits of voice at different levels, scholars have devoted numerous attention in exploring the various factors that promote employee voice behavior (e.g., Chamberlin et al., 2017; Hilverda et al., 2018; Qian et al., 2018; Gao and Jiang, 2019). Within this research, one stream focuses on individual characteristics such as dispositional factors and attitudinal factors in predicting voice (e.g., Janssen et al., 1998; LePine and Van Dyne, 1998, 2001; Nikolaou et al., 2008). Meanwhile, another stream examines the impact of situational factors on employee voice behavior. As Dutton et al. (2002) suggested, employees search for cues from their surroundings in making a decision whether to speak up or to stay silent. Specifically, research has explored factors such as organizational structure (Glauser, 1984), culture (Dutton et al., 1997, 2002), team size (LePine and Van Dyne, 1998; Islam and Zyphur, 2005), and team climate (Zhou and George, 2001) as social cues that could influence employee voice behavior.

In another vein, Liang et al. (2012) offered a more fine-grained content-based perspective for exploring voice behavior. Following their categorization, recent work has shown that promotive and prohibitive voice have different antecedents. For example, Kakkar et al. (2016) examined the relationship between different dispositional factors – approach orientation and avoidance orientation – and the two kinds of voice. They found that approach orientation and avoidance orientation affect promotive voice and prohibitive voice in opposite ways. In addition, Chamberlin et al. (2017) explored various factors that would influence promotive and prohibitive voice. They showed that factors such as core self-evaluation, felt responsibility, organizational commitment, psychological safety, ethical leadership, and leader openness are more strongly related to promotive voice, while detachment, behavioral inhibition, and performance-avoidance goal orientation are more associated with prohibitive voice. These studies, however, mostly focused on the different dispositional factors in explaining promotive and prohibitive voice. There have been few studies that examined how relational factors may lead to promotive and prohibitive voice in different ways. This is glaring because employees are likely to engage in different kinds of voice behavior across different contexts of social interactions. In this study, we explore the role of these different predictors of promotive and prohibitive voice by drawing from the multidimensional perspective within the LMX literature.

Currencies of Exchange and Voice

Leader–member exchange theory (Graen and Uhl-Bien, 1995) holds that leaders develop unique relationships with each of their subordinates. Due to time constraints, leaders selectively develop close relationships with a few subordinates (Dienesch and Liden, 1986). With the other subordinates, leaders rely more on formal rules and authority. In another words, there are two types of LMX: the "in-group" and the "out-group" exchange. In essence, the in-group subordinates have more opportunities to interact with their leaders. They receive more trust, support, and rewards. The out-group members have fewer chances to interact with leaders, and they receive less support and rewards (Dienesch and Liden, 1986). As a result, some employees will be less willing to spend time on extra-role behaviors than others (Liden and Graen, 1980).

The LMX literature is grounded within social exchange theory (Gouldner, 1960; Blau, 1964), which states that people exchange numerous materials such as information and advice as they develop friendship with colleagues at the workplace (Krackhardt, 1990; Brass and Burkhardt, 1992; Sparrowe and Liden, 1997). On the basis of this social exchange, scholars argue that LMX is multidimensional such that the contents of exchange between leaders and members vary along different dimensions (Dienesch and Liden, 1986; Liden and Maslyn, 1998). Specifically, Liden and Maslyn (1998) proposed that LMX development involves different currencies of exchange – affect, loyalty, professional respect, and contribution – and they developed LMX-MDM.

Building on these dimensions, Maslyn and Uhl-Bien (2001) further proposed that affect, loyalty, and professional respect can be seen as social currencies, while contribution denotes work-related currency.

Although both social and work-related currencies are important to the development of LMX, they may exert different impacts on individual behaviors and dyadic outcomes because the different types of exchange are likely to influence an employee's behavior in distinct ways (Dienesch and Liden, 1986; Maslyn and Uhl-Bien, 2001). This notion is aligned with the theoretical underpinning of the LMX research that delineates the importance of the situational context in which individuals interact (Biddle, 1986; Johns, 2006; Yu et al., 2018) and the nature of these interactions in affecting individuals' behaviors (Graen and Uhl-Bien, 1995; Erdogan and Liden, 2002). However, the body of research that examines the impact of LMX on voice has mostly viewed LMX as the overall quality of the relationship between leader and subordinates (e.g., Van Dyne et al., 2008; Botero and Van Dyne, 2009; Morrison, 2011; Liu et al., 2013). Few studies have examined the differential impacts of the different kinds of exchange relationships on voice. This makes it more difficult to ascertain the roles of social currency as opposed to work-related currency in predicting promotive voice, and prohibitive voice, or vice versa. In order to address this gap, we build on the multidimensional perspective within the LMX literature and theorize the mechanisms through which the two kinds of voice are influenced by social currency and work-related currency.

Social Currency and Voice

From the multidimensional perspective of LMX, social currencies refer to the social components of the exchange relationship between the leader and the employee. In general, more social currencies indicate a better-quality social relationship with the leader. Social currencies include three dimensions of LMX – affect, loyalty, and professional respect (Maslyn and Uhl-Bien, 2001). In spite of the different underlying mechanisms, we posit that social currencies are positively related to both promotive voice and prohibitive voice.

In terms of promotive voice, employees who have accumulated more social currencies with their leaders are more likely to make extra efforts in searching for ways that could improve existing practices and help the organization. To this point, scholars noted that employees are more likely to engage in prosocial behaviors when they have better-quality social relationships with their bosses (Stamper et al., 2009). This can be explained by the positive associations with voice among the three dimensions of social currencies. Stated differently, we argue that social currencies in the form of affect, loyalty, and professional respect are positively related to promotive voice.

First, the affective dimension of LMX stands for friendship and liking that the dyadic members feel toward each other (Liden and Maslyn, 1998; Maslyn and Uhl-Bien, 2001). Voice behavior can be seen as an affective response to the mutual relationship with the leader such that employees are more willing to spend time and effort to search for new ideas that could benefit the leader and the organization (Spector and Fox, 2002; Ilies et al., 2006). Similarly, the loyalty aspect of LMX can also encourage employees to find ways that could improve the overall functioning of their work unit in order to better support their leader (Maslyn and Uhl-Bien, 2001). Third, professional respect describes the perception of professional capabilities between the dyads (Liden and Maslyn, 1998; Maslyn and Uhl-Bien, 2001). A higher level of professional respect, in turn, holds the employee to a higher standard in order to maintain such a high level of respect. It demands that such an employee continuously put in extra effort to keep finding better ideas or solutions than other colleagues. Taking these together, we posit that:

H1a: Social currency is positively related to employee promotive voice.

In terms of prohibitive voice, we argue that employees with more social currencies, in spite of the different manifestations along the three dimensions, are more likely to express concerns about harmful issues. Engaging in prohibitive voice behavior typically involves more personal risks than does promotive voice. This is because expressing concerns about existing problems or harmful practices would indicate dysfunction or deficiencies of current leadership (Liang et al., 2012). The perception of risks and the fear of facing negative social consequences generally hinder employees' willingness to engage in prohibitive voice. Nonetheless, social currencies, in the form of affect, loyalty, and professional respect, can help relieve this sense of personal risks and thus promote prohibitive voice.

Specifically, employees with affective leader–member relationships usually have more chances to communicate with leaders in non-work settings (Law et al., 2000). With these additional opportunities to communicate with their leaders, employees learn to better understand the preferences and intentions of their leaders. As such, their perception of potential risks and fear of being misunderstood from engaging in prohibitive voice can be reduced.

Loyalty reflects the extent to which members and leaders publicly support and defend each other's actions and character (Dienesch and Liden, 1986; Liden and Maslyn, 1998). An employee who possesses a higher level of loyalty toward his or her supervisor generally feels safer, compared to those who do not, taking on risky endeavors such as voicing concerns or pointing out key issues. As a result, this perception of absence of negative consequences can motivate employees to engage in prohibitive voice (Liang et al., 2012).

In addition, we further contend that professional respect can also lead to a reduced sense of personal risks or fear about negative consequences associated with expressing concerns. Professional respect arises when each member of the leader–follower dyad has developed a reputation about his or her capabilities and professionalism (Liden and Maslyn, 1998). This, in turn, makes the employee more comfortable with expressing concerns, as he or she believes that the leader can understand and respect his or her behavior. Taking these together, we posit that:

H1b: Social currency is positively related to employee prohibitive voice.

Work-Related Currency and Voice

Work-related currency refers to the contribution dimension of LMX. In particular, contribution is reflected in the perception between dyadic members regarding the extent to which the other party completes the tasks within and beyond the job description (Liden and Maslyn, 1998). Such a perception is developed as the dyadic members perform work-related activities and grows over time as the exchange relationship evolves. Whereas social currency emphasizes the interpersonal aspect of the exchange relationship, the core premise of work currency is the completion of task-oriented activities (Liden and Maslyn, 1998). Voice behavior, in the form of expression of new ideas and creative solutions, can be seen as the result of the growing exchange relationship around assignment and completion of different tasks. This is because both parties of the exchange relationship with a high level of work-related currency put forth more energy and resources in order to accomplish mutual goals at work. As a result, they are more prone to embrace new ideas or solutions that could benefit the organization.

Furthermore, an exchange relationship with the leader can influence regulatory foci of the employees (Brockner and Higgins, 2001). Specifically, employees with more work-related currencies will be more promotive focused since both the leaders and the followers can benefit from the development of the work unit. In turn, they pay more attention to the positive things at work and remain open to changes (Kark and Van Dijk, 2007). These promotive-focused employees are therefore more likely to offer additional insights or new ideas that could lead to further improvement of the work unit or the organization. In fact, research has shown a positive link between employees' promotion focus and their promotive voice behavior (Lin and Johnson, 2015).

In addition, promotive voice behavior can be seen as a way through which an employee tries to obtain or maintain a strong impression among peers by making a greater contribution at work. Research on impression management has noted that individuals are likely to engage in certain behaviors in order to better manage others' impressions of themselves (Wayne and Liden, 1995). On the one hand, making more contributions at work by offering creative ideas or innovative solutions can lead to an improved impression among peers. Motivated by their desire to obtain a strong impression, employees are more likely to engage in promotive voice. On the other hand, an employee with more work-related currencies can be held to a higher standard, as he or she is expected to make continuous contributions at work. This requires the employee to keep finding new ideas and better solutions in order to maintain his or her colleagues' impression of him or her. Synthesizing extant theorizing, we argue that work-related currency manifested in the contribution dimension of LMX is positively related to voice. Thus, we propose:

H2a: Work-related currency is positively related to employee promotive voice.

We theorized earlier that more work-related currency can make employees more willing to spend time and energy on finding ways to improve their workplace. Therefore, a higher level of work-related currency can lead to more promotive voice, such as making suggestions or introducing new ideas. However, having more work-related currency between the dyads will lead to less prohibitive voice. In other words, we argue that a higher level of work-related currency is negatively related to prohibitive voice of employees.

Specifically, a high level of work-related currency denotes recognition for one's work that has been accepted by his or her leaders and peers (Maslyn and Uhl-Bien, 2001). On the basis of prior accomplishments, such an employee has developed an impression that he or she is capable of making a substantial contribution to the workplace. Engaging in prohibitive voice, however, can potentially distort this strong impression that he or she has managed to obtain. This is because expression of concerns about current practices can indicate inadequacy of work that an employee was part of, such that it undermines his or her prior contribution. Nevertheless, a high level of work-related currency demands that an employee make contributions on a continuous basis. Thus, an employee with a high level of work-related currency may try to avoid things that can create conflicting signals in order to maintain his or her impression among others.

Furthermore, engaging in prohibitive voice typically incurs a high level of personal risks. Specifically, pointing out existing problems may indicate incompetency of current leadership or confront powerful others at work who are more comfortable with the *status quo* (Liang et al., 2012). As such, challenging existing practices can lead to a higher level of difficulty in making a future contribution to the workplace. Employees with more work-related currencies are likely to be more concerned about these additional obstacles, which can incur a greater level of stress. Taking these together, we posit that work-related currency manifested in the contribution dimension of LMX is negatively related to prohibitive voice.

H2b: Work-related currency is negatively related to employee prohibitive voice.

Moderating Role of Psychological Safety

Many employees would keep silent rather than speak up (Milliken et al., 2003). They are reluctant to express their concerns about problems of the organizations to their leaders. Social information processing theory (Salancik and Pfeffer, 1978) suggests that employees' attitudes and behaviors are influenced by contextual factors. Employees scan their workplace and develop a perception of their surrounding environment. Based on their perception, employees arrive at the decision whether to engage in certain behaviors such as voice. Voice behavior often entails risk, since offering constructive suggestions implies a challenge to the *status quo* (Liu et al., 2010). Such a behavior may damage the public image of the employee, may worsen interpersonal relationships (Dutton et al., 1997; Milliken et al., 2003), and can be subject to formal or informal sanctions (Pinder and Harlos, 2001). Thus, whether it is safe to voice would be the first consideration for an employee to speak up (Liang et al., 2012). Research has shown that psychological safety can promote expression of opinions among employees (Edmondson, 2003) and is positively related to voice behavior (Detert and Burris, 2007; Walumbwa and

Schaubroeck, 2009; Liang et al., 2012; Tangirala et al., 2013; Liu et al., 2017). In contrast, when an employee feels that expressing opinions can cause trouble, he or she will try to avoid expression of his or her true opinions and remain silent.

Psychological safety refers to "being able to show and employ one's self without fear of negative consequences of self-image, status or career" (Kahn, 1990, p. 708). The degree to which a subordinate feels psychologically safe is closely related to his or her quality of social relationships with the leader (Carmeli et al., 2009). Kahn (1990) proposes that better interpersonal relationships that offer support, trust, openness, and flexibility are typically associated with higher psychological safety. The mutual respect and interpersonal trust fostered by leaders would make employees have greater confidence in their relationships with leaders (Chen et al., 2019), which in turn increases the probability that the employees will speak up (Ajzen, 1991; Schaubroeck et al., 2011).

Nonetheless, social currencies include different contents, such as mutual liking, loyalty, and respect for the professional skills of supervisors. On the basis of the different constellations of social currencies, employees are willing to offer suggestions or to express concerns only when they feel safe speaking up. Thus, psychological safety serves as an important boundary condition in predicting voice. When good leader–member social relationships exist, higher psychological safety makes an employee feeling safer sharing opinions freely for the benefit of the organization. Such an employee will be less concerned about negative social consequences associated with his or her voice behavior. In other words, an employee with more social currency with the leader will be even more willing to speak up when a high level of psychological safety is in place. Conversely, an employee will be less willing to engage in voice behavior in spite of good social relationships with the leader if the employee feels psychologically unsafe speaking up. Stated differently, the positive influence of social currency on voice behavior will be weakened, since the employee may stay silent to keep harmony with the leader. In this vein, we hypothesize that employee psychological safety strengthens the relationship between social currency and promotive and prohibitive voice, respectively. Thus, we propose:

H3a: Employee psychological safety moderates the relationship between social currency and promotive voice, such that the relationship is stronger when employee psychological safety is high rather than low.

H3b: Employee psychological safety moderates the relationship between social currency and prohibitive voice, such that the relationship is stronger when employee psychological safety is high rather than low.

Moderating Role of Power Distance Orientation

Our earlier theorizing suggests that employees' work relationships with their leaders affect their voice behavior. We further propose that the impact of work relationship on voice is also influenced by cultural value–related differences held by different individuals. Studies have shown that an employee's perceptions and responses to leader behavior can be influenced by different cultures or values (Kirkman et al., 2009; Brown and Mitchell, 2010; Lian et al., 2012). In recent years, scholars have begun to place greater emphasis on cultural value differences at the individual level (e.g., Farh et al., 1997; Kirkman and Shapiro, 2001; Farh et al., 2007; for a review, see Taras et al., 2010). To this point, scholars noted that this individual focus on cultural value differences can better capture the individual variability of value orientations within a culture (Farh et al., 2007; Botero and Van Dyne, 2009).

Among individual values, power distance orientation is arguably the most important to exchange relationships at the workplace (Chen and Aryee, 2007; Kirkman et al., 2009), especially between leaders and subordinates (Lin et al., 2013, 2018). It is the most relevant to our research framework because power distance orientation may directly influence the development of subordinates' perception and their reaction to leaders through ongoing exchange (Kirkman et al., 2009; Hu et al., 2018). Furthermore, we focus on the role of power distance orientation in the relationship between work-related currency and voice because the influence of power distance largely unfolds in the work relationship between leaders and subordinates through their task-oriented interactions. In fact, Daniels and Greguras (2014) noted that high power distance is more task oriented. As we stated earlier, unlike how social currency captures the interpersonal aspect of the exchange relationship, work-related currency centers around assignment and completion of different tasks between leader and subordinates. Therefore, we propose that employee power distance orientation serves as an important moderator of the relationship between work-related currency and employee voice.

Power distance orientation can be defined as the extent to which an individual accepts the unequal distribution of power in an organization (Clugston et al., 2000; Farh et al., 2007). Employees with high power distance orientation tend to perceive that the existing of a power difference between the leader–employee dyad is legitimate (Kirkman et al., 2009). They are more sensitive to the changes in leader behavior and respond to the changes actively (Eylon and Au, 1999). As for employees with low power distance orientation, changes of leader behavior are less prioritized in guiding their behavior (Schaubroeck et al., 2007). Stated differently, employees with high power distance orientation defer more to the leader (Schaubroeck et al., 2007), and they are more prone to define their relationships with the leaders as work relationships.

In terms of voice behavior, the extent to which individuals are willing to share their opinions rests upon their attentiveness to changes in the *status quo* and the leaders' behaviors (Eylon and Au, 1999). When employees realize that they have high-quality work relationship with the leader, they will have stronger psychological reciprocity (Francis, 2012) due to greater respect for the leader (Schaubroeck et al., 2007) and try to find ways to make contributions at work. Thus, they are more motivated and more likely to offer new ideas or creative solutions that may lead to improvement of their workplace. In other words, we argue that a high-quality interaction between a leader and employees at work can lead to more promotive voice behavior.

As such, employee power distance orientation moderates the relationship between work-related currency and promotive voice such that the positive relationship between work-related currency and promotive voice is stronger when power distance orientation is high rather than low.

Furthermore, we posit that employee power distance orientation also moderates the relationship between work-related currency and prohibitive voice. We theorized earlier that a high-level work-related currency hinders an employee's willingness to engage in prohibitive voice due to a higher level of perceived risk and greater concern about impression management. We further contend that such a relationship is even more negative when power distance orientation is high rather low. Specifically, employees with high power distance orientation are more likely to accept the *status quo* and less willing to challenge with the authority (Schaubroeck et al., 2007). In other words, they are more likely to be concerned about their leaders' impression of them. Moreover, employees with higher power distance orientation typically have less demand for autonomy and prefer clear instruction at work (Alves et al., 2006). Engaging in prohibitive voice can cause a greater deal of stress for these employees. As a result, their willingness to engage in prohibitive voice, rather than following existing rules and authority, is further reduced by their high power distance orientation. Taking these together, we propose:

H4a: Employee power distance orientation moderates the relationship between work-related currency and promotive voice, such that the relationship is more positive when employee power distance orientation is high rather than low.

H4b: Employee power distance orientation moderates the relationship between work-related currency and prohibitive voice, such that the relationship is more negative when employee power distance orientation is high rather than low.

MATERIALS AND METHODS

Participants and Procedure

We recruited participants via wjx.cn, a reliable Chinese online platform for data collection similar to Qualtrics Online Sample, and randomly distributed questionnaire links in the participant pool. In order to meet our requirements, participants had to be currently employed. During the 1-week data collection window, 702 participants answered our survey. Voluntariness and confidentiality were guaranteed to every participant before filling in their responses. This randomized distributing and recruiting process enabled us to cover a relatively diverse sample of individuals from different sectors with different backgrounds. After excluding cases with missing data or invalid responses (e.g., too-short answering time or same answers for each item), we retained a final sample of 598 participants. The valid response rate is 85.2%. This study was carried out in accordance with the recommendations of the ethics committee of Tsinghua University with written informed consent from all subjects. All subjects gave written informed consent in accordance with the Declaration of Helsinki. The protocol was approved by the ethics committee of Tsinghua University. Each participant received a small reward after completing the survey.

Among all participants, 51.2% were females, and 95.1% received at least a vocational/junior college degree. As for age, 11.5% were between 21 and 25 years old, 38.6% were between 26 and 30 years old, 27.3% were between 31 and 35 years old, 10.7% were between 36 and 40 years old, and 8.4% were between 41 and 45 years old. In terms of organizational tenure, 25.4% of participants had been working in the same company for 2–3 years, 22.2% were tenured between 4 and 5 years, and 17.6% had a tenure between 6 and 7 years.

Measures

All survey items were in Chinese. In order to ensure accuracy, we followed Brislin's (1986) recommendation of translation and back-translation procedures. Survey items were then finalized.

Currencies

Maslyn and Uhl-Bien (2001) proposed that the three dimensions of affect, loyalty, and professional respect in LMX are "social currencies" that focus on social exchange between leader and member, whereas the contribution dimension in LMX denotes "work-related currency" (Bhal and Ansari, 1996; Liden and Maslyn, 1998). We adopted LMX-MDM (Liden and Maslyn, 1998) for these two kinds of currencies.

Specifically, employees assessed their social currencies with nine items developed by Liden and Maslyn (1998). Sample items included "My supervisor is the kind of person one would like to have as a friend" [affect, 1 = *strongly disagree* to 7 = *strongly agree*; Cronbach's alpha (α) = 0.87]; "My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question" (loyalty, 1 = *strongly disagree* to 7 = *strongly agree*; α = 0.78); and "I respect my supervisor's knowledge of and competence on the job" (professional respect, 1 = *strongly disagree* to 7 = *strongly agree*; α = 0.88). Cronbach's alpha for this construct was 0.91.

Employees assessed their work-related currencies with two items representing the dimension of contribution in the LMX scale (Liden and Maslyn, 1998). Sample items included "I am willing to apply extra efforts, beyond those normally required, to further the interests of my work group" (1 = *strongly disagree* to 7 = *strongly agree*; α = 0.80).

Psychological Safety

Employees rated their psychological safety with a four-item measure adopted from Liang et al. (2012) developed within the context of China. A sample item included "I can express my true feelings regarding my job" (1 = *strongly disagree* to 7 = *strongly agree*; α = 0.80).

Power Distance Orientation

Employees rated their own individual power distance orientation with a six-item measure developed by Dorfman and Howell (1988). A sample item included "In most situations, managers should make decisions without consulting their subordinates" (1 = *strongly disagree* to 7 = *strongly agree*; α = 0.82).

Voice Behavior

Employee voice was self-rated with the 10-item scale developed by Liang et al. (2012), which contains two subscales of promotive voice and prohibitive voice (five items each). In terms of promotive voice, sample items included "The employee raises suggestions to improve the unit's working procedure" and "The employee makes constructive suggestions to improve the unit's operation" (1 = *very infrequent* to 7 = *very frequent*; $\alpha = 0.90$).

In terms of prohibitive voice, sample items included "The employee speaks up honestly with problems that might cause serious loss to the work unit, even when/though dissenting opinions exist" and "The employee dares to voice out opinions on things that might affect efficiency in the work unit, even if that would embarrass others" (1 = *very infrequent* to 7 = *very frequent*; $\alpha = 0.87$).

Control Variables

Several employees' demographic variables were included as control variables. We controlled for employees' gender (0 = *female*, 1 = *male*); age (1 = *under 20 years old*, 2 = *21–25 years old*, 3 = *26–30 years old,* 4 = *31–35 years old*, 5 = *36–40 years old*, 6 = *41–45 years old*, 7 = *above 46 years old*); education level (1 = *vocational school/technical secondary school*, 2 = *high school*, 3 = *vocational/junior college*, 4 = *undergraduate*, 5 = *graduate*); and organizational tenure (1 = *less than 1 year*, 2 = *2–3 years*, 3 = *4–5 years,* 4 = *6–7 years*, 5 = *8–9 years old*, 6 = *10 years or above*) because these demographic variables have been reported to affect individuals' perceptions of social interactions and their behavioral outcomes (e.g., Ng and Feldman, 2010).

RESULTS

Descriptive Statistics and Preliminary Analyses

Table 1 presents the descriptive statistics, including means, standard deviations, correlations, and reliabilities of variables in our models.

Overall, we conducted two-step procedure analyses with Mplus 7.4 testing both the measurement model and path analysis separately.

The Measurement Model and Common Method Variance

In order to ensure construct validity and address potential concern about common method bias, we first conducted confirmatory factor analyses of our constructs before testing our hypotheses. We included all items of the focal six variables. Values of χ^2/df lower than 5, values of comparative fit index (CFI) and Tucker-Lewis index (TLI) higher than 0.90, and values of the root-mean-square error of approximation (RMSEA) lower than 0.08 are regarded as an acceptable fit (Kline, 2010). **Table 2** shows that the six-factor model, as we hypothesized, has adequate fit ($\chi^2/df = 2.72$, *CFI* = 0.93, *TLI* = 0.93, *SRMR* = 0.05, *RMSEA* = 0.05). This model also indicates a significant improvement comparing to alternative models. Thus, the focal variables are empirically distinct.

Furthermore, we addressed the concern of possible common method bias associated with self-reported data by using Harman's one-factor test (Podsakoff and Organ, 1986). As shown in **Table 2**, the six-factor model as we hypothesized shows much a better fit than the one-factor model ($\chi^2/df = 11.90$, *CFI* = 0.72, *TLI* = 0.70, *SRMR* = 0.10, *RMSEA* = 0.14). Moreover, the explained variance of the first factor from explanatory factor analysis is 37.31%, lower than the bar of 50% (Hair et al., 1998). In addition, we conducted variance inflation factor (VIF) tests, and the values of our variables are all much lower than 10. Thus, multicollinearity is not an issue in our study.

We then conducted path analyses in Mplus 7.4 to test our hypotheses. The proposed model with all the control variables (i.e., gender, age, educational level, and tenure) had a reasonably good fit to the data ($\chi^2/df = 4.83$, *CFI* = 0.90, *TLI* = 0.91, *SRMR* = 0.06, *RMSEA* = 0.08). **Table 3** shows the results of path analysis of the hypothesized model.

Hypotheses 1a and 1b posit that social currency is positively related to employee promotive voice (H1a) and employee prohibitive voice (H1b). **Table 3** reports our results. It shows that after controlling for an employee's demographics, employee social currency positively related to both promotive voice [$\beta = 0.27$, standard error (*SE*) = 0.05, $p < 0.001$; Model 1] and prohibitive voice ($\beta = 0.24$, *SE* = 0.05, $p < 0.001$; Model 2). Thus, Hypothesis 1a and Hypothesis 1b are both supported.

Hypothesis 2a posits that work-related currency is positively related to employee promotive voice while Hypothesis 2b posits that work-related currency is negatively related to prohibitive voice. The results summarized in Model 1 in **Table 3** show that employee work-related currency is positively associated with promotive voice ($\beta = 0.10$, *SE* = 0.04, $p < 0.01$; Model 1). Thus, Hypothesis 2a is supported. Moreover, as shown in Model 2, the relationship between employee work-related currency and prohibitive voice is positively significant ($\beta = 0.11$, *SE* = 0.04, $p < 0.01$) and contrary to our hypothesis. Thus, Hypothesis 2b is not supported.

Hypotheses 3a and 3b predict that the positive relationships between social currency and voice are positively moderated by employee psychological safety such that the relationships become stronger when psychological safety is high rather than low. Following Cohen et al. (2003), we centered all continuous variables before creating their product terms. The results from path analysis show that the interaction term of social currency and psychological safety is positively related to employee promotive voice ($\beta = 0.06$, *SE* = 0.03, $p < 0.05$; Model 1). In order to further interpret the results, we followed Aiken and West's (1991) procedures to depict interactions (see **Figure 2**) and conducted a simple slopes analysis. We conducted hierarchical regression analyses using SPSS 24.0 to obtain the unstandardized outputs. The interaction plot in **Figure 2** shows that with low psychological safety (1 *s.d.* below the mean), social currency is significantly related to employee promotive voice (*simple slope* = 0.26, *SE* = 0.06, $p < 0.001$) and weaker, while with high psychological safety (1 *s.d.* above the mean), social currency is significantly related to employee promotive voice (*simple slope* = 0.44, *SE* = 0.09, $p < 0.001$) and stronger. Thus, Hypothesis 3a is supported.

TABLE 1 | Means, standard deviations, correlations, and reliabilities among studied variables.

Variables	Mean	*SD*	1	2	3	4	5	6	7	8	9	10
1. Gender	0.49	0.50	–									
2. Age	3.72	1.24	0.06	–								
3. Education level	3.82	0.67	−0.02	−0.19**	–							
4. Tenure	3.56	1.56	0.02	0.75**	−0.12**	–						
5. Social currency	4.91	1.04	0.00	−0.15**	0.23**	−0.13**	*0.91*					
6. Work-related currency	4.56	1.20	0.08	−0.06	0.02	−0.03	0.58**	*0.80*				
7. Psychological safety	4.89	1.06	0.06	−0.03	0.22**	−0.07	0.68**	0.42**	*0.80*			
8. Power distance orientation	3.75	1.11	0.12**	−0.10*	0.00	−0.17**	0.09*	0.15**	0.22**	*0.82*		
9. Promotive voice	4.56	1.16	0.06	−0.05	0.22**	−0.04	0.61**	0.44**	0.65**	0.24**	*0.90*	
10. Prohibitive voice	4.32	1.17	0.01	−0.05	0.13**	−0.04	0.55**	0.42**	0.56**	0.30**	0.71**	*0.87*

*N = 598. Cronbach's alphas are presented on the diagonal in italics. SD, standard deviation. Gender: 0 = female; 1 = male. Education: 1 = vocational school, technical secondary school; 2 = high school; 3 = vocational/junior college; 4 = undergraduate; 5 = graduate. Age: 1 = under 20 years old; 2 = 21–25 years old; 3 = 26–30 years old; 4 = 31–35 years old; 5 = 36–40 years old; 6 = 41–45 years old; 7 = above 46 years old. Organizational tenure: 1 = less than 1 year; 2 = 2–3 years; 3 = 4–5 years; 4 = 6–7 years; 5 = 8–9 years old; 6 = 10 years or above. *$p < 0.05$, **$p < 0.01$.*

TABLE 2 | Model fit results for confirmatory factor analyses.

Models	χ^2	$\Delta\chi^2$	χ^2/df	SRMR	TLI	CFI	RMSEA
SIX-FACTOR MODEL							
The hypothesized model	1,130.93	–	2.72	0.05	0.93	0.93	0.05
FIVE-FACTOR MODEL							
Combing social currency and work-related currency	1,312.41	181.48	3.12	0.05	0.91	0.92	0.06
Combing social currency and psychological safety	1,462.85	331.92	3.47	0.06	0.90	0.91	0.06
Combing promotive voice and prohibitive voice	1,598.47	467.54	3.80	0.05	0.89	0.90	0.07
FOUR-FACTOR MODEL							
Combing social currency, work-related currency, and psychological safety	1,631.68	500.75	3.84	0.06	0.88	0.89	0.07
Combing social currency and work-related currency, and combining promotive voice and prohibitive voice	1,776.30	645.37	4.18	0.06	0.88	0.89	0.07
THREE-FACTOR MODEL							
Combing social currency, work-related currency, psychological safety, and power distance orientation	2,872.05	1,741.12	6.71	0.09	0.81	0.82	0.10
Combing social currency and work-related currency, combining psychological safety and power distance orientation, and combining promotive voice and prohibitive voice	2,868.13	1,737.2	6.70	0.08	0.81	0.82	0.10
TWO-FACTOR MODEL							
Combing social currency, work-related currency, psychological safety, and power distance orientation, and combining promotive voice and prohibitive voice	3,345.81	2,214.88	7.78	0.09	0.78	0.79	0.11
ONE-FACTOR MODEL							
Combing all	5,127.12	3,996.19	11.90	0.10	0.70	0.72	0.14

$\Delta\chi^2$ was compared with the hypothesized six-factor model. TLI, Tucker-Lewis index; CFI, comparative fit index; RMSEA, root-mean-square error of approximation; SRMR, standardized root-mean-square residual.

Meanwhile, **Table 3** also shows that the interaction term of social currency and psychological safety is positively related to employee prohibitive voice (β = 0.07, *SE* = 0.03, $p < 0.05$; Model 2). The interaction plot in **Figure 3** also shows a similar pattern such that with low psychological safety (1 *s.d.* below the mean), social currency is significantly related to employee promotive voice (*simple slope* = 0.21, *SE* = 0.06, $p < 0.01$) but weaker, while with high psychological safety (1 *s.d.* above the mean), social currency is significantly related to employee prohibitive voice and stronger (*simple slope* = 0.42, *SE* = 0.09, $p < 0.001$). Therefore, we have strong support for Hypothesis 3b.

Hypothesis 4a predicts that power distance orientation moderates the relationship between work-related currency and promotive voice such that the relationship becomes stronger when employee power distance orientation is high. **Table 3** shows that the interaction term of work-related currency and power distance orientation is positively related to employee promotive voice (β = 0.06, *SE* = 0.03, $p < 0.05$; Model 1). The interaction plot in **Figure 4** seems to provide support for our hypothesis such that work-related currency is more strongly related to promotive voice when power distance orientation is high rather than low. Specifically, with high power distance orientation (1 *s.d.* above the mean), work-related currency is positively related to employee promotive voice (*simple slope* = 0.21, *SE* = 0.06, $p < 0.001$); with low power distance orientation (1 *s.d.* below the mean), work-related currency is not positively related to employee promotive

TABLE 3 | Path analysis results on promotive voice and prohibitive voice.[a]

Variables	Promotive voice	Prohibitive voice
	M1	M2
CONTROLS		
Gender	0.01 (0.03)	−0.04 (0.03)
Age	0.00 (0.04)	−0.04 (0.05)
Education level	0.09** (0.03)	0.00 (0.03)
Tenure	0.05 (0.04)	0.08 (0.05)
PREDICTORS		
Social currency	0.27*** (0.05)	0.24*** (0.05)
Work-related currency	0.10** (0.04)	0.11** (0.04)
Psychological safety	0.40*** (0.04)	0.37*** (0.04)
Power distance orientation	0.12*** (0.03)	0.20*** (0.03)
INTERACTIONS		
Social currency × psychological safety	0.06* (0.03)	0.07* (0.03)
Work-related currency × power distance orientation	0.06* (0.03)	0.01 (0.03)

[a]*N = 598. Statistics reported are standardized regression coefficients (and standard errors). M = model. *p < 0.05, **p < 0.01, ***p < 0.001.*

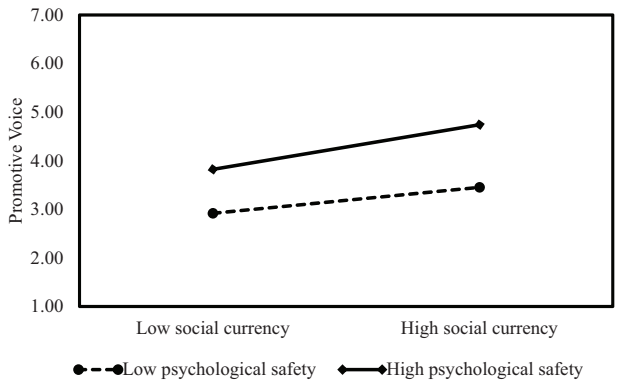

FIGURE 2 | Interactive effects of social currency and psychological safety on promotive voice.

voice (*simple slope* = 0.04, *SE* = 0.06, $p > 0.05$). Thus, we have support for Hypothesis 4a.

Hypothesis 4b predicts that employee power distance orientation moderates the relationship between work-related currency and prohibitive voice such that the hypothesized negative relationship becomes stronger when power distance orientation is high. However, our results do not provide support for this prediction. **Table 3** shows that the interaction term of work-related currency and power distance orientation is *not* significantly related to employee prohibitive voice (β = 0.01, *SE* = 0.03, $p > 0.05$; Model 2). We also plotted this interaction in **Figure 5**. It shows that with high power distance orientation (1 *s.d.* above the mean), work-related currency is positively related to employee prohibitive voice (*simple slope* = 0.16, *SE* = 0.06, $p < 0.01$), but with low power distance orientation (1 *s.d.* below the mean), work-related currency is also significantly related to employee prohibitive voice (*simple slope* = 0.12, *SE* = 0.06, $p < 0.05$). Overall, we do not find support for Hypothesis 4b.

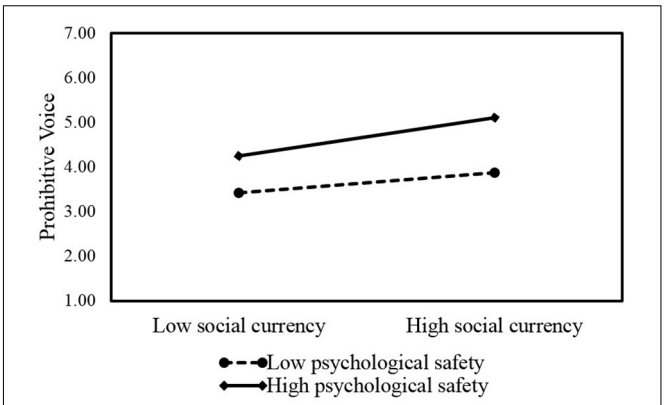

FIGURE 3 | Interactive effects of social currency and psychological safety on prohibitive voice.

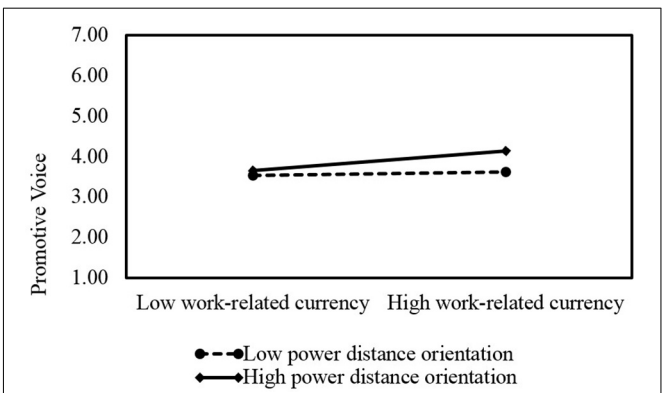

FIGURE 4 | Interactive effects of work-related currency and power distance orientation on promotive voice.

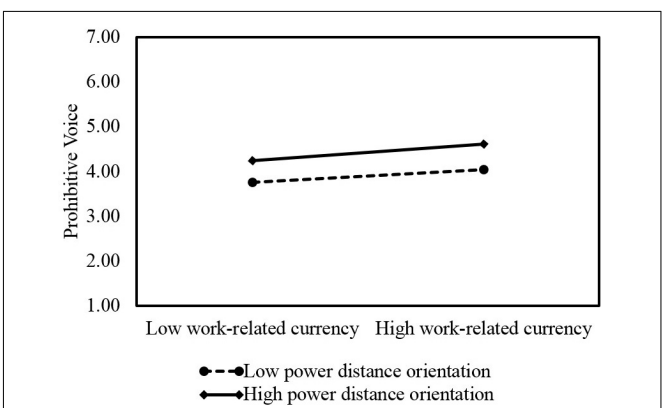

FIGURE 5 | Interactive effects of work-related currency and power distance orientation on prohibitive voice.

DISCUSSION

One of the primary goals of this study was to explore how and when employees engage in promotive and prohibitive voice. We drew from social exchange theory and the multidimensional perspective of LMX and focused on the role of exchange relationships between employees and their leaders and the different contents in these exchange relationships. In doing so, we examined the influence of social and work-related currencies on promotive and prohibitive voice, and the moderating effects of psychological safety and power distance orientation.

First, our findings show that both social currency and work-related currency have a significant and positive impact on promotive voice. Contrary to our prediction, results show that work-related currency is positively related to prohibitive voice. We speculate that this positive relationship between work-related currency and prohibitive voice might be explained by the different motives driving voice behavior. Even though engaging in prohibitive voice could potentially distort the strong impression employees have managed to obtain, it is possible that those with high work-related currency can be driven by other-serving motives rather than their own interests to do so. This is consistent with the notion that there are different motives of voice, and scholars should continue to explore the various factors that promote employees' voice behavior of different kinds (Chamberlin et al., 2017).

Furthermore, our study indicates that the conditions under which promotive voice and prohibitive voice can be explained by exchange relationships vary across different contexts. Specifically, employee psychological safety strengthens the influence of social currency on both types of voice behavior, while employee power distance orientation could only amplify the relationship between work-related currency and promotive voice. It should be pointed out that we do not find strong support for the prediction that employees' willingness to engage in prohibitive voice is further reduced when power distance orientation is high. From a motives point of view, this, perhaps, can be explained by the possibility that other-serving motives overshadow the influence of self-serving concerns. Nonetheless, our overall finding indicates that the differences in terms of the contents of exchange relationships in different kinds of voice are even more pronounced while considering an individual's dispositional characteristics. Thus, it contributes to both LMX research and voice research by shedding new light on the underlying mechanisms regarding how employee voice behavior can be explained by employees' dispositional factors in conjunction with relational factors. In section that follows, we discuss the contributions of our study in detail.

Theoretical Implications

This study explores the impact of social and work-related currencies on employee promotive and prohibitive voice behavior and the conditions under which the impacts of different currencies of exchange on the two kinds of voice behavior become stronger. Synthesizing extant literature on voice and the multidimensional perspective within LMX research, our study provides the following theoretical implications.

First, we adopted the multidimensional view of LMX in predicting employee voice behavior. Whereas work-related currency stands for the interactions on job-related issues, social currency stands for the interactions on non-job-related issues (Bhal and Ansari, 2007). Adopting the multidimensional view of LMX allows us to further uncover the complex relationship between LMX and employee voice behavior by probing into the role of different contents of the exchange relationship embedded in LMX. We also distinguish between promotive and prohibitive voice and explore their antecedents in a more fine-grained manner. It enables us to unpack the distinct mechanisms through which the different aspects of exchange influence promotive and prohibitive voice.

Furthermore, we theorized the different patterns of interactions between individual factors and relational factors in predicting the two kinds of voice behavior. We examined the moderating roles of psychological safety and power distance orientation, respectively, in the relationships between social and work-related currencies and promotive and prohibitive voice. Our results indicate that both kinds of employee voice behavior are influenced by individual characteristics in conjunction with relational factors but in distinct ways. Specifically, our findings show that psychological safety can further strengthen the relationship between social currency and both kinds of voice, while employee power distance orientation could amplify the relationship between work-related currency and promotive voice. This provides new insights to the literature on how to foster employee voice behavior by incorporating both relational and individual factors. It also reiterates the importance of examining the nature of different workplace interactions and the situational context in which parties interact with each other in this inquiry.

Practical Implications

Our study has multiple implications for managerial practices. First, prior studies have mostly focused on promotive voice, which emphasizes achieving a better state for the organization (Morrison, 2011). By examining antecedents of both promotive and prohibitive voice, we highlight the importance of prohibitive voice within organizations. Prohibitive voice should attract greater managerial attention in that it can help organizations to avoid harmful things from happening.

Second, encouraging employees to share their ideas or to express their concerns can have critical implications. Leaders play important roles in this regard. They can promote voice behavior by developing and maintaining high-quality exchange relationships with their subordinates. As such, they should be open to communicating with employees and proactively seek input and feedback from employees. They should try to find more ways to encourage prohibitive voice behavior as well.

Third, our results show that the effects of currencies on voice are unequal for people with different psychological safety and power distance orientation. Comparing to power distance orientation, employees' psychological safety can have more influence in facilitating promotive and prohibitive voice. Leaders should cultivate a harmonious workplace environment within which employees feel psychologically safe. In addition, leaders

can further encourage promotive voice behavior by promoting more work-related currencies with employees with high power distance orientation.

Limitations and Directions for Future Research

Although our study makes several contributions to theory and practice, it is not without limitations. First, we collected data from a single source (the employees). This might lead to common method bias. As such, we followed prior studies and conducted several tests to ensure that common method bias was not an issue in our study. Nevertheless, future studies can be further complemented by data collection from different sources, such as self-reported currencies and individual factors combined with leader-rated voice behavior. Second, our research design was cross-sectional, which serves as an insufficient basis to infer a causal relationship. Future research can benefit from multi-wave longitudinal studies to gain additional insights. Third, we could not draw conclusions about the differential predicting power of the two currencies on the two types of voice. Additional insights might better explain why work-related currency was not significantly related to prohibitive voice in our study. Fourth, our measurement for work-related currency only contained two items. Although Cronbach's α reached the level of acceptance, in order to obtain robust results, we encourage further research to utilize other measurements to test work-related currency. Finally, we only examined the moderating effects of two important individual factors, psychological safety and power distance orientation, on the relationship between currencies and voice. We believe that research in this vein can benefit from more exploration of different potential moderators in explaining the relationship between currencies and the different kinds of voice.

CONCLUSION

In a changing business world, voice can help an organization to achieve and sustain a competitive advantage (Detert and Edmondson, 2011; Whiting et al., 2012). As such, one important question that leaders are increasingly facing today is how they can improve employee promotive and prohibitive voice behavior. This study provides helpful insights. Specifically, we drew from both relational and individual perspectives and examined how social and work-related currencies of exchange can lead to more promotive voice and prohibitive voice. We also explored their different boundary conditions. We contribute to the LMX literature and voice research by being the first to adopt the multidimensional approach to explain the relationship between LMX and promotive and prohibitive voice while taking into account individual dispositional characteristics. We hope our study can encourage more research in this vein to further explore why and when currencies of exchange can influence promotive and prohibitive voice behavior in various contexts.

DATA AVAILABILITY STATEMENT

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

This study was carried out in accordance with the recommendations of the ethics committee of Tsinghua University with written informed consent from all subjects. All subjects gave written informed consent in accordance with the Declaration of Helsinki. The protocol was approved by the ethics committee of Tsinghua University.

AUTHOR CONTRIBUTIONS

QZ contacted the company, supervised the data collection, and completed the statistical analysis. DH made contributions in data collecting and manuscript drafting. FW reviewed the literature, and prepared and formatted the manuscript in accordance with Frontiers guidelines.

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Combining Associations Between Emotional Intelligence, Work Motivation, and Organizational Justice With Counterproductive Work Behavior: A Profile Analysis via Multidimensional Scaling (PAMS) Approach

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The need for better incorporation of the construct emotional intelligence (EI) into counterproductive work behavior (CWB) research may be achieved via a unified conceptual framework. Accordingly, the purpose of this paper is to use the Profile Analysis via Multidimensional Scaling (PAMS) approach, and a conceptual framework that unifies motivational process with antecedents and outcomes, to assess differences in EI concerning a variety of constructs: organizational justice, CWB, emotional exhaustion, job satisfaction, and intrinsic motivation. Employing established scales within a framework unifying CWB, intrinsic motivation, EI, organizational justice, and outcome constructs, two EI-based profiles displayed associations with CWB based on responses from 3,293 employees. Both the first core profile, *high overall justice and low emotional intelligence*, and the second core profile, *high emotional intelligence and low work motivation*, displayed associations with interpersonal deviance and organizational deviance, as well as emotional exhaustion and job satisfaction. The results are discussed with respect to possible underlying theory and an overarching unified motivation framework that incorporates goal choice, intrinsic motivation, antecedents, and outcomes. We also provide directions for future research and implications for managers in the workplace based on heuristic conceptual frameworks that combine multiple motivational perspectives into a unified model.

Keywords: emotional intelligence, counterproductive work behavior, organizational deviance, profile analysis, multidimensional scaling, emotional exhaustion, job satisfaction, organizational justice

INTRODUCTION

A current gap in the literature concerning counterproductive work behavior (CWB) is how to incorporate an increased range of individual differences, including emotional intelligence (EI), into the network of associations surrounding CWB (Penney and Spector, 2005; Bolton et al., 2010; Ones, 2018). This gap is significant because of the recognized role of individual differences in the overall nomological network that underpins the motivation of behavior at work (Yau and Sculli, 1990; Colquitt et al., 2011; Budnick et al., 2020). For example, EI has been shown to be a critical antecedent of work outcomes (Kashif et al., 2017; Klein et al., 2020), and a critical mediating factor for emotional regulation (Newman et al., 2010; Cheung and Tang, 2012). In addition, as CWB has continued to generate extensive research in the organizational literature, failure in emotional regulation has been increasingly traced to associations with CWB (Bragg and Bowling, 2018).

Understanding EI and its associations with emotional regulation and CWB is critical for managers when staffing and assessing personnel because they are related to essential organizational outcomes such as work quality (Bragg and Bowling, 2018). However, to comprehend fully the context in which EI operates, it is necessary to use networks of attitudes and personal states such as the experience of meaningful work (Simonet and Castille, 2020). In essence, researchers must bridge conceptual frameworks at separate levels by examining goal choice and goal-striving and engagement in conjunction with models of personality and contextual antecedents (Tisu et al., 2020). Within the research presented in this paper, we focus accordingly on connections between EI, CWB, and a delimited, parsimonious set of attitudes, namely, perceptions of organizational justice and job satisfaction, and the dynamic personal states of leader-member exchange (LMX), work motivation, and emotional exhaustion. These attitudes and personal states have been shown to explain consistently large amounts of variability in critical work outcomes such as turnover (Wright and Cropanzano, 1998; Bernerth and Walker, 2012); job performance (Wang et al., 2010), and burnout (Faragher et al., 2013).

Therefore, it would be important, for example, for staffing managers to realize that perceived organizational injustice is a key driver of workplace misbehavior (Everton et al., 2007) and that this effect may be enhanced by incorporating the particularly relevant individual difference construct of EI. We might further note the centrality of perceptions of fairness and justice to well-being at work (Johnston et al., 2016) and the strong and persistent meta-analytic evidence of the predominant contribution of justice as a critical antecedent to job satisfaction and performance (Cohen-Charash and Spector, 2001; Viswesvaran and Ones, 2002; Tziner et al., 2011).

Accordingly, it is important that future research goes further in examining work context variability, and differences in contextually related perceptions, as significant influences in critical work outcomes. For example, despite a general consensus in the literature that indicates that there is generally a consistent, negative relationship between EI and CWB (Dalal, 2005; Miao et al., 2017), the stability of this relationship bears further consideration because nuanced contextual factors can change the strength of this relationship. For example, the effect of EI on OCB is stronger in settings that require and likely habituate employees to engage in emotional labor, such as service and health care settings (Miao et al., 2017).

It would be appropriate, therefore, to use workplace sensitivities, such as justice perceptions, to help explain variations in relationships between traits such as EI and processes such as CWB, with the help of frameworks uniting individual and contextual differences with types of motivation and goal constructs and relevant work outcomes.

The need for better incorporation of the construct emotional intelligence (EI) into CWB research may be achieved via a unified conceptual framework. Accordingly, the purpose of this paper is to use the Profile Analysis via Multidimensional Scaling (PAMS) approach, a conceptual framework that unifies motivational process with antecedents and outcomes, to assess differences in EI concerning a variety of constructs: organizational justice, CWB, emotional exhaustion, job satisfaction, and intrinsic motivation. Within a framework unifying CWB, intrinsic motivation, EI, organizational justice, and outcome constructs and employing established scales, two EI-based profiles displayed associations with CWB based on responses from 3,293 employees.

However, what is often lacking in the organizational psychology literature is research conducted within a unified conceptual framework that connects goal choice and goal-striving perspectives to intrinsic work motivation and personal and contextual-level antecedents. This lack relates to a critical problem within the work motivation literature, which is that motivational phenomena are studied within multiple theoretical frameworks (e.g., goal choice, goal-striving) that are generally operationalized in isolation (Van den Broeck et al., 2019). Consequently, in this paper, we employ a recent integrative motivational framework (Van den Broeck et al., 2019) as a heuristic to understand and operationalize interrelations between goal content, intrinsic motivation, personal and contextual-level antecedents, and important work outcomes. Employing this framework, we model (a) CWB within *goal choice processes* and intrinsic motivation within *goal-striving processes*, (b) organizational justice and EI as *antecedents to goal content and intrinsic motivation*, and (c) emotional exhaustion and job satisfaction as *outcomes*.

Specifically, the central purpose of this research is to investigate how (a) a representative individual difference (EI), (b) two critical contextually related perception variables (organizational justice and LMX), and (c) a contextually related motivational state (intrinsic motivation) can model differences in (d) CWB and (e1) a core positive work outcome (job satisfaction) and (e2) a core negative work outcome (emotional exhaustion). Thus, using EI, organizational justice, LMX, and intrinsic motivation, as input variables, we wished to examine associations with CWB, job satisfaction, and emotional exhaustion. As the key organizing framework for our study, we present in **Figure 1**, an adaption of the unified conceptual framework of Van den Broeck et al. (2019), which is centered on goal choice and goal content.

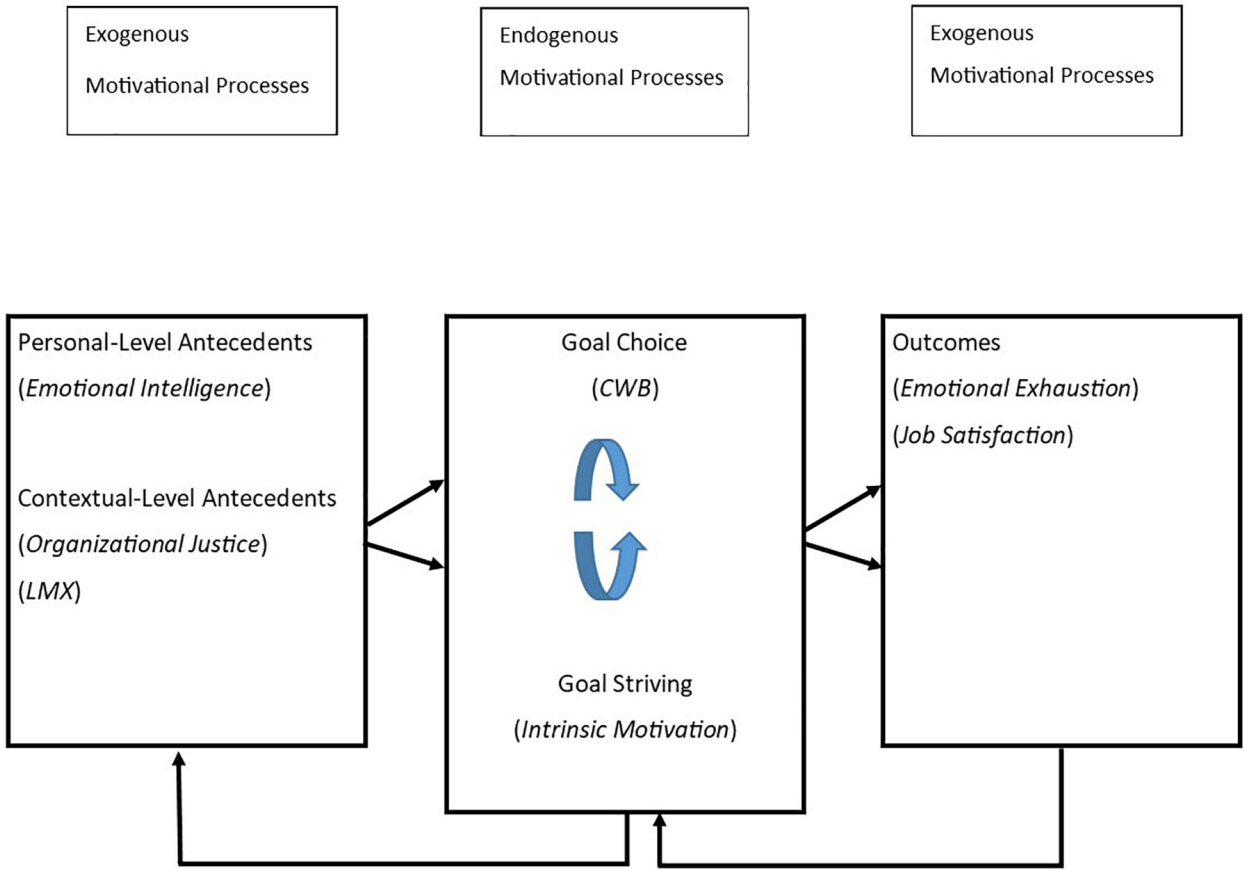

FIGURE 1 | Conceptual framework unifying goal choice and goal striving with personal and contextual antecedents and outcomes. Figure based on a complex model from Van den Broeck et al. (2019).

Goal choice describes the selection of one or more goals with a particular type of content that is valued by the individual, along with the selection of the person's higher-level objectives within personal hierarchies that reflect personal values based on the achievement of complex and long-range goals (Van den Broeck et al., 2019). At lower levels of personal hierarchies, multiple action-oriented objectives serve to advance the achievement of the higher-level goals. For example, a person may have set a goal of increasing feelings of mastery by applying newly acquired knowledge and skill in the workplace. However, to accomplish this goal, the individual must first accomplish the lower-level goal of acquiring supervisor support for training transfer (Zumrah et al., 2012).

The term *goal striving* refers to the individual allocation of cognitive and behavioral effort toward achieving goals within personal hierarchies. With respect to higher-level goals, individuals often strive to achieve these goals through lower-level goal attainment, such as in the above example of acquiring supervisor support for training transfer. Accordingly, goal choice and goal striving are phenomena embedded within hierarchies of goals, and these concepts are modeled within the endogenous motivational processes section of **Figure 1**, adapted from Van den Broeck et al. (2019).

In the next section, we articulate the importance of four critical constructs – EI, work motivation, organizational justice, and CWB – that are focal to our investigation. Additionally, we highlight research pertinent to the related constructs of LMX, job satisfaction, and emotional exhaustion.

CRITICAL CONSTRUCTS

Emotional Intelligence

Personality traits and individual differences in ability, such as EI, can have important associations with organizational stressors and CWB (e.g., Bowling and Eschleman, 2010; Dixit and Singh, 2019). In addition, researchers have demonstrated that levels of EI in key staff are significant personal factors related to the success and productivity of organizations (e.g., Newman et al., 2010; Karimi et al., 2020). In that context, EI may be defined as the ability to recognize and also monitor one's own and other people's emotions, to understand feelings, and subsequently to use emotional information to guide thinking and adapt behavior to suit the environment (Furnham and Taylor, 2020; Robinson et al., 2020).

Regulation of the emotions helps employees to maintain "positive affect," a positive outlook that influences work behaviors favorably (Newman et al., 2010); additionally, the regulation also restrains "negative affect" (Cheung and Tang, 2012). Hence, employees with high EI have the tools to regulate their emotions and to cope with adversities, and they tend to create emotional and behavioral balance by utilizing self-control and self-regulation (Mayer et al., 2008). However, because EI incorporates both trait and state-based characteristics, we use EI as a critical component within the PASM model.

Related to the study of EI and emotional regulation, researchers suggest there are numerous opportunities for integrating justice, CWB, and job performance through the integration of social exchange, affect states and processes, and emotional regulation (Colquitt et al., 2013). In general, negative affect shows negative associations with justice, while positive affect shows positive associations with justice (Colquitt et al., 2013). Based on these meta-analytic relationships, a clear direction for future research is to test the roles of positive and negative affect and emotional regulation as mediators between justice and performance, and justice and CWB (Colquitt et al., 2013).

At work, individuals with high EI often experience a high level of control, low levels of stress, and high levels of satisfaction and commitment to their work (Petrides and Furnham, 2006). High-EI individuals are also less prone to emotional exhaustion and burnout and are more likely to perform their jobs successfully. In the light of these positive attributes, and the associations articulated in **Figure 1**, we suggest that emotional intelligence also relieves frustration. Thus, for example, when employees are faced with demotivating factors such as perceived injustice and symptoms of burnout, high-EI employees are less likely to turn to work misbehaviors. Furthermore, based on the integrative framework articulated in **Figure 1**, we expect that EI will also relate to higher positive work outcomes such as job satisfaction. This anticipated association accords with research that indicates that leaders' EI is significantly and positively associated with subordinate's jobs, and that suggests that high EI leaders can serve as "mood managers" within organizations (Miao et al., 2016).

Intrinsic Work Motivation and Organizational Justice

Another variable we investigated regarding the predictor–outcome relationship articulated in **Figure 1** is intrinsic work motivation. In general, work motivation is defined as the psychological force that generates complex cycles of goal-directed thought and behavior (Tziner et al., 2012). Motivation is what animates individuals to persist in courses of action until the acts are completed (Pinder, 2014). Accordingly, scholars studying work motivation attempt to articulate the processes by which an individual's internal, psychological forces – in conjunction with external, environmental forces – determine the direction, intensity, and persistence of personal behavior aimed at goal attainment (Kanfer et al., 2017). Pinder (2014, p. 11) provides an alternative definition of work motivation as "a set of energetic forces that originate within individuals, as well as beyond an individual's being, to initiate work-related behavior and to determine its form, direction, intensity, and duration."

Intrinsic motivation occurs when individuals engage in goal striving because goal-pursuit activities are psychologically rewarding in themselves without links to external rewards (Ryan and Deci, 2017). Because those goal-pursuit activities are centered in the organizational environment, it follows that this type of work motivation (as well as other extrinsic types of motivation) results from the interaction between an individual's characteristics and the external environment (Latham and Pinder, 2005), which we illustrate in the components of **Figure 1**. Research indicates that although compared to the intrinsic nature of goal-striving tasks and rewards in the external environment, individual difference characteristics may carry less weight in determining motivation, they are still critical components of determining the worth of outcomes because they are always active in determining motivation (Klein and Fein, 2005; Fein and Klein, 2011).

Intrinsic and extrinsic motivation are also key factors strongly related to goal content (Ryan and Deci, 2017). Goal content may reflect some mixture of intrinsic content, where behavior is pursued for the sake of engagement with an activity itself, and extrinsic content, which signals goals are pursued for the sake of external rewards. The literature strongly supports that intrinsic and extrinsic elements of goal content are differentially related to well-being outcomes, with intrinsic goals as antecedents of well-being (Dittmar et al., 2014).

Organizational justice is a state-based perception defined as the extent to which employees think or feel they are provided with appropriate, fair, and respectful treatment, adequate and accurate information, and reasonable resources and rewards (Cohen-Charash and Spector, 2001; Colquitt et al., 2001). These perceptions are a product of organizational occurrences and systems, often based on specific "organizational components," such as leaders and co-workers (Hollensbe et al., 2008). Typically, organizational justice as an overall construct can be broken down into three facets, namely, *distributive justice* (fairness associated with decision outcomes and distribution of resources), *procedural justice* (fairness of the processes leading to outcomes), and *interactional justice* (the treatment an individual receives as decisions are made) (for further reading, see Niehoff and Moorman, 1993; Cohen-Charash and Spector, 2001; Colquitt et al., 2001). In the present study, we incorporated all three components to account for the full range of the justice construct.

Equity theory is the most important organizing principle surrounding the justice–motivation relationship (Adams, 1965). Namely, equity theory supposes that if employees experience some type of imbalance between their personal, perceived inputs into the workplace system, relative to their benefits received from the work system and structures, they will experience an adverse emotional state (due to perceived injustice, in this instance), and they will likely aspire to regain and maintain balance through some form of corrective behavior (Adams, 1965). In the case of experiencing organizational injustice, employees have been found to reduce their motivation and performance (Cohen-Charash and Spector, 2001; Viswesvaran and Ones, 2002). Moreover, the tenets of social exchange theory (SET) logic

(Blau, 1986; see also Cole et al., 2002), suggest that lowering one's motivation would appear to be a reasonable measure by which to address such imbalance.

It is clear that all sub-types of justice show positive associations with OCB, whether targeted to the organization or supervisor (Colquitt et al., 2013). This same meta-analytic evidence suggests that all sub-types of justice are negatively related to CWB, and in general the focus of CWB on organization or supervisor does not result in a difference in effect size (Colquitt et al., 2013). Trust, which is a crucial element within positive LMX and overall LMX quality, is also associated with higher levels of justice across all sub-types of justice (Colquitt et al., 2013). Thus, trust and LMX appear as key moderators of the justice-OCB relationship. Based on the integrative model presented in **Figure 1**, we expect intrinsic motivation and organizational justice to be inversely related to CWB.

Counterproductive Work Behavior (CWB)

In recent years, CWB has gained much research attention because it has been shown to have important economic, sociological, and psychological implications in the workplace, including associations with unethical leader behavior (Bodankin and Tziner, 2009; Ho, 2012; Nei et al., 2018). Such dysfunctional behaviors include theft, sabotage, withdrawal, and harassment, among others (Bennett and Robinson, 2000; Spector et al., 2006). CWB almost invariably violates important organizational norms and harms organizations in ways associated with the organization's goals, employees, procedures, productivity, and profitability (Spector et al., 2006). These behaviors may be directed against the organization itself or against its members, workers, and management alike, and hence they are costly to both individuals and organizations (Bennett and Robinson, 2000). Specific types of CWB include acting on negative feelings toward the organization via decreased motivation; manifesting distrust (toward the workplace and/or the managers); and even acting against the organization (Skarlicki and Folger, 1997). It makes sense that dysfunctional attitudes and behaviors of this nature are indicants of lack of job satisfaction, thus leading researchers in the field to hypothesize that work misbehavior is negatively associated with job satisfaction (e.g., Malhotra and Kathuria, 2017).

While most research has been conducted within the framework of goal content that benefits organizations, it is also appropriate to envision a type of negative goal content relative to organizational interests. Because CWB is considered to be an intentional behavior that is detrimental to organization interests, it could reflect a type of goal construct related to employee attempts to change their affective state within an organization (Dalal, 2005), which accords with evidence linking aggressive behaviors to attempts to change affective states (Bushman et al., 2001; Spector and Fox, 2002). This is consistent with several observations that the desire to change or maintain emotional states may serve as a common antecedent to both CWB and OCB (Spector and Fox, 2002; Dalal, 2005).

Furthermore, the relationship between CWB and organizational justice has been demonstrated, but that relationship seems to be contingent on other variables (Chernyak-Hai and Tziner, 2014). This is consistent with the notion that if employees experience aversion and imbalance (due to perceived injustice, in this instance), they will likely aspire to regain and maintain balance (Adams, 1965). Moreover, following the logic of SET, work misbehaviors would appear to be a reasonable measure by which to achieve that balance (Blau, 1986).

We also note that constructs that are antecedents to CWB may also serve as antecedents to Organizational Citizenship Behavior (OCB). In fact, the antecedents for OCB and CWB are very similar and should be related in opposing directions to job satisfaction, commitment, and justice (Dalal, 2005). Finally, concerning EI and its concordance with emotional regulation, and consistency with the mood regulation literature, both OCB and CWB can be considered adaptions – whereby the adaptive behaviors are meant to provide enhanced mood or satisfaction in the future (Dalal, 2005). Thus, such adaptions inherent in OCB and CWB may be geared toward the same goal of changing affect.

To increase our understanding of the nomological network around profiles of EI, work motivation, and justice, in the present study, we model CWB within the goal content component of **Figure 1**. Base on contingent relationships between CWB and other variables, as illustrated in **Figure 1**, we also decided to include three other critical constructs, described in the organizational psychology literature, that have been strongly associated with EI, namely, work motivation, justice, and CWB. These constructs are (a) *leader-member exchange* (LMX), which has been linked to CWB (Chernyak-Hai and Tziner, 2014); (b) *job satisfaction*, which has been associated with perceptions of organizational justice (Pignata et al., 2016); and (c) *burnout* (via emotional exhaustion), which is associated with a negative impact on employees' attitudes toward work and work performance (Maslach et al., 2001) as well as rates of employee turnover (Wright and Cropanzano, 1998; Urien Angulo and Osca, 2012).

Leader–Member Exchange (LMX)

The underlying proposition underlying LMX theory is that managers tend to employ different management styles for each of their subordinates (Graen and Uhl-Bien, 1995; see also Waismel-Manor et al., 2010). In turn, each specific relationship and corresponding management style induces corresponding differential responses and attitudes in subordinates, including different types of engagement (Aggarwal et al., 2020) and performance behaviors (Ilies et al., 2007). Capitalizing on reciprocity theory (Gouldner, 1960), employees in good or bad relationships with their managers (i.e., with high or low LMX) will feel obliged or reluctant to reciprocate these respective relationships (see also Adams, 1965).

Thus, high- or low-quality LMX results in correspondingly high or low levels of mutual trust, respect, and commitment. Accordingly, subordinates with high LMX relations are likely to receive more rewards (both formal and informal) than their colleagues with lower LMX relations. These benefits include tangible resources, career opportunities, emotional support (including emotional encouragement), and enhanced feedback (Graen and Uhl-Bien, 1995; Zagenczyk et al., 2015). Consequently, high LMX employees are more likely to engage

in positive behaviors, including forgiving supervisor errors (Radulovic et al., 2019), while those low on LMX will be more prone to negative behaviors (Tziner et al., 2010; Breevaart et al., 2015). Conversely, and with respect to enlarging the network of constructs investigated in this study, it is important to note that poor relations between managers and their employees will almost certainly result in reciprocal counterproductive behavior (Chernyak-Hai and Tziner, 2014).

While LMX's role as a potential mediator of workplace misbehaviors has been investigated (e.g., He et al., 2017), most studies emphasize contextual-level or job-level predictors (e.g., He et al., 2017; Sharif and Scandura, 2017). However, less is known about the effects of individuals' dispositional differences on LMX (e.g., Maslyn et al., 2017; Hao et al., 2019). In addition, there is even less emphasis on the effects of cultural and demographic parameters on leader–member interrelations (for further reading, see Rockstuhl et al., 2012; Zagenczyk et al., 2015), which makes LMX worth including as a key state in this study.

Job Satisfaction

Job satisfaction is defined as the pleasurable or positive attitude resulting from the overall positive evaluation of one's job or work experiences. Job satisfaction is related to the extent that an individual's needs are met in the work setting (Tziner et al., 2012), and consequently, job satisfaction can be linked to intrinsic factors, deriving from internally mediated rewards related to the essence of the job, and can also be linked to factors extrinsic to the individual, resulting from externally mediated rewards, such as adequate and appropriate pay (Porter and Kramer, 2004). For the purpose of enlarging the number of constructs investigated in this study, we note that job satisfaction is also associated with state-based perceptions of organizational justice (Tziner et al., 2011; Pignata et al., 2016). In addition, job satisfaction has also been shown to be related to individual characteristics, such as personal traits or dispositions (Tziner et al., 2008).

Meta-analytic evidence also suggests that job satisfaction and motivation are mediators that serve to enhance the relationship between LMX and performance (Martin et al., 2016) and that high LMX reduces the incidences of CWB. These findings suggest that the damaging effects of low LMX may more seriously affect performance through CWBs than previous research indicates (Martin et al., 2016).

Burnout and Emotional Exhaustion

As opposed to job satisfaction, burnout is a progressive psychological response to chronic work stress that can be construed as a multidimensional construct involving three distinct but interrelated aspects, namely: (a) emotional exhaustion, (b) depersonalization (negative or cynical attitudes and feelings toward the organization and service recipients), and (c) a decline in personal accomplishment and in the perceived ability to perform effectively (Maslach, 2003). Notably, Shirom and Melamed (2006) also added physical fatigue to these dimensions of burnout.

Burnout has negative implications for employees' state of health. For example, burnout is related to depression (Toker and Biron, 2012) and has also been found to be related to the increased risk of hyperlipidemia (Shirom et al., 2013), type-2 diabetes (Melamed et al., 2006), and inflamed levels of biomarkers such as C-reactive protein (Toker et al., 2005). Burnout is also an important component of general health outcomes that are related to total work hours and work–life conflict (Fein and Skinner, 2015).

This evidence suggests that burnout has clear implications for organizations, taking into account its negative impact on employees' attitudes toward work and their work performance (Maslach et al., 2001). As burnout intensifies, it tends to induce lower levels of work satisfaction, which, in turn, enhance the rates of employee turnover (Wright and Cropanzano, 1998; Urien Angulo and Osca, 2012). Burned out employees may also influence colleagues negatively (Bakker et al., 2005) and burned out managers may exhaust the entire system they manage (Pines and Aronson, 1988). In the current study, of the three dimensions comprising burnout, we opted to survey only emotional exhaustion because, as reported in two recent meta-analyses, emotional exhaustion emerged as the most closely related to antecedents and outcomes of burnout (Lee et al., 2011; Cieslak et al., 2014). In addition, these three items of emotional exhaustion provided a uniform focus and maximum clarity of wording when measuring burnout.

Within intrinsic motivation frameworks, burnout can also be related to the failure to achieve goals based on corresponding failures of social exchange and affect regulation processes (Vansteenkiste and Ryan, 2013). These observations can be linked to the work of Colquitt et al. (2013), where the authors suggest numerous opportunities for integrating justice, CWB, and OCB through the integration of social exchange and affect processes as mediators. Although more work needs to be done regarding the relationship between social exchange and affect processes, Rupp et al. (2014) provide one explanation that includes social exchange as an amplifying mechanism that enhances the role of organizational justice. Based on these findings and the comprehensive model illustrated in **Figure 1**, we expect job satisfaction to be positively related to intrinsic motivation and emotional exhaustion to be negatively related to intrinsic motivation.

Within the present research, the framework we present in **Figure 1** allows us to accomplish several important objectives:

- First, we can anchor the constructs of CWB and intrinsic motivation as central endogenous motivational processes.
- Second, in line with our reasons for conducting the present study, we were able to follow a model connecting key personal-level antecedents and reactions derived from the work context to the central endogenous motivational processes at the heart of our study, as well as to important work outcomes. As noted, the core purpose of our use of the Van den Broeck et al. (2019) model was the integration of the endogenous motivational processes surrounding CWB and intrinsic motivation with one critical personal level antecedent (EI) and two critical contextual-level antecedents (justice and LMX), which have been linked across numerous meta-analyses and previous

studies (Dalal, 2005; Colquitt et al., 2013; Martin et al., 2016; Van den Broeck et al., 2016).

- Third, the use of the model afforded a logical link from antecedents (EI, justice, and LMX) and motivational processes (CWB and intrinsic motivation) to work outcomes, namely, job satisfaction (positive) and emotional exhaustion (negative), links which have been supported by previous studies (Vansteenkiste and Ryan, 2013; Martin et al., 2016; Miao et al., 2017).

Thus, the use of the Van den Broeck et al. (2019) model allowed us to broaden the scope of the current study to include antecedent constructs (EI, LMX, justice) endogenous motivational constructs (CWB, intrinsic motivation) and outcome-based constructs (job satisfaction and emotional exhaustion) in the same PAMS study. We note that because the PAMS approach is well suited to collective capturing and bringing together the impact of a relatively broad range of related variables, it was an appropriate method to use in testing the relationships with the framework displayed in **Figure 1**. Based on these associations, we outline how individuals' perceptions of organizational justice serve as antecedents to motivation, as illustrated in **Figure 1**.

MATERIALS AND METHODS

Participants

In the present study, we collected data from 3,293 Romanian participants, all employees from various telecommunications organizations (including high-tech, communications, and telemarketing, among others). The field research was based on the administration of questionnaires by students who participated as research assistants. The participation of the respondents in the survey was voluntary. In the questionnaire, the participants were assured of our respect for the principle of data confidentiality throughout the entire collection, processing, storage, dissemination, and archiving flow. Data regarding gender, age, professional experience, education level, and the exercise of a management activity were aggregated. Thus, the data become anonymous, making it impossible to identify the respondents. There are no questions in the questionnaire regarding the names, e-mail addresses, telephone numbers or other personal data of the respondents. In this way, the information was treated responsibly, according to European Union legislation in the field of personal data.

To minimize any potential nested effects of differences in organizational culture, because the Romanian corporate culture within telecommunications firms is relatively uniform, we focused exclusively on four telecommunications companies representative of the telecommunications industry. These included Vodafone, Orange, RCS&RDS, and Telekom. **Table 1** incorporates the demographic information for these participants.

TABLE 1 | Demographic information of study participants.

Parameter	Category	Sample 1 (n = 3,293) (%)
Gender	Males	60.00
	Females	40.00
Age	18–25	53.60
	26–35	23.20
	36–45	12.30
	46+	10.90
Education	High-school	31.2
	Tertiary	7.70
	Student/B.A. graduate	41.40
	Student/M.A. graduate and above	19.70
Tenure	0–5	66.10
	5–10	14.50
	10–15	7.50
	15–20	4.60
	20–25	2.80
	25+	4.40
Team work[a]	No	83.40
	Yes	16.60
Responsibility[b]	No	74.20
	Unit/team manager	15.70
	Department manager	6.80
	Director	3.40

[a]*Working in a team.* [b]*Responsibility for other people's work.*

Procedure

The questionnaire was translated into Romanian by the fourth author of this paper, who is associated with the Bucharest University of Economic Studies, and Romanian is his maternal, education, and work language. The first author, who has equally mastered both the Romanian and English languages, compared the translations into Romanian against original English versions and essentially back-translated items from English to Romanian. Amendments to items were made if needed to ensure semantic equivalence. Only then was the questionnaire administered to participants. These instruments have already been in use in previous investigations in Romania.

A pencil and paper survey was given to working people in four telecommunications companies representative of the telecommunications industry, Vodafone, Orange, RCS&RDS, and Telekom, to complete voluntarily. After we collected the data, it was analyzed using the SPSS (v. 22.0) and AMOS (v. 22.0) software packages to assess multivariate normality. Consistent with the very large sample size, all variables were normally distributed. We considered the issue of common method variance (CMV) during the design of the study, and we used a number of design modifications to lower the risk of CMV. Although it was impossible for us to obtain data external to the questionnaire, we were able to position items measuring the CWB outcome further away from items assessing EI, motivation, and justice. We also reduced the emotional exhaustion items to the three items most clearly assessing burnout. Both of these adjustments are effective procedural remedies for CMV (Podsakoff et al., 2003).

Measures

Emotional intelligence (EI) was measured using the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF;

Petrides and Furnham, 2003), which includes 30 Likert-type items between 1 (very little) and 6 (very much); for instance, "I'm usually able to find ways to control my emotions when I want to." Half the items were reverse-scored. In previous studies, the reliability coefficient (Cronbach's α) of the questionnaire ranged between 0.82 and 0.89 (Pérez et al., 2005; Petrides and Furnham, 2006; Cooper and Petrides, 2010). In the current study, the measure had strong reliability: α = 0.91 (M = 4.26; SD = 0.96).

Work motivation (MO) was gauged by the Work Extrinsic and Intrinsic Motivation Scale (WEIMS; Tremblay et al., 2009), consisting of 18 Likert-type items ranging from 1 (does not correspond at all) to 6 (corresponds exactly); for example, "The reason for being involved in my job is for the satisfaction I experience when I am successful at doing difficult tasks." In the present study, we used the intrinsic dimension of the scale. The measure had high reliability: α = 0.92 (M = 4.12; SD = 0.87).

Organizational justice (OJ) was measured using the Justice Scale (Niehoff and Moorman, 1993), which includes 20 Likert-type items between 1 (completely disagree) and 6 (completely agree); for instance, "I consider my workload to be quite fair." The mean reliability coefficient of the questionnaire was 0.84 (Niehoff and Moorman, 1993). In the current study, the measure had strong reliability: α = 0.96 (M = 4.13; SD = 0.96). The three subscales of this construct were measured as follows: *organizational justice-distributive* (DI) comprised five items (α = 0.83; M = 4.11; SD = 1.07); *organizational justice-procedural* (FP) consisted of six items (α = 0.88; M = 4.10; SD = 1.03), and *organizational justice-interactive* (IJ) was gauged by nine items (α = 0.89; M = 4.19; SD = 1.02).

CWB was measured by employing the Interpersonal Deviance (ID) and Organizational Deviance (OD) Scale (IODS; Bennett and Robinson, 2000), which includes 18 Likert-type items between 1 (never) and 6 (every day); for instance, "I deliberately worked slower than I could." The mean reliability coefficient of the questionnaire was 0.80 (Bennett and Robinson, 2000). In the current study, the measure had strong reliability: α = 0.96 (M = 1.98; SD = 1.03). Moreover, the reliability for *interpersonal deviance* (ID) was 0.87 (six items, M = 1.98; SD = 1.08) and the reliability for *organizational deviance* (OD) was 0.94 (12 items, M = 2.0; SD = 1.05).

LMX was gauged by the LMX7 questionnaire (LMX7; Graen and Uhl-Bien, 1995), consisting of seven Likert-type items; however, each item had a different scale, from 1 (rarely, not a bit, not at all, none, strongly disagree, extremely ineffective) to 6 (very often, a great deal, fully, very high, strongly agree, extremely effective). Original reliability was α = 0.91. In the current research, reliability was: α = 0.86 (M = 4.11; SD = 0.91).

Job satisfaction (SA) was tapped with the MSQ 20-item questionnaire (Weiss et al., 1967). Each item of the questionnaire assesses a facet of work satisfaction; for instance, "To what extent are you satisfied with the chance to do something that makes use of your abilities?" The responses were given on a six-point scale. In a previous study (Smith and Tziner, 1998), the reliability coefficient of this measure was 0.82. The reliability in this paper was: α = 0.96 (M = 4.35; SD = 0.88).

Emotional exhaustion was measured using the Maslach Burnout Inventory (MBI; Maslach et al., 1986). As indicated, of the three dimensions of burnout, in this paper, we used only emotional exhaustion (EE), comprising nine Likert-type items between 1 (a few times a year) and six (every day); for instance, "I feel emotionally drained from my work." In a previous study (Smith and Tziner, 1998), Cronbach's α of this measure was 0.89. In the current study, the measure had strong reliability: α = 0.92 (M = 2.76; SD = 1.06).

Control Variables

Past empirical research has found no evidence of a meaningful relationship between demographic characteristics and research variables. In this study, all correlations between the demographic variables (age, education, tenure, teamwork, and responsibility) and the investigated variables were below 0.1; therefore, none of these variables were controlled in subsequent analyses.

Table 2 presents the validity indices for the measures used in the research, based on confirmatory factor analysis (CFA).

PAMS Approach

In the social sciences, one of the most popular representations of data is a tabular form where rows represent cases (e.g., people) and columns represent measurements of variables (e.g., items or subscales). We can view rows – arrays of column subscale scores – as person profiles. Each person profile carries two types of information: (1) the summary statistics (quantitative) that represent the profile level or height, and (2) the contextual pattern that the profile exhibits (qualitative) in each individual's person profile of observed score.

In the present study, using Profile Analysis via Multidimensional Scaling (PAMS; Kim et al., 2017; Kim and Kim, unpublished), we analyzed 3,293 cases or individuals who were measured by six subscales (EI = emotional intelligence; MO = work motivation; LMX = leader-member exchange; DI = organizational justice-distributive; FP = organizational justice-procedural; IJ = organizational justice-interactive) to capture both quantitative profile-level information and contextual profile pattern information (i.e., two core profile patterns identified in the present study). The profile level is the average of input variable scores. In the present study, the profile level was, in fact, the average of six subscale scores, and there

TABLE 2 | Validity indices for the measures used in the research, based on CFA.

Measure	CR	AVE	MaxR(H)
Emotional exhaustion	0.92	0.53	0.92
CWB (interpersonal)	0.87	0.53	0.92
CWB (organizational)	0.94	0.58	0.95
EI	0.91	0.44[a]	0.93
Work motivation	0.92	0.41[a]	0.94
Job satisfaction	0.96	0.57	0.97
LMX	0.86	0.46[a]	0.87
Distributive justice	0.83	0.50	0.83
Procedural justice	0.88	0.55	0.89
Interactional justice	0.89	0.48[a]	0.92

[a]*Convergent validity issue as the average variance extracted (AVE) < 0.50. CR, composite reliability. MaxR(H), maximum reliability. CWB, counterproductive work behavior. EI, emotional intelligence. LMX, leader–member exchange.*

were 3,293 profile levels. The profile pattern information appears in ipsatized scores around the person level.

For example, we can assume person *p*'s level to be Cp (p = 1, . . ., 3,293 in the study) and each subscore to be Mpj (j = 1, . . ., 6) since there were six subscores used as input variables for PAMS in this study, and then an array of person p's ipsatized subscores, (Mp1 – Cp), . . ., (Mp6 – Cp), represents the person *p*'s profile pattern. PAMS uses only this person pattern information to identify core profiles. In the present study, PAMS analyzed 3,293 arrays of six ipsatized subscores to identify two core profiles (see **Figure 2**) (see Kim, 2013; Kim and Kim, 2017, for details).

Notably, the PAMS approach can be interpreted as a type of dimensionality reduction technique for person profiles. Thus, regarding the option to choose between person-centering and group-centering (organization-level centering in our case), estimation of core profiles in the PAMS model is based on a *person-centering*, but not on a group-centering because PAMS estimates within-person variation in a given population. Therefore, organization-level centering is not considered in the PAMS model.

PAMS attempts to identify the most typical response patterns (called dimensional profiles) in a population and then summarizes individuals as linear combinations of these dimensional profiles. PAMS identifies two or three of the dimensional profiles that represent the most typical response profiles in a dataset. One can thus describe each individual's profile as the linear combination of these dimensional profiles. This representation is parameterized by regression coefficients (known as person weights), one for each dimensional profile. Notably, person weights are useful because they relate individual profiles to core profiles in an interpretable way.

Furthermore, although PAMS is a multivariate statistical method, unlike traditional methods, it does not require the assumption of normality, is easy to use, and effects can be detected in smaller samples (even sample sizes of fifty or less). We applied the PAMS paradigm to the Romanian sample data to identify dimensional profiles regarding organizational justice perceptions and personal states. In **Table 3**, a few person parameter estimates are included by way of example.

Regarding **Table 3**, if someone (e.g., #3) has a high correlation with core profile 1 (based on the partial correlation for corDim1 x #3), that person's profile pattern would be similar to the core profile 1 pattern. Thus, the data from **Table 3** shows that the profile of #3 is essentially identical to the core profile 1. On the other hand, if someone has a high correlation with core profile 2, it is expected that that person's profile would be similar to core profile 2. In the case of the data in **Table 3**, this relationship is revealed for #32. For details, please consult the previous PAMS studies (Kim et al., 2004, 2007, 2017; Frisby and Kim, 2008; Kim and Kim, 2017).

We chose PAMS instead of other methods of multivariate data analysis because we wanted to identify the central response patterns (the so-called "core" profiles in the present study) in a given sample. The core profiles are similar to factors extracted in exploratory factor analysis in terms of a dimension-reduction technique. However, the PAMS approach was better suited to this project because researchers can extract a few core profiles (two or three) out of numerous person profiles of observed scores in a sample. Note that PAMS views cases (or rows) in a dataset as arrays of observed column variable scores, which are called "person profiles" in PAMS terms.

However, there are fundamental differences between PAMS and other dimension-reduction methods, especially factor analysis (FA) (either exploratory or confirmatory). First, extracted factors represent certain latent traits included in a sample (e.g., intelligence or personality); PAMS, however, does not "seek" latent traits in a given sample.

Second, in the present study, PAMS identifies and extracts two core profiles from a dataset compiled from a sample of 3,293 person profiles of six observed scale scores (EI, MO, LMX, DI, FP, and IJ). Peaks on certain subscales represent high scores (because of personal skills, inclinations, or preferences on the subscale measurements) and valleys represent low scores (because of lack of skills or inappropriateness on the subscale measurements) (For details, see Kim et al., 2004, 2007; Kim, 2013).

Third, unlike factors or FA results, PAMS is designed to replicate person profiles that incorporate core profiles, based on the assumption that (a) person profiles are linearly related to core profiles as in multiple regression, and (b) that person profiles are considered as response variables (as in regression), and core profiles as predictor variables.

Finally, FA "attempts" to group homogeneous variables (by a rotation method) in several clusters and interprets these clustered variables as factors, pursuing "a simple structure" where a variable is assumed to be loaded onto one factor to enhance interpretation of factors, and factor loadings are considered to be unidirectional (usually positive). However, in PAMS, the directions of core profile coordinates (analogous to factor loadings) are irrelevant; and no rotation is required to enhance interpretation because all the input variables (six subscales in our study) are used to characterize each core profile pattern. For these reasons, rather than employ multivariate analytical methods, such as factor analysis, SEM, or HLM, we used PAMS as our primary analysis tool.

In addition, convergent and discriminant validity is addressed via the correlations between two core profiles and a third variable such as emotional exhaustion (EE), interpersonal deviance (ID), organizational deviance (OD), and job satisfaction (SA). For convergent validity we can use the examples of r(EE, dimension 1) = –0.56** and r(EE, dimension 2) = –0.060** with r(SA, dimension 1) = 0.65** and r(SA, dimension 2) = 0.07** as reflected in **Table 2**. Convergent validity is indicated because correlation coefficients for dimensions 1 and 2, for both EE and SA, the same directions were indicated, although the magnitudes were different. Within PAMS this indicates evidence of convergent validity for the dimension profiles. Conversely, for discriminant validity we use the example of r(ID, dimension 1) = –0.43** and r(ID, dimension 2) = 0.10* with r(OD, dimension 1) = –0.44** and r(OD, dimension 2) = 0.13**. Here the different directions of correlation coefficients between the two core profiles within both ID and OD are evidences of discriminant validity for the dimension profiles. Also, the correlation between the dimension profiles was r(dimension 1, dimension 2) = 0.12**. Because of a extremely reduced standard

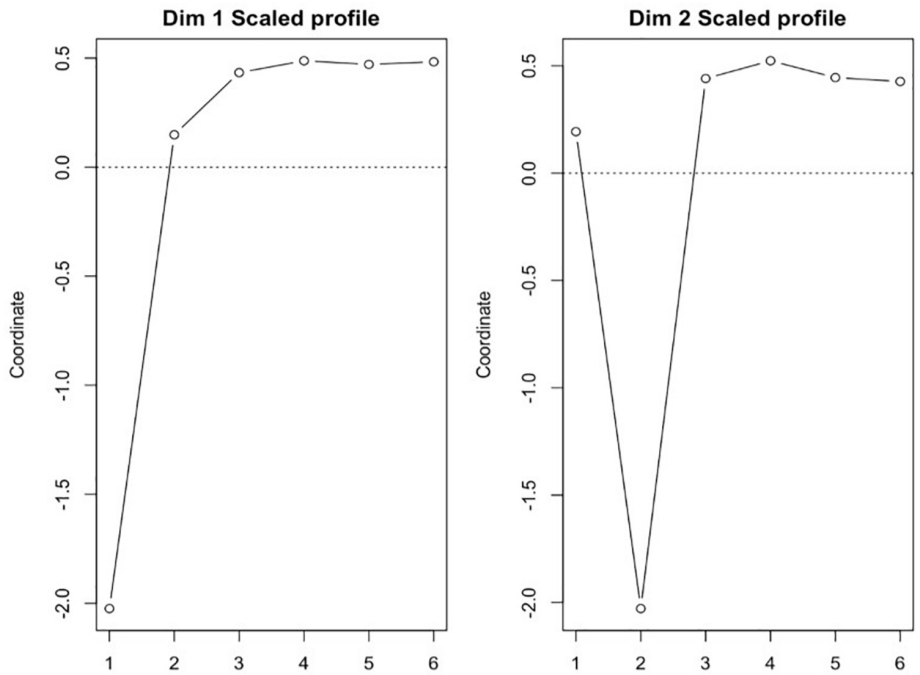

FIGURE 2 | Patterns of dimensional profiles, where 1 = emotional intelligence; 2 = work motivation; 3 = leader-member exchange; 4 = organizational justice-distributive; 5 = organizational justice-procedural; 6 = organizational justice-interpersonal.

TABLE 3 | Example data for interpretation of person weights.

id	w1	w2	level	R^2	corDim1	corDim2
#1	0.83	−1.78	3.28	0.47	0.57	−0.56
#3	1.88	−0.19	4.46	1.00	1.00	−0.72
#32	−0.47	1.78	3.85	0.89	−0.83	0.93

Where w1 = person regression weight_1; w2 = person regression weight_2; level = person average score for six subscales included as input variables in PAMS; R^2 = R-squared (which is a proportion of person variance occurring in his/her profile accounted for by two core profiles); corDim1 = partial correlation of a person between a person profile and core profile_1; corDim2 = partial correlation of a person between a person profile and core profile.

error caused by a large sample size (N = 3,293), this small correlation coefficient was statistically significant at a = 0.01, but the squared of 0.124 equals to 0.015 means that about 1.5% variance was shared between two core profiles (extracted from the present data set). This correlational result implies discriminant validity for the core profiles extracted from the current data set.

RESULTS

Next, to describe the network of associations among the study's variables, a Pearson correlation matrix was derived, as presented in **Table 4**.

Utilizing the enhanced PAMS (Kim et al., 2017; Kim and Kim, unpublished), we identified two *two-dimensional profiles* from the six predictor variables included in the current data, namely: emotional intelligence (EI); work motivation (MO); leader–member-exchange (LMX); organizational justice-distributive (DI); organizational justice-procedural (FP); and organizational justice-interactive (IJ).

We identified two core profiles from the present dataset based on two criteria: stress and interpretability. Stress is analogous to Steiger's RMSEA (root mean square error of approximation) or inverse of TLI (Tucker–Lewis Index) in SEM, and a value of 0.05 or less of stress signifies goodness-of-fit (to data) for proposed dimensionality. The stress value of the proposed two-dimensional solution in our study was 0.0022, and its bootstrap empirical confidence interval was (0.0011, 0.0058), verifying the stability of the two-dimensional solution. From 3,293 person profiles of the six observed measurements, using PAMS, we identified two core profiles that accounted for 68% of variance occurring in 3,293 person profiles.

Also, this two-dimensional solution satisfied the interpretability of the dimensions based on our judgment from the standpoint of organizational psychology.

The person weights are in fact regression weights/coefficients estimated by regressing the person profiles of the six observed measurements (EI, MO, LMX, DI, FP, and IJ) included in our data matrix that consisted of 3,293 cases (rows) and six organizational measures loaded on to two core profiles. The "person" weights

TABLE 4 | Correlation matrix (n = **3,293**).

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(1) Gender			1	0.06**	−0.02	0.06**	−0.01	0.12**	−0.03	−0.05**	0.01	−0.08**	−0.08**	−0.06**	−0.03	0.15**	0.14**	−0.01
(2) Age				1	0.13**	0.77**	0.10**	0.22**	−0.07**	0.06**	−0.05**	−0.02	0.01	−0.01	0.00	−0.06**	−0.06**	−0.05**
(3) Edu					1	0.09**	−0.01	0.20**	−0.09**	0.06**	0.05**	0.02	0.03	0.03	−0.02	−0.05**	−0.05**	0.05**
(4) Tenure						1	0.08**	0.27**	−0.04**	0.04**	−0.02	−0.02	0.01	−0.01	0.00	−0.02	−0.01	−0.04*
(5) Teamwork							1	−0.04*	0.04*	−0.03*	−0.08**	−0.08**	−0.07**	−0.06**	0.07**	−0.01	0.03	−0.12**
(6) Managerial level								1	−0.03	0.05**	0.07**	0.01	0.03*	0.03	−0.01	0.11**	0.10**	0.08**
(7) Emotional intelligence	4.26	0.96							1	−0.07**	−0.19**	−0.23**	−0.24**	−0.22**	0.53**	0.43**	0.47**	0.06**
(8) Work motivation	4.12	0.87								1	0.30**	0.52**	0.55**	0.53**	−0.14**	−0.10**	−0.17**	0.27**
(9) LMX	4.11	0.91									1	0.54**	0.53**	0.58**	−0.27**	−0.07**	−0.13**	0.33**
(10) Org. justice -distributive	4.11	1.07										1	0.84**	0.86**	−0.28**	−0.23**	−0.28**	0.34**
(11) Org. justice -procedural	4.10	1.03											1	0.88**	−0.28**	−0.23**	−0.27**	0.32**
(12) Org. justice -interactive	4.19	1.02												1	−0.29**	−0.18**	−0.23**	0.35**
(13) Emotional exhaustion	2.76	1.06													1	0.28**	0.31**	0.04**
(14) CWB-I	1.98	1.08														1	0.84**	0.17**
(15) CWB-O	2.00	1.05															1	0.12**
(16) Job satisfaction	4.35	0.88																1

*$p < 0.05$, **$p < 0.01$. (1) Pearson correlations are shown above. Frequencies for Gender, Age, Education, Tenure, Teamwork and Managerial Level appear in **Table 1**.

function as matching statistics between person profiles and core profiles in terms of their patterns and they are often expressed in terms of the correlations between them (Kim and Kim, 2017): Each person (of the 3,293) is assigned two "person" weights in our study because we identified two core profiles.

With the coordinates included in **Table 4**, we generated patterns of the dimensional profiles (see **Figure 2**). According to the profile pattern information generated, we labeled the dimension 1 profile as *high overall justice and low emotional intelligence* and the dimension 2 profile as *high emotional intelligence and low work motivation*. With reference to the integrated framework in **Figure 1**, each of these profiles represents a different state or arrangement of variables with the framework. Specifically, for the dimension 1 profile, we assume that justice perceptions are fixed at a high level within this state and EI is fixed at a low level within this state, while all other measured elements are aligned with their high or low positions in **Figure 2**. Similarly, for the dimension 2 profile, we assume that EI is fixed at a high level within this state and that intrinsic motivation is fixed at a low level within this state, while all other measured elements are aligned with their high or low positions in **Figure 2**.

In reality, the patterns of the dimensional profile should represent the pattern of the means of the six predictor variables. For example, if one plotted the six predictor variables' means in a spreadsheet file (i.e., a predictor variable-mean profile for the dimension 1 profile), its profile pattern should be equal to the pattern of the dimension 1 profile. To confirm this, we estimated the correlation between the predictors' mean profile and the dimension 1 profile. The correlation was 0.99, indeed indicating that the two patterns were visually identical.

Validation of Core Profile Patterns

To validate core profile patterns identified from the sample (n = 3,213), we first randomly split our original sample into two: Sample 1 as a calibration sample (n = 1,606) and Sample 2 as a validation sample (n = 1,607), and we then compared the two core profile patterns from Samples 1 and 2. The correlation between the first core profiles from Samples 1 and 2 was 1.00, and the correlation between the second core profiles from Samples 1 and 2 was 0.99. As expected, the correlations between the core profiles of the whole sample and the core profiles of the validation sample (Sample 2) were between 0.99 and 1.00.

We included both profile coordinates in a table (**Table 5**) and juxtaposed profile patterns in a figure (**Figure 3**). Since there was no difference in core profile patterns between the calibration sample (Sample 1) and the validation sample (Sample 2), we kept our original profiles estimated from the whole sample because they were almost identical to those core profiles estimated from Sample 1 (for calibration) and Sample 2 (for validation). **Table 5** provides the core profile coordinates from the calibration and validation samples and for the whole sample. **Figure 3** illustrates that the PAMS responses between the calibration and validation samples are visually identical. In sum, all core profile patterns identified from Sample 1, Sample 2, and the whole sample were virtually the same, and we thus included the core profiles of the entire sample as the final ones.

TABLE 5 | The core profile coordinates from split halves and whole samples.

	CP1_1st Half	CP1_2nd Half	CP1_Whole
EI	−1.30	−1.42	−1.30
MO	0.10	0.21	0.10
LMX	0.25	0.22	0.28
DI	0.32	0.38	0.31
FP	0.31	0.26	0.30
IJ	0.32	0.35	0.31
	CP2_1st Half	**CP2_2nd Half**	**CP2_Whole**
EI	0.04	0.06	0.06
MO	−0.59	−0.61	−0.60
LMX	0.15	0.10	0.13
DI	0.14	0.19	0.15
FP	0.14	0.17	0.13
IJ	0.13	0.10	0.13

CP, core profile; 1st Half, the first randomly split half sample (n = 1,606); 2nd Half, the second randomly split half sample (n = 1,607); Whole, the whole sample (n = 3,213). EI, emotional intelligence; MO, work motivation; LMX, leader–member exchange; DI, organizational justice-distributive; FP, organizational justice-procedural; IJ, organizational justice-interactive.

The two profiles, incorporating the six predictor variables scores, accounted for 68% of the total variance occurring within the 3,293 individuals' response profiles. The stress value for the two-dimensional (profiles) solution was 0.0022, indicating the goodness-of-fit. To test its statistical meaningfulness, we generated 2,000 bootstrap samples and estimated its 95% biased-corrected and accelerated (BCa) bootstrap confidence interval for the stress value. The confidence interval was (0.0011, 0.0058), which confirmed its statistical significance at $\alpha = 0.05$.

Utilizing the 2,000 bootstrap samples, we also estimated the 95% BCa confidence intervals for the coordinates of the dimensional profiles. The coordinates whose confidence intervals included zeros were considered statistically insignificant. **Table 6** consists of a summary of these results.

To examine the utility of the dimensional profile information across all observations, we estimated correlations between four of the dependent variables in the current study and the dimensional profiles. The dependent variables were emotional exhaustion (EE), interpersonal deviance (ID), organizational deviance (OD), and job satisfaction (SA). The correlations were:

$$r(\text{EE, dimension 1}) = -0.56^{**} \text{ and}$$

$$(\text{EE, dimension 2}) = -0.060^{**}$$

$$r(\text{ID, dimension 1}) = -0.43^{**} \text{ and}$$

$$r(\text{ID, dimension 2}) = 0.10^{*}$$

$$r(\text{OD, dimension 1}) = -0.44^{**} \text{ and}$$

$$r(\text{OD, dimension 2}) = 0.13^{**}$$

$$r(\text{SA, dimension 1}) = 0.65^{**} \text{ and}$$

$$r(\text{SA, dimension 2}) = 0.07^{**}$$

where ** refers to $p < 0.01$.

Thus, EE, ID, and OD variables had *negative* and statistically significant correlations with the dimension 1 profile, whereas SA had a *positive* and statistically significant correlation with the dimension 1 profile. EE had a *negative* and statistically significant correlation with the dimension 2 profile. However, ID, OD, and SA had *positive* and statistically weak but significant correlations with the dimension 2 profile. We note that these finding are in according with other studies testing relationships between EI, motivation, and job satisfaction (Carmeli, 2003; Christie et al., 2007; Othman et al., 2009).

In addition, for both the dimension 1 profile and the dimension 2 profile, the PAMS method allows users to envision an *inverse profile* for each dimension, in which each of the maker variables indicated as fixed in reference to the initial profile is then envisioned at the opposite ends of the scale for the inverse profile. For example, the substantial negative correlations with the dimension 1 profile indicate that those responders who scored high on EE, ID, and OD are *inversely* related to the dimension 1 profile pattern – the *high overall justice and low emotional intelligence*. Thus, concomitantly, those same participants, scoring high on EE, ID, and OD, will align with an inverse profile pattern (of the six predictor scores included in PAMS) that indicates an inversely related *low overall justice and high emotional intelligence* profile. In contrast, within the basic dimension 1 profile, those who have low EE, ID, and OD scores tend to have a *high* overall justice component score, but a *low* emotional intelligence score.

Additionally, respondents demonstrating high ID, OD, and SA exhibit weak, yet statistically significant positive, correlations with the *high emotional intelligence and low work motivation* profile (dimension 2). Thus, these respondents also tend to have their score response patterns resembling dimension 2, the *high emotional intelligence and low work motivation* profile. Conversely, employees experiencing high EE scores tend toward the *low emotional intelligence and high work motivation* profile (the inverse profile for dimension 2).

DISCUSSION

The use of the Van den Broeck et al. (2019) model allowed us to broaden the scope of the present study to include antecedent constructs (EI, LMX, justice), endogenous motivational constructs (CWB, intrinsic motivation), and outcome-based constructs (job satisfaction and emotional exhaustion) in the same PAMS study.

The first indication from this study is that rather than the individual components of justice (see above) impinging upon employees' exhaustion and workplace deviance, it is the *overall* perception of justice that affects the deviant employees. This finding is similar to that of previous research on this topic (e.g., Chernyak-Hai and Tziner, 2014). Thus, based on the inverse profile for dimension 1 in this study, low, *overall* organizational justice and high emotional intelligence are commensurate with high emotional exhaustion, interpersonal deviance, and organizational deviance.

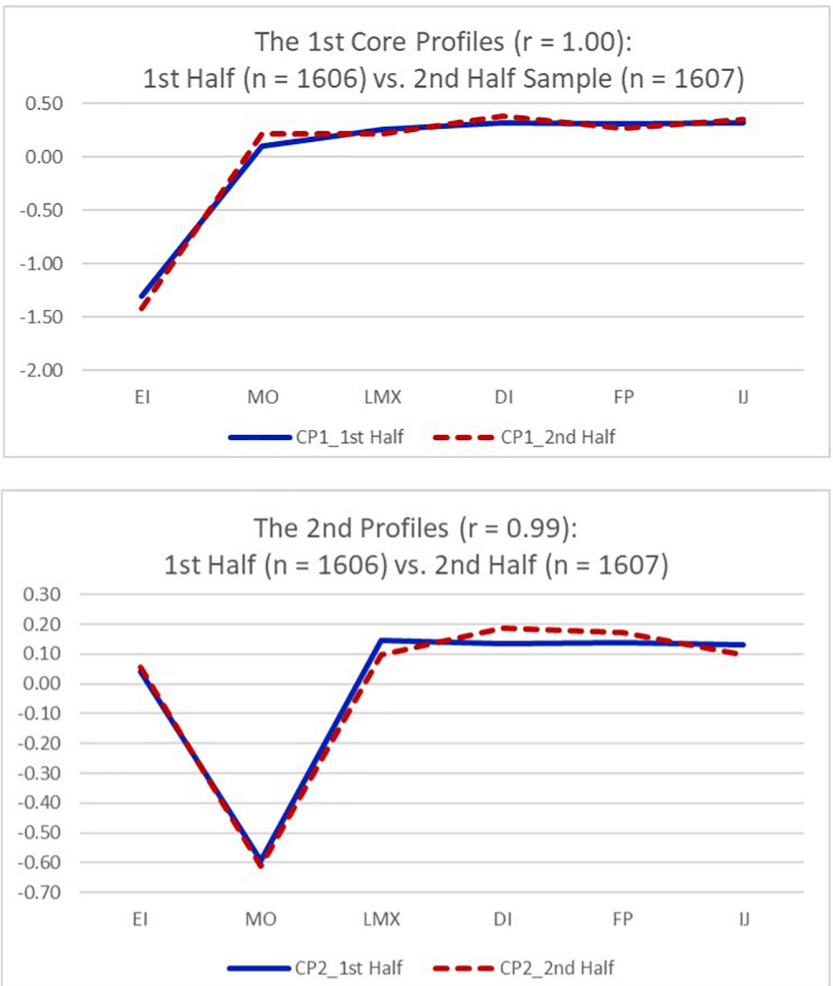

FIGURE 3 | Comparing the core profile patterns in the first and second half samples.

Concerning the consequences of this perceived sense of injustice, the finding is congruent with those emanating from previous studies, such as those of Maslach et al. (2001); Moliner et al. (2005), and Shkoler and Tziner (2017) that illustrate that a sense of unfairness could eventually lead to burnout, of which emotional exhaustion constitutes a major facet (Son et al., 2014). Indeed, as noted, injustice in the workplace consumes employees psychologically and depletes their personal resources over time (Hobfoll, 1989), thus inducing a state of emotional exhaustion (Tepper, 2001).

Conversely, our finding that a high perception of organizational justice and fair treatment links very positively with job satisfaction is not surprising; it coheres with both social exchange theory (Blau, 1986; see also Cole et al., 2002) and the extant literature (Pignata et al., 2016; Mashi, 2018).

The relationship between low organizational justice and high levels of emotional intelligence, recorded above, is seemingly unexpected, for we recall that high EI should essentially enhance the control of emotions and the handling of difficult situations in life (Joseph and Newman, 2010). A plausible explanation, however, for this found relationship between (overall) justice and workplace deviance among the high-EI subjects is that highly emotionally intelligent employees actually manipulate those frustrations founded upon perceived injustice in a sophisticated and malicious way (e.g., Shkoler and Tziner, 2017): they harm other employees and the organization as a whole. However, this subtle Machiavellian behavior depletes psychic-energetic resources because of the need to be constantly alert in order to keep this misbehavior hidden. This defensive posture, in turn, is likely to provoke emotional exhaustion.

Our results indicate that the opposite relationship of the above also holds true, namely, that those who demonstrate *high* levels of organizational justice, along with *low* levels of emotional intelligence, also tend toward higher levels of emotional exhaustion, interpersonal deviance, and organizational deviance. Possibly, from a psychological weighting perspective, lower EI, which is associated with lack of self-regulation and monitoring of emotions, would appear to have a more powerful impact on emotional exhaustion and organizational deviance than high justice perceptions.

TABLE 6 | Dimensional profile coordinates, mean coordinates, standard errors, and confidence intervals for the whole sample.

	Original	Mean	*SE*	BCaLower	BCaUpper
Dimension 1					
EI	**−1.30**	−1.33	0.06	−1.42	−1.23
MO	0.10	0.11	0.05	−0.02	0.22
LMX	**0.28**	0.21	0.06	0.22	0.38
DI	**0.31**	0.35	0.03	0.25	0.33
FP	**0.30**	0.32	0.04	0.19	0.36
IJ	**0.31**	0.34	0.02	0.29	0.31
Dimension 2					
EI	**0.06**	0.03	0.03	0.02	0.09
MO	**−0.60**	−0.43	0.21	−0.63	−0.24
LMX	0.13	0.07	0.11	−0.09	0.23
DI	0.15	0.16	0.08	−0.01	0.31
FP	0.13	0.10	0.08	−0.04	0.24
IJ	0.13	0.07	0.08	−0.02	0.24

Significant coordinates are in bold. Original, indicates the original coordinates before bootstrapping. Mean, the mean coordinates from 2,000 bootstrap coordinate estimates. SE, bootstrap standard error estimates for the coordinates. BCaLower, the 2.5th percentile lower tail and BCaUpper, the 97.5th percentile upper tail. EI, emotional intelligence; MO, work motivation; LMX, leader–member exchange; DI, organizational justice-distributive; FP, organizational justice-procedural; and IJ, organizational justice-interactive.

Of interest, our study revealed a dimension 1 profile labeled *high overall justice and low emotional intelligence*, indicating that high job satisfaction is consistent with low emotional intelligence. At first glance, this might seem contradictory to the above-mentioned finding that this combination leads to higher levels of emotional exhaustion, interpersonal deviance, and organizational deviance. Indeed, a review of the literature indicates mixed results in this respect, with some studies reporting a positive relationship between job satisfaction and emotional intelligence (e.g., Rezvani et al., 2016), and others indicating a negative relationship (e.g., Thompson and Samuel, 2014).

While the former link is intuitively conceivable, the latter relationship is puzzling, as we expect highly emotional intelligent individuals to be inclined toward utilization of their cognitive capacity of coping with negative emotions that emanate from their jobs (and other work-related contextual factors) (Dilchert et al., 2007). Indeed, we anticipate that high-EI employees develop positive emotions at work, experience the job as pleasant and gratifying, and achieve feelings of high job satisfaction (Adil and Kamal, 2016).

Conversely, we expect individual employees characterized by *low* EI to be unlikely to cope with their negative feelings and prone to release their frustration through disobedience. Alternatively, these low-EI employees would be disposed to display "fake" emotions (i.e., surface acting), which entails suppressing negative feelings and a substantial investment of psychological energy (e.g., Prati et al., 2009), resulting in lower levels of job satisfaction.

Nevertheless, beyond these hypothetical contemplations, in our study we observe clearly that the relationship is inverse, namely, that low emotional intelligence is consistent with high job satisfaction. Perhaps, reverting back to our assessment of high-EI employees, we might now propose that low-EI employees demonstrate a lower capacity for complex schemes (such as the Machiavellian ploys described above). Moreover, from a psychological weighting perspective, the combined high perceptions of justice overcome any tendencies toward deviant behavior, such that the final existential state is one of high work satisfaction. Alternatively, we might contend, in contradistinction to the previous proposition, that low-EI employees would not, *a priori*, make efforts to "surface act." More likely, they may innocently adopt a more naive or simple perspective of their job and, as such, more easily find work satisfaction.

We would like, additionally, to cast an interpretative light on the findings related to dimension 2, the *high emotional intelligence and low work motivation* profile that revealed an associate pattern score characterized by high interpersonal deviance, organizational deviance, and low job satisfaction. As discussed, it is easily understandable that when motivation at work is at a low level, employees are more prone to experience low levels of job satisfaction and to display work misbehavior (Shkoler and Tziner, 2017). We also observed that high-EI employees with low job motivation, based on perceived injustice, fathom out ways to harm other employees and the organization as a whole (Joseph and Newman, 2010). Thus, this employee profile must surely represent a "red light" for managers in the workplace.

Last, we might also need to inquire why the combination of low levels of emotional intelligence and high work motivation is associated with a high level of emotional exhaustion. One possible response is that high levels of work motivation compel employees to expend considerable energy at work, and that the burned-up energy amounts to exhaustion that constitutes a severe depletion of personal resources. Moreover, low emotional intelligence hampers effective assessment of feelings, such that the poor emotional regulation also induces and contributes toward a state of emotional exhaustion (Adil and Kamal, 2016).

CONCLUSION

The major contributions of this research are found within (a) the conceptual unification of goal choice and goal-striving processes linked to state-based and individual difference antecedents, and (b) within the empirical support generated for this unified motivational framework in the development and demonstration of two distinct person profiles. We demonstrated the utility of the overarching motivational framework using PAMS across a total sample of 3,293 respondents. Moreover, we note the abundance of research supporting the necessity of a model to serve as an advanced organizer as part of guided instruction in complex environments (White, 1992; Mayer, 2004; Kirschner et al., 2006).

In light of these observations, we recommend to practitioners that train managers to understand the complexity of the related effects that impact on motivation in the workplace, that they use heuristic conceptual frameworks combining multiple motivational perspectives into a unified model similar to the type used within this paper. Such an approach allows for the unification of isolated motivational models, which must be

understood together for managers to appreciate the complex interrelationships between goal choice, goal striving, and state and individual difference antecedents to motivation, and their ultimate connections to organizational outcomes. For example, there are several reasons why individuals choose to engage in CWB that include reactions to injustice or job dissatisfaction, negative role models, and thrill-seeking (Bennett and Robinson, 2000). The results of our research suggest that when choices to engage in CWB occur in contexts of perceived injustice, a high level of EI may actually be positively associated with CWB.

Limitations and Future Research

We note that the paths illustrated in this research do not provide *direct* causal evidence. However, these paths do indicate very strong networks of association that might be leveraged to explain in more detail focal constructs such as emotional intelligence. In addition, our measurements were based on self-report questionnaires. Although we attempted to employ procedural remedies to minimize the risk of significant common method variance (CMV), multiple self-report questionnaires may contain some shared variability due to measurement methods, although any potential bias due to CMV is likely to be very low (Spector, 2006). However, following expert recommendations (Podsakoff et al., 2003) future researchers should try to use multiple measurement methods, such as supervisor or co-worker ratings of CWB, in addition to the types of procedural remedies we employed.

We recognize that phenomena in organizations tend to occur in multilevel networks that are complex. Although we have presented a parsimonious model of key variables, the constructs reflected in our research could be expanded to include both group- and organizational-level constructs, such as measures of group cohesion, organizational culture, or organizational effectiveness. In particular, while we selected organizations from which to sample participants based on an assumed uniform culture within the industry sector (telecommunications), we did not directly test this assumption.

Future studies might also incorporate a small number of additional variables as covariates. These might be stated in terms of (a) states, which could include justice-related contextual variables, such as illegitimate tasks (Omansky et al., 2016); (b) individual differences such as age, which has been shown to moderate the relationship between justice and emotional exhaustion (Brienza and Bobocel, 2017); and (c) as indicated, cultural and demographic factors that impinge on the interrelationships between employees and their managers (Zagenczyk et al., 2015).

In addition, given the prominence of the *low organizational justice with high emotional intelligence* profile we suggest that Machiavellianism, narcissism, and psychopathy be given primary attention as the most prominent socially aversive traits that have been researched in the literature (Paulhus and Williams, 2002). Such traits, frequently discussed as the "dark triad" (Paulhus and Williams, 2002) could potentially moderate the relationships we uncovered between the *low organizational justice with high emotional intelligence* profile and outcomes we noted in this study such as emotional exhaustion. Other elements or types of negative organizational behaviors should also be examined as potential moderators of this profile. This is particularly true of behaviors designed to be injurious to the organization that were not specifically investigated in this study and that seem to covary, such as destructive political behaviors, breaches of confidence, and excessive or inappropriate impression management activities (Griffin and O'Leary-Kelly, 2004; Levy and Tziner, 2011).

To examine the determinants of organizational justice in more detail, we recommend that managers use interview data, which might include performance management conversations, as well as exit-interview data, which could provide a retrospective account of justice perceptions. As part of such studies we would recommend the use of multilevel or mixed-methods research approaches (e.g., Shkoler, 2019) to investigate further the team-level variables in organizational contexts. This would be particularly important for our proposed model, because over 80% of participants in our study did not work in teams. Furthermore, this investigation should be replicated with respondents exhibiting demographic characteristics spanning more evenly over the respective ranges (e.g., more evenly spread over the 26–46 + categories of age).

DATA AVAILABILITY STATEMENT

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

AT: project design and model development. EF: manuscript writing and conceptual framework development. S-KK: data analyses. CV: project design and data analyses. OS: manuscript writing.

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Associations of Job Insecurity With Perceived Work-Related Symptoms, Job Satisfaction, and Turnover Intentions: The Mediating Role of Leader–Member Exchange and the Moderating Role of Organizational Support

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This study wants to examine effects of job insecurity on several work-related outcomes (perceived work-related symptoms, job satisfaction, and turnover intentions) by developing a moderated mediation model. The model emphasizes the role played by the quality of leader–member exchange (LMX) in mediating the relation between perceived job insecurity and outcomes related to work, and the moderating role of perceived organizational support (POS) in influencing the mediation. Survey data from 510 workers at Italian organizations were collected, and regression was used to evaluate the hypotheses. After age, gender, education, and organizational tenure were controlled, results showed that perceived quality of LMX carried the effect of job insecurity on all outcomes, and that this relationship was stronger for employees who reported higher levels of POS. This study makes important theoretical and practical contributions to job insecurity, LMX, and POS research, underlining the importance of promoting the leader–member relationship's quality in an ethical and supportive work environment.

Keywords: job insecurity, leader–member exchange, organizational support, perceived health, work-related symptoms, job satisfaction, turnover intentions

INTRODUCTION

An increasing body of research focusing on the associations between types of contract and negative psychological responses has emphasized the relation between job insecurity, health, and different work outcomes, such as well-being conditions (Benavides et al., 2000; Virtanen et al., 2002; Yaşlıoğlu et al., 2013; Griep et al., 2015). Job insecurity is a psychosocial risk associated with adverse impacts for both the worker and the organizational context. It has serious consequences for employees and is associated with the intent to leave the organization (Vander Elst et al., 2014; Probst et al., 2018). A meta-analysis on job insecurity outcomes showed that job insecurity has negative effects on several job and organizational attitudes and health (Sverke et al., 2002).

However, we cannot automatically infer that job insecurity directly relates to several work-related outcomes. For example, De Witte (2005), while emphasizing the effect that job

insecurity has, i.e., on well-being, also underlines that among other psychological risks or job demands, job insecurity did not, however, represent the most troublesome factor. Also, Loi et al. (2011) showed that job insecurity did not seem to have a significant effect on performance, while Cheng and Chan (2008) found a significant negative association between insecurity and impaired performance. As such, research is needed to determine the conditions under which this occurs.

One specific concern about the effect of insecurity on work outcomes is the effect of job insecurity on supervisor–employee relationship. Researchers showed that leader–member exchange (LMX) may have an important role in worker well-being, job satisfaction, and turnover intentions (Griffeth et al., 2000; Lapierre and Hackett, 2007; Volmer et al., 2011), but what is needed is a deeper understanding of how social exchange elements and relationships (i.e., LMX) may intervene in the effect of job insecurity to work-related outcomes (Flickinger et al., 2016).

Further, studies have also shown that when the employee–organization relationship is undermined by distrust and lack of support, workers are more likely to feel unsatisfied about their occupation and consider leaving (e.g., Dulebohn et al., 2012).

In line with this, the present contribution aims to underline the effect of job insecurity on several work-related outcomes (perceived work-related symptoms, job satisfaction, and turnover intentions), by developing a moderated mediation model. The model emphasizes the mediating role of the quality of LMX underpinning the association between job insecurity and work outcomes, and the moderating role of organizational support in influencing the mediation (see **Figure 1**).

Precisely, we suggest that LMX quality mediates the influence of insecurity on work-related outcomes. Second, we acknowledge that the strength of perceived organizational support (POS), as a contextual variable, has the potential to intensify the effect of LMX on work outcomes. We hypothesize that low levels of LMX quality following high levels of job insecurity will result in low job satisfaction, low perceived health, and high turnover intentions. Hence, we suggest that the influence of LMX on work outcomes will be greater for workers with higher POS levels, compared with those with lower POS.

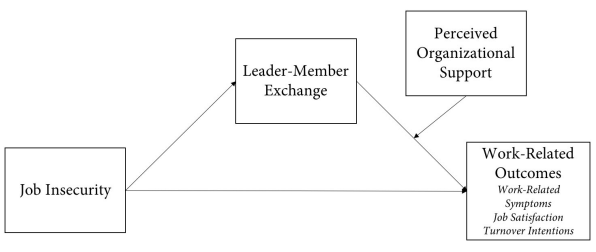

FIGURE 1 | Proposed model for investigating the relationships among job insecurity, leader–member exchange, perceived organizational support, and perceived work-related symptoms, job satisfaction, and turnover intentions.

THEORETICAL BACKGROUND AND HYPOTHESES

The Role of Leader–Member Exchange in Mediating the Relationship Between Job Insecurity and Work-Related Outcomes

Insecure workers are characterized by low levels of occupational health (Virtanen et al., 2002) and are subject to stronger exposure or show higher vulnerability to stress (Hall, 2006; Yaşlıoğlu et al., 2013), reduced organizational commitment (Sverke et al., 2002), and job satisfaction (De Witte and Näswall, 2003; Reisel et al., 2010). Job insecurity is assumed to have harmful consequences for workers as well as organizations, since it has a significant impact on workers' stress and on the intention to leave (De Witte et al., 2010; Vander Elst et al., 2014; Probst et al., 2018).

An increasing amount of research has focused on the costs of job insecurity in the long term for well-being (Hellgren and Sverke, 2003; De Witte, 2005; Vander Elst et al., 2014). Researches indicate that job insecurity explains variations over time in both job satisfaction and physical pains. Extended periods of job insecurity decrease job satisfaction and well-being and increase physical symptomatology (Heaney et al., 1994; Hellgren and Sverke, 2003; Reisel et al., 2010).

Following De Cuyper and De Witte's (2007) study, it may be argued that job insecurity can be considered as a violation of the psychological contract, which negatively affects job satisfaction and organizational commitment.

The LMX model (Graen and Uhl-Bien, 1995; Gerstner and Day, 1997) posits that each leader–follower dyadic pair develops relationships characterized by uniqueness, and that high-quality LMX relationships are beneficial to the follower in terms of mutual support, trust, and decision-making discretion.

Prior literature suggests that temporary employment discourages workers' organizational commitment and loyalty (Zeytinoglu and Cooke, 2005; De Cuyper et al., 2008); also, followers' perceptions of LMX positively influence job satisfaction, well-being, and health, and negatively intention to turnover (e.g., Dulebohn et al., 2012). Job insecurity may also threaten the exchanges other than the worker–organization relationship, so that it could be viewed as a discrepancy in the social exchange (Shoss, 2017). Additionally, LMX is more effective when workers perceive less security at work (Loi et al., 2011). Generally speaking, Dulebohn et al. (2012) showed that LMX is an important mediator involved in the relation between various antecedents and outcomes, appearing to bridge their association.

According to this, we hypothesize that:

H1: LMX quality mediates the relationship between job insecurity and (a) work-related symptoms, (b) job satisfaction, and (c) intention to turnover.

Moderating Role of Organizational Support

As Joelson and Wahlquist (1987) pointed out, job insecurity has a harmful impact on well-being and job satisfaction because

of unpredictability and uncontrollability. First, job insecurity is related to unexpectedness, since what will occur is uncertain, making it problematic to respond and act in a proper way. Also, unpredictability implies the inability to control the threats (De Witte, 1999).

Given that organizational support facilitates adaptation in transitions, by providing the employees with help against psychological consequences of job loss (i.e., Schlossberg and Leibowitz, 1980), one can expect that positive organizational support may help workers to cope with uncertainty, also promoting organizational commitment although under conditions of high job insecurity (Di Stefano et al., 2018; Venza and Cascio, 2019).

Perceived organizational support (Eisenberger et al., 1986) is the worker's perception of how the organization cares about employees' expectations and needs, appreciates their contributions, is willing to help, supporting, and rewarding. While LMX refers to social exchanges with supervisors, POS refers to social exchanges with the organization (e.g., Settoon et al., 1996; Wayne et al., 1997). Since workers who have access to high quality exchanges with their organization (i.e., perceive higher organizational support) should benefit to a greater extent from high LMX quality, one may argue that high LMX employees should be more satisfied, and even less prone to turnover intentions if they have high, as opposed to low, POS (Erdogan and Enders, 2007). POS should increase the strength of the LMX-job satisfaction relationship. So, we hypothesize the following:

H2: POS moderates the strength of the relationship between the LMX quality and (a) work-related symptoms, (b) job satisfaction, and (c) intention to turnover, such that the relationship is weaker when POS is high rather than low.

H3: POS moderates the strength of the indirect relationship of job insecurity with (a) work-related symptoms, (b) job satisfaction, and (c) intention to turnover via LMX, such that the mediated relationship is weaker when POS is low than under high.

MATERIALS AND METHODS

Sample and Procedure

Participants were 510 employees (45.1% were females) from four mobile services call centers located in Italy. These organizations regularly survey employees about their well-being and perceived working conditions, while a committee discusses results to consider proposals for organizational development. Data for the present research came from one of these comprehensive surveys. All employees received e-mail providing detailed information regarding research, the requirements for inclusion, the link to survey, and the assurance of confidentiality. In order to reduce common method bias (Podsakoff et al., 2003), the survey did not request any personal information, and the order of item presentation was counterbalanced across the respondents.

Age ranged between 21 and 59 years, with an age of 31.88 years on average (SD = 11.57), and the average job tenure was 10.97 years (SD = 8.12). As for educational qualification, the largest part (72.8%) had a high school diploma.

Measures

Job Insecurity

Perceived job insecurity was assessed by five items adopted from Job Content Questionnaire (Karasek et al., 1998). Sample items included "My job is secure." Respondents specified their extent of agreement on a four-point Likert scale, ranging from 1 ("Strongly disagree") to 4 ("Strongly agree") and were re-coded so that more agreement corresponds to more job insecurity perception. The coefficient alpha was 0.84.

Leader–Member Exchange

Quality of working leader–follower relationships was assessed by the seven-item LMX-7 questionnaire (Graen and Uhl-Bien, 1995). Sample items included "How well does your leader recognize your potential?" Participants provided their responses using five-point scales, each of which is different from one item to another (1 = "Rarely," 5 = "Very often," or 1 = "None" to 5 = "Very high"). Higher scores represent a higher quality exchange between the supervisor and the employee. The coefficient alpha was 0.96.

Perceived Organizational Support

Organizational support was assessed by the short version (eight items) of the POS scale from Eisenberger et al. (1986, 1997), and Muse and Stamper (2007). Sample items included "The organization takes pride in my accomplishments at work." Responses were recorded on a five-point agreement scale, ranging from 1 ("Strongly disagree") to 5 ("Strongly agree"). Higher scores represent a higher perceived support from the organization. The coefficient alpha was 0.98.

Perceived Work-Related Symptoms

Perceived work-related symptoms were measured with Multidimensional Organizational Health Questionnaire's list of eight psychosomatic symptoms (Avallone and Paplomatas, 2005). Respondents were asked to evaluate how frequently over the past 6 months they perceived several symptoms, using a four-point Likert scale ranging from 1 ("Never") to 4 ("Often"), and then assessing what percentage they attribute these disorders to the work performed. Sample items included "In the last 6 months, how often have you perceived... Muscle and joint pains?" Higher scores represent a larger amount of perceived symptoms related to work. The coefficient alpha was 0.92.

Job Satisfaction

Job satisfaction was assessed using the three-item measure of global job satisfaction proposed by Cammann et al. (1983) and Bowling and Hammond (2008). An example item is "All in all I am satisfied with my job." The measure uses a five-point Likert scale from 1 ("Strongly disagree") to 5 ("Strongly agree"). Higher scores represent a higher job satisfaction. The coefficient alpha was 0.91.

Turnover Intentions

Intention to quit the job was measured with Mobley et al.'s (1978) three-item measure of intention to quit. An example item is "As soon as possible, I would leave this organization." The scale uses a five-point Likert scale, ranging from 1 ("Very unlikely") to 5 ("Certain"). High scores reflect high turnover intentions. The coefficient alpha was 0.92.

Data Analysis

Before proceeding with the analyses of the hypothesized relations between variables, several confirmatory factor analyses (CFAs) were performed using the maximum likelihood estimation method in AMOS 20 (Arbuckle, 2011) to examine the distinctiveness of the latent variables and examine the existence of common method bias and alternative model specifications (Podsakoff et al., 2003). First, a measurement model was examined including six latent variables: job insecurity, LMX, POS, work-related symptoms, job satisfaction, and turnover intentions, using scale items as observed indicators explained by the latent factors and allowing the factors to correlate which each other. Next, the hypothesized model with six correlated factors was compared to other alternative models: a model with three correlated factors that integrates job insecurity, LMX, and POS items into one dimension, and specifies outcomes as separate constructs; a three-correlated factor model that specifies job insecurity, LMX, and POS as separates constructs, and integrates all item outcomes into one dimension; a single overall latent factor model, underlying all the items designed for the questionnaire. Due to the number of items measured for some constructs, partial disaggregation technique was used by combining items into composites in order to reduce higher levels of random error; hence, items that relate to job insecurity, LMX, POS, and perceived work-related symptoms were combined to create two composite indicators of each construct instead of several single-item indicators.

Hypotheses were tested with Model 4 and Model 14 of Hayes' (2013) SPSS macro PROCESS for estimating moderated mediation effects, following the approach described in Preacher et al. (2007) and Hayes (2018). Model 4 was used to test the mediating role (H1) of LMX along with the direct relationship between job insecurity and work-related outcomes. Model 14 was used to simultaneously test whether the POS moderated the relationship between LMX and work-related outcomes (moderator hypothesis, H2), and if the indirect path was moderated by POS (moderated mediation hypothesis, H3). The macro PROCESS uses bootstrapping (n = 5000) to estimate unstandardized coefficients and biased corrected confidence intervals (CIs) to assess results in a single step. Age, gender, education, and organizational tenure were inserted as control variables.

RESULTS

Measurement Models

Confirmatory factor analyses provided support for the hypothesized six-correlated-factor model; results indicate acceptable model fit to the data (see **Table 1**). This model provided better statistical significance compared with the alternative model in which all predictor items are loaded onto a single factor [$\Delta\chi^2$ (9) = 2142.467, $p < 0.001$]; the fit indexes were also better than the fit from the model in which work-related outcomes items are loaded onto a single factor [$\Delta\chi^2$ (9) = 714.918, $p < 0.001$]; and better than single overall latent factor model [$\Delta\chi^2$ (15) = 3433.063, $p < 0.001$]. Thus, the results of alternative CFA models provided evidence of construct independence.

Descriptive Statistics

The means, standard deviations, intercorrelations, and reliabilities for all the variables in this study can be seen in **Table 2**.

As shown in **Table 2**, the intercorrelations showed, first, that control variables were uncorrelated, in most cases, with the constructs; only education was weakly correlated with work-related symptoms (r = 0.12), and organizational tenure was weakly correlated with work-related symptoms (r = 0.29), job satisfaction (r = −0.25), and turnover intentions (r = −0.16). Second, job insecurity correlated with work-related outcomes: it showed a moderate positive correlation with work-related symptoms (r = 0.41) and turnover intentions (r = 0.54), and a moderate negative correlation with job satisfaction (r = −0.50); also, it was moderately and negatively correlated with LMX (r = −0.41) and strongly and negatively correlated with POS (r = −0.73). Mediator variable, i.e., LMX, correlated moderately and negatively with work-related symptoms (r = −0.52) and turnover intentions (r = −0.59), and moderately and positively with job satisfaction (r = 0.57), and with the moderator variable (i.e., organizational support: r = 0.39). Last, organizational support moderately correlated with all

TABLE 1 | Fit statistics for measurement model comparison.

		χ^2	df	CFI	TLI	RMSEA	[90% CI]	SRMR	χ^2_{diff} (model comparison)
1	Six-factor model	112.256*	39	0.988	0.980	0.061	0.048–0.074	0.016	
2	Three-factor model (predictors)[a]	2254.723*	48	0.651	0.520	0.301	0.290–0.311	0.235	2142.467* (2*vs*.1)
3	Three-factor model (outcomes)[b]	827.174*	48	0.877	0.830	0.179	0.168–0.189	0.083	714.918* (3*vs*.1)
4	One-factor model	3545.319*	54	0.447	0.325	0.356	0.346–0.366	0.178	3433.063* (4*vs*.1)

*N = 510. [a]Job insecurity, leader–member exchange, and perceived organizational support as one factor. [b]Perceived work-related symptoms, job satisfaction, and turnover intentions as one factor. *p < 0.001.*

TABLE 2 | Descriptive statistics and intercorrelations among the study variables.

		Mean	SD	1	2	3	4	5	6	7	8	9
Control variables												
1	Age	31.88	11.57	–								
2	Gender[a]	1.45	0.50	−0.04	–							
3	Education[b]	2.39	0.71	0.27*	0.02	–						
4	Tenure	10.97	8.12	0.49*	−0.01	0.30*						
Predictor variable												
5	Job insecurity	3.26	0.59	−0.04	0.03	−0.01	0.00	–				
Mediator variable												
6	Leader–member exchange	2.92	0.74	0.08	−0.03	0.04	0.00	−0.41*	–			
Moderator variable												
7	Organizational support	2.25	1.29	0.03	−0.05	−0.04	−0.02	−0.73*	0.39*	–		
Outcome variables												
8	Work-related symptoms	1.87	1.35	0.07	−0.01	0.12*	0.29*	0.41*	−0.52*	−0.45*	–	
9	Job satisfaction	2.78	1.20	−0.12*	−0.06	−0.04	−0.25*	−0.50*	0.57*	0.50*	−0.83*	–
10	Turnover intention	3.73	1.07	−0.12*	0.03	0.03	−0.16*	0.54*	−0.59*	−0.56*	0.62*	−0.62*

*N = 510. [a]1 = male, 2 = female; [b]from 1 = "middle school graduation" to 5 = "postgraduate qualification." *p < 0.01.*

three outcomes, i.e., negatively with work-related symptoms ($r = -0.45$) and turnover intentions ($r = -0.56$), and positively with job satisfaction ($r = 0.50$).

Test of Hypotheses

Mediation Hypothesis

Hypothesis 1 predicted that LMX mediated the relationship of job insecurity with work-related outcomes (work-related symptoms, job satisfaction, and turnover intentions). After controlling for covariates, the results showed that job insecurity had indirect effects on independent variables via LMX in the expected direction ($b = 0.39$ for work-related symptoms, $b = -0.36$ for job satisfaction, and $b = 0.33$ for turnover intentions), and in all cases, bootstrapped 95% CI did not include zero ([0.30, 0.48] for work-related symptoms; [−0.45, 0.28] for job satisfaction; [0.26, 0.41] for turnover intentions) (see the upper part of **Table 3**). Consequently, LMX partially mediated the job insecurity-outcomes relationship. Hence, Hypothesis 1 was supported.

Moderation Hypothesis

Hypothesis 2 predicted that POS moderated the relationships of LMX with work-related outcomes. As can be seen in the lower part of **Table 3**, the job insecurity × LMX interaction was found to be significant in predicting work-related symptoms ($b = 0.36$) and job satisfaction ($b = -0.18$) but was non-significant in predicting turnover intentions ($b = -0.01$). To probe the pattern of significant moderation effects, the relation between LMX and work-related symptoms, and LMX and job satisfaction were plotted across different values of the moderator (i.e., POS). Test of simple slope revealed that the negative LMX-symptoms relationship was stronger ($t = -12.33$, $p < 0.001$) under low POS (-1 SD), but weaker ($t = -2.00$, $p = 0.04$) under high POS (+1 SD) (see **Figure 2**). Similarly, but in the opposite direction (see **Figure 3**), simple slope test revealed that the positive LMX-job satisfaction relationship was weaker ($t = 11.18$, $p < 0.001$) under low POS (-1 SD), but stronger ($t = 4.75$, $p < 0.001$) under high POS. Thus, H2 was partially supported, highlighting the role of POS in moderating the effect of the relationship between LMX and two out of three work-related outcomes.

Moderated Mediation Hypothesis

According to Hypothesis 3, the indirect effects of job insecurity on work-related outcomes via LMX were moderated by POS. Results showed that the indirect effect of job insecurity on work-related symptoms through LMX was stronger for those with low POS (effect = 0.57, 95% CI [0.44, 0.70]), while it was weaker for those with high POS (effect = 0.11, 95% CI [0.04, 0.18]) (see **Table 4**). Moreover, the moderated mediation index was significant, yielding a value that did not include 0 in the CI (index = −0.18, 95% CI [−0.24, −0.13]). Also, results revealed that the job insecurity exerted an indirect effect on job satisfaction through LMX and that it was more remarkable for those with low POS (effect = −0.44, 95% CI [−0.55, −0.33]), while it was weaker for those with high POS (effect = −0.21, 95% CI [−0.30, −0.15]) (see **Table 4**). Furthermore, the moderated mediation index yielded a value that did not include 0 in the CI (index = 0.09, 95% CI [0.05, 0.13]). Finally, the conditional indirect effect of job insecurity on turnover intentions was non-significant (index = 0.01, 95% CI [0.02, −0.03]) (see **Table 4**). Consistent with H3a and H3b, these results confirmed that the mediated effect of the perceptions of job insecurity on work-related symptoms and job satisfaction via LMX was dependent on POS levels, while the conditional indirect effect of job insecurity on turnover intentions (H3c) was not confirmed.

DISCUSSION

The purpose of this study was to examine the relationship between job insecurity and several work-related outcomes. As expected, we found that employees higher in job insecurity reported higher levels of perceptions of work-related symptoms

TABLE 3 | Mediation and moderated mediation analyses.

	Work-related symptoms					Job satisfaction					Turnover intentions				
				95% CI					95% CI					95% CI	
Predictors	***b***	**SE**	***p***	**LL**	**UL**	***b***	**SE**	***p***	**LL**	**UL**	***b***	**SE**	***p***	**LL**	**UL**
Results from the mediation model (Model 4)															
Job insecurity[a]	0.54	0.09	<0.001	0.37	0.71	−0.64	0.07	<0.001	−0.78	−0.50	0.64	0.06	<0.001	0.52	0.76
LMX[b]	−0.78	0.07	<0.001	−0.91	−0.64	0.72	0.06	<0.001	0.60	0.83	−0.66	0.05	<0.001	−0.76	−0.56
Indirect effect[c]	0.39	0.05	<0.001	0.30	0.48	−0.36	0.04	<0.001	−0.45	−0.28	0.33	0.04	<0.001	0.26	0.41
R^2			0.40*					0.31*					0.50*		
F			56.55					45.31					82.22		
Results from the moderated mediation model (Model 14)															
LMX	−0.68	0.07	<0.001	−0.81	−0.54	0.66	0.06	<0.001	0.54	0.77	−0.61	0.05	<0.001	−0.71	−0.51
POS	−0.29	0.05	<0.001	−0.39	−0.19	0.20	0.04	<0.001	0.11	0.28	−0.22	0.04	<0.001	−0.29	−0.14
LMX x POS	0.36	0.06	<0.001	0.25	0.47	−0.18	0.05	<0.001	−0.27	−0.08	−0.01	0.04	0.75	−0.10	0.07
R^2			0.47*					0.50*					0.53*		
F			55.79					62.87					69.79		

*N = 510. LMX, leader–member exchange; POS, perceived organizational support. Covariates (age, gender, education, and tenure) are omitted for parsimony. B represents unstandardized regression coefficients with ordinary least squares (OLS) regression method. [a]Effect of job insecurity on dependent variable controlling for LMX (path c'). [b]Effect of LMX controlling for job insecurity (path b). [c]Indirect effect of job insecurity on dependent variable (path ab). *p < 0.001.*

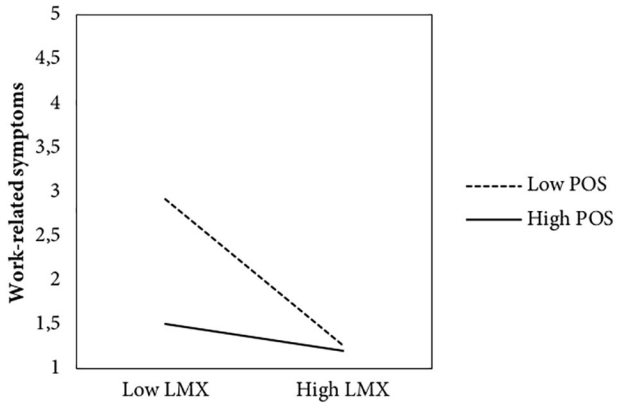

FIGURE 2 | Impact of leader–member exchange on work-related symptoms at low and high levels of perceived organizational support. *Note:* LMX, leader–member exchange; POS, perceived organizational support.

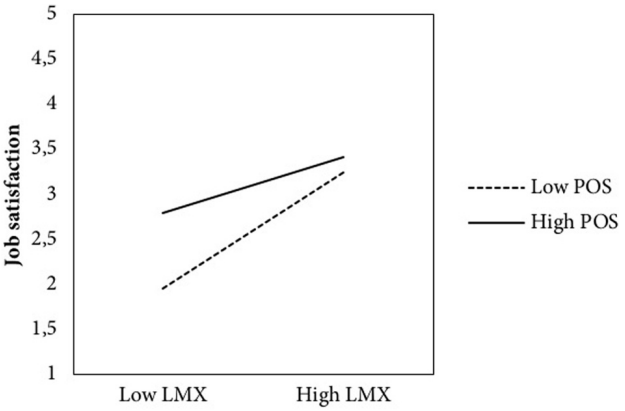

FIGURE 3 | Impact of leader–member exchange on job satisfaction at low and high levels of perceived organizational support. *Note:* LMX, leader–member exchange; POS, perceived organizational support.

TABLE 4 | Moderated indirect effects.

			95% CI	
Conditional indirect effects (through LMX)	***Coefficient***	**SE**	**LL**	**UL**
Work-related symptoms				
POS (−1 SD)	0.57	0.07	0.44	0.70
POS (+1 SD)	0.11	0.04	0.04	0.18
	Index			
Index of moderated mediation	−0.18	0.03	−0.24	−0.13
Job satisfaction				
POS (−1 SD)	−0.44	0.06	−0.55	−0.33
POS (+1 SD)	−0.21	0.04	−0.30	−0.15
	Index			
Index of moderated mediation	0.09	0.02	0.05	0.13
Turnover intentions				
POS (−1 SD)	0.30	0.04	0.23	0.38
POS (+1 SD)	0.32	0.05	0.22	0.43
	Index			
Index of moderated mediation	0.01	0.02	−0.04	0.07

N = 510. LMX, leader–member exchange; POS, perceived organizational support.

and lower job satisfaction, and are more likely to express higher intention to turnover. This is line with the previous studies, which revealed that temporary workers show worse physical and psychological health conditions compared to those with permanent contracts (Benavides et al., 2000; Virtanen et al., 2002; Hall, 2006; De Witte et al., 2015).

The main objective of our research was to assess the mediating role of LMX in the association of job insecurity with work-related outcomes. Congruent with our hypotheses, we find that higher LMX had a mediating effect on lower levels of perceived work-related symptoms, higher job satisfaction, and lower intention to turnover.

Previous research has highlighted that LMX is associated with poor well-being and job satisfaction (e.g., Dulebohn et al., 2012). Nevertheless, limited research has been conducted concerning the conditions under which low LMX quality have their worst effects. This study attempts to fill this gap by estimating whether the strength of the associations between LMX and work-related outcomes is conditional upon worker POS. Results from regression analyses revealed that POS moderates the relationship of LMX with work-related symptoms and job satisfaction. Particularly, workers who feel low support from their organization are more susceptible to perceive more symptoms related to their work activity and being unsatisfied of their job as a result of low levels of LMX quality. This finding is consistent with Loi et al.'s (2011) results that insecure workers were more responsive to the support gained from supervisors.

Finally, we found that POS moderates the indirect effect of job insecurity through LMX on two out of three work-related outcomes, namely, the work-related symptoms and the job satisfaction. These findings highlight that low LMX quality, following from high job insecurity, is more likely to escalate into work-related symptoms and into lowering job satisfaction under low POS levels; conversely, detrimental and mediated effects of job insecurity on well-being and job satisfaction via LMX may be further attenuated under high POS condition.

Therefore, LMX and organizational support should be considered when developing organizational intervention programs and strategies intended to promote employees' health perceptions, in particular under higher job insecurity condition, since the importance of considering the subjective dimension of this construct (e.g., De Witte, 2005) improves the quality of exchanges in organizations and thus increases favorable work-related factors, protecting them from negative ones.

It is worth mentioning some limitations to this study, mainly due to its cross-sectional nature, which makes it difficult to infer causal relations among variables, albeit the causal relations were derived from theoretical constructs and previous research. Therefore, further research should consider prospective longitudinal studies over time. However, recently Spector (2019)

has effectively argued how "longitudinal design to reflect causality has been overstated and that it offers limited advantages over the cross-sectional design in most cases in which it is used" (Spector, 2019, p. 125). Also, it is worth nothing that some intercorrelations between constructs range from moderate to high. Nevertheless, CFAs provided support for the hypothesized six-correlated-factor model. So, despite the high correlations between some variables, the constructs are not identical and it is possible to consider them separately.

Anyway, these results have several implications for HR management. Particularly in times of economic crisis, when permanent contracts are difficult to obtain, results showed that stimulating the LMX, under the more general condition of a perceived support from the organization, could increase satisfaction and health. From this point of view, the quality of LMX becomes more important when job security is inadequate; under this condition, high-quality LMXs become crucial for organizations attempting to improve employees' well-being and satisfaction. In line with our results, when workers have feelings of job insecurity, the promotion of LMX under high levels of POS is particularly effective.

DATA AVAILABILITY STATEMENT

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

GD contributed to conceptualization, writing—original draft preparation, and data analysis. GV contributed to writing—review and editing. DA contributed to data collection and writing—review. All authors contributed to the article and approved the submitted version.

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REVIEW
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A Literature Review of Social and Economic Leader–Member Exchange

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Leader–member exchange (LMX) research has increasingly relied upon the social exchange theory (SET) as a theoretical foundation, but the dominating way of measuring LMX has not followed this theoretical development (Gottfredson et al., 2020). With the aim of developing a measure that more coherently reflects SET, Kuvaas et al. (2012) conceptualized LMX as two qualitatively different relationships, labeled economic LMX and social LMX. Since the most applied LMX measures are under scrutiny for not being sufficiently grounded in theory (Gottfredson et al., 2020), it may be especially important to expose alternative measures. Therefore, we provide a comprehensive review of the research to date applying a two-dimensional approach to LMX, while also adding to interpretation and suggestions for how we can progress the field even further.

Keywords: leader–member exchange, social exchange, economic exchange, literature review, leader–follower relationships

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INTRODUCTION

The leader–member exchange (LMX) literature is hardly at its infancy, but the field is still under progressive development (Martin et al., 2019). It seems as if the LMX field is reinventing itself, as indicated by its entrance in novel terrains (e.g., social network analysis; Sparrowe and Emery, 2015); its application of more sophisticated methods (e.g., polynomial regression, multilevel modeling; Kim et al., 2019); and its update of theoretical influences (e.g., Thomas et al., 2013; Sparrowe, 2018). Nevertheless, a central concern in the LMX literature's development has been the emphasis on the need for more coherence between theory and empirical research (Krasikova and LeBreton, 2012; Gottfredson et al., 2020). One particular important issue that has been raised is that most of the extant measures of LMX do not sufficiently reflect its theoretical foundation (Bernerth et al., 2007; Gottfredson et al., 2020). In what follows, we aim to contribute to LMX literature by providing a specialized review of a growing stream of research that adopts an alternative LMX conceptualization and measurement that are more strongly anchored to its contemporary theoretical foundation.

The LMX theory revolves around the notion that leaders often interact differently with various followers (Graen and Uhl-Bien, 1995). With some followers, there may be a great deal of personal involvement, trust, and long-term investment. While with others, there may be less investment and trust, and more formal, *quid pro quo* transactions. Both of these types of exchange relationships are theoretical underpinnings of the social exchange theory (SET) (Blau, 1964), in which the LMX theory has increasingly relied on as a theoretical framework (e.g., Dulebohn et al., 2012; Matta and Van Dyne, 2015; Gottfredson et al., 2020). In addition, whereas role theory, which was the original theoretical underpinnings to LMX (e.g., Graen, 1976), failed to receive meta-analytical

support, the SET strongly did so (Martin et al., 2016). Still, measures of the LMX relationship have traditionally focused on the first, meaning the "socioemotional" exchange relationship (e.g., Bernerth et al., 2007; Wayne et al., 2009), as LMX has typically been measured along a low- to high-quality continuum, where the items are purely targeted at capturing socioemotional qualities. Therefore, lower levels of LMX merely reflect the absence of features that are characteristic of a high-quality LMX relationship, and not an economic, contractual *quid pro quo* relationship. Although prior research has contributed to important insights regarding the benefits of high-quality LMX relationships (e.g., Gottfredson and Aguinis, 2017), it has neglected to capture the role of economic qualities of LMX relationships. This aligns well with Gottfredson et al. (2020) critique that most of the extant LMX measures ". . .do not capture LMX's theoretical foundations" and that there is "misalignment between conceptualization and measurement" (p. 1).

In order to sufficiently capture both the economic and socioemotional exchange relationships, Kuvaas et al. (2012) conceptualized LMX as two qualitatively different relationships, labeled economic and social LMX. In alignment with the SET, social LMX relationships are characterized by a high degree of trust and long-term investment, which generates diffuse obligations, a sense of being taken care of by the other, and an anticipated mutuality in exchanges (Shore et al., 2006). An economic LMX relationship, on the other hand, is more formal and instrumental, and there is less interpersonal trust that the other will reciprocate future obligations, making exchanges between them more *quid pro quo* (Kuvaas et al., 2012). This conceptualization aligns strongly with the contemporary and dominating theory explaining LMX relationships, namely the SET, as recently called for by Gottfredson et al. (2020) in their critique of prior LMX research.

Prior larger reviews and meta-analyses have focused on the importance of high-quality LMX relationships (e.g., Gerstner and Day, 1997; Dulebohn et al., 2012) and have offered valuable insights on the benefits of being in a high-quality LMX relationship. However, they provide limited insight regarding the economic type of relationship between a leader and a follower. Therefore, we review research that has taken a two dimensional approach to LMX with the aim of exploring its relevance and importance for LMX research overall (for full overview of included articles see **Table 1**). As such, our review is the first to provide a coherent overview of the specific implications offered by adopting a two-dimensional approach to LMX. As discussed throughout our paper, LMX relationships do exhibit both socioemotional and economic aspects. Usually, social and economic LMX are moderately negatively related to each other (e.g., Berg et al., 2017), but research also suggests that they may interact and that a relationship may carry high levels of both (Caniëls and Hatak, 2019). In addition, economic LMX seems to provide unique explanatory variance on a range of various employee outcomes beyond what a high-quality or social LMX can do by its solitary (e.g., Kuvaas et al., 2012; Buch et al., 2019a) (see **Table 2** for economic LMX correlations). This indicates that the two-dimensional approach to LMX has allowed to more fully capture the nature of the LMX relationship, and overall contributed to an enhanced understanding of the leader–follower relationship. Therefore, we argue that this line of research warranted special attention as offered throughout our review.

THEORETICAL UNDERPINNINGS OF SOCIAL AND ECONOMIC LMX

Although the dominating view today seems to be that LMX strongly relies on the SET (e.g., Bernerth et al., 2007; Colquitt et al., 2014), this has not always been the case. Actually, when introduced to the scholarly literature close to 50 years ago, the LMX theory was referred to as the vertical dyad linkage (VDL) theory, and its main focus was understanding how a "role-making" process can occur naturally (Dienesch and Liden, 1986; Graen and Scandura, 1987). After some time, the VDL theory, which started out as an alternative to the notion that leaders treat everyone the same ("average leadership style"; cf. Graen and Uhl-Bien, 1995), was "rebranded" to the "LMX theory" and started increasingly to rely on Blau (1964) SET and the distinctions between a social and an economic exchange relationship.

In a similar fashion, in the related area of employee–organization relationships (EOR), several constructs have been used as proxy indicators for the nature or quality of a particular social exchange relationship (Takeuchi, 2012) – including perceived organizational support (POS; Dulac et al., 2008; Liao, 2011), the psychological contract (e.g., Van Dyne and Ang, 1998), perceived investment in employee development (e.g., Lee and Bruvold, 2003), justice (Masterson, 2001), commitment (e.g., Walumbwa et al., 2011), and perceived supervisor support (Settoon and Mossholder, 2002). Still, until Shore et al. (2006) developed measures of both social and economic exchange relationships with the organization, most research on the EOR had overlooked the role of economic exchanges, as has been the case for LMX research.

According to the SET, perceived social exchange relationship is characterized by a long-term orientation, since the exchange is ongoing and based on feelings of diffuse obligation. The emphasis is on socioemotional aspects of exchange, such as give and take and being taken care of, and each exchange partner trusts that the other will reciprocate (Shore et al., 2006). Social exchange entails a broad investment, as it involves both the exchange of socioemotional resources as well as investment in the relationship itself (Shore et al., 2009). These characteristics allow for transitory perceived asymmetries between contributions and inducements because one party is able to prioritize the other party's interests ahead of their own (Deckop et al., 1999).

Employees with a strong perception of social exchange will thus be prosocially motivated to a greater degree – that is, they will feel a greater obligation to reciprocate the benefits and support received by engaging in behaviors that exceed the minimum requirements for employment. As was enumerated by Blau (1964) and has been echoed by Foa and Foa (1975) and Shore et al. (2006), the nature of a particular exchange relationship is defined by a person's interpretation of the meaning of a particular exchange. Increased organizational investment, for instance, should create feelings of diffuse obligations on behalf of the employees, which, in turn, should influence employees

TABLE 1 | Overview of published studies applying the two-dimensional social and economic LMX.

Article	Journal	ELMX correlations	SLMX correlations
Aleksić et al. (2017)	Personnel Review	Non-significant relationship with creativity; satisfaction with work–family balance; LMX7 and SLMX.	Positive relationship with creativity; satisfaction with work–family balance and LMX7.
Babic et al. (2019)	Journal of Knowledge Management	Non-significant relationship with prosocial motivation; knowledge hiding and SLMX.	Positive relationship with prosocial motivation. Non-significant relationship with knowledge hiding.
Berg et al. (2017)	European Management Journal	Non-significant relationship with creative behavior and willingness to take risks. Negative relationship with emotional carrying capacity and SLMX.	Positive relationship with creative behavior and emotional carrying capacity. Non-significant relationship with willingness to take risks.
Buch (2015)	International Journal of Human Resource Management	Negative relationship with intrinsic motivation; affective commitment and SLMX.	Positive relationship with intrinsic motivation and affective commitment.
Buch et al. (2019a)	Journal of Organizational Behavior	Negative relationship with affective commitment; other orientation; OCB; work effort and SLMX. Positive relationship with turnover intention.	Positive relationship with affective commitment; other orientation; OCB and work effort. Negative relationship with turnover intention.
Buch et al. (2014a)	Leadership and Organizational Development Journal	Positive relationship with extrinsic motivation. Negative relationship with leader rated work effort and SLMX. Non-significant relationship with intrinsic motivation.	Positive relationship with intrinsic motivation and leader rated work effort. Non-significant relationship with extrinsic motivation.
Buch et al. (2014b)	Journal of Leadership and Organizational Studies	Positive relationship with laissez-faire leadership. Negative relationship with affective commitment; work effort; OCB and SLMX.	Negative relationship with laissez-faire leadership. Positive relationship with affective commitment; work effort and OCB.
Caniëls and Hatak (2019)	The International Journal of Human Resource Management	Positive relationship with narcissism. Non-significant relationship with employee resilience and SLMX.	Non-significant relationship with narcissism. Positive relationship with employee resilience.
Dysvik et al. (2015)	Leadership and Organization Development Journal	Non-significant relationship with employee knowledge donating and manager knowledge collecting. Negative relationship with SLMX.	Positive relationship with employee knowledge donating. Non-significant relationship with manager knowledge collecting.
Kuvaas and Buch (2018)	Human Resource Management	Positive relationship with perceived invariable goals. Negative relationship with leader rated work performance and SLMX.	Negative relationship with perceived invariable goals. Positive relationship with leader rated work performance.
Kuvaas and Buch (2020)	Leadership and Organization Development Journal	Negative relationship with need for relatedness; need for autonomy; need for competence and SLMX. Positive relationship with turnover intention. Non-significant relationship with leader self-efficacy and leader role ambiguity.	Negative relationship with leader role ambiguity and turnover intention. Positive relationship with need for relatedness; need for autonomy and need for competence. Non-significant relationship with leader self-efficacy.
Kuvaas et al. (2012)	The Leadership Quarterly	Negative relationship with manager rated work performance; manager rated OCB and SLMX.	Positive relationship with manager rated work performance and manager rated OCB.

SLMX, Social leader–member exchange; ELMX, Economic leader–member exchange; OCB, Organizational citizenship behavior.

to increase their efforts above and beyond the minimum requirements (Shore et al., 2006) – not solely to garner future benefits but also as an expression of appreciation (Blau, 1964). Shore et al. (2006) and Song et al. (2009) provide support for this proposition by demonstrating that social exchange perceptions are associated with both improved work performance and organizational citizenship behaviors (OCBs).

Unlike social exchange, employees with a strong economic exchange perception probably see their relationship with their leader (and the organization as a whole; see Loi et al., 2009) as involving a set of financial and tangible obligations in exchange for the fulfillment of job duties (Shore et al., 2009). An economic exchange relationship is not expected to be long term (Shore et al., 2006). It is characterized by little personal involvement (Lai et al., 2009) and involves the exchange of more financial or tangible resources (Song et al., 2009), typically obtained via discrete *quid pro quo* transactions (Lai et al., 2009). As a result, most contemporary research on the EOR differentiates social from economic exchanges on the following dimensions: the level of investment and obligation, the degree of trust, the immediacy of the exchange, and the financial vs. socioemotional aspect of the exchange (Shore et al., 2006, 2009).

TABLE 2 | Overview of economic LMX correlations or range of correlations from published studies.

Variable	ELMX correlations
SLMX	$r = -0.15^{**}, -0.49^{**}$
Affective commitment	$r = -0.34^{**}, -0.22^{**}$
Turnover intention	$r = 0.20^{**}, 0.23^{**}$
Satisfaction with work–family balance	Non-significant
Perceived invariable goals	$r = 0.36^{**}$
Knowledge hiding	Non-significant
Employee knowledge donating	Non-significant
Intrinsic motivation	$r = -0.33^{**}$
Extrinsic motivation	$r = 0.15^{**}$
Prosocial motivation	Non-significant
Need for relatedness	$r = -0.19^{**}$
Need for competence	$r = -0.19^{**}$
Need for autonomy	$r = -0.26^{**}$
OCB	$r = -0.19^{**}, -0.12^{**}$
Manager rated OCB	$r = -0.24^{**}$
Work effort	$r = -0.28^{**}, -0.14^{**}$
Leader rated work effort	$r = -0.14^{**}$
Manager rated work performance	$r = -0.29^{**}, -0.25^{**}$
Creativity	Non-significant
Other orientation	$r = -0.06^{**}$
Emotional carrying capacity	$r = -0.16^{*}$
Willingness to take risks	Non-significant
Narcissism	$r = 0.22^{*}$
Employee resilience	Non-significant
Laissez-faire leadership	$r = 0.31^{**}, 0.33^{**}$
Manager knowledge collecting	Non-significant
Leader self-efficacy	Non-significant
Leader role ambiguity	Non-significant

SLMX, Social leader–member exchange; ELMX, Economic leader–member exchange; OCB, Organizational citizenship behavior. $^{*}p < 0.05$. $^{**}p < 0.01$.

MEASUREMENT OF SOCIAL AND ECONOMIC LMX RELATIONSHIPS

With respect to measuring LMX, the most frequently utilized indicators (e.g., LMX7) have been criticized for lacking content validity (e.g., Bernerth et al., 2007; Colquitt et al., 2014; Gottfredson et al., 2020). Furthermore, Sparrowe and Liden (1997, p. 524) noted that applying the SET to LMX research has been problematic because "the dimensions of actual exchange behavior that differentiate economic from social exchange have not been specified in a way that facilitates empirical verification."

Indeed, not only Gottfredson et al. (2020) but also Colquitt et al. (2014) advocated the use of alternative scales that are more connected to the sentiments that Blau (1964) used to describe exchange relationships. In their comparison of the relative content validity of scale indicators of social exchange relationships, Colquitt et al. (2014) found a supervisor targeted version of Shore et al. (2006) social exchange scale (a social exchange-based measure of leader–member relationships; i.e., LMX) to exhibit a content-valid pattern. In line with this later criticism, reiterated by Gottfredson et al. (2020) and Kuvaas et al. (2012) did, in fact, base their first measures of social and economic LMX simply by using Shore et al. (2006) measure of perceived social and economic exchange relationships with organizations. As such, social LMX, also sometimes referred to as SLMX, is simply a more content valid supervisor-targeted version of Shore et al. (2006) social exchange scale. As stated by Kuvaas et al. (2012), for most items, they merely replaced "my organization" with "my store manager," and a sample item of social LMX is "I don't mind working hard today – I know I will eventually be rewarded by my store manager."

Accordingly, Kuvaas et al. (2012) main contribution was introducing the economic LMX part into the LMX literature. At this point, an interesting parallel can be drawn with Burns (1978) initial proposition of a "transactional–transformational" leadership continuum, which was later contested by Bass (1985), who suggested that the two leadership styles should be viewed as two separate dimensions, rather than as opposite poles of a single continuum. Still, economic LMX is not merely transactional leadership as it takes a *relationship*-based approach to examining the leader–member dyad, rather than merely measuring transactional leader *behaviors*.

Kuvaas et al. (2012) noted that simply changing the referent of the economic exchange items was not enough, in particular because as leaders, line and/or middle managers probably have limited discretion with respect to pay and compensation issues. They, therefore, rewrote items that could be interpreted mainly as pay decisions to issues of formal authority, in line with descriptions of economic or transactional LMX relationships, as "...based on compliance with job descriptions" (Wayne et al., 2009, p. 254) involving formal role-defined relations and unidirectional downward influence (Graen and Uhl-Bien, 1995). Such relationships are posited "...not to evolve beyond what is specified in the employment contract" (Wayne et al., 2009, p. 254) and as limited to the fulfillment of contractual obligations (e.g., Graen and Uhl-Bien, 1995; Wayne et al., 2009; Walumbwa et al., 2011).

Later, several studies picked up this idea and used the economic LMX measure presented by Kuvaas et al. (2012) in line with their calls for additional studies from other businesses and other countries to learn more about the generalizability of their findings. These social and economic LMX scales have been found to have satisfactory psychometric properties in several languages and countries, including the Netherlands (De Ruiter et al., 2016; Caniëls and Hatak, 2019), Norway (Kuvaas et al., 2012; Buch et al., 2014a; Berg et al., 2017), Slovenia (Aleksić et al., 2017; Babic et al., 2019; Premru, 2019), Belgium (Audenaert et al., 2017), and Oman (a small country in the Middle East) (Alkathiri, 2016).

Furthermore, in support of their two-dimensionality and the added value of measuring economic LMX in addition to traditional measures of social exchange with the supervisor (i.e., LMX7; LMSX; LMX-MDM), these studies have shown social and economic LMX to be differentially related to measures such as narcissism, creative behavior, and prosocial motivation (Aleksić et al., 2017; Berg et al., 2017; Babic et al., 2019; Caniëls and Hatak, 2019). Indeed, Aleksić et al. (2017) empirically investigated both social LMX together with LMX7 and found economic LMX to be non-significantly related to both LMX7

and social LMX [the supervisor-targeted social exchange version of Shore et al.'s (2006)]. Besides, Buch et al.'s (2019a) provided additional evidence of the social and economic LMX distinction via the simple observation that other orientation interacted in a different way with economic LMX than with social LMX in two independent samples.

Findings such as these imply that assuming the existence of economic exchanges between leaders and followers from low scores on scales measuring the social exchange part of LMX is not warranted. Accordingly, both theoretically and empirically, low ratings from leaders and followers when using, for instance, LMX7 do not necessarily imply a transactional economic exchange relationship between the two – it could be an indication of laissez-faire leadership or other unknown factors.

However, it should be emphasized that Kuvaas et al. (2012) excluded some of the more contingent *quid pro quo* items from their economic LMX in their exploratory study in order to achieve a statistically significant chi-square in line, which a "...relatively small group of methodologists" (Crede and Harms, 2019, p. 20) argue "is the single best indicator of model misspecification" (Crede and Harms, 2019, p. 20). Given the aforementioned, as well as the current debate in this regard, future research may consider applying and examining the validity of all eight economic LMX items presented by Kuvaas et al. (2012) rather than merely relying on the four that satisfied the chi-square criteria in their exploratory study.

Nevertheless, in a follow-up study, Buch et al. (2011) developed additional items on the basis of the SET (e.g., Blau, 1964) to better capture the *quid pro quo* aspects of economic LMX relationships. This modified economic LMX scale has, to the best of our knowledge, demonstrated satisfactory psychometric properties in at least five independent samples (Buch et al., 2011, 2014b; Buch, 2015). Since Buch (2015) measured both social and economic LMX, together with Shore et al. (2006) measures of social and economic exchanges with the organization, our review also provides an indication of the measure discriminant validity with respect to each other. Specifically, the supervisor targeted social and economic exchange scales only shared 26% variance or less with each other, adding to the line of research on multifoci perspectives of social exchange (e.g., Rupp and Cropanzano, 2002; Lavelle et al., 2007), demonstrating that followers distinguish between their exchange relationships with their leaders and their exchange relationships with their organization.

Furthermore, Dysvik et al. (2015) refined the wording of a few economic LMX items and used a nine-item scale in their research, which has been used in at least two additional studies (Kuvaas and Buch, 2018; Buch et al., 2019a) with satisfactory validity and reliability in several independent samples amounting to more than 5,000 respondents. The nine-item economic LMX scale used in this research can be found in, for instance, Dysvik et al. (2015).

Finally, in terms of psychometric properties, the majority of the studies included in our review suggest that economic LMX explains unique variance in such outcomes as affective commitment, turnover intention, work performance, and work effort when social LMX is included into the model. The significant amount of unique variance explained by economic LMX not only suggests that economic LMX has its own unique value in prediction but also suggests that economic LMX and social LMX, which align well with traditional conceptualizations of LMX (e.g., LMSX; Bernerth et al., 2007), are two discriminant constructs.

LITERATURE OVERVIEW

In their first study, Kuvaas et al. (2012), with a sample of 552 followers and 78 leaders, obtained support for the two-dimensionality approach to LMX relationships. More specifically, they found that economic LMX was negatively related to leader-rated work performance ($\alpha_1 = -0.27$, $p < 0.001$) and leader-rated organizational citizenship behavior (OCB) ($\beta_1 = -0.22$, $p < 0.001$). On the other hand, social LMX was positively related to work performance ($\alpha_2 = 0.20$, $p < 0.001$) and OCB ($\beta_2 = 0.26$, $p < 0.001$).

Extending the support for the social and economic LMX influence on performance measures, Buch et al. (2014a) found a similar pattern investigating economic and social LMX in relation to leader-rated work effort based on a sample of 352 dyads from the public health sector in Norway. They found that social LMX was positively related to work effort ($\gamma = 0.11$, $p < 0.05$), and economic LMX was negatively related to work effort ($\gamma = -0.11$, $p < 0.05$). Additionally, they investigated the potential moderating role of work motivation and found that followers who were highly intrinsically motivated seem to be less influenced by the benefits of a social LMX relationship ($b_{high} = -0.02$, $p > 0.05$), whereas followers who were less intrinsically motivated had more to gain from a social LMX relationship ($b_{low} = 0.24$, $p < 0.01$). Such interaction results were not found in relation to economic LMX, but they did find a positive relationship between economic LMX and extrinsic motivation ($r = 0.15$, $p < 0.01$).

Kuvaas and Buch (2018) investigated the association between social and economic LMX and work performance through the mediating role of perceiving goals as invariable, which refers to "the extent to which followers believe that the goals are absolute standards that must be met without exception" (p. 236). Since LMX plays an important role in how followers perceive and respond to HR practices (Bos-Nehles and Audenaert, 2019), they hypothesized that social LMX would decrease and economic LMX would increase the likelihood of perceiving goals invariable. With a sample of 204 followers and 59 leaders, they found that social LMX was negatively ($\gamma = -0.36$, $p < 0.001$) and economic LMX positively ($\gamma = -19$, $p < 0.05$) associated with perceiving goals as invariable. In addition, social LMX was positively related to leader-rated work performance (*indirect "effect"* = 0.09, $p < 0.05$) through perceiving goals as invariable. No indirect association was found for economic LMX.

In another study, Buch (2015) investigated how social and economic LMX function in conjunction with the social and economic organizational exchange relationship in their relations to affective commitment. Results from a two-wave study of 341 followers illustrated that having a social LMX relationship can dampen the negative association between an economic organization exchange relationship and affective commitment.

More specifically, the negative association between economic organization exchange and affective commitment was weaker when social LMX was high ($b_{high} = -0.22$ $p < 0.01$) compared to when social LMX was low ($b_{low} = -0.41$, $p < 0.001$).

As the theoretical argument stands, social and economic LMX relationships exist simultaneously (Goodwin et al., 2009). One study that considered the dual role of social and economic LMX is the one by Caniëls and Hatak (2019). More specifically, they investigated how various *combinations* of social and economic LMX, in conjunction with employee narcissism, influenced employee resilience. In order to do so, they applied polynomial regression on their sample of 123 followers. The results revealed that as long as social LMX dominated over economic LMX, there was a positive association with employee resilience. Still, the results were somewhat different for followers who had narcissistic tendencies. These types of followers benefited the most from a combination of either a low economic and low social LMX relationship or a high economic and high social LMX relationship, indicating that they may respond differently to social and economic LMX.

Taking on another follower characteristic, Buch et al. (2019a) investigated the role of other orientation, in the relationship between social and economic LMX and turnover intention, work effort, affective commitment, and OCB. One sample, which constituted a two-wave study of 200 followers, revealed weaker associations between economic LMX and both turnover intention ($b_{high} = -0.04$, $p = 0.39$ vs. $b_{low} = 0.38$ $p < 0.01$) and affective commitment ($b_{high} = 0.01$ $p = 0.48$ vs. $b_{low} = -0.35$ $p < 0.01$) for followers with higher other orientation. Similar patterns were found in a second sample, which consisted of a larger two-wave study of 4,518 respondents. In addition, in this sample, higher other orientation mitigated the negative association between economic LMX and work effort ($b_{high} = -0.04$, $p < 0.01$ vs. $b_{low} = -0.11$, $p < 0.001$). Lastly, they found a weaker positive association between social LMX and follower OCB for followers with higher ($b_{high} = 0.05$, $p < 0.01$) than lower ($b_{low} = 0.10$, $p < 0.01$) other orientation.

Moving from follower characteristics to leader characteristics, Buch et al. (2014b) investigated the mediating role of social and economic LMX in the relationship between laissez-faire leadership and several employee outcomes. Based on two samples with 200 respondents each, they found that economic LMX fully mediated the negative relationships between laissez-faire leadership and affective commitment (standardized "effect" = −0.15, $p < 0.01$) and work effort (standardized "effect" = −0.17, $p < 0.01$), and partially mediated the relationship between laissez-faire leadership and OCB (standardized "effect" = −0.19, $p < 0.01$). These findings imply that economic LMX is an important mechanism through which laissez-faire leadership negatively relates to favorable employee outcomes.

Looking closer at leader characteristics, Kuvaas and Buch (2020) investigated the role of leader self-efficacy and leader role ambiguity on follower LMX. Based on role theory, they argued that the extent to which leaders' experience that they meet the expectations of their leadership roles would influence the development of social and economic LMX among followers. In a sample of 109 leaders and 696 followers, they found that leader role ambiguity was negatively related to follower social LMX ($\gamma = -0.67$, $p < 0.001$) and positively related to follower economic LMX ($\gamma = 0.52$, $p < 0.001$). Additionally they found that satisfaction of the need for autonomy and relatedness mediated the relationships between both social and economic LMX and turnover intention.

Furthermore, two studies have investigated the association between social and economic LMX and follower creativity (Aleksić et al., 2017; Berg et al., 2017). Berg et al. (2017) argued that social and economic LMX would influence employee creative behavior through the followers' willingness to take risks, depending on the follower's emotional carrying capacity. Based on two-wave data from a sample of 147 followers, they found a marginal positive relationship between social LMX and creative behavior ($b = 0.16$, $p = 0.06$), and a non-significant relationship between economic LMX and creative behavior. Moreover, the relationship between social LMX and creative behavior was strengthened when mediated by emotional carrying capacity and moderated by willingness to take risks. Despite the fact that they only used social and economic LMX as control variables, a similar pattern was obtained by Aleksić et al. (2017) using a sample of 251 employees, revealing a positive relationship between social LMX and creativity ($r = 0.29$, $p < 0.01$), and a non-significant relationship between economic LMX and creativity.

Lastly, two studies have examined the roles of social and economic LMX in knowledge sharing processes at work (Dysvik et al., 2015; Babic et al., 2019). Dysvik et al. (2015) specifically investigated the moderating role of social and economic LMX on the relationship between follower knowledge donating and manager knowledge collecting. Based on a sample of 227 follower–leader dyads, their results revealed that there was a positive association between knowledge donating and knowledge collecting for high levels of social LMX ($b_{high} = 0.29$, $p < 0.001$) compared to low social LMX ($b_{low} = 0.10$, ns). Babic et al. (2019) investigated the role of social and economic LMX on knowledge hiding in teams. In a two-wave sample consisting of 92 teams, they found that social LMX was marginally negatively related to knowledge hiding in teams ($\beta = -0.07$, $p = 0.093$). Moreover, they found marginal support for the interaction between prosocial motivation and high levels of social LMX on the influence of knowledge hiding in the team. Both of these studies indicate that social LMX relationship is an important facilitator in knowledge sharing process at work.

In addition to the journal publications presented above, we have also included several peer-reviewed conference presentations and available book chapters in order to provide an exhausting coverage of the state of the art of social and economic LMX research.

With respect to peer-reviewed conference presentations, Buch et al. (2011) aimed to validate the scale measuring economic LMX using two independent study samples. Their findings indicate that economic LMX measure has good psychometric properties, demonstrating discriminant, convergent, and criterion-related validity (Buch et al., 2011). Moreover, they obtained negative correlations between economic and social LMX in both samples (study 1: $r = -0.30$, $p < 0.01$; study 2:

$r = -0.44$, $p < 0.01$), but not strong enough to support a single continuum perspective. In relation to employee outcomes, they found that perceptions of economic LMX relationships seem to undermine affective commitment and job satisfaction, as well as increase turnover intention.

Another conference paper (De Ruiter et al., 2016) investigated the mediating roles of social and economic LMX between manager psychological contract breach and various employee outcomes. Most noteworthy is perhaps the fact that economic and social LMX differentially related to different types of outcomes. Among others, they found a negative indirect relationship from manager psychological contract breach via perceived economic LMX relationship and change related OCB, but no such significant relationship was found for social LMX. On the other hand, social LMX positively mediated the relationship between psychological contract breach and OCB directed at coworkers, but here, no significant results for the mediated influence of economic LMX were found.

Furthermore, Buch et al. (2019b) recently presented the moderating role of leader political skill, or "the ability to effectively understand others at work and to use such knowledge to influence others to act in ways that enhance one's personal and/or organizational objectives" (Ferris et al., 2005, p. 127), on the relationship between social and economic LMX relationships and perceptions of the motivational climate. Their preliminary results indicate that perceiving social LMX positively relates to perceptions of a mastery climate, while perceiving economic LMX positively relates to perceptions of a performance climate. In support of the moderating role of leader political skill, it seems as if social LMX is especially important for the facilitation of mastery climate among less politically skilled leaders.

Despite not accounting for economic LMX, it is worth mentioning that Kopperud et al. (2018) investigated the moderating role of a leader's psychological flexibility on the relationship between a leader's work overload and employees' perceived social LMX relationship. Their results suggest that when leaders have low psychological flexibility, this impairs the leaders' ability to build social LMX relationships.

Beyond the abovementioned studies, the two-dimensional approach to LMX has also been applied in four dissertations (Buch, 2012; Alkathiri, 2016; De Ruiter, 2017; Premru, 2019) and discussed in four book chapters (Kuvaas et al., 2015; Liden et al., 2015; Buch, 2016; Buch and Kuvaas, 2016). Finally, in a chapter in the Oxford Handbook of Leader–Member Exchange (2015), Liden et al. (2015) discuss social and economic LMX as various ways of measuring LMX. In sum, dissertations, book chapters, and unpublished work indicate the same patterns as those of the published studies, while also demonstrating increased relevance across different academic sources.

DISCUSSION

Drawing on a number of empirical studies, the aim of our literature review was to create a comprehensive picture of the findings obtained by taking a two-dimensional approach to LMX. Our literature review suggests that social LMX demonstrates a positive relationship to a range of favorable follower outcomes. As expected, we find moderate to strong positive associations between social LMX and affective commitment; satisfaction with work family balance, employee knowledge donating, and employee resilience; and moderate negative associations with turnover intention. Positive associations are found for motivational outcomes: prosocial motivation, intrinsic motivation, need for relatedness, need for autonomy, and need for competence. Lastly, there are small to strong positive associations found between social LMX and follower performance: work effort, OCB, creativity, leader rated work performance, manager rated work effort, and manager rated OCB. These findings are as expected because of the similarity between social and high-quality LMX, and support the idea that perceiving a social LMX relationship, such as trust, as personal investment is highly beneficial for followers and their organizations.

More importantly, economic LMX is almost consistently negatively related to favorable follower outcomes. Here, we found moderate negative associations between economic LMX and affective commitment, intrinsic motivation, need for relatedness, need for autonomy, and need for competence. There are small to moderate positive associations found between economic LMX and turnover intention and extrinsic motivation. Lastly, there are small to moderate negative associations found between economic and follower performance: work effort, OCB, leader rated work performance, manager rated work effort, and manager rated OCB. This implies that experiencing an economic LMX relationship can influence the employee in several negative ways, and that there are costs to interpersonal exchanges that are more short-term, instrumental, and *quid pro quo*. In sum, the way in which social LMX and economic LMX relate differently to various outcomes across a range of different samples supports the idea of two qualitatively different relationships. As the findings illustrate, we may therefore stand at risk of losing valuable insight of the leader–follower relationship by only measuring social or high-quality LMX. By applying the two-dimensionality approach to LMX, we are arguably more able to predict important employee outcomes. In the following, we have chosen to emphasize and discuss particular findings, as we believe that they are in need of closer inspection and interpretation.

The Two-Dimensionality of Social and Economic LMX

Beyond the link between social and economic LMX to employee outcomes, it is important to comment on the way in which they relate to each other. Generally, we found small to moderate negative associations between social and economic LMX, and three studies in which they were not significantly related at all (Aleksić et al., 2017; Babic et al., 2019; Caniëls and Hatak, 2019). This weak negative association between the two and their different relation to various employee outcomes strongly support the two-dimensional perspective of LMX. Besides, if they were opposite poles on a single continuum, the negative correlations between the two should have been much stronger.

Moreover, both empirically and theoretically, our literature review suggests that an economic LMX relationship is not

the opposite of being in a social LMX relationship. Among others, Caniëls and Hatak (2019) specifically investigated the extent to which employees perceive social and economic LMX simultaneously. Their results indicate that social and economic LMX can be simultaneously present in the leader–follower relationship, manifested in the combination of equal amounts or one dominating over the other. We find additional support for the coexistence of social and economic LMX by the notion of relational ambivalence (see Ashforth et al., 2014). For instance, Methot et al. (2017) argue in favor of moving beyond the tendency to pit "negative" and "positive" workplace relationships against each other, but rather recognizing that they can be more complex (e.g., the presence of both negative and positive features at the same time). Besides, Goodwin et al. (2009) argued that the economic and instrumental behaviors associated with transactional low-quality relationships may exist over time as the relationships develop into a high-quality social exchange relationship. Therefore, an interesting avenue for future research could be to investigate how social and economic LMX relationships combine to create relational ambivalence and associated positive and/or adverse effects on different outcomes.

Mediators Between Economic LMX and Follower Outcomes

A range of different mediators has been suggested to explain the relationship between high-quality LMX (social LMX) and subsequent follower outcomes. These mechanisms vary in their explanatory strength, but generally, the influence of mechanisms such as motivation, trust, and job satisfaction is well-established (Martin et al., 2016). Given the vast majority of research that offers insights into the underlying mechanisms between high-quality (social LMX) and follower outcomes, we focus our attention to potential mediators between economic LMX and employee outcomes.

Firstly, we believe an important avenue for future research is addressing why economic LMX is most often detrimental to follower outcomes. In alignment with suggestions made by Buch et al. (2019a), a possible explanation could be that economic exchanges operate with different exchange rules than the traditional norm of reciprocity, which is thought to be the underlying mechanism of social exchange relationships (Cropanzano and Mitchell, 2005). Rather, economic exchanges may operate by norms of competition or rivalry, where the aim of the exchange revolves around gaining more from the relationship than what you invest in it (Meeker, 1971). If so, this would serve as a potential explanation for why economic LMX relationships are associated with more negative outcomes, with the exception of some individuals that may be more inclined to respond better to more competitive norms of exchange (e.g., thriving with more exploitative exchanges). This could explain why economic LMX may be less detrimental for certain individuals (a topic that we discuss more in-depth later on).

One additional suggestion for future research could be further integration of self-determination theory (SDT) (Deci and Ryan, 1985) as an underlying explanatory mechanism. Kuvaas and Buch (2020) findings indicate that economic LMX seems to negatively influence employee outcomes partly by reducing need satisfaction. Therefore, it may be of particular interest, especially considering that social and economic LMX may serve significant, but different roles in need satisfaction, and thereby, in the process of self-determination (Kuvaas and Buch, 2020).

Follower Characteristics and Follower LMX

A valuable recognition drawn from various studies is the potential importance of personal characteristics and dispositions in influencing how followers respond to the quality of their leader–follower relationship. By this, it is meant that individuals do not necessarily respond equally to the quality of interpersonal relationships at work (Fernet et al., 2010).

Empirical support for this is found by Buch et al. (2014a), who found that people who are highly intrinsically motivated seems to be less influenced by the benefits of a social LMX relationship, whereas people who are less intrinsically motivated have more to gain from a social LMX relationship. Additionally, Buch et al. (2019a) found that followers with high other orientation were more able to deal with the adverse influence of an economic LMX relationship, while people who were low on other orientation were the most sensitive for the negative influence of an economic LMX relationship. Similarly, we believe that a third personal factor could explain the non-significant findings in relation to economic LMX and creativity, and the marginally significant relationship found between social LMX and creativity (Aleksić et al., 2017; Berg et al., 2017). Tierney (2015) point out that the quality of the LMX relationship and its influence on creativity may matter more for some people than others. For example, Tierney (2010) found that people with a strong creative self-efficacy were not influenced by LMX, indicating that some people produce creative work regardless of the type of relationship they have with their leader (Tierney, 2015). Due to the lack of influence from social LMX and economic LMX found on followers' willingness to take risks (Berg et al., 2017), followers' willingness to take risks may rather function as a moderator in the relationship between LMX and creativity. This implies that economic LMX and social LMX may influence creativity differently depending on the followers' willingness to take risks. In instances where individuals are low in willingness to take risk, social LMX may have a greater positive influence on creativity, whereas economic LMX may have a greater negative influence on creativity. Individuals who are generally not inclined to take risks will need additional support from a social LMX relationship in order to feel safe to do so. On one hand, having an economic LMX relationship may produce additional fear of failure, making them even more hesitant to take risks. On the other hand, people who generally are more willing to take risks will do so despite the quality of the LMX relationship, and therefore are also more creative.

Moreover, Caniëls and Hatak (2019) theorize in their study that narcissistic followers may respond more positively to an economic LMX relationship, as they are a "specific category of

followers that require unconventional leadership treatment" (p. 21). They find that followers with narcissistic tendencies benefit from situations in which both social LMX and economic LMX are low or situations in which both social LMX and economic LMX are high (Caniëls and Hatak, 2019). This indicates that narcissism is a particular type of trait making it likely to respond differently to economic LMX relationships than the normal pattern that is often observed. In a related vein, Lee et al. (2019) found that, depending on followers' level of psychological entitlement, he or she would value reciprocity of social exchanges differently (Lee et al., 2019). Arguably, such findings indicate that depending on an individual's level of narcissism or other dark traits may make them respond differently or even positively to an economic LMX relationship as it may serve their expectations and worldview.

Overall, we encourage future researchers to investigate relationships between social LMX and economic LMX and outcomes *in conjunction with* potential important personal characteristics. It may be especially important to identify personal characteristics that can serve as buffers against the adverse influence of perceiving an economic LMX relationship, but also potential dark traits that enable a positive response to an economic LMX relationship.

Leader Characteristics and Follower LMX

Limited research exists on different leader characteristics and their influence on followers' perceived LMX relationship. However, Kuvaas and Buch (2020) found that leader role ambiguity was positively related to follower economic LMX and negatively related to follower social LMX. Since role ambiguity is often experienced as a type of strain, these leaders may simply not have the necessary resources to build social LMX relationships with their followers (Kopperud et al., 2018). Rather, it seems as if they limit their exchanges to those that adhere to the formal employment contract. Moreover, leaders may feel overwhelmed and generate withdrawal behaviors that correspond to the type of passivity that is often associated with laissez-faire leadership. This aligns well with the association found between laissez-faire leadership and economic LMX, in which economic LMX fully mediated the negative relationships between laissez-faire leadership and affective commitment and work effort, and partially mediated the negative relationship between laissez-faire leadership and OCB (Buch et al., 2014b). This means that passive leadership behaviors facilitate the perspectives of an economic LMX relationship, perhaps due to a lack of presence and exchanges that only have a more formal or transactional character. Tying together laissez-fair leadership, leader-experienced strain and economic LMX could therefore be a potential avenue for future research. Nevertheless, due to the negative association found between social LMX and role ambiguity, it seems necessary that the leader has a sufficient degree of role clarity and experienced safety within his or her role in order for the leader to be able to build social LMX relationships (Kuvaas and Buch, 2020). Overall, there are a few studies contributing to the limited knowledge regarding antecedents to economic LMX relationships. Therefore, we encourage future research to investigate factors that shape an economic LMX relationship, such as potential important leader characteristics.

Other Areas for Future Research

We have already mentioned several avenues for future research, yet the ideas presented are by no means exhaustive, and other potential factors and possible boundary conditions need to be identified in further research. For instance, the topic of LMX differentiation has also gained increased attention in later years (Martin et al., 2018). LMX differentiation refers to how much the leader varies his or her behavior across different followers (Liden et al., 2006). In this respect, Buch (2019) recently refined the conceptualization of LMX differentiation by incorporating the distinction between social and economic LMX as part of a symposium on LMX differentiation. The aim of the symposium was to gather various articles that were thought to offer new perspective or contributions in relation to LMX differentiation.

Distinguishing between social and economic differentiation essentially implies that leaders differentiate their engagement in *both* social and economic exchanges with their followers. For instance, leaders may not differentiate social and economic exchanges equally across different followers. Rather, the leader could differentiate less in terms of economic exchanges, which means that tangible recourses may be distributed more equally, while they vary in the extent to which they engage in social exchanges with different followers. Thus, some followers may receive more supervisory support than others based on their leaders' perception of individual needs for such support. Accordingly, distinguishing between the type of exchanges that are differentiated could have different implications for employees. For instance, perceiving that the leader engages in substantially more social exchanges with particular followers and not others may be more detrimental than perceiving variation in economic exchanges. Also, and as hypothesized by Buch (2019) at the recent LMX symposium, these kinds of differentiation may be "good" or "bad" for employee outcomes, depending on, for instance, whether the followers prefer short-term oriented economic exchanges (often of tangible resources, and characterized by little personal involvement) or more long-term, diffuse social exchange relationships.

Although more research is clearly needed, Buch (2019) preliminary "work-in progress" results presented at last year's LMX differentiation symposium (EAWOP) provided an early empirical indication that more politically skilled leaders differentiated less on the economic exchange dimension. Tentatively, leaders may have done so to avoid or to reduce feelings of inequality or injustice because, theoretically, more tangible economic exchanges should be more salient to others, and leads to jealousy and envy to a greater extent. Buch's (2019) preliminary results also suggested that economic LMX and social LMX differentiations were barely correlated, and that a higher leader span of control (the more followers each leader had to supervise) was related to more differentiations on the social exchange (but not the economic exchange) dimension of LMX. Accordingly, one could hypothesize that, with larger groups, leaders tend to differentiate more on the social exchange

dimension where they choose their reciprocal relationships, and differentiate between/selected exchange partners in a trusting and long-term oriented way. As a whole, this refinement of LMX differentiation is likely to have implications for how leaders differentiate between their use of social and economic exchanges in their LMX relations. For example, the more differentiated the distribution of tangible, economic exchanges, the less they could be considered "negative," given the conditions such as a politically skilled leader demonstrating individualized consideration and treating individuals differently according to their perceived and actual needs.

As such, applying a similar two-dimensional logic to the LMX differentiation literature could be an interesting avenue for future research. We therefore encourage future research to investigate these matters further and to consider the inclusion of potential moderators such as leader political skill (e.g., Buch, 2019), justice (e.g., Yu et al., 2018), and leadership behaviors such as transformational leadership (e.g., Gottfredson and Aguinis, 2017).

Moreover, a fruitful avenue for future research could be considering the issue of LMX (dis)agreement when applying the two-dimensional approach to LMX. A great amount of LMX research has only captured the perspective from one member of the dyad, since it has been assumed that a leader and a follower will evaluate the quality of their relationship similarly (Gooty and Yammarino, 2016). However, it is increasingly recognized that agreement in terms of how the leader and the follower evaluate the quality of their relationship is, at the general level, often only moderate at best (Gerstner and Day, 1997; Sin et al., 2009). Distinguishing between social and economic LMX as two different types of relationships will necessarily have implications for how we understand the phenomenon of (dis)agreement that deviates from how it is traditionally understood. Discrepancy found on traditional measures of LMX may only reflect divergent perceptions regarding the absence or presence of socioemotional qualities within the leader–follower relationship. This is not sufficient to conclude that traditional LMX disagreement actually indicates divergent perceptions regarding the more economic or transactional qualities within the leader–follower relationship. As such, measuring perceptions of social and economic LMX from both sides of the dyad allows for nuancing the LMX (dis)agreement phenomenon and could potentially contribute to an enhanced understanding of its relation to employee outcomes.

Although some studies have applied leader-rated performance measures, future research should also consider applying objective measures in relation to the influence of social and economic LMX. Our literature review provides empirical support for the importance of measuring economic LMX in addition to social or high-quality LMX, but adding objective outcome measures could potentially increase our confidence even more. Overall, we believe that our suggested potential areas of future research may enhance our understanding of the leader–follower relationship even further.

CONCLUSION

As LMX has gained increased research attention, the field has also been criticized for a lack of fit between theory and how LMX has been measured. Still, such criticism provides opportunities for future advancement. By providing a literature review of social and economic LMX, we aim to contribute to constructive development of the field by strengthening the tie between the LMX theory and the SET. We also aim to encourage researchers to develop the two-dimensional perspective even further in future research.

AUTHOR CONTRIBUTIONS

IA wrote most of the first draft of the manuscript. RB contributed by writing parts of the manuscript. All authors provided critical feedback and helped shape the manuscript.

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The Dark Side of Relational Leadership: Positive and Negative Reciprocity as Fundamental Drivers of Follower's Intended Pro-leader and Pro-self Unethical Behavior

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In this study, we use a social exchange perspective to examine when [i.e., high- vs. low-quality leader–member exchange (LMX)], why (i.e., positive vs. negative reciprocity), and how (i.e., pro-leader vs. pro-self unethical behavior) followers consider unethical behavior that either benefits the leader or the self. Across an experimental and a time-split survey study, we find that high-quality LMX relationships motivate pro-leader unethical intention as a means to satisfy positive reciprocity motives, and that low-quality LMX relationships motivate pro-self unethical intention as a means to satisfy negative reciprocity motives. Importantly, our studies demonstrate that it is crucial to incorporate both positive and negative reciprocity motives when studying the effects of LMX. Implications of these results for social exchange theory, LMX, and the broader literature of (self- and other-serving) unethical behavior are discussed.

Keywords: leader–member exchange, positive reciprocity, negative reciprocity, social exchange theory, pro-leader unethical intention, pro-self unethical intention

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INTRODUCTION

Unethical behavior, despite being costly and detrimental for organizations (Giacalone and Promislo, 2010), is quite prevalent and is expected to become even more prevalent in the future (Rickman and Witt, 2007). Research examining the predictors and mechanisms of unethical behavior has greatly increased in the last decades (Treviño et al., 2014). Several studies have investigated what leaders, as central gatekeepers of appropriate conduct, can do to prevent unethical behavior among their followers (Treviño and Brown, 2005; Brown and Treviño, 2006; Kalshoven et al., 2016). The quality of the leader–member exchange (LMX) relationship between leaders and followers (Dienesch and Liden, 1986; Graen and Uhl-Bien, 1995; Settoon et al., 1996) appears to play a prominent role in preventing employee unethical behavior. Under the assumption that followers aim to positively reciprocate high-quality LMX relationships, initial studies have demonstrated that LMX is *negatively* related to self-serving behaviors such as deviance, counterproductive work behaviors, and withdrawal (Gerstner and Day, 1997; El Akremi et al., 2010; Liu et al., 2013; Jawahar et al., 2018).

Interestingly, however, under the same positive reciprocity assumption, more recent studies have demonstrated that LMX is *positively* related to other-serving undesirable behaviors as pro-leader unethical behavior (Bryant and Merritt, 2019). In these recent studies, followers are assumed to use pro-leader unethical behaviors to positively reciprocate the benefits they receive from their leaders in high-quality LMX relationships. As such, this positive reciprocity mechanism is used in research to explain both why high-quality LMX relationships *demotivate* (El Akremi et al., 2010; Liu et al., 2013; Jawahar et al., 2018) and *motivate* (Umphress et al., 2010; Bryant and Merritt, 2019) unethical behaviors. That is, the negative effects of LMX on self-serving unethical behavior and its positive effects on other-serving unethical behavior are assumed to be driven by the same motivational mechanism of positive reciprocity. We argue that this one-sided focus on positive reciprocity motives derived from high-quality LMX relationships foregoes the role of negative reciprocity motives sparked by low-quality LMX relationships (Uhl-Bien and Maslyn, 2003). While the (lack of) benefits to an exchange may be an important motivator for followers, it seems equally feasible that negative reciprocity either *motivates* self-serving unethical behavior or *demotivates* other-serving unethical behavior. Exploring these underlying differences between positive and negative reciprocity motives is imperative in understanding why, when, and how LMX relates to unethical behaviors that serve either the follower or others, and may be crucial in developing interventions that aim to reduce all types of unethical behaviors.

Drawing from the social exchange theory (Gouldner, 1960; Blau, 1964) and the LMX theory (Liden and Graen, 1980; Graen and Uhl-Bien, 1995), we argue that the quality of the LMX relationship motivates followers to either positively or negatively reciprocate this relationship, leading them to consider either pro-leader or pro-self unethical behavior. We provide empirical evidence for our proposed conceptual model across an experimental study and a time-split field study. By presenting a coherent framework that explains when (i.e., high- vs. low-quality LMX), why (i.e., positive vs. negative reciprocity), and how (i.e., pro-leader vs. pro-self unethical behavior) individuals consider unethical behavior as a means of reciprocating exchanges with their leader, we contribute to the literatures on social exchange theory (e.g., Gouldner, 1960; Blau, 1964), LMX (e.g., Dienesch and Liden, 1986; Graen and Uhl-Bien, 1995; Settoon et al., 1996), and (self- and other-serving) unethical behavior (e.g., Umphress et al., 2010; Treviño et al., 2014; Bryant and Merritt, 2019). Our specific contributions are fourfold. First, although previous research has demonstrated that LMX can both *demotivate* (El Akremi et al., 2010; Liu et al., 2013; Jawahar et al., 2018) and *motivate* (Umphress et al., 2010; Bryant and Merritt, 2019) unethical behaviors, our study is among the first to directly contrast these motivations in a single study. Second, although previous research has certainly suggested that reciprocal social exchange mechanisms play a crucial role in motivating unethical behavior (e.g., Umphress et al., 2010; Umphress and Bingham, 2011; Miao et al., 2013; Effelsberg et al., 2014; Effelsberg and Solga, 2015; Kalshoven et al., 2016; Kong, 2016; Bryant and Merritt, 2019; Lee et al., 2019), none of these have explicitly tested how reciprocity motives facilitate the relationship between LMX and unethical behavior. This is especially important in light of recent criticisms of LMX research that the social exchange component is often ignored altogether (Gottfredson et al., 2020). Third, although LMX can motivate both positive and negative reciprocity motives, research tends to limit itself to the positive aspect (Uhl-Bien and Maslyn, 2003). Our study demonstrates that positive and negative reciprocity entail different motives that predict different intended unethical behaviors in meaningfully different ways. Finally, given the prevalence and importance of LMX relationships (Henderson et al., 2009) and the destructive nature of unethical behavior (Giacalone and Promislo, 2010), our study offers practitioners an important consideration when developing LMX relationships.

LEADER–MEMBER EXCHANGE THEORY

The LMX theory (Dienesch and Liden, 1986; Graen and Uhl-Bien, 1995; Settoon et al., 1996) explains how the relationships between leaders and followers develop (role theory; Graen, 1976) and how this relationship formation determines interactions between leaders and followers (social exchange theory; Gouldner, 1960; Blau, 1964). According to the LMX theory, leaders and followers go through role-taking and role-making processes to determine what both parties can expect from one another (for a review, see Dulebohn et al., 2012). Leaders and followers either develop low-quality economic exchange relationships where leaders reward followers for performing the duties as specified in their work contract, or develop more high-quality social exchange relationships where leaders additionally exchange affect, loyalty, contribution, and professional respect (Liden and Maslyn, 1998). The quality of the LMX relationship refers to the extent to which followers perceive that an exchange of social resources is absent (i.e., a low-quality LMX relationship) or present (i.e., a high-quality LMX relationship) (Lord and Maher, 1991; Engle and Lord, 1997).

The basic use of social exchange theory in LMX is as follows. As leaders have limited resources to establish exchange relationships with followers (Liden and Graen, 1980; Graen and Uhl-Bien, 1995), they tend to differentiate among followers and develop high-quality social exchange relationships with some followers, while maintaining low-quality economic exchange relationships with others. This differentiation implies that followers consider both the quality of their own LMX relationship and that of their peers to determine the extent to which they are obligated to engage in positive reciprocity, where benefit is returned with benefit, or in negative reciprocity, where harm is returned with harm (Gouldner, 1960; Blau, 1964). Followers who perceive a higher-quality LMX relationship with their leader will feel privileged relative to peers with lower-quality LMX relationships and will interpret their relatively high-quality social exchanges with their leader as a unique benefit (Henderson et al., 2009). This unique benefit then instills a positive reciprocity motive among these followers (Gouldner, 1960; Perugini et al.,

2003; Brandes and Franck, 2012), where followers are motivated to return the benefit they received with equal benefit. In contrast, followers who perceive a lower-quality LMX relationship will feel deprived relative to peers with higher-quality LMX relationships, which will lead to perceptions of unfair treatment (Folger and Martin, 1986; Masterson et al., 2000) and dissatisfaction with their leader (McClane, 1991). This deprivation then instills a negative reciprocity motive among these followers (Uhl-Bien and Maslyn, 2003; Eisenberger et al., 2004), which may motivate them to return the harm they received with equal harm.

Although the duality of positive and negative reciprocity is a necessary element of LMX relationships, most studies on LMX are limited to positive reciprocity (Uhl-Bien and Maslyn, 2003). Specifically, LMX research typically uses the positive reciprocity route to argue for relationships with undesirable behavior, both of the kind that benefits employees themselves (El Akremi et al., 2010; Liu et al., 2013; Jawahar et al., 2018) and those that benefit others (Umphress et al., 2010; Bryant and Merritt, 2019). Although certain studies have demonstrated that general positive reciprocity beliefs moderate the effects of LMX and organizational identification on unethical behavior (Umphress et al., 2010; Bryant and Merritt, 2019), no studies known to us have empirically investigated the intervening effects of positive reciprocity motivated by high-quality LMX relationships, let alone intervening effects of negative reciprocity motivated by low-quality LMX relationships. This is problematic, as not differentiating between positive and negative reciprocity confounds the potentially different motives that employees may have to engage in different unethical behaviors, especially different unethical behaviors that serve to benefit different parties. In what follows, we will contrast pro-leader with pro-self unethical behaviors and argue how engaging in these distinct behaviors causes employees to differentially satisfy either positive or negative reciprocity motives.

Unethical Behavior as Means of Positive and Negative Reciprocity

Unethical behavior is typically defined as any act that is "either illegal or morally unacceptable to the larger community" (Jones, 1991, p. 367). The majority of studies has focused on unethical behavior that serves to benefit oneself (Umphress et al., 2010; Umphress and Bingham, 2011). Recent research, however, has demonstrated that individuals also engage in unethical behavior to benefit others, including their organizations (Umphress et al., 2010; Umphress and Bingham, 2011), groups (Thau et al., 2015), and even leaders (Johnson and Umphress, 2018; Mesdaghinia et al., 2018; Bryant and Merritt, 2019). Benefits, in these contexts, are typically represented by the extent to which unethical behavior allows one to more effectively or efficiently ensure desirable outcomes (Schweitzer et al., 2004; Ordóñez et al., 2009; Welsh and Ordóñez, 2014). Within this study, we distinguish *pro-leader* and *pro-self* unethical behavior by defining them as follower "actions that are intended to promote the effective functioning of (the follower's leader *or* the follower him-/herself) and violate core societal values, mores, laws, or standards of proper conduct" (cf. Umphress and Bingham, 2011, p. 622). As is the case with similar constructs, it is important to stress that benefits are *intended*, regardless of whether the beneficiary actually benefits from the unethical behavior (Sackett, 2002; Umphress et al., 2010).

Engaging in unethical behavior is typically associated with various negative consequences and costs, including direct or indirect punishment and damage to their reputation or moral identity (Becker, 1968; Gino and Margolis, 2011; Mulder et al., 2015). Accordingly, followers tend to be inhibited from engaging in unethical behavior (Jordan and Monin, 2008) and need to be released of these inhibitions before they can engage in them (Treviño et al., 2014), both to benefit oneself (e.g., Vriend et al., 2016) and others (e.g., Chen et al., 2016). Ethical inhibitions can be released when the perceived benefits of unethical behavior outweigh its perceived costs (Becker, 1968; Lewicki, 1983). For pro-self unethical behavior, this is typically the case when personal gains can be ensured (e.g., Brief et al., 2001; Gino and Margolis, 2011) or when relationships can be maintained (El Akremi et al., 2010; Liu et al., 2013; Jawahar et al., 2018). Within the broader tradition of unethical pro-organizational behavior research, pro-leader unethical behavior benefits may include the opportunity to satisfy needs for affiliation (Thau et al., 2015), strengthen relational ties (Miao et al., 2013; Effelsberg et al., 2014; Johnson and Umphress, 2018), or enact reciprocity beliefs (Umphress et al., 2010; Bryant and Merritt, 2019; Wang et al., 2019).

Positive Reciprocity Motives and Pro-leader Unethical Behavior

We argue that pro-leader unethical behavior will be able to satisfy the positive reciprocity motive instilled by high-quality LMX relationships. High-quality LMX relationships create an obligation for followers to positively reciprocate the benefit they receive from their leaders by engaging in actions that benefit their leaders in return (Gouldner, 1960; Uhl-Bien and Maslyn, 2003; Brandes and Franck, 2012). Followers that fulfill this reciprocity motive by engaging in pro-leader unethical behavior gain no direct benefit themselves. Instead, for the follower, the prime functionality of the pro-leader unethical behavior is that the benefit is directly bestowed upon their leader (Mesdaghinia et al., 2018). Despite the lack of direct self-benefits accrued through pro-leader unethical behavior, however, followers do risk its consequences (cf. Becker, 1968; Gino and Margolis, 2011; Mulder et al., 2015). This indicates that followers would be willing to go through great lengths, at potentially great costs, to benefit their leader.

Although followers may be inhibited to engage in pro-leader unethical behavior (cf. Jordan and Monin, 2008; Chen et al., 2016), previous research has established that strong relational ties may release such ethical inhibitions (Umphress et al., 2010; Umphress and Bingham, 2011; Miao et al., 2013; Thau et al., 2015; Johnson and Umphress, 2018). High-quality LMX relationships are characterized by mutual affect, loyalty, and liking (Liden and Maslyn, 1998), which signal strong relational ties. Such strong relational ties can encourage followers to resort to pro-leader unethical behavior. They may, for example, exaggerate successes

and lie about wrongdoings of their leader to others, intending to benefit or protect the leader and maintain the high-quality LMX relationship. Thus, as high-quality LMX relationships obligate followers to positively reciprocate the benefits they receive from their leader (Gouldner, 1960; Brandes and Franck, 2012), pro-leader unethical behavior allows followers to satisfy this obligation (cf. Umphress and Bingham, 2011).

Negative Reciprocity Motive and Pro-self Unethical Behavior

We argue that pro-self unethical behavior satisfies the negative reciprocity motive instilled by low-quality LMX relationships. Low-quality LMX relationships are characterized as economic exchange relationships, in which followers are expected to adhere to the formal obligations, rules, standards, and norms as stipulated in their work contract (Liden and Maslyn, 1998). Similarly, leaders are expected to hold their followers accountable for violations of these contract obligations (Treviño and Brown, 2005; Brown and Mitchell, 2010). Followers with a low-quality LMX relationship are likely to feel deprived relative to peers who have higher-quality LMX relationships (Henderson et al., 2009), instilling a negative reciprocity motive in them (Uhl-Bien and Maslyn, 2003; Eisenberger et al., 2004). When followers engage in pro-self unethical behavior, they directly violate the formal obligations, rules, standards, and norms that their leaders are holding them accountable for. This signals that followers' gains obtained by their unethical behavior are more important to them than adhering to the rules stipulated by their leader. Pro-self unethical behavior therefore satisfies a negative reciprocity motive by directly degrading and corrupting the economic exchanges that they are expected to maintain as stipulated by the formal work contract. Pro-self unethical behavior can therefore be perceived as an effective means through which followers can reciprocate the felt unfair treatment and restore the balance in the relationship with their leader. Typical examples of pro-self unethical behaviors driven by a negative reciprocity motive in LMX relationships include both leader- and organization-directed deviance (El Akremi et al., 2010; Liu et al., 2013), counterproductive work behavior (Jawahar et al., 2018), withdrawal behaviors (Gerstner and Day, 1997), and illegitimate acts such as exaggerating one's successes or illegally appropriating resources.

STUDY 1

The purpose of Study 1 was to investigate whether LMX indeed differentially relates to pro-leader and pro-self unethical behaviors and whether these effects are indeed driven by positive and negative reciprocity motives. More specifically, we conducted an experimental study to assess, first, whether low-quality LMX relationships motivate more pro-self than pro-leader unethical intentions and whether high-quality LMX relationships motivate more pro-leader than pro-self unethical intentions. Second, we examined whether positive reciprocity motives explain why high-quality LMX relationships are more likely to motivate pro-leader than pro-self unethical intentions and negative reciprocity motives explain why low-quality LMX relationships are more likely to motivate pro-self than pro-leader unethical intentions.

Materials and Methods

Participants

One hundred and sixty-four United States residents (M_{age} = 31.75, SD_{age} = 11.10, 40.85% female) were recruited through Mturk. We told participants that we were investigating how personality influences decision-making. Participants were provided with $0.50 for their participation.

Procedure

We randomly assigned participants to one of four experimental conditions in a 2 (LMX: high vs. low) × 2 (type of unethical behavior: pro-leader vs. pro-self) between-subjects design. We first provided participants with either a high-LMX or a low-LMX scenario (adapted from Bhal and Dadhich, 2011) (low LMX between brackets in *italics*):

> "*You and your supervisor (do not) get along very well. You (do not) like your supervisor as a person very much, and you (do not) like working with your supervisor. The two of you just (do not) get along. You have the feeling that your supervisor does not only treat (only treats) you as an employee, but also (and not) as a unique person, and that you can (not) go to your supervisor with personal wishes and problems. Your relationship is based on mutual trust (your formal work contract). Because your supervisor is (not) willing to do something extra for you, you are also (not) willing to do more than strictly necessary.*"

Positive and negative reciprocity motives

After the LMX manipulation, we used a shortened (cf. Caliendo et al., 2012; Egloff et al., 2013) version of Perugini et al.'s (2003) measurement instrument to assess the extent (1 = *fully disagree*, 7 = *fully agree*) to which participants would have positive and negative reciprocity motives in relationship to the supervisor depicted in the scenario. Positive reciprocity motive (α = 0.86) was assessed by the items: "If my supervisor does me a favor, I am prepared to return it," "I go out of my way to help my supervisor who has been kind to me before," and "I am ready to undergo personal costs to help my supervisor who helped me before." Negative reciprocity motive (α = 0.85) was assessed by the items: "If my supervisor causes me to suffer a serious wrong, I will take revenge as soon as possible, no matter what the cost," "If my supervisor puts me in a difficult position, I will do the same to my supervisor," and "If my supervisor offends me, I will offend my supervisor back."

Pro-leader and pro-self unethical intentions

After inquiring about their reciprocity motives, depending on their assigned condition, we asked participants to indicate either the extent (1 = *fully disagree*, 7 = *fully agree*) to which they would engage in pro-leader or pro-self unethical behavior. Pro-leader unethical intention (α = 0.91) was assessed by the items: "If it would help my supervisor, I would misrepresent the truth to make my supervisor look good," "If it would help my supervisor, I would exaggerate the truth about my supervisor's successes to others," and "If it would benefit my supervisor, I would withhold negative information about my supervisor to others." Pro-self

unethical intention (α = 0.78) was assessed by the items: "If it would help me, I would misrepresent the truth to make me look good," "If it would help me, I would exaggerate the truth about my successes to others," and "If it would benefit me, I would withhold negative information about myself to others." These items were based on similar items developed by Umphress et al. (2010) and Johnson and Umphress (2018)[1].

We piloted these items for discriminant validity in a sample of 221 employed United States residents (M_{age} = 31.29, SD_{age} = 9.85, 33.94% female) recruited through Mturk. An exploratory factor analysis revealed two distinct pro-leader and pro-self unethical intention factors that together explained 78.99% of the variance. Pro-leader and pro-self unethical intentions were positively correlated, $r(220) = 0.42$, $p < 0.001$, which is comparable to correlations between similar constructs (e.g., the meta-analytic correlation between interpersonal and organizational deviance, ρ = 0.62, as reported by Berry et al., 2007). These results confirm that intended pro-leader and pro-self unethical behaviors are distinct and measurable constructs.

Manipulation check

To check our LMX manipulation, we used Liden and Maslyn's (1998) 11-item measurement instrument to assess how participants perceived the quality of the relationship with the supervisor as described in the scenario (1 = *fully disagree*, 7 = *fully agree*; α = 0.99). Example items include: "I like my supervisor very much as a person," "My supervisor would come to my defense if I were 'attacked' by others," and "I am willing to apply extra efforts, beyond those formally required to further the interests of my supervisor."

Control variables

We controlled for gender and age. Substantive conclusions drawn from the results are similar both with and without control variables.

Results

Descriptive statistics and intercorrelations are reported in **Table 1**. The significant correlation between the LMX manipulation and the LMX manipulation check, $r(164) = 0.87$, $p < 0.001$, indicates that LMX was successfully manipulated.

The Effect of LMX on Unethical Intentions

A 2 (LMX: low vs. high) × 2 (type of unethical behavior: pro-leader vs. pro-self) ANOVA on unethical intention revealed no significant main effect of LMX, $F(1, 160) = 0.79$, *ns,* a significant main effect of type of unethical behavior, $F(1, 160) = 15.25$, $p < 0.001$, and a significant interaction effect, $F(1, 160) = 59.83$, $p < 0.001$. Additional contrast analyses revealed that participants in the high LMX condition had higher pro-leader (M = 3.57, SD = 1.34) than pro-self (M = 2.77, SD = 1.48) unethical intentions, $t(160) = 2.66$), $p < 0.01$, and that participants in the low LMX condition had higher pro-self (M = 4.59, SD = 1.42) than pro-leader (M = 2.09, SD = 1.20) unethical intentions, $t(160) = 8.25$, $p < 0.001$. These results are illustrated in **Figure 1**.

The Mediating Role of Reciprocity Motives

To assess the extent to which reciprocity motives mediate the indirect relationship between LMX and unethical intention, we conducted moderated-mediation regression path analyses using lavaan 0.6-5 in *R* (Rosseel, 2012). Specifically, we followed Model 14 moderated-mediation procedures as described by Hayes (2013), which allowed us to assess our theoretical rationale that the effects of LMX on intended unethical behavior are driven by positive and negative reciprocity motives, and that these motives dictate what type of unethical intention is elicited. Standardized results of the regression path analysis and conditional indirect effects are reported in **Table 2**.

First, results indicate that our LMX manipulation has a positive effect on positive reciprocity motive (β = 0.63, $p < 0.001$) and a negative effect on negative reciprocity motive (β = 0.37, $p < 0.01$), which supports our premise that the quality of LMX relationship dictates reciprocity motives. Second, results indicate that non-significant effect of positive reciprocity motive on unethical intention (β = -0.03, *ns*) is moderated by the type of unethical behavior (β = -0.34, $p < 0.001$), such that positive reciprocity motive is positively related to pro-leader unethical behavior (β = 0.30, $p < 0.001$) and negatively related to pro-self unethical behavior (β = -0.37, $p < 0.001$). Third, results indicate that negative reciprocity motive has a significant effect on unethical intention (β = 0.24, $p < 0.001$) that is conditional upon the type of unethical behavior (β = 0.24, $p < 0.001$), such that negative reciprocity motive is unrelated to pro-leader unethical behavior (β = 0.00, *ns*) and positively related to pro-self unethical behavior (β = 0.48, $p < 0.001$). Finally, conditional indirect effects indicate that high-quality LMX relationships, through positive reciprocity motives, increase pro-leader unethical intention (β = 0.19, $p < 0.001$) and decrease pro-self unethical intention (β = −0.24, $p < 0.001$), and that low-quality LMX relationships, through negative reciprocity motives, do not affect pro-leader unethical behavior (β = −0.00, *ns*), but do increase pro-self unethical intention (β = −0.18, $p < 0.001$).

Discussion

The results of Study 1 provide us with a first indication that high-quality LMX relationships can motivate pro-leader unethical behavior to satisfy positive reciprocity motives and that low-quality LMX relationships can motivate pro-self unethical behavior to satisfy negative reciprocity motives. Despite its merits, however, Study 1 has several limitations that prevent us from drawing too strong conclusions with respect to our expected relationships. First, although previous research has also manipulated LMX by means of scenarios (Bhal and Dadhich, 2011), actual LMX relationships develop over a longer period of time (Liden and Graen, 1980; Dienesch and Liden, 1986; Graen and Uhl-Bien, 1995), which is something that is difficult to capture through experimental manipulations. Second, although our diverse sample allows us to generalize across a multitude of occupations, organizations, and industries, it does not allow us to generalize across nationalities. Research has demonstrated

[1]The questionnaire initially contained two sets of six items. However, we left out three items across both sets because they referred to behaviors that were not unambiguously unethical. Furthermore, these items deviated from established unethical behavior scales (e.g., Umphress et al., 2010; Johnson and Umphress, 2018).

TABLE 1 | Descriptive statistics and intercorrelations (Study 1).

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Gender (0 = male, 1 = female)	1.41	0.49	–							
2. Age (years)	31.75	11.10	0.18*	–						
3. Leader–member exchange manipulation (0 = low, 1 = high)	0.51	0.50	−0.10	−0.01	–					
4. Unethical behavior manipulation (0 = pro-leader, 1 = pro-self)	0.49	0.50	0.05	−0.12	−0.05	–				
5. Leader–member exchange manipulation check	4.06	2.17	−0.08	0.05	0.87***	0.00	(0.99)			
6. Positive reciprocity motive	4.56	1.76	−0.03	0.03	0.63***	0.08	0.74***	(0.86)		
7. Negative reciprocity motive	3.32	1.61	−0.17*	−0.27***	−0.35***	0.03	−0.42***	−0.36***	(0.85)	
8. Unethical intention	3.29	1.64	−0.14	−0.11	−0.06	0.26***	−0.06	−0.07	0.28***	(0.85)

*N = 164. Cronbach's alphas between parentheses on the diagonal. *p < 0.05, ***p < 0.001.*

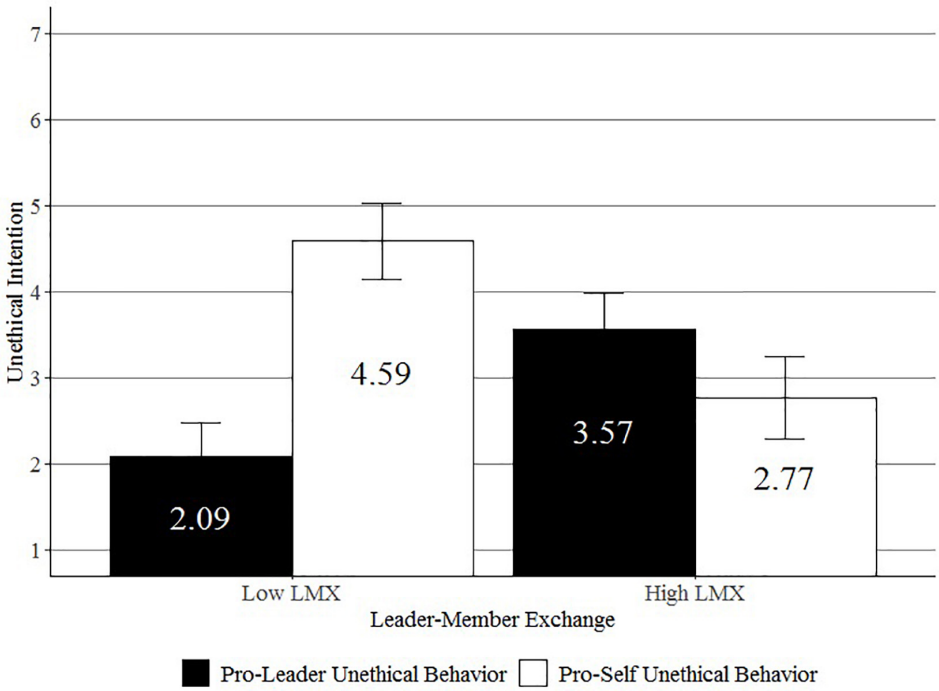

FIGURE 1 | Effect of LMX on unethical intentions (Study 1).

that the effects of LMX may be culturally dependent, especially when aspects of ethics and fairness are concerned (Rockstuhl et al., 2012). Similarly, national culture also has a substantial influence on ethical decision-making (Westerman et al., 2007). Accordingly, taken together, it would be useful to assess our expected relationships in a different (national) context where the quality of the LMX relationship has been able to mature over time.

STUDY 2

The purpose of Study 2 was to replicate the mediating mechanisms of Study 1 in a different cultural setting using a time-split field study among followers that have actually been able to develop an LMX relationship with their leaders over time.

Materials and Methods

Sample and Procedure

We collected three-wave time-split data from followers from different companies from various industries in the Netherlands, including construction, education, healthcare, local government, and retail, among others. We invited 480 followers to participate in our study for Wave 1. A total of 366 followers (76.25%) completed the first questionnaire. Two months after inviting them to participate in the first wave, we invited these 366 followers to participate in Wave 2. A total of 330 followers (90.16%) completed the second questionnaire. Four months after inviting them to participate in the second wave, we invited these followers to participate in Wave 3. A total of 269 followers (81.52%) completed the third questionnaire. Of these 269 followers, 120 were male and 149 female, with an average age of 43.77 years (*SD* = 11.74, *range* = 17–65) and organizational

TABLE 2 | Standardized coefficients for regression path analysis and conditional indirect effects (Study 1).

Variable	Positive reciprocity motive	Negative reciprocity motive	Unethical intention
Regression path analysis			
Gender	0.03 (0.06)	−0.16* (0.07)	−0.12 (0.07)
Age	0.04 (0.06)	−0.24*** (0.07)	−0.06 (0.07)
Leader–member exchange (manipulation)	0.63*** (0.06)	−0.37*** (0.07)	0.09 (0.08)
Type of unethical behavior (manipulation)			0.26*** (0.06)
Positive reciprocity motives			−0.03 (0.08)
Negative reciprocity motives			0.24*** (0.07)
Type of unethical behavior (manipulation) × Positive reciprocity motives			−0.34*** (0.07)
Type of unethical behavior (manipulation) × Negative reciprocity motives			0.24*** (0.07)
R^2	0.40	0.22	0.37
Conditional indirect effects			
Leader–member exchange (manipulation) –> Positive reciprocity motive > Unethical intention (pro-leader)			0.19** (0.07)
Leader–member exchange (manipulation) –> Positive reciprocity motive > Unethical intention (pro-self)			−0.24*** (0.07)
Leader–member exchange (manipulation) –> Negative reciprocity motive > Unethical intention (pro-leader)			−0.00 (0.04)
Leader–member exchange (manipulation) –> Negative reciprocity motive > Unethical intention (pro-self)			−0.18*** (0.05)

*N = 164. Standard errors between parentheses. *p < 0.05, **p < 0.01, ***p < 0.001.*

tenure of 11.47 years (*SD* = 9.59, *range* = 0–39). Most followers held a lower (99) or higher (110) vocational degree.

Measures

We measured all scales on a five-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (5). As the questionnaires were in Dutch, we translated the scales from English to Dutch using a back-translation procedure (Brislin, 1970).

LMX

We assessed LMX (α = 0.87) in the first wave by means of the 11 items developed by Liden and Maslyn (1998) described earlier.

Positive and negative reciprocity motives

We assessed positive (α = 0.79) and negative (α = 0.88) reciprocity motives in the second wave by means of the items developed by Perugini et al. (2003) described earlier.

Pro-leader and pro-self unethical intentions

We assessed intended pro-leader (α = 0.76) and pro-self (α = 0.81) unethical behavior in the third wave by means of the items used previously.

Control variables

We controlled for gender, age, tenure with organization, tenure with leader, and number of hours weekly worked under contract. Substantive conclusions drawn from the results are similar both with and without control variables.

Convergent and Divergent Validity and Common Method Bias Considerations

We used lavaan 0.6-5 in *R* (Rosseel, 2012) to assess the convergent and discriminant validities for the suggested measurement model, to compare this with various alternative measurement models, and to assess the extent of the common method bias. We first estimated a baseline measurement model in which all items loaded freely on their focal and designated construct without any cross-loadings. This baseline measurement model provided an unacceptable fit to the data [$\chi^2(220) = 770.66$, *RMSEA* = 0.10 [0.09–0.10], *CFI* = 0.82, *TLI* = 0.79] but was superior to models in which we collapsed LMX and positive reciprocity, $\Delta\chi(4) = 247.20$, $p < 0.001$, LMX and negative reciprocity $\Delta\chi(4) = 444.39$, $p < 0.001$, positive and negative reciprocity, $\Delta\chi(4) = 449.08$, $p < 0.001$, and pro-leader and pro-self unethical intentions, $\Delta\chi(4) = 144.26$, $p < 0.001$. We then estimated a model in which we included an uncorrelated methods factor (cf. Podsakoff et al., 1990). Adding this uncorrelated methods factor significantly improved the model fit over our baseline model, $\Delta\chi(20) = 241.86$, $p < 0.001$, indicating that common method variance is present. Squaring the standardized factor loadings of the items with the uncorrelated common method factor indicated that 5.24% of the variance can be attributed to a common method.

We then followed the procedures outlined by Williams and McGonagle (2016) to assess the degree of common method variance present in our study and the extent of its effects on (interrelations between) substantive variables. First, we compared the common methods factor model with a common methods factor model in which the substantive factor intercorrelations were constrained to be equal to those of the baseline model. The fit between the restricted and unrestricted models was not significantly different, $\Delta\chi(10) = 0.46$, *ns*, indicating that the presence of common method variance does not influence the interrelationships between the substantive factors. Second, we calculated the substantive and method reliability for all five substantive factors. Results demonstrate that LMX, positive and negative reciprocity, and pro-leader and pro-self unethical intentions have acceptable substantive reliabilities (0.82, 0.79, 0.89, 0.80, 0.81) and relatively low method reliabilities (0.07, 0.00, 0.00, 0.01, 0.00), indicating that the presence of common method variance does not influence the substantive meaning of the substantive factors.

Finally, we explored potential sources of the unacceptable fit of the baseline model. Supplementary analyses revealed that removing the 11 LMX items from the baseline model resulted in

a good fit to the data [$\chi^2(48) = 158.16$, $RMSEA = 0.09$ [0.08–0.11], $CFI = 0.93$, $TLI = 0.91$], substantially improving the model fit relative to the baseline model ($\Delta CFI = 0.11$, $\Delta TLI = 0.12$). This indicates that our measurement instrument for LMX, which is multidimensional in nature (Liden and Maslyn, 1998), may be the primary culprit for the poor fit of our baseline model. To verify this, we employed the internal-consistency approach to parceling (Kishton and Widaman, 1994; Little et al., 2002). A model in which we parceled the 11 LMX items into four parcels based on their underlying dimensions, affect, contribution, loyalty, and professional respect also resulted in a good fit to the data [$\chi^2(94) = 238.48$, $RMSEA = 0.08$ [0.06–0.09], $CFI = 0.92$, $TLI = 0.90$], substantially improving the model fit relative to the baseline model ($\Delta CFI = 0.11$, $\Delta TLI = 0.12$). Although these results may imply that the measurement instrument for LMX may suffer from poor reliability in our sample, this should have limited consequences for our statistical analyses (cf. Little et al., 2002).

Results

Descriptive statistics and intercorrelations are reported in **Table 3**.

To assess the mediating role of positive and negative reciprocity motives, we conducted mediation regression path analyses using lavaan 0.6-5 in *R* (Rosseel, 2012). Specifically, we (1) regressed positive and negative reciprocity motives on LMX and the control variables and (2) regressed pro-leader and pro-self unethical intentions on positive and negative reciprocity motives, LMX, and the control variables. Standardized results of the regression path analysis and conditional indirect effects are reported in **Table 4**.

First, the results indicate that LMX has a positive effect on positive reciprocity motive ($\beta = 0.16$, $p < 0.01$) and a negative effect on negative reciprocity motive ($\beta = -0.16$, $p < 0.01$). Second, the results indicate that positive reciprocity motive has a positive effect on both pro-leader ($\beta = 0.23$, $p < 0.001$) and pro-self ($\beta = 0.12$, $p < 0.05$) unethical intentions. Third, the results indicate that negative reciprocity motive has no significant effect on pro-leader unethical intention ($\beta = 0.05$, *ns*), but does have a significant positive effect on pro-self unethical intention ($\beta = 0.20$, $p < 0.01$). Finally, conditional indirect effects indicate that the relationship between LMX and pro-leader unethical intention is primarily driven by positive reciprocity motives ($\beta = 0.04$, $p < 0.05$) and not negative reciprocity motives ($\beta = -0.01$, *ns*), and that the relationship between LMX and pro-self unethical intention is primarily driven by negative reciprocity motives ($\beta = -0.03$, $p < 0.05$) and not positive reciprocity motives ($\beta = 0.02$, *ns*).

Discussion

The results of Study 2 provide further support for our premise that both high- and low-quality LMX relationships can motivate followers to engage in unethical behavior, albeit for different reasons. More specifically, followers with a high-quality LMX relationship are motivated to engage in pro-leader unethical behavior to satisfy negative reciprocity motives, and followers with a low-quality LMX relationship are motivated to engage in pro-self unethical behavior to satisfy negative reciprocity motives. In contrast to Study 1, however, we did not find a significant indirect relationship from LMX to pro-self unethical intention that is mediated by positive reciprocity motive.

GENERAL DISCUSSION

In this investigation, we took a social exchange perspective to identify when, why, and how leaders may unintendedly motivate followers to consider unethical behavior that either serves the leader or the self. Across two studies, we find compelling empirical evidence to support our expectation that high-quality LMX relationships motivate pro-leader unethical intention to satisfy positive reciprocity motives and that low-quality LMX relationships motivate pro-self unethical intention to satisfy negative reciprocity motives. The diverse nature of the studies allows us to generalize these findings across a wide variety of occupations, organizations, industries, and even cultures. Furthermore, our experimental setup in Study 1 and the time-split nature of Study 2 provide further credence to the causal direction of our expected effects.

In addition to the expected effects, there was an unexpected and inconsistent cross-effect of reciprocity on intended unethical behavior across the studies. Specifically, while we found in Study 1 that positive reciprocity motive is *negatively* related to intended pro-self unethical behavior, in Study 2, we found that this relationship is *positive*. These inconsistent cross-effects of positive reciprocity motive may be evidence for a cultural dependency effect of LMX (Rockstuhl et al., 2012) and ethical decision-making (Westerman et al., 2007). On a more general level, however, this could indicate that there is more to the relationship between reciprocity motive and unethical behavior than we envisioned. The unexpected positive cross-effect of positive reciprocity on intended pro-self unethical behavior in Study 1, for example, could indicate that a positive reciprocity motive (i.e., doing good) may license followers to engage in intended unethical behavior for their own benefit (i.e., doing bad) (cf. Sachdeva et al., 2009). The unexpected negative cross-effect of positive reciprocity on intended pro-self unethical behavior in Study 2, on the other hand, could, for example, indicate that followers may not only be concerned with reciprocating established exchange relationships (i.e., paying back), but also be concerned with developing future exchange relationships over time (i.e., paying forward) (Korsgaard et al., 2010).

Theoretical Implications

Our theoretical and empirical findings have implications for various streams of literature, particularly on social exchange theory (e.g., Gouldner, 1960; Blau, 1964), LMX (e.g., Dienesch and Liden, 1986; Graen and Uhl-Bien, 1995; Settoon et al., 1996), and (self- and other-serving) unethical behavior (e.g., Umphress et al., 2010; Treviño et al., 2014; Bryant and Merritt, 2019). First, our findings have implications for the notion that leaders, as gatekeepers of appropriate conduct, are tasked with preventing self-interested unethical behavior among their

TABLE 3 | Descriptive statistics and first-order intercorrelations (Study 2).

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. Gender (0 = male, 1 = female)	0.55	0.50	–									
2. Age (years)	43.77	11.74	−0.04	–								
3. Tenure with organization (years)	11.47	9.59	−0.08	0.59***	–							
4. Tenure with leader (years)	4.35	5.30	−0.19**	0.20**	0.33***	–						
5. Number of contractual hours (per week)	30.84	8.92	−0.56***	0.11	0.07	0.12	–					
6. Leader–member exchange	3.90	0.55	0.05	−0.09	−0.07	0.01	0.03	(0.87)				
7. Positive reciprocity motive	3.14	0.86	0.00	−0.23***	−0.16**	−0.01	−0.07	0.18**	(0.79)			
8. Negative reciprocity motive	1.59	0.71	−0.23***	0.03	0.14*	0.09	0.21***	−0.16**	0.17**	(0.88)		
9. Pro-leader unethical intention	2.78	0.89	−0.14*	−0.11	−0.11	0.01	0.14*	0.12	0.26***	0.11	(0.76)	
10. Pro-self unethical intention	2.45	0.87	−0.19**	−0.08	−0.10	−0.01	0.17**	−0.02	0.16**	0.24***	0.61***	(0.81)

*N = 269. Cronbach's alphas between parentheses on the diagonal. *p < 0.05, **p < 0.01, ***p < 0.001.*

TABLE 4 | Standardized coefficients for regression path analysis and indirect effects (Study 2).

Variable	Positive reciprocity motive	Negative reciprocity motive	Pro-leader unethical intention	Pro-self unethical intention
Regression path analysis				
Gender	−0.06 (0.07)	−0.14 (0.07)	−0.08 (0.07)	−0.11 (0.07)
Age (years)	−0.18* (0.07)	−0.10 (0.07)	−0.02 (0.07)	−0.01 (0.07)
Tenure with organization (years)	−0.06 (0.08)	0.15* (0.07)	−0.08 (0.07)	−0.11 (0.07)
Tenure with leader (years)	0.04 (0.06)	0.02 (0.06)	0.01 (0.06)	−0.02 (0.06)
Number of contractual hours (per week)	−0.09 (0.07)	0.13 (0.07)	0.10 (0.07)	0.08 (0.07)
Leader–member exchange	0.16** (0.06)	−0.16** (0.06)	0.08 (0.06)	−0.01 (0.06)
Positive reciprocity motive			0.23*** (0.06)	0.12* (0.06)
Negative reciprocity motive			0.05 (0.06)	0.20** (0.06)
R^2	0.09	0.11	0.11	0.10
Indirect effects				
Leader–member exchange –> Positive reciprocity motive > Pro-leader unethical intention				0.04* (0.02)
Leader–member exchange –> Positive reciprocity motive > Pro-Self unethical intention				0.02 (0.01)
Leader–member exchange –> Negative reciprocity motive > Pro-leader unethical intention				−0.01 (0.01
Leader–member exchange –> Negative reciprocity motive > Pro-self unethical intention				−0.03* (0.01)

*N = 269. Standard errors between parentheses. *p < 0.05, **p < 0.01, ***p < 0.001.*

followers (Treviño and Brown, 2005; Brown and Treviño, 2006; Kalshoven et al., 2016). Indeed, although empirical evidence is scarce (Martin et al., 2016), research has predominantly suggested that leaders can *prevent* undesirable behaviors among their followers by forming high-quality LMX relationships with them (El Akremi et al., 2010; Liu et al., 2013; Jawahar et al., 2018). The central idea behind this preventive perspective is that high-quality LMX relationships obligate followers to positively reciprocate this relationship by reducing unethical behavior. Although the negative effect of positive reciprocity on pro-self unethical behavior in Study 1 certainly speaks to this idea, results of Study 2 demonstrate that positive reciprocity is positively associated with intended pro-self unethical behavior, suggesting moral licensing effects (cf. Sachdeva et al., 2009). Overall, therefore, our results imply that forming high-quality LMX relationships does not necessarily lead to a felt obligation among followers to reduce their pro-self unethical behavior.

Second, our findings have implications for the role of negative reciprocity in LMX relationships. Like positive reciprocity, negative reciprocity is part of the social exchange mechanisms that followers have at their disposal (Gouldner, 1960; Blau, 1964; Eisenberger et al., 2004). Although negative reciprocity is part of the LMX framework, it is not regularly used as such (Uhl-Bien and Maslyn, 2003). Instead, as mentioned earlier, research on LMX typically relies on the positive reciprocity route to argue for relationships with undesirable behavior (El Akremi et al., 2010; Liu et al., 2013; Jawahar et al., 2018). Moreover, although researchers have linked unethical behavior to positive reciprocity dispositions (Umphress et al., 2010; Bryant and Merritt, 2019), we know of no research that has considered the indirect effects of LMX on unethical behavior *through* positive reciprocity motives, not to mention negative reciprocity motives. This is an important shortcoming, given that leaders have limited resources to establish high-quality relationships with all their followers (Liden and Graen, 1980; Graen and Uhl-Bien, 1995; Henderson et al., 2009), meaning that negative reciprocity is very likely to result. Furthermore, our findings clearly indicate that negative reciprocity plays a crucial role in the relationship between LMX and unethical intentions. Specifically, developing low-quality LMX relationships may make followers

feel sufficiently deprived that they have a need to negatively reciprocate this deprivation, which they can do by engaging in pro-self unethical behavior. Following up on our first theoretical implication, given that both high-quality (through positive reciprocity) and low-quality (through negative reciprocity) LMX relationships may elicit pro-self unethical behavior, forming LMX relations may not be useful for leaders to regulate follower unethical behavior.

Finally, our findings have implications for the further conceptualization of pro-leader relative to pro-self unethical behavior and how LMX relationships motivate it. Previous research has established that followers engage in pro-leader unethical behavior because they identify with their leader (Johnson and Umphress, 2018) and as a response to leader bottom-line mentality (Mesdaghinia et al., 2018). We add to this literature by consistently demonstrating that the high-quality LMX relationships that leaders develop with followers spark a necessity to positively reciprocate this relationship, which followers can do by engaging in pro-leader unethical behavior. Although previous studies have suggested that reciprocity considerations *moderate* the relationship between LMX and unethical behavior (e.g., Umphress et al., 2010; Bryant and Merritt, 2019), our social exchange theory embedded experimental approach demonstrates that positive and negative reciprocity *mediate* this relationship. These results not only indicate that pro-other unethical behavior is distinct from pro-self unethical behavior, as is frequently implied (e.g., Umphress et al., 2010; Umphress and Bingham, 2011; Johnson and Umphress, 2018), but also demonstrate that they operate through distinct mechanisms.

Practical Implications

Our findings have meaningful implications for the promotion and prevention of unethical behavior through LMX relationships. Given its copious beneficial effects (Ilies et al., 2007; Dulebohn et al., 2012; Martin et al., 2016), differentiating among followers has become common managerial practice (Henderson et al., 2009). While we do not dispute that LMX relationships can be extremely useful and beneficial to management, our findings do suggest that LMX relationships may also have some qualities that limit their usefulness. Provided that both low- and high-quality LMX relationships motivate unethical behavior, albeit for different reasons, leaders are effectively motivating their followers to engage in unethical behavior through the LMX relationships that they establish – regardless of their quality. This Catch-22, where the beneficial effects of a management tool are associated with various harmful effects, is not unique to LMX relationships (e.g., goal-setting, Schweitzer et al., 2004; Ordóñez et al., 2009). One way of off-setting this perverse cycle, as previous research has suggested, is to employ followers high on moral identity (Aquino and Reed, 2002; Johnson and Umphress, 2018; Mesdaghinia et al., 2018), as this tends to reduce the effects of motivating mechanisms on unethical behavior. Given that moral identity is difficult to establish, however, it may be more efficient for a leader to emphasize moral awareness (Jordan, 2009). If leaders are able to create a moral awareness among their followers, they can reduce their intended unethical behaviors (Barsky, 2008). Leaders can potentially do so by employing an ethical leadership style that demotivates unethical conduct (Brown and Mitchell, 2010; Treviño et al., 2014). An alternative route for leaders to reduce unethical behavior is by increasing the likelihood and severity of punishment. If followers perceive that the punishment of unethical behavior outweighs its benefit or find that the behavior is not functional to satisfy their positive and negative reciprocity motives, their ethical inhibitions may be maintained (Chen et al., 2016; Vriend et al., 2016), causing them to refrain from engaging in such behavior (Becker, 1968; Mulder et al., 2015).

Limitations and Future Research Directions

While our investigation has several strengths, it also has several limitations. Despite employing an experimental setup in a US sample and a time-lagged design in a Dutch context, there are several methodological and empirical limitations of note. First, both LMX and ethical decision-making are prone to cultural biases (Westerman et al., 2007; Rockstuhl et al., 2012). Although we found consistent evidence for our expectations in countries representing the Anglo and Nordic clusters (Ronen and Shenkar, 2013), the shape of our expected relationships may be different for other clusters. It seems feasible, for example, that collectivistic cultures are less open to negative reciprocity motives and self-serving unethical behavior than individualistic cultures, which may make the positive reciprocity and other-serving unethical behavior path more salient in these cultures. Second, similarly, our studies included followers from a wide range of organizations and industries. Although this attests to the external validity of our samples, it does not rule out that the shape of our expected relationships may be different for specific types of organizations or industries. Third, we used a single source, namely the follower, to gauge our focal variables. This implies that common method variance may bias (inflate) the relationships found across our studies. Given our experimental and time-split designs and that we found no evidence that the relatively small fraction of common method variance in Study 2 (5.24%) influenced the interrelationships and reliabilities of our focal variables, however, we do not think that common method variance is an issue.

Another methodological and empirical limitation of note is that we relied on self-report of unethical intentions, rather than other-reports of unethical behavior. Our argumentation to justify this is threefold. First, a follower's unethical intentions are a cognitive representation that leaders are unable to tap into (cf. Janssen, 2000). Second, unethical acts violate important norms and can, in some cases, even be illegal. This means that followers are unlikely to reveal their unethical acts to others (Treviño and Brown, 2005), implying that it is difficult for leaders to assess the unethical intentions and behavior of their followers. Third, the average correlation between intention and behavior is relatively high (r = 0.47, as

reported in a meta-analysis by Armitage and Conner, 2001); although unethical intentions do not perfectly capture unethical behavior, they should be a very strong predictor of it. Taken together, for the purpose of our study, we believe that measuring unethical intention is more appropriate than behavior and that this unethical intention sufficiently captures unethical behavior.

Both a conceptual and methodological limitation lies in the fact that LMX is a dynamic construct that continually changes (role theory; Graen, 1976) as a result of (reciprocal) interactions between leaders and followers (social exchange theory; Gouldner, 1960; Blau, 1964). This implies that LMX may be an endogenous construct (Antonakis et al., 2014) in which it is unclear whether LMX would have a causal effect on (pro-leader and pro-self) unethical behavior through (positive and negative) reciprocity, as we suggest, or whether this unethical behavior shapes the quality of the LMX relationship. This is further complicated by the fact that we rely on the argument that followers employ this unethical behavior to satisfy their reciprocity motive, likely intending to influence the quality of their LMX relationship. Although we have tried to relieve this limitation by employing an experimental setup in the first study and a time-split design in the field study in which participants were asked about their current LMX and their intended reciprocity motive and unethical behavior, this does not completely rule out alternative causal models.

A final conceptual limitation lies in our argumentation for the mediating role of negative reciprocity. We assume that negative reciprocity is caused by the fact that those in low-quality LMX relationships will feel deprived relative to those in high-quality LMX relationships. While there is ample evidence for this argument from an LMX differentiation perspective (Henderson et al., 2009), we do not empirically employ such a perspective, as we do not compare the LMX relationships between followers from the same leader. Furthermore, it could well be that followers have no need to establish social exchanges with their leaders and are relatively comfortable with relationships solely based on economic exchanges. In such cases, followers would not feel deprived, would not feel their economic exchange as a slight, and would have no need to engage in pro-self unethical behavior as a means of negative reciprocation. Hence, the preference of favoring a simple contract-based economic exchange relationship or wanting a higher-quality relationship could serve as an important moderator of the effects that we have explored throughout our studies.

CONCLUSION

Scholars and practitioners have long assumed that leaders can prevent unethical behavior among their followers by establishing high-quality LMX relationships with them, which has become a popular means for leaders to manage their followers. Recent findings and the current investigation, however, have suggested and demonstrate that the story may be more nuanced, such that both low- and high-quality LMX relationships may motivate unethical behavior. Followers either engage in pro-leader unethical behavior to positively reciprocate high-quality relationships or pro-self unethical behavior to negatively reciprocate low-quality relationships. Regardless of their quality, therefore, LMX relationships motivate unethical behavior among followers. The only influence that the quality has, then, is who this unethical behavior is intended to benefit. In light of both its beneficial and harmful effects, theorists and practitioners should be wary of the effects of the LMX relationships: the dark side of relational leadership.

DATA AVAILABILITY STATEMENT

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

All procedures performed in the studies were in accordance with ethical standards. All participants were informed about study procedures and voluntarily consented to participate. Study 1 was approved by the institutional research committee (University of Groningen Faculty of Economics and Business Ethical Committee, reference number #2013_52). The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

TV and RS were involved in all steps of the research process. OJ and JJ contributed to the writing of the manuscript. All authors contributed to the article and approved the submitted version.

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Leader–Member Exchange Fosters Beneficial and Prevents Detrimental Workplace Behavior: Organizational Identification as the Linking Pin

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Discretionary behaviors, such as counterproductive work behavior (CWB) and organizational citizenship behavior (OCB), directly refer to an organization's normative expectations. As such, employees engaging in these behaviors violate or exceed organizational norms, respectively. An employee's relationship quality with his or her supervisor [i.e., leader–member exchange (LMX)] has been found to be a prominent antecedent of employees' workplace behavior. However, the actual mechanisms that link LMX and discretionary behaviors (i.e., CWB and OCB) are not yet well understood. Integrating social exchange as well as the social identity theory, we present an employee's organizational identification (OI) as a mechanism that sheds light on why LMX leads to employees' subsequent discretionary behavior. Across four empirical studies employing complementary study designs, we demonstrate that LMX is positively associated with OI, which, in turn, curbs CWB and fosters OCB. Specifically, this pattern of findings is consistent across (1) a cross-sectional study with 188 Swiss employees, (2) a time-lagged study with 502 Swiss employees, (3) an online recall experiment with 131 US participants, and (4) an online vignette experiment with 139 US participants. In sum, we present an integrative theoretical model and respective empirical support to shed light on OI as a pivotal mechanism that can explain why the relationship quality with one's supervisor can simultaneously serve as a deterrent for CWB and foster OCB.

Keywords: leader–member exchange, organizational identification, norms, workplace deviance, multi-methods research, organizational citizenship behavior (OCB), counterproductive work behavior (CWB)

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INTRODUCTION

"Tend to the people, and they will tend to the business."

John C. Maxwell (2011)

In 2014, the largest retail pharmacy in the United States, CVS, faced 29 million USD in fines for losing track of painkillers, suggesting that CVS employees stole prescription drugs (Lazarus, 2014). Such example illustrates how critical it is to understand why some employees harm their employer by violating organizational norms [i.e., counterproductive work behavior (CWB);

O'Boyle et al., 2011; Mercado et al., 2018; Götz et al., 2019]. At the same time, it is of equal importance to understand why some employees exceed organizational norms in a positive fashion by going the *extra mile* [i.e., organizational citizenship behavior (OCB); e.g., Organ et al., 2006; Podsakoff et al., 2018; Spitzmüller et al., 2018].

An important factor that determines how employees feel and behave at the workplace is the relationship quality with their immediate supervisors [i.e., leader–member exchange (LMX); e.g., Scandura and Graen, 1984; Liden et al., 1997; Bauer and Erdogan, 2015]. Research consistently demonstrated the pivotal role of LMX with regard to subordinates' reactions and behaviors [for reviews, see Schriesheim et al. (1999), Martin et al. (2010), and Anand et al. (2011)]. Specifically regarding employees' CWB and OCB, meta-analytic evidence illustrates that when employees perceive the relationship with their supervisor to be of high quality, they are less likely to engage in CWB, while they are also more inclined to display OCB (e.g., Gerstner and Day, 1997; Dulebohn et al., 2012; Martin et al., 2016).

While the relationships between LMX and CWB as well as OCB are rather well established, little is known about the underlying mechanisms, particularly regarding the relationship of LMX and CWB (Martin et al., 2010, 2016). We draw from the social identity approach (e.g., Tajfel and Turner, 1986; Turner et al., 1987; Haslam, 2004) to argue that the extent to which employees identify with their organization [organizational identification (OI)] accounts for the effects of LMX on discretionary workplace behavior, such as CWB and OCB. Employees tend to generalize the relationship quality with their supervisor to the organization (e.g., Gerstner and Day, 1997; Zhang and Chen, 2013; Eisenberger et al., 2019), that is, the better the relationship with their supervisors, the more connected employees feel with their employer. Consequently, they should be more inclined to define themselves in terms of the organization (e.g., Carmeli et al., 2011; Loi et al., 2014; Zhao et al., 2019) and, in turn, act in the organization's best interest by refraining from CWB and engaging in OCB (e.g., Riketta, 2005; Riketta and Van Dick, 2005; Lee et al., 2015).

Against this background, we advance theory and research in three ways. First, we present OI as a mechanism underlying the effects of LMX on CWB and OCB, respectively—in doing so, we answer specific calls by Martin et al. (2010, 2016). Second, we extend the literature on social identity by incorporating OI as a central predictor of both CWB and OCB—thereby, we answer specific calls by Lee et al. (2015) as particularly the link of OI and detrimental work behavior (i.e., CWB) is not yet well established empirically [for notable exceptions, see Norman et al. (2010), Al-Atwi and Bakir (2014), and Evans and Davis (2014)]. Third, we present four complementary study designs to test our theoretical model in a robust and triangulating fashion [for methodological in-depth discussions, see Turner et al. (2017), Aguinis et al. (2019), and Podsakoff and Podsakoff (2019)]—in doing so, we offer a consistent empirical support for our theoretical model among employees from Switzerland and the United States in two field studies (studies 1 and 2) as well as in two online experiments (studies 3 and 4; **Figure 1**).

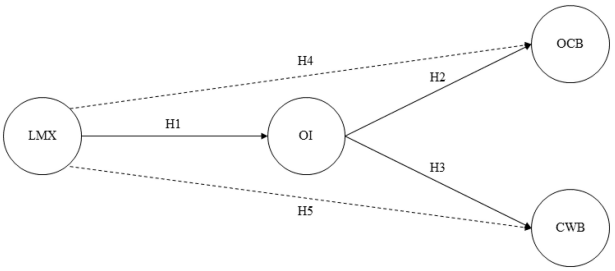

FIGURE 1 | Theoretical model of the current research. Solid lines represent direct effects, whereas dotted lines represent the respective indirect effects. LMX, leader–member exchange; OI, organizational identification; OCB, organizational citizenship behavior; CWB, counterproductive work behavior.

THEORETICAL BACKGROUND

Leader–Member Exchange Fosters Organizational Identification

Social exchange processes at the workplace play a pivotal role in establishing desirable attitudinal and behavioral outcomes of employees in organizations—exemplarily, they have been shown to increase job performance and job satisfaction (e.g., Dulebohn et al., 2012, 2017; Martin et al., 2016). At the most general level, the social exchange theory (SET; e.g., Blau, 1964; Cropanzano and Mitchell, 2005; Cropanzano et al., 2017) understands social life as involving a series of sequential transactions of resources between two or more parties. This exchange of resources is governed by the norm of reciprocity in that one party tends to repay the other party in accordance to the value of the exchange (Gouldner, 1960). As such, an employee may choose to reciprocate perceived treatment by the supervisor with respective positive or negative behavior (e.g., Colquitt et al., 2013; Eisenberger et al., 2019; Greco et al., 2019). Within organizations, people develop differentiated social exchange relationships, most prominently with their direct supervisor (e.g., Graen and Uhl-Bien, 1995; Liden and Maslyn, 1998; Cropanzano et al., 2017).

LMX refers to the quality of the social exchange relationship between an employee and the immediate supervisor (e.g., Graen and Uhl-Bien, 1995; Gerstner and Day, 1997; Martin et al., 2016). Specifically, high-quality relationships (i.e., high LMX) highlight long-term exchanges that are trustful, open-ended, spontaneous, and mutually beneficial. Low-quality relationships (i.e., low LMX), on the other hand, are characterized by a lack of mutual trust, by a focus on contract-based obligations, and by endeavors to maintain balanced exchanges across short-term episodic transactions (e.g., Graen and Uhl-Bien, 1995; Liden et al., 1997; Martin et al., 2016). Compared with related constructs derived from social exchange theory [e.g., team-member exchange (TMX)], LMX shows a relatively greater importance in predicting employees' attitudes and behaviors at the workplace (Banks et al., 2014). Moreover, it has been argued that "the relationship with one's supervisors [is] a lens through which the entire work experience is viewed" (Gerstner and Day, 1997, p. 840).

Supervisors are considered to be organizational agents (e.g., Kelman, 1958; Rousseau, 1995; Ostroff, 2019) who enact organizational rules and norms—from an employee's perspective, supervisors are furthermore understood as proxies for the organization (e.g., Rousseau, 1995; Eisenberger et al., 2010, 2019). Therefore, employees might attribute—and thereby generalize—the status of their relationship with their immediate supervisor to the entire organization (e.g., Gerstner and Day, 1997; Martin et al., 2016; Dulebohn et al., 2017). In line with previous research (e.g., Katrinli et al., 2008; Loi et al., 2014; Zhao et al., 2019), we contend that higher levels of mutual trust and support exchanged between employees and their direct supervisors are associated with the degree to which an employee feels connected with the organization. In particular, LMX provides employees with relevant cues, such as respect from their supervisors, that they generalize to the organization and that forms the extent to which they identify with the organization (e.g., Tyler and Blader, 2003; Blader and Tyler, 2009; Zhao et al., 2019). We therefore hypothesize the following:

> *Hypothesis 1:* Leader–member exchange is positively associated with organizational identification.

Organizational Identification Promotes Desirable and Prevents Detrimental Workplace Behavior

OI reflects the psychological state of defining oneself in terms of one's organization (e.g., Ashforth and Mael, 1989; Haslam, 2004; Haslam and Ellemers, 2006). At its core, OI has been argued to be a "root construct" (Albert et al., 2000, p. 13) that provides a basis for the development of attitudes toward and behaviors at the workplace—beyond work attitudes such as affective commitment or job satisfaction [for meta-analyses, see Riketta (2005), Riketta and Van Dick (2005), and Lee et al. (2015)]. OI is a form of social identification as conceptualized within the social identity approach (SIA; Haslam, 2004).

The SIA—comprising the social identity (Tajfel and Turner, 1986) and self-categorization theory (Turner et al., 1987)—explicates when, how, and why individuals act in a coordinated manner and thereby lends insight into how organizations can achieve their overarching goals. Specifically, a social identity is defined as "that part of the individuals' self-concept which derives from their knowledge of their membership of a social group (or groups) together with the value and emotional significance of that membership" (Tajfel, 1981, p. 255). The SIA posits that a social identity is activated by contextual cues which shift individual behavior to intergroup behavior (e.g., Tajfel, 1981; Haslam, 2004; Haslam and Ellemers, 2006). Specifically, a shared social identification, such as OI, enables a collective perception and behavior in that people with a salient social identity more readily think and act in terms of their respective group (e.g., Haslam et al., 1997; Haslam, 2004; Haslam and Ellemers, 2006). Accordingly, OI leads organizational attributes, such as values, goals, and, most notably, norms, to become salient, self-defining, and internalized for employees (e.g., Ashforth and Mael, 1989; Haslam and Ellemers, 2006; Ashforth et al., 2008).

With specific regard to normatively defined behaviors at the workplace, CWB and OCB are discretionary workplace behaviors that are considered to deviate from normative organizational expectations in either a negative or a positive way, respectively (e.g., Viswesvaran and Ones, 2000; Bennett and Stamper, 2001; Rotundo and Sackett, 2002). Specifically, CWB is defined as "voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both" (Robinson and Bennett, 1995, p. 556). As such, CWB subsumes a broad array of individual behaviors that have negative implications for the accomplishment of the organization's goals. In contrast, OCB refers to "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (Organ, 1988, p. 4). As such, OCB subsumes behaviors that deviate from organizational norms in a positive way which is why OCB is often referred to as *going the extra mile*. Importantly, despite their somewhat antagonistic conceptualization, CWB and OCB should be understood as two distinct constructs that both cover important facets of the overall job performance an employee can display at work (see also Dalal, 2005; Spector et al., 2010; Dalal and Carpenter, 2018).

Although the SIA suggests that employees internalize organizational norms and adhere to them, OI has been shown to also foster behaviors that exceed organizational norms, such as OCB [for meta-analyses, see Riketta (2005), Riketta and Van Dick (2005), and Lee et al. (2015)]. An explanation for this seemingly contradictory finding is offered by the deviance regulation theory (DRT; Blanton and Christie, 2003). The DRT posits "that people try to maintain positive public and private self-images by choosing desirable ways of deviating from social norms and by avoiding undesirable ways of deviating from social norms" (p. 115)—as such, organizationally identified employees may deviate from organizational norms in a positive fashion to enhance their self-image. In contrast, employees that are only weakly or not identified with their organization have been argued to be associated with less adherence to organizational norms and, ultimately, a greater intent to harm the organization (Vadera and Pratt, 2013)—specifically by engaging in CWB, yet, as Lee et al. (2015) noted in their meta-analysis, the empirical basis for this relationship is currently rather sparse [for notable exceptions, see Norman et al. (2010), Al-Atwi and Bakir (2014), and Evans and Davis (2014)].

In light of the theoretical propositions by the SIA (e.g., Tajfel and Turner, 1986; Turner et al., 1987; Haslam, 2004), the DRT (Blanton and Christie, 2003), and previous research (e.g., Norman et al., 2010; Al-Atwi and Bakir, 2014; Evans and Davis, 2014), we expect employees who strongly identify with their organization to act in the organization's best interest by even exceeding organizational norms (i.e., OCB). We furthermore contend that employees who identify weakly, if at all, with their organization more readily violate organizational norms, thereby displaying CWB; thus, we hypothesize:

> *Hypothesis 2:* Organizational identification is positively associated with organizational citizenship behavior.

Hypothesis 3: Organizational identification is negatively associated with counterproductive work behavior.

Organizational Identification as the Linking Pin

Drawing from SET (Blau, 1964; Cropanzano and Mitchell, 2005; Cropanzano et al., 2017) and the SIA (Tajfel and Turner, 1986; Turner et al., 1987; Haslam, 2004) and based on previous research, we have so far hypothesized (1) that employees generalize the quality of their relationship with their immediate supervisor to the entire organization and thereby align their OI accordingly and (2) that OI not only fosters OCB but also prevents CWB because highly identified employees act in the organization's best interests. Synthesizing our theoretical argumentation and previous findings, we posit that OI is a central underlying mechanism that may explain why LMX tends to prevent CWB and foster OCB (**Figure 1**).

Ample research suggests that LMX is a central predictor of discretionary workplace behavior (i.e., CWB and OCB), but the underlying mechanisms are less clear (e.g., Gerstner and Day, 1997; Martin et al., 2010, 2016). We contend that one reason why an employee's relationship quality with the direct supervisor (i.e., LMX) and CWB as well as OCB are associated is an employee's OI. Employees may generalize a high-quality social exchange relationship with their supervisors to the organization as a whole (e.g., Gerstner and Day, 1997; Sluss and Ashforth, 2007; Eisenberger et al., 2019), which may lead them to feel a sense of connectedness with the whole organization. OI, as "root construct" (Albert et al., 2000, p. 13) of attitudes and behavior in the workplace, connects employees to the organization as a whole. Because of this sense of oneness, employees may be more inclined to act in line with organizational interests by engaging in OCB. Conversely, employees who have a low-quality social exchange relationship with their supervisor may only weakly identify with their organization and therefore be more inclined to engage in CWB (relatedly, see Blanton and Christie, 2003). Thus, we finally hypothesize:

Hypothesis 4: Organizational identification mediates the positive relationship between LMX and organizational citizenship behavior.

Hypothesis 5: Organizational identification mediates the negative relationship between LMX and counterproductive work behavior.

OVERVIEW OF STUDIES

We tested our hypotheses across two field and two experimental studies in an effort to replicate and triangulate our results, employing complementary research designs and sampling strategies (for in-depth discussions, see Turner et al., 2017; Aguinis et al., 2019; Podsakoff and Podsakoff, 2019). In study 1, we employed an initial cross-sectional field study. Because cross-sectional designs are considered to be a basic tool for conducting research that has certain methodological draw-backs by design (e.g., Conway and Lance, 2010; Podsakoff et al., 2012; Spector, 2019), we used a time-lagged field research design in study 2. To further strengthen the validity and the generalizability of our findings, we conducted two online experiments sampling employees from the United States using the crowdsourcing platform MTurk (e.g., Buhrmester et al., 2011, 2018; Porter et al., 2019). Specifically, to corroborate our pattern of results experimentally (e.g., Shadish et al., 2002; Podsakoff and Podsakoff, 2019; Spector, 2019), in study 3, we conducted a recall experiment [relatedly, see Yam et al. (2017)], and in study 4, we employed a vignette experiment (Aguinis and Bradley, 2014). Because the procedures of the respective field and experimental studies differed only slightly, we jointly describe our general procedures and only distinguish between the studies when needed, respectively.

FIELD STUDIES

Method

Participants and Procedure

In study 1, we employed cross-sectional survey and student-recruited sampling (Wheeler et al., 2014) to collect self-report data on 203 employees in Switzerland. Because 15 participants indicated themselves as self-employed, we excluded them from further data analysis. Thus, we based our data analysis on the final sample of 188 employees. In study 2, we employed a prospective two-wave survey design, implementing a lag of 1 month to mitigate a potential common method bias (Podsakoff et al., 2012). Using student-recruited sampling again (Wheeler et al., 2014), 614 employees started to fill in our survey. At time 1, 583 participants completed the first survey, and at time 2, 1 month later, 502 answered our questions regarding the discretionary behaviors, namely, CWB and OCB. No participant out of these 502 indicated herself or himself as self-employed, and, thus, the final sample consisted of 502 employees.

Measures and Covariates

We collected the data online using SoSci Survey (Version 3.1.04; Leiner, 2019) and, if not mentioned otherwise, translated all scales into German using the back-translation procedure as recommended by Brislin (1970). Furthermore, if not mentioned otherwise, we measured all items on visual analog scales (0 = "strongly disagree" to 100 = "strongly agree") because they display superior measurement qualities in comparison to traditional Likert-type response scales and, ultimately, provide data on an interval scale (e.g., Reips and Funke, 2008; Rausch and Zehetleitner, 2014; Kuhlmann et al., 2017).

We described both studies to potential participants as psychological research investigating attitudes and behaviors at the workplace covering different aspects of a typical workday. Welcoming the participants to the actual survey, we assured them of anonymity as well as of data security due to exclusive storage on an encrypted server to eventually foster more truthful responses (e.g., Tourangeau and Yan, 2007; Anseel et al., 2010; Dalal and Hakel, 2016). Next, the participants were asked

page by page to answer the items regarding (1) demographic characteristics, (2) LMX, (3) OI, and (4) CWB and OCB. Within the respective scales, the items were presented in a random order to attenuate potential response biases, such as order, primacy, or recency bias (Saris and Gallhofer, 2014).

Leader–member exchange

We measured LMX using Schyns' (2002) validated German version of the LMX-7 scale by Graen and Uhl-Bien (1995), which consists of seven items. We slightly adapted the items to fit the format of our standardized response format (e.g., "My supervisor understands my job-related problems and needs").

Organizational identification

In study 1, we operationalized two components of OI by using (1) the six-item scale by Mael and Ashforth (1992) to assess OI's cognitive component in terms of perceived oneness with the organization (e.g., "When I talk about my organization, I usually say 'we' rather than 'they'") and (2) the five-item scale by Blader and Tyler (2009) to assess OI's affective component in terms of pride in the organizational membership (e.g., "I am proud to tell others where I work"). In study 2, we additionally used the five-item scale by Blader and Tyler (2009) to assess OI's evaluative component in terms of respect from organizational members for being an organizational member.

Counterproductive work behavior

Following the methodological recommendations regarding the measurement of CWB and OCB (Dalal, 2005), we measured CWB using the CWB-C scale by Spector et al. (2010), which consists of 10 behavioral items (e.g., "I came to work late without permission"). In doing so, we accommodated meta-analytic findings that there is one general latent factor comprising CWB (e.g., Berry et al., 2007; Marcus et al., 2016). Specifically, we asked the participants to judge how often they had shown the respective behaviors at work (1) over the last 6 months in study 1 and (2) over the last month in study 2 (0 = "never" to 100 = "daily").

Organizational citizenship behavior

Relatedly, we employed the OCB-C scale by Spector et al. (2010), which consists of 10 items to measure OCB (e.g., "I offered suggestions to improve how work is done"). In doing so, we acknowledged that research has consolidated to focus on OCB as a whole instead of overemphasizing its potential sub-dimensions (e.g., Spector and Fox, 2010; Spector and Che, 2014; Spitzmüller et al., 2018). We asked the participants again to indicate the frequency of engaging in the respective behavior at work (1) over the last 6 months in study 1 and (2) over the last month in study 2 (0 = "never" to 100 = "daily").

Demographic characteristics

We collected the participants' gender, age, organizational tenure, and employment status (self-employed or employed).

Analytic Strategy

To test our theoretical model in a comprehensive and rigorous manner, we applied latent variable modeling [i.e., confirmatory factory analyses (CFA) and structural equation modeling (SEM)]. This analytic approach explicitly allows (1) to inspect the fit of a specified model to the actual data, (2) to correct for measurement error, and (3) to compare alternative models (e.g., Cole and Preacher, 2014; Brown, 2015; Kline, 2016). First, we specified several competing CFA models to establish a well-fitting measurement model. Second and against the background of a well-fitting measurement model, we applied SEM to test our hypotheses. Importantly, no residuals were allowed to covary in any model because there was no theoretical rationale to do so (e.g., Landis et al., 2009; Kline, 2016; Pan et al., 2017). We evaluated acceptable model fit in light of five fit indices: (1) absolute test of fit, χ^2, (2) comparative fit index (CFI) $\geq$ 0.90, (3) Tucker–Lewis index (TLI) $\geq$ 0.90, (4) root mean square error of approximation (RMSEA) $\leq$ 0.05, and (5) standardized root mean square residual (SRMR) $\leq$ 0.08 (Hu and Bentler, 1999).

We conducted all statistical analyses using the statistical environment R (Version 3.4.0; R Development Core Team, 2020) and particularly used the packages *lavaan* (Version 0.6-1.1141; Rosseel, 2012) and *RMediation* (Version 1.1.4; Tofighi and MacKinnon, 2011). To determine the proper estimator, we assessed the assumptions of the *maximum likelihood* estimator: (1) Because we used visual analog scales, the assumption of measurement on an interval-scale level can be considered as fulfilled (e.g., Reips and Funke, 2008; Rausch and Zehetleitner, 2014; Kuhlmann et al., 2017); (2) Furthermore, we tested the respective data for multivariate normality using the Henze–Zirkler test (Henze and Zirkler, 1990), which is provided in the *MVN* package (Version 5.7; Korkmaz et al., 2014).

Results

Tables 1, **2** display the descriptive statistics, zero-order correlations, as well as the internal consistencies for study 1 and study 2. The data of both studies were not distributed in a multivariate normal manner—thus, we used the robust maximum likelihood estimator to obtain robust standard errors and a corrected test statistic to evaluate model fit (Yuan and Bentler, 1998).

Table 3 displays the results of the CFAs for both studies, namely, (1) a one-factor model in which we specified all items to load onto one factor, (2) a three-factor model in which we specified LMX, both components of OI, and CWB and OCB to form one factor, respectively, (3) a five-factor model in which we specified LMX, the specific facets of OI, CWB, and OCB to load onto one factor, respectively, (4) an adapted version of model 3 in which we specified OI as a second-order factor to subsume both components, and (5) a parceled version of model 4 to reduce model complexity (e.g., Landis et al., 2000; Brown, 2015; Kline, 2016). Specifically, we created three indicator parcels for each construct by adapting the *item-to-construct balance* principle in model 5 (e.g., Little et al., 2002; Williams and O'Boyle, 2008; Brown, 2015). Overall, model 5 suggested acceptable fit to and thus a valid representation of the data in both studies: study 1: $\chi^2(82) = 103.29$, $p = 0.06$, CFI = 0.99, TLI = 0.98, RMSEA = 0.04 (90% CI: 0.00–0.06, $p = 0.85$), SRMR = 0.05; study 2: $\chi^2(126) = 522.50$, $p < 0.001$, CFI = 0.93, TLI = 0.91, RMSEA = 0.08 (90% CI: 0.07–0.09, <0.001), SRMR = 0.07.

TABLE 1 | Zero-order correlations, internal consistencies, and descriptive statistics for study 1.

	M	*SD*	1	2	3	4	5	6	7	8
(1) Gender (1 = ♂)	102 ♀, 86 ♂									
(2) Age	34.39	12.03	−0.12							
(3) Tenure	5.54	7.00	−0.09	0.65***						
(4) LMX	57.96	25.43	−0.09	−0.12	−0.09	(0.94)				
(5) OI cognitive	57.09	22.08	−0.09	0.14	−0.02	0.33***	(0.84)			
(6) OI affective	70.47	19.31	0.04	0.26***	0.12	0.35***	0.45***	(0.81)		
(7) OCB	66.39	17.11	−0.06	0.29***	0.20**	0.06	0.31***	0.25***	(0.86)	
(8) CWB	12.51	11.79	−0.11	−0.23**	−0.11	−0.20**	−0.16*	−0.42***	0.02	(0.82)

*N = 188. Standardized Cronbach's alpha coefficients are reported along the diagonal in parentheses. LMX, leader–member exchange; OI cognitive, cognitive component of organizational identification; OI affective, affective component of organizational identification; OCB, organizational citizenship behavior; CWB, counterproductive work behavior. *p < 0.05, **p < 0.01, ***p < 0.001.*

TABLE 2 | Zero-order correlations, internal consistencies, and descriptive statistics for study 2.

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
(1) Gender (1 = ♂)	185 ♀, 317 ♂										
(2) Age	30.66	9.50	−0.06								
(3) Tenure	2.55	4.88	−0.07	0.52***							
(4) LMX	70.12	21.02	−0.03	−0.04	0.05	(0.92)					
(5) OI cognitive	53.37	23.17	−0.12**	0.08	0.12**	0.40***	(0.86)				
(6) OI affective	63.88	21.52	−0.08	−0.02	0.03	0.42***	0.59***	(0.84)			
(7) OI evaluative	64.17	20.85	−0.12**	0.01	0.10*	0.64***	0.57***	0.60***	(0.87)		
(8) OCB	53.17	18.58	−0.08	0.10*	0.13**	0.29***	0.36***	0.33***	0.40***	(0.85)	
(9) CWB	8.65	9.06	−0.14**	−0.11*	0.01	−0.15**	−0.08	−0.17***	−0.19***	0.03	(0.77)

*N = 502. Standardized Cronbach's alpha coefficients are reported along the diagonal in parentheses. LMX, leader–member exchange; OI cognitive, cognitive component of organizational identification; OI affective, affective component of organizational identification; OI evaluative, evaluative component of organizational identification; OCB, organizational citizenship behavior; CWB, counterproductive work behavior. *p < 0.05, **p < 0.01, ***p < 0.001.*

TABLE 3 | Confirmatory factor analyses for studies 1 and 2.

Model	χ^2	*df*	*P*	CFI	TLI	RMSEA (90% CI, *p*)	SRMR
Study 1							
Model 1	2,620.41	665	<0.001	0.37	0.34	0.13 (0.13–0.14, <0.001)	0.16
Model 2	1,798.79	662	<0.001	0.64	0.62	0.10 (0.10–0.11, <0.001)	0.13
Model 3	1,295.15	655	<0.001	0.80	0.79	0.08 (0.07–0.08, <0.001)	0.08
Model 4	1,305.38	657	<0.001	0.80	0.78	0.08 (0.07–0.08, 0.07)	0.08
Model 5	103.29	82	0.06	0.99	0.98	0.04 (0.00–0.06, 0.85)	0.05
Study 2							
Model 1	5,085.07	860	<0.001	0.52	0.50	0.11 (0.10–0.11, <0.001)	0.11
Model 2	3,627.31	857	<0.001	0.69	0.67	0.09 (0.08–0.09, <0.001)	0.11
Model 3	2,205.55	845	<0.001	0.85	0.84	0.06 (0.06–0.06, <0.001)	0.08
Model 4	2,260.21	851	<0.001	0.85	0.84	0.06 (0.06–0.06, <0.001)	0.08
Model 5	522.50	126	<0.001	0.93	0.91	0.08 (0.07–0.09, <0.001)	0.07

Study 1: N = 188; study 2: N = 502.

On the basis of model 5, in both studies, we applied SEM and regressed (1) OI onto LMX and (2) CWB and OCB onto OI and onto LMX, respectively, to allow the estimation of all potentially relevant direct as well as indirect effects. In both studies, the resulting models displayed good fit to the data: study 1: $\chi^2(82) = 103.27$, $p = 0.06$, CFI = 0.99, TLI = 0.98, RMSEA = 0.04 (90% CI: 0.00–0.06, $p = 0.86$), SRMR = 0.05; study 2: $\chi^2(126) = 522.40$, $p < 0.001$, CFI = 0.93, TLI = 0.91, RMSEA = 0.08 (90% CI:0.08–0.09, <0.001), SRMR = 0.07 (**Table 4** and **Figures 2**, **3**). In turn, we found statistically significant positive associations of LMX with OI [study 1: $b^* = 0.51$ (95% CI: 0.33–0.67); study 2: $b^* = 0.68$ (95% CI: 0.60–0.77)] but no direct effects of LMX regarding both CWB and OCB. In addition, OI was statistically significantly related to CWB in a negative way [study 1: $b^* = -0.46$ (95% CI: −0.67–−0.24); study 2: $b^* = -0.33$ (95% CI: −0.54–−0.11)] and to

TABLE 4 | Full structural equation models for studies 1 and 2.

Path	Study 1					Study 2				
			95% CI					95% CI		
	*b**	*SE*	Lower	Upper	*p*	*b**	*SE*	Lower	Upper	*p*
OI on										
LMX	0.51	0.09	0.33	0.67	<0.001	0.68	0.04	0.60	0.77	<0.001
CWB on										
OI	−0.46	0.11	−0.67	−0.24	<0.001	−0.33	0.11	−0.54	−0.11	<0.01
LMX	−0.03	0.11	−0.24	0.18	0.79	0.07	0.09	−0.10	0.23	0.44
OCB on										
OI	0.54	0.15	0.24	0.84	<0.001	0.52	0.07	0.37	0.66	<0.001
LMX	−0.20	0.12	−0.44	0.04	0.10	−0.02	0.08	−0.18	0.13	0.76
CWB with										
OCB	0.25	0.12	0.02	0.47	<0.05	0.19	0.05	0.10	0.29	<0.001
LMX → OI → CWB	−0.23	0.07	−0.38	−0.11	–	−0.22	0.08	−0.38	−0.07	–
LMX → OI → OCB	0.27	0.09	0.11	0.47	–	0.35	0.06	0.25	0.46	–

Study 1: N = 188; study 2: N = 502. Path coefficients stem from the completely standardized solution of the full structural equation model. OI, organizational identification; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

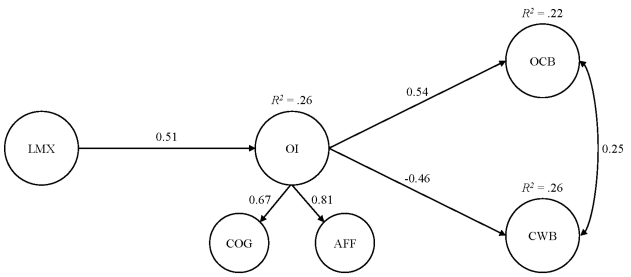

FIGURE 2 | Results from the full structural equation model for study 1. Only the statistically significant coefficients, from the full structural equation model, that stem from the completely standardized solution are displayed. *N* = 188. LMX, leader–member exchange; OI, organizational identification; COG, cognitive component of organizational identification; AFF, affective component of organizational identification; OCB, organizational citizenship behavior; CWB, counterproductive work behavior.

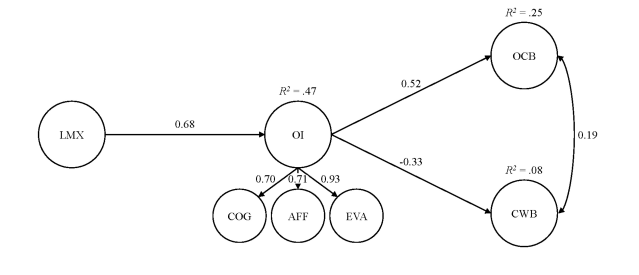

FIGURE 3 | Results from the full structural equation model for study 2. Only the statistically significant coefficients, from the full structural equation model, that stem from the completely standardized solution are displayed. *N* = 502. LMX, leader–member exchange; OI, organizational identification; COG, cognitive component of organizational identification; AFF, affective component of organizational identification; EVA, evaluative component of organizational identification; OCB, organizational citizenship behavior; CWB, counterproductive work behavior.

OCB in a positive way [study 1: b^* = 0.54 (95% CI: 0.24–0.84); study 2: b^* = 0.52 (95% CI: 0.37–0.66)]. Interestingly, in both studies, the residual correlations between the endogenous constructs, CWB and OCB, were statistically significant and positive. Finally, following the recommendations by Tofighi and MacKinnon (2011), we applied the distribution-of-the-product method for building 95% confidence intervals for the standardized indirect effects. In both studies, we found (1) statistically significant negative indirect effects of LMX *via* OI onto CWB [study 1: b^* = −0.23 (95% CI: −0.38–−0.11); study 2: b^* = −0.22 (95% CI: −0.38–−0.07)] and (2) statistically significant positive indirect effects of LMX *via* OI onto OCB [study 1: b^* = 0.27 (95% CI: 0.11–0.47); study 2: b^* = 0.35, *SE* = 0.06, 95% CI: (0.25–0.46); **Table 4**]. Following Becker (2005), we ran all of our analyses with and without demographic controls, and the results were essentially identical with the inclusion of these variables. In sum, we found empirical support for all our postulated hypotheses.

Discussion

Across both field studies, we found a consistent pattern of results that supports our theoretical model. In particular and conditional upon the data, LMX is positively associated with OI, which, in turn, is negatively associated with CWB and positively with OCB. In addition, we did not find direct effects of LMX onto OCB or CWB, but, as hypothesized, we found the respective indirect effects. As such, this consistent pattern of results lends initial support to a leader's pivotal role in strengthening an employee's OI (e.g., Carmeli et al., 2011; Loi et al., 2014; Zhao et al., 2019). In turn, OI appears to curb negative and, at the same time, foster positive discretionary behaviors at work. As such, employees who are strongly identified with their organization are more inclined

to refrain from violating organizational norms by showing CWB and, even more so, to exceed organizational norms by displaying OCB. In other words, OI appears to serve as a unique factor affecting both positive and negative voluntary behaviors at the workplace [relatedly, see Hunt (1996)].

Although we addressed certain methodological limitations of study 1 by employing a time-lagged study design in study 2 (i.e., mitigation of common methods bias; Podsakoff et al., 2012), the overall research design hampers rigorous causal inferences (e.g., Spencer et al., 2005; Shadish et al., 2002; Pirlott and MacKinnon, 2016). Specifically, all postulated associations are eventually assumed to be causal—yet, these claims cannot be empirically corroborated by the non-experimental study designs that we employed in the field (Shadish et al., 2002). Consequently, to test our theoretical model more rigorously, we chose to employ a randomized experimental design because "when mediation models are tested by randomized experimental means, inferences about mediation rest on a very firm foundation" (Stone-Romero and Rosopa, 2008, p. 330). Specifically, we conducted two experimental studies in which we manipulated LMX using a recall task [study 3; relatedly, see Yam et al. (2017)] and a vignette task (study 4; Aguinis and Bradley, 2014).

EXPERIMENTAL STUDIES

Method

Design and Procedure

To conduct our two online experiments manipulating LMX, we sampled from the crowdsourcing platform MTurk. To assure a high data quality, we took several preventive measures following recent methodological recommendations: First, we randomly spread four *bogus* items across the experimental materials, included an initial warning for the participants that some items might strike them as odd, and recorded the time to complete the experiment in seconds to check for potential careless responders (i.e., insufficient effort responding; e.g., De Simone et al., 2015; Huang et al., 2015; De Simone and Harms, 2018). Second, we set a 97% approval rate as a qualification criterion for potential MTurk workers to be included in the study (Peer et al., 2014). Third, to decrease dropout rates in light of the experimental manipulation, we informed the participants upfront that they might come across a task where they need to type a few sentences and appealed to the participants' conscience by telling them that our research depends on good data quality (Zhou and Fishbach, 2016). Finally, we offered the participants $2 for their complete participation which, in light of the average completion time of roughly 10 min, resulted in an hourly wage of approximately $12 (Gleibs, 2017).

Resembling our field studies, we described our research to potential participants as investigating attitudes and behaviors at the workplace with a specific focus on different aspects of a typical workday. Upon initial participation, we assessed the participants' demographic characteristics and then randomly assigned them into one of three conditions. In study 3, the recall experiment, the participants were asked to type in three to five sentences describing situations depicting (1) a high-quality relationship with their supervisor (high-LMX condition), (2) a low-quality relationship with their supervisor (low-LMX condition), or (3) particular activities that they usually pursue in their spare time (control condition). In study 4, the vignette experiment, we randomly assigned the participants into one of three vignette conditions, where the participants were asked to imagine either (1) a high-quality relationship with an imaginary supervisor (high-LMX condition), (2) a low-quality relationship with an imaginary supervisor (low-LMX condition), or (3) certain hobbies that they like to pursue in their spare time (control condition). In both studies, initially, the participants in the LMX conditions read a few introductory sentences about different characteristics of relationship quality between supervisors and employees (high-LMX and low-LMX condition) or about spare time being an important aspect of one's life besides work (control condition). In each LMX condition, we also provided two respective examples based on items of the multidimensional measure of LMX (LMX-MDM; Liden and Maslyn, 1998). Then, we randomly assigned the participants to one of three conditions to manipulate LMX.

In study 3, we manipulated LMX *via* recall task because this method has been successfully employed in other psychological experimental studies (e.g., Yam et al., 2017). Specifically, we asked the participants to recall (1) particular situations depicting a high-quality relationship with their supervisor based on mutual trust, respect, liking, and/or reciprocal influence (high-LMX condition), (2) particular situations depicting a low-quality relationship with their supervisor lacking in mutual trust, respect, liking, and/or reciprocal influence (low-LMX condition), or (3) particular activities that they liked to pursue in their spare time (control condition). Having read the introductory sentences, the participants were asked to type in three to five sentences describing situations in accordance with the respective condition. Exemplary for the respective participants' responses, situations such as the following were described: (1) high-LMX: "My supervisor helped me complete quality assurance logs because we were very busy and I could not finish in time," (2) low-LMX: "My supervisor questioned where I was when I was in a meeting and not in the office," or (3) control: "I run outside to improve my health and unwind."

In study 4, we manipulated LMX *via* a vignette task and, in doing so, followed the methodological recommendations by Aguinis and Bradley (2014). Specifically, we phrased our vignettes for the high-LMX and the low-LMX conditions in close resemblance to the LMX-MDM scale by Liden and Maslyn (1998). We explicitly chose this scale as a reference to attenuate potential verbatim carry-over effects that might occur from phrasing vignettes along the lines of the same scale that we employed to assess LMX (i.e., LMX-7; Graen and Uhl-Bien, 1995) for the respective manipulation check. Although both measures of LMX somewhat differ conceptually and verbally, meta-analytic evidence suggests a strong correlation between the LMX-MDM and the LMX-7 scales (Martin et al., 2016). In addition, we made sure that the participants across all conditions had roughly the same amount of overall information and the exact same information regarding the organization and the tenure they supposedly had spent with their imaginary supervisor. In turn,

the participants were asked to read one of the following vignettes and imagine themselves in one of the following scenarios:

> *You work for a mid-size organization in the private sector. You have been working under your present supervisor for about 2 years now and you (dis)like working with this supervisor. You do (not) respect your supervisor's knowledge of and competence on the job and you do (not) particularly value his/her opinion. Also, you do (not) like your supervisor very much as a person. (Un)fortunately, you can(not) always count on the supervisor to defend you in times of crises. He/She is the kind of supervisor who would (not) defend your work actions to a superior without complete knowledge of the issue in question. In return, you (refrain from) do(ing) work for your supervisor that goes beyond what is specified in your job description.* [The differences between the high- and the low-LMX conditions are printed in parentheses.]

For the control condition, we asked the participants to imagine themselves in the following situation while leaving out any details regarding a potential supervisor:

> *You work for a mid-size organization in the private sector. In your spare time on weekdays, you like to do relaxing activities. Usually, you read a book or watch a movie. Sometimes you go to the movies nearby with friends. You also like exercising and cooking. You enjoy trying out new recipes. At the weekend, you go out quite often and meet up with friends and family, but as you also like being outdoors, you spend some weekends hiking in nature. You enjoy the mountains and the fresh air. Sometimes a friend joins you on your trip.*

Participants

We conducted our two online experiments on the crowdsourcing platform MTurk. In doing so, we recruited 172 full-time employed adults in study 3 and 207 full-time employed adults in study 4.

Measures and Covariates

We designed the online experiments to closely resemble our field studies. Thus, we provided the materials in English using SoSci Survey (Version 3.1.04; Leiner, 2019) and measured the variables of interest using VAS (e.g., Reips and Funke, 2008; Rausch and Zehetleitner, 2014; Kuhlmann et al., 2017), ranging from 0 to 100 with the verbal anchors "strongly disagree" and "strongly agree" as response scales, if not mentioned otherwise.

Organizational identification

We measured the three components of OI, namely, (1) perceived oneness with the organization (six items; Mael and Ashforth, 1992), (2) pride in the organizational membership (five items; Blader and Tyler, 2009), and (3) respect from organizational members for being an organizational member (five items; Blader and Tyler, 2009).

CWB and OCB

We measured CWB using the 10-item CWB-C scale by Spector et al. (2010) and measured OCB using the 10-item OCB-C scale by Spector et al. (2010). Specifically, we asked the participants to indicate the likelihood of engaging in each of the presented behaviors over the next 6 months at work, respectively (0 = "never" to 100 = "daily").

Insufficient effort responding

To flag the participants who are potentially responding carelessly to our measures, we randomly spread the four items with the highest loadings from the insufficient effort responding (IER) scale by Huang et al. (2015) over the entire survey (e.g., "I can teleport across time and space"). In addition, we recorded the total completion time in seconds (e.g., Huang et al., 2012; De Simone et al., 2015; De Simone and Harms, 2018).

Demographic characteristics

We asked the participants to indicate their (1) gender, (2) age in years, (3) tenure with the current organization in years, and (4) whether they currently had a supervisor. The participants who reported to currently not have a supervisor were subsequently thanked for their interest in our study but immediately excluded from further participation in it.

Manipulation Check

To check whether the manipulation of LMX *via* the recall task in study 3 and *via* the vignette task in study 4 had worked, we asked the participants in both studies to answer the seven items of the LMX-7 scale by Graen and Uhl-Bien (1995) with regard to how they viewed the relationship with their supervisor, keeping in mind the situations or the scenarios they had just described or read about, respectively.

Results

We again conducted all statistical analyses in R (Version 3.4.0; R Development Core Team, 2020). Following the recommendations by De Simone et al. (2015) and De Simone and Harms (2018), we first screened the data by applying (1) a direct criterion based on the IER scale to identify the participants who were responding carelessly and (2) an archival criterion based on the participants' response time regarding the entire online experiment to identify the participants that were responding too quickly. Regarding study 3, we excluded 24 out of the initial 172 participants due to an average IER score above 10 and 17 participants due to an average response time of less than 2 s per item (Huang et al., 2012); this resulted in a final sample of 131 participants for study 3. Resembling these criteria in study 4, we excluded 28 out of the 207 participants due to suspected careless responding and 40 participants due to a particularly low average response. In turn, the final sample of study 4 comprised 139 participants (see **Appendix** for zero-order correlations, internal consistencies, and descriptive statistics for studies 3 and 4).

Next, we conducted one-way ANOVAs to check whether the manipulation of LMX worked. In study 3, there was a statistically significant main effect of the experimental manipulation on LMX, $F(2,128) = 5.83$, $p < 0.01$, $\eta_p^2 = 0.08$. A *post hoc* comparison of the experimental conditions using Tukey HSD test revealed statistically significant differences between the high-LMX ($M = 81.34$, $SD = 18.29$) and the low-LMX conditions ($p < 0.01$) and between the low-LMX ($M = 68.21$, $SD = 19.95$) and the control conditions ($M = 77.78$, $SD = 16.13$) ($p < 0.05$), but not a statistically significant difference between the high-LMX and the control conditions ($p = 0.61$). Because the difference

between the high- and the low-LMX conditions was statistically significant, we considered the overall manipulation of LMX to be successful in study 3. With regard to study 4, we found a statistically significant main effect of the experimental condition regarding LMX, $F(2,136) = 211.10$, $p < 0.001$, $\eta_p^2 = 0.76$. *Post hoc* comparisons using Tukey HSD test indicated statistically significant ($p < 0.001$) differences between all three conditions, specifically (1) the high-LMX ($M = 89.91$, $SD = 7.51$), (2) the low-LMX ($M = 22.63$, $SD = 21.69$), and (3) the control conditions ($M = 75.92$, $SD = 16.56$). In turn, we considered the manipulation of LMX *via* vignette as successful.

To test our hypotheses, we conducted path analyses focusing on direct as well as indirect effects using the R package *lavaan* (Version 0.6-1.1141; Rosseel, 2012). Because the data did not follow a multivariate normal distribution and because our sample sizes were rather small, we used the robust maximum likelihood estimator to obtain robust standard errors (Yuan and Bentler, 1998). We specified models in which the paths from LMX to OI, OCB, and CWB, direct effects from OI to CWB and OCB, as well as a covariance between these two endogenous constructs were estimated. Importantly, we estimated the path analytic models for the full samples (i.e., all three conditions) and for the manipulated sample (i.e., low-LMX and high-LMX conditions).

Both studies yielded a consistent pattern of findings in that LMX was positively associated with OI, which, in turn, was negatively associated with CWB and positively associated with OCB. Furthermore, there were no statistically significant direct effects of LMX on either CWB or OCB (**Tables 5**, **6**). In addition, the correlation between CWB and OCB was not statistically significant in any of the estimated models. Consequently, using the R package *RMediation* (Version 1.1.4; Tofighi and MacKinnon, 2011), we applied the distribution-of-product method for building 95% confidence intervals for the standardized indirect effects. Analyzing the full sample of study 3, we found the two indirect effects to be statistically significant because the respective confidence intervals excluded zero: (1) LMX *via* OI onto CWB, $b^* = -0.19$, $SE = 0.05$, 95% CI: (−0.30–−0.09) and (2) LMX *via* OI onto OCB, $b^* = 0.31$, $SE = 0.06$, 95% CI: (0.20–0.44). Analyzing only the participants in the high- and the low-LMX conditions, thereby excluding the control condition, essentially yielded the same pattern of results in study 3: (1) LMX *via* OI onto CWB, $b^* = -0.20$, $SE = 0.07$, 95% CI: (−0.35–−0.06) and (2) LMX *via* OI onto OCB, $b^* = 0.39$, $SE = 0.09$, 95% CI: (0.24–0.56). Analyzing the complete sample of study 4, we found the following statistically significant indirect effects: (1) LMX *via* OI onto CWB, $b^* = -0.25$, $SE = 0.09$, 95% CI: (−0.43–−0.07) and (2) LMX *via* OI onto OCB, $b^* = 0.57$, $SE = 0.07$, 95% CI: (0.44–0.70) (**Table 6**). Analyzing only the participants in the high- and the low-LMX conditions again, thereby excluding the control condition, we again found the following indirect effects to be statistically significant in study 4: (1) LMX *via* OI onto OCB, $b^* = 0.60$, $SE = 0.07$, 95% CI: (0.47–0.74) and (2) LMX *via* OI onto CWB, $b^* = -0.28$, $SE = 0.11$, 95% CI: (−0.50–−0.06). Overall, the consistent pattern of results across both experimental studies yielded further empirical support for our theoretical model.

Discussion

Closely resembling the field studies, we found consistent results in both experimental studies which corroborate our theoretical model. In particular and conditional upon the data, LMX is statistically significantly associated with OI, which, in turn, is negatively related to CWB and positively related to OCB. Consistent with our theoretical model again, we found indirect effects of LMX *via* OI regarding the discretionary behaviors CWB and OCB. Importantly, this pattern of results was consistent across two different manipulations, namely, a recall task and a vignette task. Overall, these experimental studies provide further support to our notion that OI is a central mechanism linking LMX to discretionary workplace behaviors.

A potential drawback of our experimental vignette study might lie in the fact that the high-LMX and the control conditions

TABLE 5 | Path analyses for study 3.

Path	Recall (including control condition)					Recall (excluding control condition)				
			95% CI					95% CI		
	*b**	*SE*	Lower	Upper	*p*	*b**	*SE*	Lower	Upper	*p*
OI on										
LMX	0.49	0.08	0.35	0.64	<0.001	0.60	0.08	0.43	0.77	<0.001
CWB on										
OI	−0.39	0.09	−0.57	−0.22	<0.001	−0.33	0.11	−0.55	−0.10	<0.01
LMX	−0.01	0.11	−0.23	0.21	0.93	0.07	0.13	−0.20	0.33	0.63
OCB on										
OI	0.65	0.08	0.49	0.81	<0.001	0.65	0.10	0.44	0.85	<0.001
LMX	0.08	0.08	−0.08	0.24	0.32	0.09	0.11	−0.12	0.30	0.40
CWB with										
OCB	−0.05	0.09	−0.23	0.13	0.57	−0.10	0.09	−0.28	0.08	0.29
LMX–OI–CWB	−0.19	0.05	−0.30	−0.09	–	−0.20	0.08	−0.35	0.06	–
LMX–OI–OCB	0.32	0.06	0.24	0.56	–	0.39	0.09	0.24	0.56	–

Recall (including control condition): N = 131; recall (excluding control condition): n = 83. Path coefficients stem from the completely standardized solution. OI, organizational identification; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

TABLE 6 | Path analyses for study 4.

Path	Vignette (including control condition)					Vignette (excluding control condition)				
			95% CI					95% CI		
	*b**	*SE*	Lower	Upper	*p*	*b**	*SE*	Lower	Upper	*p*
OI on										
LMX	0.79	0.04	0.71	0.87	<0.001	0.79	0.05	0.71	0.88	<0.001
CWB on										
OI	−0.31	0.12	−0.54	−0.09	<0.01	−0.36	0.14	−0.63	−0.08	<0.05
LMX	−0.20	0.11	−0.42	0.02	0.07	−0.13	0.13	−0.38	0.13	0.33
OCB on										
OI	0.72	0.07	0.58	0.87	<0.001	0.76	0.08	0.61	0.91	<0.001
LMX	0.15	0.08	−0.001	0.30	0.05	0.14	0.08	−0.01	0.30	0.07
CWB with										
OCB	−0.12	0.10	−0.32	0.09	0.26	−0.16	0.13	−0.40	0.09	0.21
LMX–OI–CWB	−0.25	0.09	−0.43	−0.07	–	−0.28	0.11	−0.51	−0.06	–
LMX–OI–OCB	0.57	0.07	0.44	0.70	–	0.60	0.07	0.47	0.74	–

Vignette (including control condition): N = 139; vignette (excluding control condition): n = 91. Path coefficients stem from the completely standardized solution. OI, organizational identification; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

did not differ significantly with respect to the manipulation check. Although the participants in the low-LMX condition rated their LMX significantly lower than in the high-LMX condition, the actual mean (M = 68.21) was still on the positive side of the response scale (i.e., above 50). Yet, in light of the fact that the high- and the low-LMX conditions significantly differed, we consider our pattern of findings as somewhat robust.

GENERAL DISCUSSION

Across two field and two experimental studies, we found that the quality of employees' relationship with their direct supervisor (i.e., LMX) positively predicted the extent to which employees identify with their organization, which, in turn, curbed behavior harmful to the organization (i.e., CWB) and fostered desirable behavior in the workplace (i.e., OCB). In all four studies, we identified OI as a pivotal mechanism that can explain why LMX affects discretionary workplace behaviors. As such, we contend that our research, at least partially, answers the respective call by Martin et al. (2016) to study "theory-guided mechanisms that explain the link between LMX and the various dimensions of performance" (p. 104). Furthermore, the empirical support that we provided for the position of OI as a central antecedent of both CWB and OCB directly answers respective calls by Lee et al. (2015, p. 1,062) to "explore organizational identification's implications for those undesirable behaviors at work."

Theoretical Implications

Our findings contribute to the existing literature in several ways. We extend the literature regarding the effects of LMX by having theoretically proposed and empirically illustrated OI as an intervening mechanism that transmits the effects of LMX regarding discretionary behaviors, namely, CWB and OCB. Essentially different from work attitude constructs, such as affective commitment (e.g., Van Knippenberg and Sleebos, 2006; Klein et al., 2012; Lee et al., 2015), OI directly refers to an individual's identification in terms of the organization and, thus, its norms. Our findings suggest that employees generalize the relationship with their supervisor to the organization as a whole, which leads them to define themselves in terms of the organization and to act according to organizational norms and interests or even exceed them (i.e., refraining from CWB, engaging in OCB).

Besides proposing OI as a mechanism linking LMX and discretionary behavior, we theoretically and empirically illustrated that OI itself plays a pivotal role regarding the emergence of employees' OCB and, importantly, the deterrence of employees' CWB. In line with the theoretical propositions by the SIA (Tajfel and Turner, 1986; Turner et al., 1987; Haslam, 2004) in general, our findings support and extend the meta-analytic findings regarding the fundamental role OI appears to play in organizational behavior in general (e.g., Riketta, 2005; Riketta and Van Dick, 2005; Lee et al., 2015). In particular, strongly identified employees appear to choose desirable ways of deviating from organizational norms (i.e., OCB) and to refrain from undesirable ways of deviating from organizational norms (i.e., CWB; relatedly, see Blanton and Christie, 2003). As such, OI can be considered as a unique factor that oppositely but simultaneously affects both negative discretionary behaviors (i.e., CWB) as well as positive discretionary behaviors [i.e., OCB; for a related discussion, see Hunt (1996)].

However, even if OI truly is somewhat of an almighty engine of organizational behavior, there is also reason to be careful due to its potential negative consequences (e.g., Dukerich et al., 1998; Vadera and Pratt, 2013; Conroy et al., 2017). Specifically, if employees were strongly identified with an organization that held questionable norms from a societal or ethical perspective, employees might engage in behavior that could be viewed as desirable from the perspective of the organization and, at the same time, perceived as detrimental by the overarching society

(e.g., unethical pro-organizational behavior; e.g., Umphress et al., 2010; Umphress and Bingham, 2011). To provide future research with a more balanced view of the consequences of OI, it might also be promising to extend our empirical work and to investigate these potential negative outcomes of OI.

Finally, drawing from two theoretical frameworks—the SET (Blau, 1964; Cropanzano and Mitchell, 2005; Cropanzano et al., 2017) and the SIA (Tajfel and Turner, 1986; Turner et al., 1987; Haslam, 2004)—we contribute to a more unified understanding of why employees engage in discretionary workplace behavior by empirically testing an integrative model and corroborating previous findings regarding parts of our conceptual model [relatedly, see Tyler and Blader (2003), Blader and Tyler (2009), and O'Boyle et al. (2011)]. We found indirect effects that were somewhat comparable in size across the four complementary studies despite the different methodological approaches employed. Of course, such a comparison should be made with caution because of the standardization by the respective sample-specific standard deviations which obviously can vary across studies (Cohen et al., 2003).

Limitations and Avenues for Future Research

As Spector (2019, p. 135) noted, "no single study, no matter what the design, is in itself conclusive, but rather, it is a body of research across many researchers using a variety of methods that allow us to have confidence in conclusions." Our research also has limitations of which we hope will inspire future research. First, a potential drawback of this research lies in the fact that we measured all variables in a self-report manner. Thus, biases, such as common method (Podsakoff et al., 2012), social desirability (Paulhus, 1984), and/or non-response bias (Greco et al., 2015), might lead to exaggerated or somewhat distorted associations of the constructs under investigation. Yet, concerns regarding common method bias are alleviated to some extent because we conducted observational studies—thereby following the recommendations by Podsakoff et al. (2012)—as well as experimental studies. In addition, current methodological recommendations regarding the measurement of sensible constructs, such as CWB, consider self-report to be a prudent source for measuring this private behavior (e.g., Berry et al., 2012; Dalal and Hakel, 2016; Carpenter et al., 2017). Nonetheless, future research might employ more rigorous research designs with multiple measurement points (e.g., Ployhart and MacKenzie, 2015; Liu et al., 2016; O'Laughlin et al., 2018) and explicit investigations of potential non-response biases (e.g., Greco et al., 2015) to strengthen causal inferences.

Second, we focused on an employee's perception of the LMX quality at the individual level and, in doing so, did not account for the dyadic nature of LMX or other even higher levels of analysis (e.g., work group; cf. Gooty and Yammarino, 2016; Epitropaki et al., 2018; Martin et al., 2018). Exemplarily, Gooty and Yammarino (2016) investigated the relationship of LMX at the individual, the dyadic, and the group levels and found this multilevel perspective to provide a complex picture of the manifold effects of LMX: While LMX dispersion at the dyadic level attenuated the positive relationship of LMX and performance at the individual level, LMX differentiation at the group level turned out to be dysfunctional for individual performance. Therefore, we consider future research adopting a multilevel perspective—thereby acknowledging contextual factors such as dyadic and work group characteristics—to study the effects of LMX regarding OI and subsequently CWB and OCB a promising avenue [see also Klein et al. (2000), Martin et al. (2018), and Seo et al. (2018)].

Third, we theoretically postulated and empirically demonstrated the effect of LMX regarding OI but did not control for a SET construct referring to the organization, such as perceived organizational support (POS; e.g., Rhoades and Eisenberger, 2002; Eisenberger and Stinglhamber, 2011; Eisenberger et al., 2019). Specifically, Lavelle et al. (2007) argued that employees hold distinct social exchange relationships with multiple organizational foci (e.g., organization, supervisors) and suggested that employees rather reciprocate treatment they experienced within foci than to generalize to others. Although meta-analytic evidence does not provide strong evidence supporting multi-foci arguments (Colquitt et al., 2013), future research might explore the role of organization-focused constructs, such as POS, within our theoretical model, thereby investigating the claim by Gerstner and Day (1997) that "the relationship with one's supervisors [is] a lens through which the entire work experience is viewed" (p. 840) more rigorously.

Fourth, despite research having somewhat consolidated on considering CWB and OCB to have general underlying respective factors (e.g., Berry et al., 2007; Marcus et al., 2016; Spitzmüller et al., 2018), these discretionary behaviors have numerous behavioral manifestations that might call for a more fine-grained conceptualization and investigation of these constructs. In this current research, we considered both in their most general forms and took into account Dalal's (2005) methodological recommendations regarding operationalization [e.g., avoidance of antithetical items; see also Dalal and Carpenter (2018)], yet the very definitions of both constructs stress the normative component of the behaviors in that specific reference made to an employee's organization (e.g., Warren, 2003; Palmer, 2012; Götz et al., 2019). In other words, different behaviors might be viewed as destructively or constructively deviant by different organizations or even different workgroups (e.g., Robinson and Kraatz, 1998; Liao et al., 2004; Bollmann and Krings, 2016). As such, future research might explore deviance within one single organization, thereby explicitly taking into account the specific normative context of the employees under investigation [exemplarily, see Dineen et al. (2006)].

Fifth, against the basis of our studies, we currently cannot rule out potential alternative mechanisms for the association of LMX and CWB as well as OCB (e.g., Spencer et al., 2005; Kline, 2015; Pirlott and MacKinnon, 2016). Thus, we call upon future research to investigate competing intervening mechanisms, such as trust [specifically, see Martin et al. (2016)], to empirically test our claim of OI being a central mediator between LMX and discretionary workplace behaviors. In a similar vein, an interesting addition to our theoretical model might stem from Eisenberger et al. (2002, 2010), who found a supervisor's organizational embodiment

(SOE) to be a moderator of the positive association of LMX with affective organizational commitment. We did not include a moderator, such as SOE, into either of our theoretical models or our empirical investigations, but future research could extend our work and investigate whether SOE moderates the relationship between LMX and OI, which could give practitioners even more working surface. In particular, we expect that a supervisor's adherence to organizational norms in the form of SOE might affect whether employees identify with him or her or the overall organization and, in turn, show varying degrees of normatively aligned behavior [relatedly, see Ashforth et al. (2007) and Sluss and Ashforth (2007, 2008)].

Practical Implications

Keeping these limitations in mind, we see two particular practical implications arising out of our research. First and in light of the pivotal role of LMX regarding employees' OI as well as subsequent CWB and OCB, supervisors should be aware of their important role as proxies for an organization. High-quality interpersonal relationships between supervisors and subordinates are beneficial for the organization as a whole because employees tend to generalize their relationship with their supervisor to the organization and align their behavior toward the organization accordingly. Consequently, managers should invest in developing and maintaining high-quality relationships with their employees. Of course, each supervisor–subordinate dyad can be fairly idiosyncratic in terms of an employee's understanding of a relationship as of high quality (e.g., Liden et al., 1997; Martin et al., 2016, 2018). In general, the LMX literature strongly focuses on the relationship between leaders and subordinates and thereby rather sparsely discusses specific leader behaviors. Yet, in addition to maintaining high-quality relationships with their employees, supervisors should also *walk the talk* by demonstrating behavioral integrity and providing employees with guidance to foster beneficial and prevent detrimental subordinate behaviors (Dineen et al., 2006). In turn, implementing LMX-focused trainings of leaders appears to be a promising avenue for organizations [relatedly, see Graen et al. (1982)].

Second, employees' OI deserves attention in its own right. The central role of OI in enhancing beneficial as well as mitigating detrimental behaviors, as judged by the respective organization, in itself suggests that organizations would be well advised to maintain identity-enhancing measures that aim at strengthening employees' OI [relatedly, see Ashforth and Saks (1996), Chao (2012), and Van Knippenberg (2016)]. Specifically, (1) increasing employees' feelings of oneness with the organization, (2) providing employees with particular reasons as a basis for their pride in being a member of a specific organization, and, of course, (3) valuing employees as organizational members appear to be promising measures for organizations to fortify this "root construct" (Albert et al., 2000, p. 13) of organizational behavior. In that regard, the Actualizing Social and Personal Identity Resources (ASPIRe) model (Haslam et al., 2003) outlines a workshop-based four-phase intervention and has been empirically demonstrated to be promising (Peters et al., 2013). Specifically, the ASPIRe model offers a practical measure for organizations to develop OI among their employees and, thereby, to eventually foster employees' beneficial attitudes toward and behaviors at the workplace.

CONCLUSION

Violations of organizational norms can have deleterious consequences for organizations as our introductory example of employees stealing painkillers at the US pharmacy company CVS illustrated (Lazarus, 2014). In this research, we showed that high-quality interpersonal relationships with the immediate supervisors can strengthen employees' OI, thereby leading employees to refrain from CWB and to engage in OCB. In closing, we encourage researchers to corroborate and extend our findings—in addition, we invite managers to be aware of the impact the relationship quality they maintain with their employees can have regarding the extent to which employees identify themselves with the organization as a whole as well as the extent to which they engage in beneficial and detrimental behavior at the workplace.

DATA AVAILABILITY STATEMENT

The data as well as the corresponding R code regarding this manuscript are available at https://osf.io/p6r3u/ – in case of any question, please contact the corresponding author.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

MG contributed substantially to the conception, design, acquisition, analysis, and interpretation of data for the work, drafted the work, revised the work critically for important intellectual content, approved the final version to be published, and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. MD contributed substantially to the conceptualization, acquisition and interpretation of data, revised the work critically for important intellectual content, approved the final version to be published, and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. KJ revised the work critically for important intellectual content, approved the final version to be published, and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All authors contributed to the article and approved the submitted version.

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APPENDIX

TABLE A1 | Zero-order correlations, internal consistencies, and descriptive statistics for study 3.

Variable	M_{in}	SD_{in}	M_{ex}	SD_{ex}	1	2	3	4	5	6	7
(1) Gender (1 = ♂)	58 ♀, 73 ♂		38 ♀, 45 ♂			−0.17	−0.05	−0.20	−0.13	0.01	0.22*
(2) Age	37.44	09.53	37.36	09.78	−0.11		0.61***	0.06	0.09	0.13	−0.05
(3) Tenure	07.97	05.97	07.95	06.19	0.05	0.56***		0.02	0.17	0.06	0.01
(4) LMX	76.03	18.73	75.01	20.11	−0.12	0.09	0.06	0.92 | 0.93	0.59***	0.48***	−0.13
(5) OI	68.93	20.48	70.25	20.28	−0.03	0.08	0.24**	0.48***	0.95 | 0.96	0.70***	−0.28**
(6) OCB	68.49	18.55	67.80	18.84	0.04	0.04	0.04	0.40***	0.69***	0.88 | 0.88	−0.26*
(7) CWB	10.53	09.51	09.76	09.17	0.12	−0.07	−0.01	−0.20*	−0.40***	−0.31****	0.69 | 0.75

*Recall (including control condition): N = 131; recall (excluding control condition): n = 83. The subscript "in" refers to the full sample including the control condition and the subscript "ex" refers to the subsample excluding the control condition. Correlations for the full sample are presented below and correlations for the subsample are presented above the diagonal. Standardized Cronbach's alpha coefficients are reported along the diagonal where the first coefficient refers to the full sample. LMX, leader–member exchange; OI, organizational identification; OCB, organizational citizenship behavior; CWB, counterproductive work behavior. *p < 0.05, **p < 0.01,***p < 0.001.*

TABLE A2 | Zero-order correlations, internal consistencies, and descriptive statistics for study 4.

Variable	M_{in}	SD_{in}	M_{ex}	SD_{ex}	1	2	3	4	5	6	7
(1) Gender (1 = ♂)	60 ♀, 79 ♂		43 ♀, 48 ♂			−0.05	0.08	−0.02	−0.15	−0.09	0.07
(2) Age	36.76	09.30	37.24	10.03	−0.06		0.61***	−0.09	0.05	0.02	−0.14
(3) Tenure	07.71	08.76	07.54	06.96	0.08	0.43***		−0.05	0.13	0.08	0.01
(4) LMX	60.88	33.71	52.94	37.61	0.02	−0.07	0.00	0.97 | 0.97	0.79***	0.75***	−0.41***
(5) OI	62.64	24.98	58.62	27.23	−0.11	0.07	0.14	0.78***	0.97 | 0.97	0.87***	−0.45***
(6) OCB	62.61	24.66	60.05	27.10	−0.03	0.08	0.08	0.72***	0.84***	0.94 | 0.94	−0.47***
(7) CWB	11.63	12.33	13.11	13.70	0.08	−0.14	0.04	−0.45***	−0.47***	−0.46***	0.83 | 0.84

*Vignette (including control condition): N = 139; vignette (excluding control condition): n = 91. The subscript "in" refers to the full sample including the control condition and the subscript "ex" refers to the subsample excluding the control condition. Correlations for the full sample are presented below and correlations for the subsample are presented above the diagonal. Standardized Cronbach's alpha coefficients are reported along the diagonal where the first coefficient refers to the full sample. LMX, leader–member exchange; OI, organizational identification; OCB, organizational citizenship behavior; CWB, counterproductive work behavior. *p < 0.05, **p < 0.01, ***p < 0.001.*

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Examining the Effects of Cultural Value Orientations, Emotional Intelligence, and Motivational Orientations: How do LMX Mediation and Gender-Based Moderation Make a Difference?

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We examined the role of leader–member exchange (LMX) as a mediator between individual differences and outcomes across three separate studies with 838 participants. Gender-based moderation was used with the LMX mediation effect. Our results suggest that gender makes a dramatic difference. Specifically, we found that LMX mediation lowered the tendency of counterproductive work behaviors (CWBs) for men. In addition, we found that LMX mediated the effect extrinsic motivation has on extrinsic job satisfaction for women. We trace these differences to a tendency for women to express a more democratic and participative leadership style, which implies a different criterion for leader performance in some situations. We also present suggestions for how the findings of our studies can be extended via organizational practice and future research.

Keywords: LMX, motivation, counterproductive work behaviors, organizational citizenship behaviors, gender, emotional intelligence, cultural value orientations

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INTRODUCTION

Most individuals invest the majority of their waking hours in work activities (Landy and Conte, 2016). Given the extensive time and energy people invest at work, it is of paramount importance to investigate the effects of key workplace factors, such as work-based relationships, that positively influence work outcomes of individuals and organizations. This is even more relevant to the managerial and leadership literature, as many of us work in close proximity or in constant communication with the direct manager at the workplace. So, leadership constructs and processes take a central focus in understanding relationships at work, and this literature leader–member exchange (LMX) theory has been highly successful in explaining critical work outcomes over many decades of research and application (Sharif and Scandura, 2017). Furthermore, adding to the long discussion regarding the effects of environmental vs. individual differences in the work context, in the current paper, we investigate both situational and individual factors engaging LMX in the role of a mediator variable while gender was invoked as a moderator variable. Gender's effect is particularly important because previous research has indicated that women tend to display different leadership styles than men (e.g., Barsheshet-Picer and Tziner, 2014), that is, democratic and participative styles of leadership to a greater degree than men (Eagly and Johnson, 1990; Appelbaum and Shapiro, 1993; Eagly et al., 2003; van Engen and Willemsen, 2004; Eagly, 2005; Eagly and Carli, 2007). **Figure 1** portrays the overall research model.

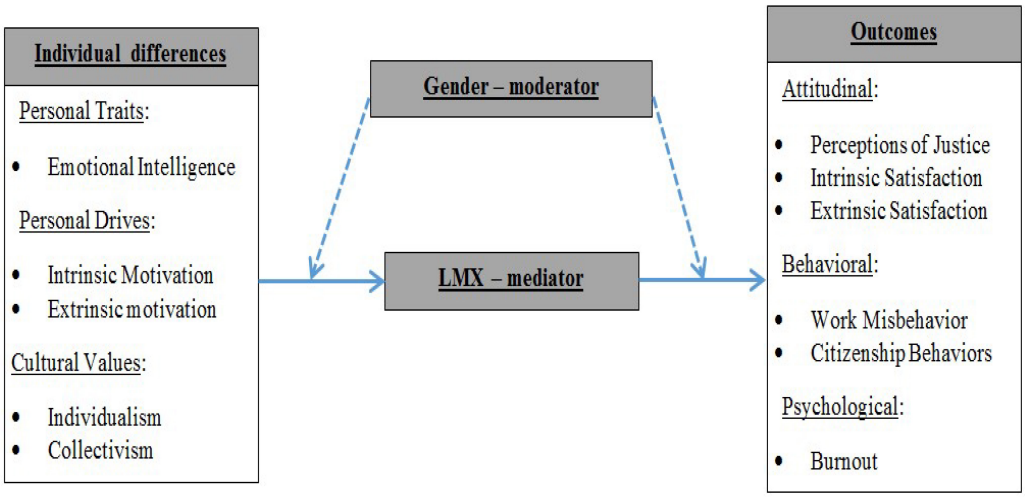

FIGURE 1 | Predictors and outcomes of LMX (as a mediator)—overall model.

Employing LMX as a mediator variable, we focus on the dyadic relationships between managers and subordinates as affected by three individual differences—cultural value orientations (CVOs) (individualism vs. collectivism), emotional intelligence, and intrinsic/extrinsic motivational orientations. These individual differences are related to the desired outcomes of organizational citizenship behaviors (OCBs), justice perceptions, and job satisfaction, and the negative outcomes of counterproductive work behaviors (CWBs) and burnout. It is important to emphasize that we contribute to the construct validity evidence for most of the constructs in this paper and that we recognize that individual differences have been scrutinized within the LMX literature. Although the effects of gender-based moderation has been researched, there is still room for further exploration (Zagenczyk et al., 2015), and it is these interactions with gender-based differences on which the current research is intended to shed light. Specifically, we used moderated-mediation models with the same common nexus of mediation and moderation, where we examined the role of LMX as a potential mediator between employees' individual differences and multiple job-related outcomes along with gender-based moderation.

There is good reason to examine further linkages between gender, LMX, and job-related outcomes. Many scholars suggest that men and women use basically the same mechanisms to create leader behaviors, but there are also subtle, true distinctions (Powell, 1990; Appelbaum and Shapiro, 1993; Eagly, 2005). Specifically, in spite of an amount of gender bias in measuring and defining leadership, there appears to be a basic female leadership style that tends toward a democratic style of relationship enhancement with cooperative and participative leadership behaviors (Eagly and Carli, 2003; Rosener, 2011). Meta-analytic evidence indeed exists to support a gender-specific effect on leadership styles. However, it is worth noting that it dates back to three decades ago. As the state of affairs may have changed, it would be justified to ascertain this effect anew. Consistent with gender-stereotypical expectations about tendencies to lead democratically or autocratically, an early meta-analysis (Eagly and Johnson, 1990) reported that women tend to adopt a more democratic or participative style and a less autocratic or directive style compared to men. This gender difference was shown to occur both within organizations as well as laboratory settings, lending support to the social role theory of sex differences in social behaviors (Eagly and Johnson, 1990). In addition, using research from the 1990s, it was again found that women tend to use more democratic as well as transformational leadership styles compared to men (Eagly et al., 2003; van Engen and Willemsen, 2004).

We posit that much of the basis for how women may present different leader behaviors compared to men can be traced to differences in communication patterns and conflict management strategies and that these patterns and strategies reflect types of processes or exchange elements within LMX. This is in addition to having different expectations in terms of leadership practices. For example, men tend toward a more impersonal style of information exchange during organizational communication, which is in contrast to more relationship-enhancing styles for women in both online and face-to-face communication (Mulac et al., 1998; Sussman and Tyson, 2000; Caruso and Salovey, 2004). Also, with respect to conflict management, women seem to attend to the overall relational context compared to men, and they more readily use cooperative and integrative strategies that work to maximize benefits for all stakeholders and preserve long-term relationships (Brewer et al., 2002).

Based on this strong evidence for an overall democratic, participative tendency for women's leader behaviors, and the strong evidence base for gender differences in organizational communication and conflict management, we chose to develop three moderated-mediation models, which link LMX mediation and gender-based moderation to various types of attitudinal and behavioral outcomes. We use different models because we wanted to analyze individual differences separately from motivation. However, it is the moderated-mediation pathways that use both

LMX mediation and gender-based moderation that serve as the link between the different studies we present in this paper.

At this point, a very worthy point should be made. Although some of the relationships in this study may have been addressed, it is still essential to conduct additional replications. In fact, the late, great mathematician and sociologist Louis Guttman asserted:

But the essence of science is replication: a scientist should always be concerned about what will happen when he or another scientist repeats his experiment. Suppose a regression equation is calculated from one unconditional random sample: what is the variance of prediction made for a new unconditional random sample from the same population on the basis of the previous equation? The answer to this question is unknown; many psychologists are aware of this and therefore do not depend on a single sample but do empirical cross-validation. The same kind of issue, with a different twist, holds for testing hypotheses (Guttman, 1981, p. 25).

LEADER–MEMBER EXCHANGE

Leader–member exchange theory was developed over four decades ago, and it is based on the observation that in dyadic relationships, managers tend to develop and use different relationship and management styles with each of their subordinates (Dansereau et al., 1975; Graen and Cashman, 1975). Different styles of LMX also produce different attitudes in subordinates themselves (Ilies et al., 2007). Capitalizing upon social exchange theory (SET; Blau, 1964) and reciprocity theory (Gouldner, 1960), employees in good relationships with their manager (i.e., high LMX) usually feel obliged to mutually reciprocate according to these relationships (see also Adams, 1965). As such, high-quality LMX results in high levels of trust, respect, and commitment from leaders to subordinates and vice versa. It is important to note that bad relations (i.e., low LMX) with a manager will also tend to result in reciprocal "bad" behavior, and accordingly may eventually lead to CWBs (Ilies et al., 2007; Breevaart et al., 2015; Lebron et al., 2018; Shkoler et al., 2019). However, while LMX's role as a potential mediator has been investigated (e.g., Sharif and Scandura, 2017), most studies emphasize the prediction of contextual factors, and less is known about the effects of various individual differences as related to performance. In addition, there is even less emphasis on the effects that demographic parameters have on the LMX–performance relationship (Zagenczyk et al., 2015).

THE MODERATING EFFECT OF GENDER

Leader–member exchange may elicit negative and/or positive outcomes depending on the differentiation the managers make in their relationships with employees. However, this is not true in all cases, and is susceptible to moderating effects (Erdogan and Bauer, 2010). Social role theory suggests that beliefs about gender-appropriate characteristics are societally determined and are translated into differences in behavior between women and men (Eagly, 1987; Eagly and Wood, 2012). Namely, early in life, individuals adapt to the gendered roles that are made available to them by learning and enacting socialized role-related skills (Eagly et al., 2000; Eagly and Wood, 2012). As such, it is possible that the strength of felt gender roles can affect personal predispositions toward other people, especially in key or focal relationships, including those relationships in organizations. It is very plausible that those differences in behavioral predispositions affect many types of work attitudes and evaluations of work states such as job satisfaction and personal preferences and reactions to interactions with leaders. In addition, stereotypes, social categorization, favoritism, and social dominance hierarchies may also have an impact on the behavior of women and men, and these variations in behaviors can lead to differentiating results (McCord et al., 2018).

These gender-based behavioral variations have historically been internalized by the majority of individuals within a society (e.g., McCord et al., 2018) and, ultimately, "through the process of socialization, people come to internalize the gender-typed behaviors that are associated with their own gender role, and they come to expect gender-typed behaviors that conform to the gendered roles of others" (Webster et al., 2018, p. 363). In addition, "these shared expectations for gender-role-congruent behavior produce powerful norms and stereotypes for the behavior and attributes (e.g., sex-typed skills) of women and men (Eagly and Wood, 2012)" (Webster et al., 2018, p. 363). These role-derived differences between genders are socially and culturally cultivated, as are the associated stereotypes with these gender roles. In the end, these role-derived differences between genders and associated stereotypes may elicit different reactions to work situations between women and men (Webster et al., 2018).

CURRENT RESEARCH

In the current paper, we aim to address the gaps mentioned above by investigating traits, drivers, and CVOs as predictors of LMX and different attitudinal, behavioral, and psychological outcomes, across three separate studies, with a specific attention to the role of gender. As such, the emphases and contributions of this research include providing new evidence on the role of LMX as a mediator, taking advantage of an often-disregarded simple demographic parameter—gender—as a moderator, and replicating past research findings in regard to LMX. Accordingly, we aim to show critical differences between males and females, which we believe may be of paramount importance for the understanding of LMX in the organizational and managerial contexts.

To that end, we chose various individual differences as predictors, LMX as the mediator, and several researched outcomes (namely, OCBs, burnout, and CWBs). As stated, we also looked into the gender differences between males and females in this context (see **Figure 1** for the overall model), ultimately leading to moderated-mediation models (via multiple-group analyses).

In essence, based on the studies above indicating that women are inclined to develop a more relationship-enhancing style, we expect our studies to illustrate that they are also more likely to develop, *experience*, and *report* higher LMX than men. This perception supposedly impacts in turn upon the dependent variables investigated in this study. It is important to note that, based on extant literature and personal practical experience as consultants with non-academic organizations, of the infinite number of variables at every researcher's disposal, we have opted for those we deem as dominant in determining work behaviors and work attitudes.

As it is highly difficult to test the overall model in one study, we split the investigation into three different studies, to facilitate survey handling, to indulge participants' patience, and to advocate parsimonious methodology (see "Discussion" section). Moreover, overly lengthy questionnaires in survey research lead to respondents' fatigue and lack of interest, thereby affecting the reliability of their responses (Shkoler, 2019). This is corroborated in the literature, as "people can easily quit in the middle of a questionnaire. They are not as likely to complete a long questionnaire… as they would be if talking with a good interviewer" (Phellas et al., 2011, p. 190). We advocated the notion that "questionnaires should take no longer to complete than participants are willing to spend time answering" (Bird, 2009, p. 1312), and, thus, segmented the overall survey into three different questionnaires (i.e., different studies), keeping the number of studies to a minimum as we saw fit.

STUDY 1

It is imperative to emphasize that the combination of scrutinized variables in each study was based on the vast literature that will be presented hereafter. The decision was not made within a void. However, after all the authors reached consensus, the studies are explored as presented in their respective models (see **Figures 2–4** for studies 1, 2, and 3, respectively).

Cultural Value Orientations

Individualism (IND) and collectivism (COL) can be considered global cultural dimensions that underpin CVOs that may distinguish one individual from another. Our choice of CVOs was based on the fact that they are similar to gender-based behavioral variations, in that they have historically been internalized by the majority of individuals within a society (e.g., McCord et al., 2018) through socialization processes, and because CVOs are similar to gender-based schema due to being oriented toward a major facet of personal identity. The constructs of IND and COL can be applied on the individual (micro-) level as CVOs (see Kirkman et al., 2009), as personal values (e.g., hedonism and altruism)—rather than personality traits (e.g., self-efficacy, extraversion, and emotional intelligence)—just as they are similarly applied to culture as a whole (macro-level). The IND/COL distinction can also be applied to the individual level, employing the definitions of idiocentrism and allocentrism (Triandis, 1989; Chen et al., 2007). *Idiocentric* individuals have IND-based CVOs, and such individuals are typically associated with independence, self-reliance, uniqueness, achievement orientation, and competition (Green et al., 2005; Chen et al., 2007). *Allocentric* individuals have COL-based CVOs, and their behaviors are associated with a sense of duty toward the in-group, interdependence with others, a desire for social harmony and conformity with group norms, and internalizing the group's goals and values with a high priority (Green et al., 2005; Chen et al., 2007). In other words, the definition of a personal identity is based on group memberships. Whereas collectivists define theirs based on the group, individualists view their personal identity as separate from their memberships in different groups (Hofstede, 1984; Erdogan and Liden, 2006).

Additionally, in relation to LMX, we followed Erdogan and Liden's (2006) work, and also chose the values of IND/COL instead of the other cultural values, as "individualism/collectivism deals with the relationship orientation of individuals, it influences the factors contributing to the development of interpersonal relationships (Sullivan et al., 2003). In addition, because collectivism defines expectations of individuals from their social system, it may influence how individuals react" (Erdogan and Liden, 2006, p. 4). The authors also based their rationale on social exchange and reciprocity theories (Gouldner, 1960; Blau, 1964) advocated in our current research. Naturally, this notion is cardinal and fundamental to our study.

In spite of the utility of these constructs, in recent years, these two values (individual and cultural) have received both inconsistent and minor attention at the individual level (Allen et al., 2014). Many studies have considered the constructs in the macro-cultural sense as cultural differences (e.g., Allen et al., 2014) and not in the micro-individual sense as individual differences. Those who did research them on the micro-level usually either used them separately or linked them to very few organizational variables (e.g., Özbek et al., 2016). Also, at the individual level, these concepts tend to be used as moderators rather than predictors (Cetin et al., 2015). Most of the cultural-level research on IND and COL is also based on data collected from adolescents or young people (e.g., Lampridis and Papastylianou, 2017), and there is not much evidence regarding the association between prosocial behavior and CVOs. The majority of the studies involving IND and COL assess their relationship indirectly, and the results reported are inconsistent (Lampridis and Papastylianou, 2017, p. 271). Therefore, for the purposes of this study, we chose to examine these specific individual differences as related to prosocial behaviors, such as personal *values*, rather than to personality traits. Additionally, and as will be elaborated further, the study aims at exploring the gender differences in relation to IND and COL.

Organizational Citizenship Behaviors

Organizational citizenship behaviors are voluntary prosocial behaviors toward the organization or its members, which have a positive impact on effectiveness and efficiency. OCBs are typically seen as outside the formal job description, spontaneous and voluntary behaviors, not apparently or explicitly rewarded, and

positive in terms of the organization or group enjoying the behavior (Organ et al., 2006). Such behaviors include helping others with their workload or problem solving, preventing intra-work discord, and working beyond what is required by organizational norms (Organ, 1988). OCBs can stem from job experiences (Zhang et al., 2017) as well as individual differences (Jain, 2016).

When a manager is supportive (e.g., emotional support, trust, information sharing, etc.), employees feel obliged to reciprocate, giving mutual benefit to both sides. However, while LMX's relationship with OCBs is somewhat clear, the role of cultural values is less so. In spite of the relatively low amount of research in this area, CVOs have indeed been associated with OCBs targeted at an individual in the lower level of organizations (Moorman and Blakely, 1995). However, there is a considerable need to investigate a greater range of psychological processes linking these constructs.

For example, collectivists typically prefer harmony and are inclined to the in-group more closely, and also are much more affected by cohesion and support (from the in-group), as they tend to maintain relationships even when they are not personally advantageous (e.g., Markus and Kitayama, 1991). Thus, assuming they view the manager as part of their in-group, collectivists would likely have a higher affinity to their manager, or reciprocate positive behaviors more readily. On the other hand, because they are achievement orientated and competitive, individualists might see OCBs as a medium to further their work goals and would engage in these behaviors for more personal reasons than collectivists do. In addition, to be consistent with the principle of social harmony, collectivists may try to maintain a good relationship with their manager (Mullen and Skitka, 2009). In contrast, individualists may strive to maintain positive relationships with managers to advance their personal goals or to advance goals that correspond with their own values, like self-actualization, personal growth and development, and individual achievements (Kemmelmeier et al., 2006). Because of the important role of the manager, LMX may also act as a mediator between cultural values and OCBs as the manager provides a focal person at the center of social behaviors. All these expected relationships are articulated via the paths in **Figure 2**.

LMX and OCBs

When managers are supportive of their workers (as characterized, for example, by emotional support, trust, and information sharing), the employees are likely to feel obliged to reciprocate, thus giving mutual benefit to both sides of the manager–worker relationship. One such benefit of supervisors' support is OCB, which is manifested when employees now recognize that it is worth working beyond their formal job descriptions. They realize that the extra time invested is also one of the few ways they might reciprocate their managers' support.

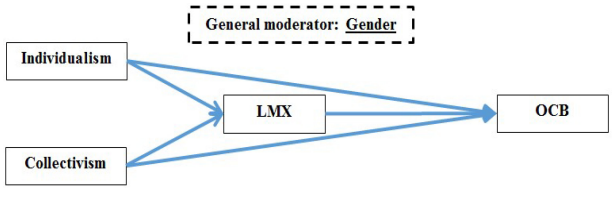

FIGURE 2 | Research model for study 1.

IND/COL and OCBs

While the relationship between LMX and OCBs is clear, the role of cultural values in that relationship is less so. As noted, however, the "collectivists" prefer harmony, are inclined to the in-group more closely, and are much more affected by cohesion and support from the in-group. Thus, they would also have a higher affinity to their manager or reciprocate more readily. On the other hand, individualists, because they are achievement orientated and competitive, might more likely see OCBs as a medium to further their work goals, and would engage in these behaviors for more personal reasons, more so than would the collectivists.

IND/COL and LMX

For the same reasons, collectivists would try to maintain a strong relationship with their managers (as one of the in-group members; see also Mullen and Skitka, 2009). As indicated, individualists would also do so, but rather to advance those objectives that correspond to their values. These include self-actualization, personal growth and development, and individual achievements (Kemmelmeier et al., 2006). As such, LMX may also act as a mediator between cultural values and OCBs.

LMX as a Mediator

We can see that IND/COL values and LMX can be translated into different specific work behaviors (such as OCBs). Additionally, IND/COL might also impact both the *degree* and *quality* of those LMX relationships. Thus, as the culmination of these suppositions, we would expect that personal values of IND/COL would translate to divergent degrees of outcomes (such as in Study 1: LMX and OCBs). That is, LMX may operate as a *mediator* between IND/COL values and OCBs.

Gender as a Moderator

The personal values of IND/COL are cultivated in society in much the same manner as gender roles. Thus, as gender affects social outcomes, and personal values lead to varying outcomes in relationships at work, so the interaction between values and gender should promote interesting and differing outcomes and varying relationships with LMX.

Not only might women and men perceive the generic concept of leadership differently, but also, concerning leaders *per se* in the work situation, they may possess disparate attitudes toward their workplace and their respective managers and supervisors, and thus behave differently from one another regarding LMX.

Notably, however, the role of gender, as depicted in Study 1, was as a *general* moderator and not as a specific moderator; that is, not a specific moderation, but a multi-group moderation/analysis consisting of competing models to see if *our* model (for each study, respectively) differs between women and men. The *a priori* prime postulation of the current research is that the models would indeed highlight differences,

but, notably, we did not tap into the intricate link-by-link moderation formulation.

It is therefore eminently possible to hypothesize that gender will have a moderating effect in conjunction with LMX, because LMX encapsulates the strength of the relationship between leaders and subordinates. Of course, we recognize that the *specific* effects of gender have been observed in the past (moderations of specific associations, e.g., Beauregard, 2012; Bowling and Burns, 2015; Bell and Khoury, 2016; Webster et al., 2018). However, it needs to be pointed to the absence of studies on the moderating effect of gender on the specific dyadic and directional relationships investigated in this study. Namely, while there is existing research on the moderating role of gender in respect to LMX and outcomes such as OCB (Wang et al., 2017) and personnel decisions (Varma and Stroh, 2001), our concern was based on the moderating roles for gender relative to LMX and the key constructs of CVOs, EI, and intrinsic and extrinsic motivation. Thus, in the current paper, we look at the *overall differences* between genders as associated with LMX (e.g., Khoreva and Tenhiälä, 2016), and this logic, which is articulated in three separate moderated-mediation models, is what unites the separate studies within this paper. Notably, we have chosen not a specific moderation, but a multi-group moderation/analysis with competing models to investigate if our model showcases anticipated differences between women and men (see **Figures 1–4**, where gender is included as a moderator of *all* paths).

Overall moderation (multi-group moderation/analysis) was chosen over specific moderation for parsimonious reasons. Notably, specific moderation effects would necessitate more variables (e.g., interaction effects) and regression lines in a model (via SEM analyses), thus requiring more degrees of freedom and model complexity, which, in turn, might result in a poorly fitted and defined model.

Furthermore, although culture may be defined as "common patterns of beliefs, assumptions, values, and norms of behavior of human groups (represented by societies, institutions, and organizations)" (Aycan et al., 2000, p. 194), the notion of cultural differences has two related, complementary, but also mutually exclusive aspects. Cultural differences and values are interpreted on the macro-level—the country level of analysis, and the micro-level—the individual level of analysis (Hofstede, 1980, 1991). It is naturally gleaned because macro-CVOs are, eventually, assimilated at other levels (meso- and micro-levels), usually by a top-down mechanism, as "macro socio-cultural contexts influence the acquisition and uses of knowledge in micro-social contexts" (De Abreu, 2000, p. 2), and this top-down process affects "behavioral changes of members in various cultures" (Erez and Gati, 2004, p. 583). In this manner, global culture may affect the national culture, which may impact the organizational culture, which may influence the group culture, which eventually may lead to changes on the individual level (Hofstede, 1980, 1991; Erez and Gati, 2004).

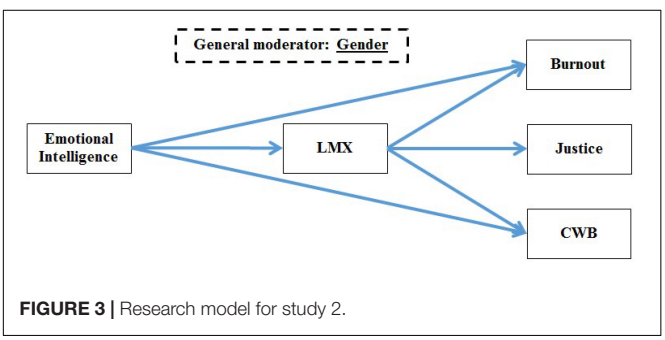

FIGURE 3 | Research model for study 2.

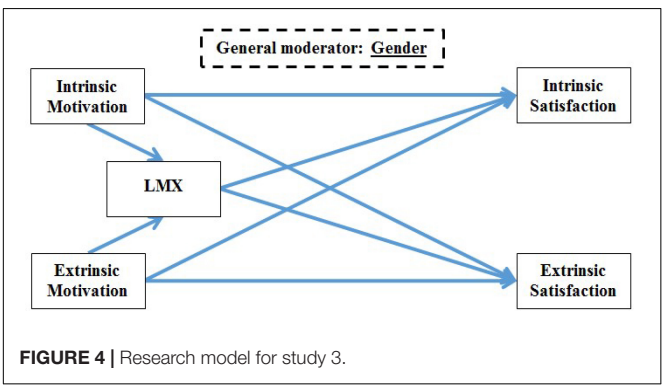

FIGURE 4 | Research model for study 3.

Study 1 Hypotheses

In light of the above discussion, we arrived at several hypotheses concerning the relationship between IND/COL values with LMX and OCBs, respectively; the relationship between LMX and OCBs; the mediating roles of LMX between IND and OCBs, and COL and OCBs, respectively; and the moderating effect of gender in all these relationships, namely:

H1.1: Individualism has a negative correlation with LMX.
H1.2: Collectivism has a positive correlation with LMX.
H1.3: Individualism has a positive correlation with OCBs.
H1.4: Collectivism has a positive correlation with OCBs.
H1.5: LMX has a positive correlation with OCBs.
H1.6: LMX mediates the relationship between individualism and OCBs.
H1.7: LMX mediates the relationship between collectivism and OCBs.
H1.8: Gender moderates the associations between individualism/collectivism and LMX (as depicted in H1.1–H1.7).

Method

Procedure

The survey research (paper and pencil) was based on the administration of questionnaires by students who participated as research assistants (not as participants). The participation of the respondents in the survey was voluntary. We assured the anonymity and discretion of the participants and the data derived from the research and included a conscious consent question at the beginning of the survey asking for their agreement to participate. No incentives were given whatsoever to the participants for their cooperation (refer to the Ethics Statement section at the end of the paper). In the questionnaire, the participants were assured of our respect for the principle of data confidentiality throughout the entire stages of collection,

processing, storage, dissemination, and archiving. Data regarding gender, age, professional experience, education level, and the exercise of a management activity were gathered. Thus, the data become anonymous, making it impossible to identify the respondents. There are no questions in the questionnaire regarding the names, e-mail addresses, telephone numbers, or other personal data of the respondents. In this way, the information was treated responsibly, according to legislation in the field of personal confidentiality of data. All the respondents were employees from various organizations (including high-tech, telemarketing, cellular phone companies, among others). In a way, they could be regarded as convenience investigees.

Participants

Cross-sectional data were collected from 245 Israeli workers (all measures were self-reported), 46.5% males (n = 114) and 53.5% females (n = 131) aged 33–64 years (M = 48.22, SD = 11.87). Most of them (90.2%) were married, and 9.8% were single; 49.4% held a BA degree and 50.6% held an MA degree or higher. The participants had been working in their jobs between 4 and 38 years (M = 21.72, SD = 13.38).

Measures

LMX was gauged by the LMX7 questionnaire (Graen and Uhl-Bien, 1995) consisting of seven Likert-type items; however, items were rescaled to show high LMX (e.g., "extremely effective") was at the high end of the scale. In the current research, reliability was α = 0.89 (M = 3.85, SD = 1.02, e.g., "How well does your manager understand your job problems and needs?").

OCBs were gauged by a scale from Williams and Anderson's (1991) work, consisting of 14 Likert-type items from 1 ("never") to 6 ("always"). In the current research, reliability was α = 0.76 (M = 4.92, SD = 0.53, e.g., "Helps others who have heavy workloads").

The use of full-scale instead of subscales is twofold. First, there are statistical synergies between the subscales, culminating in a "superior" or more efficient full-scale. Namely, the reliabilities and factor loadings of the full-scales are higher than those of their respective subscales [e.g., the first subscale of OCBs (OCB-I; toward individuals) had an alpha of 0.70; the second subscale of OCBs (OCB-O; toward the organization) had an alpha of 0.66]. However, when loading on a single full-scale factor, the alpha received was 0.76, indicating, from a statistical perspective, that it is better in this sample to employ the measure in its full-scale form (as reliabilities are sample-dependent).

Second, the focus of the paper was LMX and gender. We employed full-scales (additionally) to avoid diverting readers' attention from the primary goal by using multiple subscales and over-complex models.

Individualism/Collectivism was gauged by the Individualism and Collectivism Scale (IND-COL; Min Jung et al., 2009), consisting of 10 Likert-type items from 1 ("strongly disagree") to 6 ("strongly agree"). In the current research, for *individualism*, reliability was α = 0.76 (M = 3.16, SD = 0.67, e.g., "Acting as an individual is more appealing to me than acting as a member of a group"); for *collectivism*, reliability was α = 0.77 (M = 3.61, SD = 0.66, e.g., "I will sacrifice my self-interest for the benefit of the group I am in").

Results

Common-Method Bias

To assess the extent to which inter-correlations among the variables might be an artifact of common method variance (CMV), we employed three tests: (a) the Harman's single-factor method [a confirmatory factor analysis (CFA) in which all items are simultaneously loaded on one single factor]; (b) a common latent factor method (a CFA in which all items are loaded on both their expected factors and one common latent factor is loaded on each of the items respectively, but are uncorrelated to their respective latent factors); and (c) a CFA without a common latent factor, as suggested by Podsakoff et al. (2003) and advocated in Jawahar et al. (2018). The Harman's single-factor method accounted only for 30.47% of the explained variance: $\chi^2(244) = 1513.77$, $p = 0.000$, $\chi^2/df = 6.20$, CFI = 0.61, NFI = 0.77, GFI = 0.84, SRMR = 0.19, RMSEA (90% CI) = 0.29 (0.12–0.34), *p-close* = 0.000. (We added CIs for the RMSEA, as well as in other places in the entire paper, as per Dilchert's, 2017, suggestion to include them, when applicable, in empirical research). In addition, the common latent factor accounted only for 27.31% of the explained variance: $\chi^2(241) = 925.17$, $p = 0.000$, $\chi^2/df = 3.83$, CFI = 0.78, NFI = 0.83, GFI = 0.88, SRMR = 0.11, RMSEA (90% CI) = 0.15 (0.09–0.21), *p-close* = 0.004. Last, the CFA analysis (without a common latent factor) accounted only for 28.44% of the explained variance: $\chi^2(182) = 991.05$, $p = 0.000$, $\chi^2/df = 5.44$, CFI = 0.77, NFI = 0.80, GFI = 0.91, SRMR = 0.10, RMSEA (90% CI) = 0.13 (0.00–0.19), *p-close* = 0.000. As can be seen, the common latent factor method produced better indices and less CMV. While these results do not rule out completely the possibility of same-source bias (i.e., CMV), following Podsakoff et al. (2003), less than 50% ($R^2 < 0.50$) of the explained variance accounted for by the first emerging factor—in conjunction with the poor model fit for each analysis—indicates that CMV is an unlikely explanation of our investigation's findings. In addition, we followed the suggestion for correcting CMV via construct-level correction indicated by Tehseen et al. (2017) and discovered that the changes in coefficient strength were very negligible. This observation, again, indicates that our results did not suffer from CMV issues.

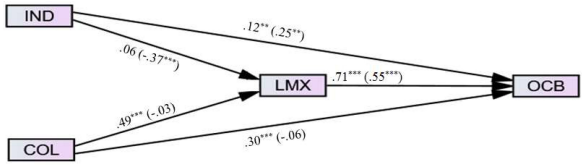

FIGURE 5 | Path diagram for male group (n = 114) and female group (n = 131; in parenthesis), study 1. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. χ^2(df) = 22.77 (2), p = 0.433, χ^2/df = 11.38, SRMR = 0.02, CFI = 0.93, GFI = 0.96, NFI = 0.93, ECVI = 0.24, RMSEA (90% CI) = 0.20 (0.13–0.28), p-close = 0.000.

To test the Study 1 model, we employed SEM with multi-group moderation analyses using the observed (not latent) variables of the research. The path diagrams for the male group and the female group are presented in **Figure 5, with coefficients** and **significance** levels (and fit indices). The bivariate correlation matrix is presented in **Table 1**.

As can be seen in **Figure 5**, the model's fit is marginal; not all the indices are adequate (see Byrne, 2010). In terms of mediation effects, not all the mediation conditions were met in each model where the significant effects of (1) predictor → criterion; (2) predictor → mediator; (3) mediator → criterion should be present; and (4) the direct effect should be less than the total effect (Hayes, 2013). Therefore, when testing for the significance of the mediation effect via bootstrapping (see Preacher and Hayes, 2008), we chose only the paths that met *all* the aforementioned mediation conditions. We used the R software package (v. 3.4.1) for employing a recent effect size estimate (kappa-squared = k^2; Preacher and Kelley, 2011) of the indirect mediation effect with a 95% confidence interval bootstrapping.

This resulted in a standardized indirect effect (collectivism → LMX → OCBs) for *males* of 0.31 (95% CI: 0.23, 0.45; k^2 = 0.42, p = 0.000). The standardized indirect effect (individualism → LMX → OCBs) for *females* was −0.18 (95% CI: −0.47, −0.04; k^2 = 0.21, p = 0.013). Most notable is the gender difference for this effect size between the two models. Also, in contrast to our expectation, collectivism was negatively correlated with LMX, only in the *female* group. This path was non-significant in the *male* group. **Table 2** summarizes the results.

STUDY 2

Emotional Intelligence (EI)

Emotions play an important part in the manager–worker relationship because they affect the quality of LMX (Cropanzano et al., 2017). Emotional intelligence (EI) is generally defined as a trait that reflects an awareness of one's own and other people's emotions that enables an individual to distinguish between different feelings and to use emotional information to guide thought, behavior, and performance (Boyatzis, 2009; Joseph and Newman, 2010). EI is based in (a) self-awareness, (b) self-management, (c) self-control, (d) adaptability and flexibility, (e) achievement orientation, and (f) a positive point of view (Boyatzis, 2009). Furthermore, the regulation of emotions helps employees to maintain a positive state of mind (Joseph and Newman, 2010; Shkoler and Tziner, 2017). Again, we draw on social role theory and its suggestions that beliefs about gender-appropriate characteristics are societally determined (Eagly, 1987; Eagly and Wood, 2012). In respect to expectations regarding the handling of emotions and according EI, we note that early in life, individuals adapt to the gendered roles that are made available to them by learning and enacting socialized role-related skills, and that such social skills can include changes in the management of emotion (Arnett et al., 2018). As such, it is possible that the strength of felt gender roles can affect personal predispositions toward regulating emotions toward other people and hence could be connected to EI.

Organizational Justice

Organizational justice (OJ) is the extent to which employees are provided with appropriate, fair, and respectful treatment, information, and resources and rewards (Fein et al., 2013). These perceptions are a product of overall impressions based on a consequence of organizational occurrences and personal evaluations based on specific "organizational components," such as leaders and co-workers (Hollensbe et al., 2008). Typically, OJ comprises (a) *distributive* justice, (b) *procedural* justice, and (c) *interactional* justice (Fein et al., 2013). However, for parsimonious reasons, in the present study, we investigated the *overall* perception of justice (e.g., Shkoler and Tziner, 2017).

CWBs and Burnout

In contrast to OCBs, CWBs have received increasing attention on both the academic and the organizational fronts (Ho, 2012; Shkoler and Tziner, 2017; Lebron et al., 2018; Shkoler et al., 2019) due to their significant economic, sociological, and psychological implications (Aubé et al., 2009). CWBs, which may include theft, sabotage, withdrawal, or harassment, are directed at either the organization itself or its members (Welbourne and Sariol, 2017; Bragg and Bowling, 2018). CWBs usually damage organizations in various ways (Robinson, 2008). There are many antecedents to CWBs, such as *individual differences* (Palmer et al., 2017), *job experiences*, *work stressors* (Welbourne and Sariol, 2017), and more. To indicate a negative exemplar, we examined work burnout, which is usually described as a psychological state related to stress over time and is composed of (a) emotional exhaustion, (b) experienced distance from others (depersonalization), and (c) feelings of reduced personal accomplishment/efficacy associated with a variety of negative outcomes (Anthony-McMann et al., 2017). Moreover, burnout may also be affected by *individual differences*, *job experiences*, and *work stressors* (e.g., Nahrgang et al., 2011; Tziner et al., 2018; Rabenu et al., 2019; Tziner et al., 2019a).

A manager's support, trust, rewards, transparency, and respect are some of a worker's resources in the job (see Hobfoll, 1989). When the LMX is high, those resources are more frequent and abundant; they might well help to prevent employees from burning out and lead them to perceive their workplace as fairer and more just. Positive relationships with managers assuage workers' negative experiences and may be reciprocated with good behavior on the employee's part, giving them less reason to engage in CWBs.

EI and Burnout

On the other hand, what the manager cannot provide is EI, which is a *personal* trait. As a highly important personal resource, EI regulates feelings, facilitates the processing and understanding of emotional information, and, when present at high levels, promotes a positive state of mind that may help workers cope, thus decreasing and even preventing burnout.

TABLE 1 | Correlation matrix for males (n = 114) and females (n = 131; *above* the diagonal) for Study 1.

	1	2	3	4	M_m (M_f)	SD_m (SD_f)
(1) Collectivism	–	0.40***	−0.36***	0.02	3.20 (3.12)	0.71 (0.62)
(2) Individualism	−0.04	–	−0.18*	−0.05	3.58 (3.63)	0.74 (0.58)
(3) LMX	0.03	0.49***	–	0.47***	3.82 (3.87)	1.16 (0.89)
(4) OCBs	0.13	0.64***	0.86***	–	4.84 (4.98)	0.59 (0.47)

*$p < 0.05$, ***$p < 0.001$. An indication of m or f: m, male group; f, female group.*

TABLE 2 | Hypotheses summary (Study 1).

Hypotheses	Male group	Female group
H1.1: Individualism has a negative correlation with LMX	Supported	Supported
H1.2: Collectivism has a positive correlation with LMX	Supported	Not supported
H1.3: Individualism has a positive correlation with OCBs	Supported	Not supported
H1.4: Collectivism has a positive correlation with OCBs	Not supported	Not supported[a]
H1.5: LMX has a positive correlation with OCBs	Supported	Supported
H1.6: LMX mediates the relationship between individualism and OCBs	Supported	Not supported
H1.7: LMX mediates the relationship between collectivism and OCBs	Not supported	Supported
H1.8: Gender moderates the associations between individualism/collectivism and LMX	Supported	

[a]*Although statistically significant, the (negative) relationship is contrary to the hypothesis.*

EI and CWBs

Emotions play a crucial role in workplace incivility (e.g., Sears and Humiston, 2015), and emotional regulation is a prime ingredient in "keeping it cool and calm." This positive state of mind also reduces the possibility that workers will engage in CWBs (for a meta-analysis, see Miao et al., 2017).

EI, LMX, and Justice

Because of its beneficial elements, EI may also facilitate efficient judgment of the work context and interpersonal activities. Being self-regulated, positive, and calm ultimately may help employees create a better-quality relationship with the manager (i.e., high LMX) and to perceive the organization in a brighter light (i.e., perceptions of justice). As such, LMX may also act as a mediator.

LMX as a Mediator

We can see that EI and LMX can be translated into different work behaviors (i.e., CWBs), attitudes (i.e., OJ perceptions), and even psychological outcomes (i.e., burnout). Additionally, EI might also impact the degree and quality of LMX relations. Thus, as the culmination of previous arguments, LMX may operate as a *mediator* between EI and CWBs, OJ perceptions, and work burnout.

Gender as a Moderator

Here, as well, we expect gender differences. Regarding Study 2, it is known that women have higher EI than men (e.g., Mandell and Pherwani, 2003; Brackett et al., 2004), and thus may exhibit different attitudes or behaviors at work.

Figure 3 summarizes the main themes discussed above, according to the following logic. When LMX is high, resources to prevent employees' burnout are more frequent and/or abundant, potentially leading to a negative association between LMX and burnout. This negative association may also be helpful in perceiving the workplace as fairer and more just, potentially leading to a positive association between LMX and justice perceptions. A strong relationship with the manager might assuage negative experiences, giving less reason to engage in CWBs, as such a relationship would be reciprocated with employees' good behavior. Managers, however, cannot provide the EI that might facilitate sound judgment of the work context and interpersonal activities that would reduce CWBs. Strong EI promotes self-regulation, positive attitudes, and a calm disposition that promote quality relationships with managers and positive perceptions of justice in the organization. As such, LMX may also act as a mediator between EI and justice, EI and burnout, and EI and CWBs. It is also known that women have higher EI than men (e.g., Mandell and Pherwani, 2003), and thus may be expected to exhibit different attitudes or behaviors at work than their male colleagues, such as the significant moderating role that gender plays in reactions to injustice (Khoreva and Tenhiälä, 2016). Thus, concerning the relationships described in this study, we also expect moderation effects based on gender. These relationships are articulated in the expected paths illustrated in **Figure 3** and the hypotheses listed below.

Study 2 Hypotheses

H2.1: LMX has a positive correlation with organizational justice.
H2.2: LMX has a negative correlation with burnout.
H2.3: LMX has a negative correlation with CWBs.
H2.4: EI has a positive correlation with LMX.
H2.5: EI has a positive correlation with organizational justice.
H2.6: EI has a negative correlation with burnout.
H2.7: EI has a negative correlation with CWBs.

H2.8: LMX mediates the relationship between EI and organizational justice.
H2.9: LMX mediates the relationship between EI and burnout.
H2.10: LMX mediates the relationship between EI and CWBs.
H2.11: Gender moderates the associations between EI, LMX, organizational justice, burnout, and CWBs (as depicted in H2.1–H2.10).

Method

Procedure

The survey research (paper and pencil) was based on the administration of questionnaires by students who participated as research assistants (not as participants). The participation of the respondents in the survey was voluntary. We assured the anonymity and discretion of the participants and the data derived from the research and included a conscious consent question at the beginning of the survey asking for their agreement to participate. No incentives were given whatsoever to the participants for their cooperation (refer to the Ethics Statement section at the end of the paper).

Participants

Cross-sectional data were collected from 243 Israeli workers (all measures were self-reported) from various organizations via voluntarily surveys, 48.1% males (n = 117) and 51.9% females (n = 126) aged between 20 and 60 (M = 32.67, SD = 8.87). Most of them (83.4%) held a BA degree, and 16.4% held an MA degree or higher. The participants had been working in their jobs between 0 and 48 years (M = 6.69, SD = 8.17).

Measures

LMX was gauged by the LMX7 questionnaire (Graen and Uhl-Bien, 1995) consisting of seven Likert-type items; however, each item had a different scale from 1 to 6. In the current research, reliability was α = 0.87 (M = 4.15, SD = 1.04).

CWBs were measured by the Interpersonal and Organizational Deviance Scale (IODS; Bennett and Robinson, 2000), consisting of 19 Likert-type items between 1 ("never") and 6 ("every day"). In the current study, reliability was α = 0.76 (M = 1.67, SD = 0.54, e.g., "Taken property from work without permission").

Organizational justice was measured using the Justice Scale (Niehoff and Moorman, 1993), consisting of 20 Likert-type items between 1 ("completely disagree") and 6 ("completely agree"). In the current study, reliability was α = 0.76 (M = 3.95, SD = 1.01, e.g., "I consider my workload to be quite fair").

Emotional intelligence was gauged using the Trait Emotional Intelligence Questionnaire—Short Form (TEIQue-SF; Petrides, 2009), consisting of 30 Likert-type items between 1 ("very little") and 6 ("very much"). In the current study, reliability was α = 0.76 (M = 4.47, SD = 0.45, e.g., "Expressing my emotions with words is not a problem for me").

Burnout was measured with the Maslach Burnout Inventory (MBI; Maslach and Jackson, 1981), consisting of 22 Likert-type items between 1 ("a few times a year") and 6 ("every day"). In the current study, reliability was α = 0.95 (M = 2.34, SD = 0.96, e.g., "I feel emotionally drained from my work").

Results

Common-Method Bias

In order to assess the extent to which inter-correlations among the variables might be an artifact of CMV, we employed three tests: (a) the Harman's single-factor method (a CFA in which all items are simultaneously loaded on one single factor), (b) a common latent factor method (a CFA in which all items loaded are on both their expected factors and one common latent factor is loaded on each of the items, respectively, but are uncorrelated to their respective latent factors), and (c) a CFA without a common latent factor, as suggested by Podsakoff et al. (2003) and advocated in Jawahar et al. (2018). The Harman's single-factor method accounted only for 21.16% of the explained variance: $\chi^2(371) = 1296.55$, $p = 0.000$, $\chi^2/df = 3.49$, CFI = 0.70, NFI = 0.75, GFI = 0.89, SRMR = 0.16, RMSEA (90% CI) = 0.15 (0.11–0.20), *p-close* = 0.016. In addition, the latent common method factor analysis accounted only for 20.09% of the explained variance: $\chi^2(363) = 1174.62$, $p = 0.000$, $\chi^2/df = 3.23$, CFI = 0.84, NFI = 0.87, GFI = 0.91, SRMR = 0.11, RMSEA (90% CI) = 0.10 (0.04–0.19), *p-close* = 0.024. Last, the CFA analysis (without a common latent factor) accounted only for 21.04% of the explained variance: $\chi^2(308) = 1{,}089.13$, $p = 0.000$, $\chi^2/df = 3.53$, CFI = 0.79, NFI = 0.82, GFI = 0.90, SRMR = 0.09, RMSEA (90% CI) = 0.13 (0.07–0.18), *p-close* = 0.000. As can be seen, the common latent factor method produced better indices and less CMV. However, while these results do not rule out completely the possibility of same-source bias (i.e., CMV), following Podsakoff et al. (2003), less than 50% ($R^2 < 0.50$) of the explained variance accounted for by the first emerging factor indicates that CMV is an unlikely explanation of our investigation's findings, in conjunction with the bad model fit for each analysis. In addition, we followed the suggestion for correcting CMV via construct-level correction made by Tehseen et al. (2017) and discovered that the changes in coefficients' strength were very negligible. This, again, indicates that our results did not suffer from CMV issues.

To test the Study 2 model, we employed SEM with multi-group moderation analyses using the observed (not latent) variables of the research. The path diagrams for the male group

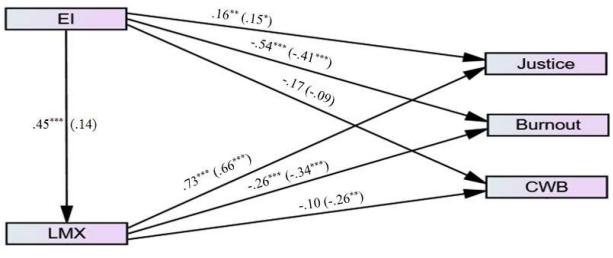

FIGURE 6 | Path diagram for male group (n = 117) and female group (n = 126; in parenthesis), study 2. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. χ^2(df) = 1.04 (2), p = 0.595, $\chi^2/df = 0.52$, SRMR = 0.01, CFI = 1.00, GFI = 0.99, NFI = 0.99, ECVI = 0.23, RMSEA (90% CI) = 0.00 (0.00–0.11), p-close = 0.745.

TABLE 3 | Correlation matrix for males (n = 117) and females (n = 126; *above* the diagonal) for Study 2.

	1	2	3	4	5	M_m (M_f)	SD_m (SD_f)
(1) EI	–	0.14	−0.45***	0.24***	−0.12	4.53 (4.41)	0.42 (0.47)
(2) LMX	0.45***	–	−0.39***	0.68***	−0.27**	4.26 (4.06)	0.99 (1.08)
(3) Burnout	−0.65***	−0.50***	–	−0.52***	0.34***	2.18 (2.48)	0.89 (0.98)
(4) Justice	0.49***	0.80***	−0.61***	–	−0.22**	4.14 (3.79)	0.95 (1.05)
(5) CWBs	−0.21*	−0.18*	0.32***	−0.21**	–	1.58 (1.51)	0.56 (0.51)

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. An indication of m or f: m, male group; f, female group.*

TABLE 4 | Hypotheses summary (Study 2).

Hypotheses	Male group	Female group
H2.1: LMX has a positive correlation with organizational justice	Supported	Supported
H2.2: LMX has a negative correlation with burnout	Supported	Supported
H2.3: LMX has a negative correlation with CWBs	Not supported	Supported
H2.4: EI has a positive correlation with LMX	Supported	Not supported
H2.5: EI has a positive correlation with organizational justice	Supported	Supported
H2.6: EI has a negative correlation with burnout	Supported	Supported
H2.7: EI has a negative correlation with CWBs	Not supported	Not supported
H2.8: LMX mediates the relationship between EI and organizational justice	Supported	Not supported
H2.9: LMX mediates the relationship between EI and burnout	Supported	Not supported
H2.10: LMX mediates the relationship between EI and CWBs	Not supported	Not supported
H2.11: Gender moderates the associations between EI, LMX, organizational justice, burnout, and CWBs	Supported	

and the female group are presented in **Figure 6**, with the coefficients and their significance levels (and fit indices). The bivariate correlation matrix is presented in **Table 3**.

As can be seen in **Figure 6**, the model's fit is strong (see Byrne, 2010). We followed our analyses and processes, as in Study 1, and we used kappa-squared to test the indirect mediation effects with a 95% bootstrapped CI.

This resulted in a standardized indirect effect (EI → LMX → OJ) for *males* of 0.29 (95% CI: 0.18, 0.47; k^2 = 0.37, p = 0.002). The standardized indirect effect (EI → LMX → burnout) for *males*, as well, was −0.11 (95% CI: −0.23, −0.04; k^2 = 0.14, p = 0.004). **Table 4** summarizes the results.

STUDY 3

In this study, we wanted to investigate if different motives corresponded with related attitudinal outcomes. We chose personal drivers (intrinsic/extrinsic motivation) as predictors of corresponding outcomes (intrinsic/extrinsic satisfaction) via LMX mediation. Intrinsic motivation is the internal driver for the individual's experiences, which connect with self-concept and are inherently interesting or enjoyable. Thus, employees work out of the excitement, feeling of accomplishment, and personal satisfaction they derive from both the process of carrying out work-related activities and the results (Bauer et al., 2016; Legault, 2016). Extrinsic motivation is influenced by the organization, the work, and the employee's environment (e.g., social norms, peer influence, financial needs, authority, or promises of reward), and it is focused on the utility of the activity rather than the activity itself (Legault, 2016).

Intrinsic/Extrinsic Motivational Orientations

The intrinsic/extrinsic division of motivation lacks coherent research within the LMX paradigm. In addition, most of the past research on separate effects of intrinsic and extrinsic motivation has addressed the intrinsic aspect (e.g., Bauer et al., 2016). In addition, motivation has been shown to be affected by personal traits, needs, and even work fit, while affecting various outcomes and attitudes, such as satisfaction, OCBs, and engagement, making an understanding of intrinsic and extrinsic motivational orientations relevant to LMX mediation and gender moderation (e.g., Tziner et al., 2019b; Shkoler and Kimura, 2020).

Intrinsic and Extrinsic Job Satisfaction

Job satisfaction is an internal state of gratification or discontentment about one's job (Thompson and Phua, 2012). There can be distinctions between overall job satisfaction and subtypes of job satisfaction, such as intrinsic and extrinsic job satisfaction, and the latter may be more closely related to motivational states relative to global job satisfaction (Weiss et al., 1967). Satisfaction has been shown to be affected by *job experiences* (e.g., Mas-Machuca et al., 2016; Pacheco and Webber, 2016) and *individual demographical differences* (e.g., Pacheco and Webber, 2016; Shkoler and Kimura, 2020). Therefore, we suggest that women and men may have different levels of drivers/motives in their work and might enjoy/interpret intrinsic/extrinsic incentives differently. In practice, managers may supply the employee with various resources and incentives, such as rewards,

work conditions (i.e., extrinsic incentives), and/or challenge, support, and work enjoyment (i.e., intrinsic incentives). In providing for the internal/external needs of the employee, managers may increase the different types of job satisfaction.

LMX and Job Satisfaction

Managers may provide their employees with various resources and incentives that are extrinsic, such as objective rewards and pleasant working conditions, or intrinsic, such as challenge, support, and work enjoyment. These incentives satisfy the internal and external needs of the employees whose various manifestations of job satisfaction are thereupon likely to be enhanced.

Motivation, LMX, and Job Satisfaction (LMX as Mediator)

In the same vein, given enough incentives, intrinsic/extrinsic motivation—understood as the expression of different drivers that move individuals to satisfy them—may also translate into intrinsic/extrinsic satisfaction. It appears that this outcome, by definition, necessitates a mediator between motivation and satisfaction. Indeed, we believe there to be an axis that connects the driver to the satisfaction and that given that the manager is a pinnacle in the work context (providing incentives and work-related resources), it is highly probable that LMX may act as a mediator in this regard.

Gender as a Moderator

Here, as well, we expect gender differences. Concerning Study 3, women and men may have different drivers/motives in their work and might enjoy/interpret intrinsic/extrinsic incentives differently.

All the proposed relationships described above are illustrated in **Figure 4**, and they give rise to the following hypotheses.

Study 3 Hypotheses

H3.1: LMX has a positive correlation with intrinsic satisfaction.

H3.2: LMX has a positive correlation with extrinsic satisfaction.

H3.3: Intrinsic motivation has a positive correlation with intrinsic satisfaction.

H3.4: Intrinsic motivation has a positive correlation with extrinsic satisfaction.

H3.5: Extrinsic motivation has a positive correlation with intrinsic satisfaction.

H3.6: Extrinsic motivation has a positive correlation with extrinsic satisfaction.

H3.7: Intrinsic motivation has a positive correlation with LMX.

H3.8: Extrinsic motivation has a positive correlation with LMX.

H3.9: LMX mediates the relationship between intrinsic motivation and intrinsic satisfaction.

H3.10: LMX mediates the relationship between intrinsic motivation and extrinsic satisfaction.

H3.11: LMX mediates the relationship between extrinsic motivation and intrinsic satisfaction.

H3.12: LMX mediates the relationship between extrinsic motivation and extrinsic satisfaction.

H3.13: Gender moderates the associations between intrinsic/extrinsic motivation and intrinsic/extrinsic satisfaction (as depicted in H3.1–H3.12).

Method

Procedure

The survey research (paper and pencil) was based on the administration of questionnaires by students who participated as research assistants (not as participants). The participation of the respondents in the survey was voluntary. We assured the anonymity and discretion of the participants and the data derived from the research and included a conscious consent question at the beginning of the survey asking for their agreement to participate. No incentives were given whatsoever to the participants for their cooperation (refer to the Ethics Statement section at the end of the paper).

Participants

Cross-sectional data were collected via voluntary surveys from 350 Israeli workers (all measures were self-reported) from various organizations, 38% males (n = 133) and 62% females (n = 217) aged between 20 and 67 (M = 27.06, SD = 6.62). Half of them (50%) had a high-school education, 39% held a BA degree, and 11% held an MA degree or higher.

Measures

LMX was gauged by the LMX7 questionnaire (Graen and Uhl-Bien, 1995) consisting of seven Likert-type items; however, each item had a different scale from 1 to 6. In the current research, reliability was α = 0.84 (M = 4.14, SD = 0.87).

Motivation was gauged by the Work Extrinsic and Intrinsic Motivation Scale (WEIMS; Tremblay et al., 2009) consisting of 18 Likert-type items between 1 ("does not correspond at all") and 6 ("corresponds exactly"). The measure is (largely) divided into two subscales—*intrinsic* motivation (7 items) and *extrinsic* motivation (11 items). *Intrinsic motivation* had a reliability of α = 0.76 (M = 3.38, SD = 0.94, e.g., "For the satisfaction I experience from taking on interesting challenges"), and *extrinsic motivation* had a reliability of α = 0.70 (M = 3.97, SD = 1.15, e.g., "For the income it provides me").

Satisfaction was gauged by the Minnesota Satisfaction Questionnaire—Short Form (MSQ-SF; Weiss et al., 1967) consisting of 20 Likert-type items between 1 ("very dissatisfied") and 6 ("very satisfied"). The measure is divided into two subscales—intrinsic satisfaction (13 items) and extrinsic satisfaction (7 items), drawing upon Herzberg (1966). In the current research, *intrinsic satisfaction* had a reliability of α = 0.92 (M = 4.43, SD = 0.85, e.g., "The chance to do different things from time to time"), and *extrinsic satisfaction* had a reliability of α = 0.83 (M = 4.48, SD = 0.90, e.g., "My pay and the amount of work I do").

Results

Common-Method Bias

In order to assess the extent to which inter-correlations among the variables might be an artifact of CMV, we employed three tests: (a) the Harman's single-factor method (a CFA in which all items are simultaneously loaded on one single factor), (b) a common latent factor method (a CFA in which all items are loaded on both their expected factors and one common latent factor is loaded on each of the items, respectively, but are uncorrelated to their respective latent factors), and (c) a CFA without a common latent factor, as suggested by Podsakoff et al. (2003) and advocated in Jawahar et al. (2018). The Harman's single-factor method accounted only for 33.41% of the explained variance: $\chi^2(311) = 977.31$, $p = 0.000$, $\chi^2/df = 3.14$, CFI = 0.81, NFI = 0.82, GFI = 0.90, SRMR = 0.13, RMSEA (90% CI) = 0.17 (0.13–0.28), *p-close* = 0.005. In addition, the latent common method factor analysis accounted only for 31.55% of the explained variance: $\chi^2(294) = 891.45$, $p = 0.000$, $\chi^2/df = 3.03$, CFI = 0.88, NFI = 0.87, GFI = 0.95, SRMR = 0.09, RMSEA (90% CI) = 0.11 (0.07–0.16), *p-close* = 0.013. Last, the CFA analysis (without a common latent factor) accounted only for 32.81% of the explained variance: $\chi^2(244) = 773.15$, $p = 0.000$, $\chi^2/df = 3.16$, CFI = 0.73, NFI = 0.80, GFI = 0.89, SRMR = 0.11, RMSEA (90% CI) = 0.15 (0.11–0.27), *p-close* = 0.000. As can be seen, the common latent factor method produced better indices and less CMV. However, while these results do not completely rule out the possibility of same-source bias (i.e., CMV), according to Podsakoff et al. (2003), less than 50% ($R^2 < 0.50$) of the explained variance accounted for by the first emerging factor indicates that CMV is an unlikely explanation of our investigation's findings, in conjunction with the bad model fit for each analysis. In addition, we followed the suggestion for correcting CMV via construct-level correction made by Tehseen et al. (2017) and discovered that the changes in coefficients' strength were very negligible. This, again, indicates that our results did not suffer from CMV issues.

In order to test the Study 3 model, we mainly employed SEM with multi-group moderation analyses using the observed (not latent) variables of the research. The path diagrams for the male group and the female group are presented in **Figure 7**, with the coefficients and significance levels (and fit indices). The bivariate correlation matrix is presented in **Table 5**.

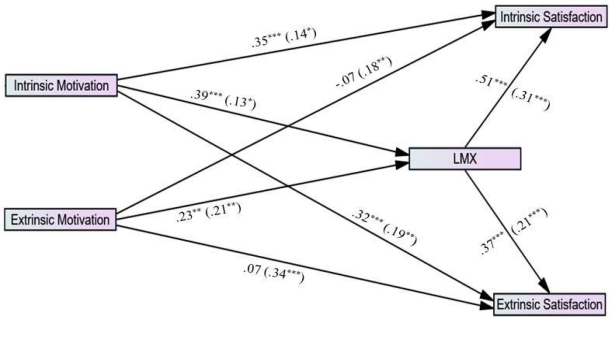

FIGURE 7 | Path diagram for male group ($n = 133$) and female group ($n = 217$; in parenthesis), study 3. $^*p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$. $\chi^2(df) = 5.17$ (4), $p = 0.461$, $\chi^2/df = 1.29$, SRMR = 0.03, CFI = 0.94, GFI = 0.99, NFI = 0.95, ECVI = 0.21, RMSEA (90% CI) = 0.02 (0.00–0.07), *p*-close = 0.597.

As can be seen in **Figure 7**, the model's fit is strong (see Byrne, 2010). We followed our analyses and processes as in Study 1. We used kappa-squared to test the indirect mediation effect with a 95% confidence interval bootstrapping.

This resulted in standardized indirect effects for *males*: (1) indirect effect of intrinsic motivation → LMX → intrinsic satisfaction of 0.25 (95% CI: 0.11, 0.30; $k^2 = 0.05$, $p = 0.000$) and (2) an indirect effect of intrinsic motivation → LMX → extrinsic satisfaction of 0.19 (95% CI: 0.06, 0.25; $k^2 = 0.02$, $p = 0.000$). In addition, the standardized indirect effects for *females*: (1) indirect effect of intrinsic motivation → LMX → intrinsic satisfaction of 0.07 (95% CI: 0.003, 0.11; of $k^2 = 0.01$, $p = 0.031$), (2) indirect effect of intrinsic motivation → LMX → extrinsic satisfaction of 0.05 (95% CI: 0.002, 0.08; $k^2 = 0.01$, $p = 0.032$), (3) indirect effect of extrinsic motivation → LMX → intrinsic satisfaction of 0.09 (95% CI: 0.01, 0.15; $k^2 = 0.12$, $p = 0.014$), and (4) indirect effect of extrinsic motivation → LMX → extrinsic satisfaction of 0.06 (95% CI: 0.004, 0.12; $k^2 = 0.13$, $p = 0.000$). The most notable results are the gender differences between the two models, namely: (1) extrinsic motivation does not work as hypothesized for males, based on an insignificant path from E-M to E-S; but (2) extrinsic motivation does work for females. **Table 6** summarizes the results.

DISCUSSION

The present research proposed to test leader–member relations (LMX) as a mediation mechanism, and gender as a related moderator, in various situations. Relatively, little research has been devoted to the prediction of LMX in terms of individual differences, and even less to the possible effects gender might have on the scope of LMX research. For this purpose, we proposed three different models and demonstrated that known, researched, and new relationships greatly depended on gender differences, as shown in each study.

Study 1

As can be seen in **Table 2**, our predictions were supported only partially, mainly for the effect gender had on the results and the model in general. While LMX and individualism were positively correlated with OCBs in both genders, collectivism was only positively related to LMX and OCBs in the *male* group (in the female group, it was also significantly negatively related to LMX). As such, LMX acted as a *partial* mediator to OCBs from collectivism (male group only) and from individualism (female group only).

These findings support the current paper in a number of ways. First, IND/COL was tested in an organizational context and was shown to have positive associations with OCBs. Second, we verified that LMX might act as a partial mediator between individual differences (in terms of values) and organizational outcomes. Third, we have proven that gender has an intricate effect on the research model.

TABLE 5 | Correlation matrix for males (n = 133) and females (n = 217; *above* the diagonal) for Study 3.

	1	2	3	4	5	M_m (M_f)	SD_m (SD_f)
(1) I-M	–	0.39***	0.21**	0.27***	0.37***	3.75 (3.16)	0.80 (0.94)
(2) E-M	0.35***	–	0.26***	0.32***	0.47***	3.99 (3.96)	1.17 (1.13)
(3) LMX	0.47***	0.37***	–	0.38***	0.34***	4.10 (4.16)	0.97 (0.79)
(4) I-S	0.56***	0.24**	0.65***	–	0.89***	4.48 (4.40)	0.87 (0.83)
(5) E-S	0.52***	0.32***	0.54***	0.90***	–	4.53 (4.44)	0.85 (0.92)

$^{**}p < 0.01$, $^{***}p < 0.001$. An indication of m or f: m, male group; f, female group. I-M, intrinsic motivation. E-M, extrinsic motivation. I-S, intrinsic satisfaction. E-S, extrinsic satisfaction.

TABLE 6 | Hypotheses summary (Study 3).

Hypotheses	Male group	Female group
H3.1: LMX has a positive correlation with intrinsic satisfaction	Supported	Supported
H3.2: LMX has a positive correlation with extrinsic satisfaction	Supported	Supported
H3.3: Intrinsic motivation has a positive correlation with intrinsic satisfaction	Supported	Supported
H3.4: Intrinsic motivation has a positive correlation with extrinsic satisfaction	Supported	Supported
H3.5: Extrinsic motivation has a positive correlation with intrinsic satisfaction	Not supported	Supported
H3.6: Extrinsic motivation has a positive correlation with extrinsic satisfaction	Not supported	Supported
H3.7: Intrinsic motivation has a positive correlation with LMX	Supported	Supported
H3.8: Extrinsic motivation has a positive correlation with LMX	Supported	Supported
H3.9: LMX mediates the relationship between intrinsic motivation and intrinsic satisfaction	Supported	Supported
H3.10: LMX mediates the relationship between intrinsic motivation and extrinsic satisfaction	Supported	Supported
H3.11: LMX mediates the relationship between extrinsic motivation and intrinsic satisfaction	Not supported	Supported
H3.12: LMX mediates the relationship between extrinsic motivation and extrinsic satisfaction	Not supported	Supported
H3.13: Gender moderates the associations between intrinsic/extrinsic motivation and intrinsic/extrinsic satisfaction	Supported	

Specifically, we argue that our results suggest that women may not experience the effects of the COL-based CVOs on OCBs because women may generally show a higher level of OCBs compared to men: $t(243) = 2.07$, $p = 0.039$, Cohen's $d = 0.25$. If women do show a higher base rate of OCBs relative to men, then the effect of the COL-based CVOs would be less significant. In contrast, a naturally low base rate of OCBs for men might be enhanced via a high COL-based CVOs for men. It is also interesting to observe the negative effect from IND-based CVOs to LMX for women, which may suggest that women high in IND-based CVOs would not see leader relationships as an important target for influence. The individualistic women in our sample tended to have lower LMX.

Study 2

As can be seen in **Table 4**, the hypotheses were supported only partially, again, mainly for the effect gender had on the results and the model in general. LMX and EI were positively correlated to justice perceptions, and negatively to burnout in both genders. However, EI was not related to CWBs in any gender group, while LMX was negatively related to CWBs in the *female* group only.

Furthermore, EI was positively correlated with LMX in the *male* group only. Contrary to a vast literature showing that females scored higher in EI than males (e.g., Mandell and Pherwani, 2003), in Study 2, the male group ($M = 4.53$) scored higher than females ($M = 4.41$) on EI: $t(241) = 2.07$, $p = 0.040$, Cohen's $d = 0.21$, which might explain the findings that LMX is a *partial* mediator between EI and justice perceptions or CWBs, for *males* only.

These findings support the current paper in several ways: (1) EI may have an impact on leader–member relations, justice perceptions, burnout, and CWBs; (2) LMX may have a positive impact on justice perceptions, burnout and CWBs; (3) LMX may act as a partial mediator between individual differences (in terms of traits) and personal job-related outcomes (justice perceptions and burnout); and (4) gender has an important impact on these results.

Study 3

As can be seen in **Table 6**, most of the hypotheses were supported. Specifically, *all* the hypotheses were supported for the *female* group; however, extrinsic motivation was not at all correlated to any type of job satisfaction for the male group. Again, this shows the effect gender had on the results and the model in general. As such, LMX was found to be a *partial* mediator between work motivations (intrinsic/extrinsic) to job satisfactions (intrinsic/extrinsic), apart from the aforementioned discrepancy for the male group.

These findings support the current paper in several ways: (1) intrinsic and extrinsic motivations may be positively correlated with LMX and intrinsic and extrinsic satisfaction; (2) LMX may have a positive impact on both intrinsic and extrinsic satisfaction; (3) LMX may act as a partial mediator between individual differences (in terms of drivers) and personal job-related outcomes (intrinsic and extrinsic job satisfaction); and (4)

gender has an impact on the results. Overall, it is clear that LMX serves as a component of intrinsic and extrinsic satisfaction, but this role of LMX is more pronounced for men.

This concludes the two main goals of the paper, namely, that (a) LMX may act as a mediator in an organizational context, and (b) gender *does* matter, making dramatic differences in results.

IMPLICATIONS FOR RESEARCH AND PRACTICE

There are several important implications of the current research—statistical, practical, and theoretical. First, the differences in effect sizes across all three studies in this paper are a solid example for reporting effect sizes, as significance levels can show neither the strength of the effects nor their power. For instance, in **Figure 5**, the significance for the indirect effect for the *female* group is 0.013 with effect size (k^2) of 0.21. However, in **Figure 7**, the first indirect effect for the *male* group is significant at 0.000 but with effect size (k^2) of 0.05, which is drastically lower judging by Cohen's (1988) benchmarks for the proportion of variance accounted for in one variable by another (e.g., R^2, η^2, etc.), defined as small, medium, and large effect sizes as 0.01, 0.09, and 0.25.

Second, we have consistent support for the LMX mediation with gender moderation paths articulated across all three studies within this paper and, thus, from a practical and organizational point of view, the findings in this paper are overall intricate and intriguing. To illustrate: (a) Study 1 showed that individualistic females tended to have lower-quality leader–member relations (negative correlation); (b) Study 2 showed that high LMX lowered the tendency of CWBs in males, but not in females; and (c) Study 3, using indirect effects modeled through LMX, showed that extrinsic motivation was not a significant driver in males, but it was for females, while intrinsic motivation was significant for both genders. Just as important as managerial skills is the consciousness that the manager may act as a mediator between the worker and various outcomes (see **Figure 1**) that puts a significant responsibility on managers when considering intersections of LMX and gender. In conjunction with our findings, we would recommend the selection of managers who can adjust and choose different approaches and leadership styles when managing a male subordinate vs. a female one or when encountering situations requiring more democratic and participative rather than directive leadership styles.

To extend this idea, we encourage managers and others involved in selection and assessment to consider the intersection of gender and leadership in more detail because there is no one specific type of leadership that is appropriate to all situations (Mumford and Manley, 2003).

Instead, there are different styles of leadership, which are differentially effective in different contexts and serve as different criteria for leaders (Cox et al., 2003). Across multiple studies, there is evidence for a tendency for women to be more democratic and participative in leadership style when compared to men (Eagly and Johnson, 1990), which seems to suggest that if other factors are assessed and considered equal, women may be particularly suitable for leadership roles demanding democratic and participative behaviors.

Beyond the important work of Eagly and Johnson (1990), more contemporary studies also indicate that gender differences in respect to leadership do exist, but that these differences are complex and point to an intersection of how particular gendered behaviors are differentially valued or are otherwise dominant in organizations (de la Rey, 2005; Eagly and Carli, 2012; Collins et al., 2014).

This finding essentially means that gender does affect the manifestation of different leadership styles to some extent, although reasons for this difference are not necessarily genetic (Eagly and Carli, 2012). One implication of this idea is that designers of organizational systems may suggest differences in how performance metrics for leadership are developed and communicated to men and women, and how these are potentially assessed across men and women differently based on the types of leadership required for specific roles. The use of such variable performance metrics could be employed both for purposes of leader development and performance management and for areas of assignment within organizations. For example, gender could potentially be used as one factor in a selection battery, when considering candidates for staffing leadership roles requiring an enhanced democratic and participative leadership style. Within this paper, this recommendation is consistent with the findings of Study 1, which would suggest that collectively oriented or allocentric values also be included with gender when LMX is a key criterion for leader performance.

Another key fact to consider, pertinent to leader selection and assessment, is that gender may influence the specific characteristics subordinates used to make judgments about desired leader behaviors, and these judgments can include nuanced effects within LMX dimensions. For example, communally oriented LMX dimensions such as loyalty have been shown to influence job embeddedness for female (but not male) subordinates (Collins et al., 2014). In contrast, agentically oriented LMX dimensions such as respect have been shown to influence job embeddedness for both genders in similar ways (Collins et al., 2014). In this paper, we have shown a similar effect, in that LMX lowered the tendency of CWBs in males, but not in females. While CWBs are not the same as job embeddedness, they certainly share a negative association (Holtom and Darabi, 2018). We suggest that the finding of this paper that LMX lowered the tendency of CWBs in males should be tested in organizations with specific regard to agentically oriented LMX dimensions, to see if the effect of lowered CWBs could be enhanced.

In addition, in Study 3, we showed that extrinsic motivation was not a significant driver of satisfaction in males, but that it was for females—although intrinsic motivation was significant for both genders. This has implications for selecting female leaders into contexts heavy with extrinsic goal affordances, in developing performance management programs, and when discussing the types of motivational states potentially activated by goal setting and resourcing activities. For example, managers might consider the differential effect on job embeddedness from communally

oriented LMX dimensions (such as loyalty) when selecting women as part of leader–subordinate dyads and when conducting performance management programs.

Additionally, the interaction of gender, LMX, and job embeddedness might be extended to other outcomes and downstream workplace processes related to LMX such as justice perceptions. Finally, we note that the notion of demographical differences—specifically gender—is underestimated in the literature on individual differences and leadership (Zagenczyk et al., 2015). However, as found in this paper, gender has an impact on research in various ways and should *not* be ruled out when investigating or replicating models for the selection of leaders. Its effects are important on theoretical and practical levels alike.

LIMITATIONS

The use of self-report measures may prove a limitation, as may the cross-sectional data we collected in each study that resulted in a lack of inferences of causation. We also did not gauge the LMX from the manager/leader perspective, only from that of the employee. This brings up the related limitation that we did not employ dyadic match and directional match as it relates to gender in leader–subordinate pairs. However, Spector (2019) argues that longitudinal designs offer limited advantages over cross-sectional designs. The latter incorporates explanatory mechanisms and temporal precedence (e.g., gender) factors and constitutes a valuable mode of investigation (for further reading, see Spector, 2019).

A more serious limitation is that the fit indices we produced in Study 1 showed only a marginal fit, with RMSEA above 0.10. However, this was probably due to the measures chosen for IND and COL-based CVOs. Other measures of CVOs, such as the horizontal and vertical individualism and collectivism scale (HVIC; Triandis and Gelfand, 1998), could provide higher reliability and more nuanced distinctions of these CVOs. On a separate ground, one may question to what extent current results in regard to culture dimensions can extrapolate to other cultures if it is postulated that Israeli culture is quite unique (as a reminder, the measures in the current study were tapped with Israeli respondents). We posit that Almagor and Ben-Porath have demonstrated that results obtained in the Israeli cultural context replicate into the North American one. Most likely, because despite some uniqueness characterizing the Israeli culture, as any other culture, Sagie and Weisberg (2001) assert that Israeli society has gone from being ascetic, collectivistic, closed, and relatively homogeneous to being more materialistic, individualistic, open, and pluralistic as the North American is. Hence, we assume that current results in regard to the two investigated culture dimensions can be extrapolated to other cultural contexts. Nonetheless, we recommend to attempt replicate present findings also with respondents from other national cultures.

Another limitation might be the segmentation of the research into three studies. However, it would be near impossible to deliver such a demanding, long, and tiring survey containing all the research variables to one set of subjects. It may have been possible to logically combine the individual differences used in Study 1 and Study 2 into a single SEM. However, we were concerned about the relationships between emotional intelligence and collectivism items being too close, in that the items could have been related to both constructs to some degree. This also raises the issue of the inclusion of emotional intelligence as a construct.

The use of EI within this study, at least within the framework of its traditional interpretation, may be seen as a limitation, based on a new understanding of the general factor of personality (GFP). Significant evidence now exists for a degree of variability overlap between EI and the GFP that accounts for almost the entire construct (van der Linden et al., 2018). Meta-analytic evidence in particular points toward an estimate of $\rho = 0.88$ between EI and GFP (van der Linden et al., 2017), with further genetic studies suggesting a phenotypic correlation of $r = 0.90$ (van der Linden et al., 2018). There is some debate regarding the nature of the GFP, in respect to whether it is a substantive factor or rather it is a result of systemic statistical bias; however, the consensus seems to be that although there may be some amount of systemic bias, there remains a stable and substantive individual difference behind the GFP (van der Linden et al., 2018). As the GFP seems to represent the most desirable elements of the five-factor model of personality such as emotional stability, conscientiousness, and sociability, it seems to present a broad trait reflecting social effectiveness, which is quite similar to what EI is measuring (van der Linden et al., 2016). However, EI is an established construct, and links between EI and the GFP would be beyond the scope of this paper.

RECOMMENDATIONS

In respect to the relationships between individual differences and LMX, one important point for future research would be to investigate data addressing the congruence of supervisor and subordinate individual difference in greater detail. Accordingly, we would recommend including gender or other demographics in future models/studies as they might have interesting and important roles based on their congruence or lack of congruence within supervisor and subordinate dyads, using effect sizes for mediating analyses and indirect effects (see Preacher and Kelley, 2011), testing LMX as a mediator in different model constellations (for example, by combining IND and COL-based CVOs with EI as antecedents to LMX in similar moderated-mediation models), and replicating the findings of the paper to reach better validity. In this regard, we would recommend more nuanced measures of IND and COL-based CVOs (e.g., the HVIC; Triandis and Gelfand, 1998). Finally, we recommend testing models with both job-related and individual differences parameters in an organizational context, with attention given to specific types of contextual effects (e.g., culture and climate), and highlight the vital role of the manager (especially via manager's impressions of LMX) and the sensitivity one may need in managerial skills.

One of the main roles of academia, and ours as researchers, is to make advances in science and push it forward. Our focus within this paper was to examine the role of the moderated-mediation pathways that link

LMX mediation and gender-based moderation, which serve as the link between the different studies we present in this paper. In this regard, we found consistent support that gender may have a moderating effect in conjunction with LMX. We believe this is because LMX encapsulates the strength of the relationship between leaders and subordinates.

We have also suggested that the results of this paper have a major implication for selection of women to leadership roles, in that we have articulated some of the contextual elements that allow women to emerge as effective leaders, although we note that the relationships between gender, leadership, and organizational outcomes are vast and complex. We consequently wish to call for more research on this issue in order to reach what is "necessary for a coherent science" (Reeve, 2016, p. 1).

DATA AVAILABILITY STATEMENT

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

AT: study design and project management. OS: data analyses and manuscript writing. EF: manuscript writing. All authors contributed to the article and approved the submitted version.

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Locus of Control and Leader–Member Exchange: A Dimensional, Contextualized, and Prospective Analysis

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Since the relationship between leaders and subordinates has important implications for organizations, exploring how high-quality leader–member exchange (LMX) relationships develop over time is a critical research objective. However, LMX research has essentially focused on leader-centric approaches to describe how leaders develop differential relationships with subordinates and has devoted little attention to the influence of subordinate characteristics. This study contends that subordinates' individual differences may act as drivers of LMX relationships. Specifically, we posited that individuals with an internal work locus of control, owing to their sense of control over the work environment, are more prone to develop high LMX relationships over time. Moreover, we expected this effect to be enhanced when these individuals are given clear expectations about their work role because such conditions would ease their sense of agency. Further, we suggested that these effects may partly depend on the dimension of LMX (i.e., affect, loyalty, contribution, and professional respect) under consideration. We argued that the effect of internal work locus of control would generalize to all LMX dimensions but that its interaction with role clarity would primarily impact the loyalty and contribution dimensions of LMX as their behavioral orientation would result in valued outcomes for internals. Data were collected through questionnaires among a sample of 424 employees working in various industries. Through a two-wave study and controlling for the autoregressive effects of LMX, subordinates' internal work locus of control was found to enhance LMX relationships over time. Using a multidimensional approach to LMX, our results further show that the effect of internal work locus of control generalized to all dimensions of LMX. Using a contextualized view of the development of LMX, we also found that role clarity moderated the positive relationship between internal work locus of control and LMX over time such that the relationship was stronger when role clarity was high. However, from a dimensional perspective, role clarity only accentuated the relationship between work locus of control and LMX's loyalty dimension. The implications of these findings for LMX research are discussed.

Keywords: locus of control, leader–member exchange, role clarity, leadership, dimensional approach, moderation analysis

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INTRODUCTION

The leader–member exchange (LMX) theory stipulates that supervisors engage in relationships of distinct quality with subordinates depending on how interactions develop within each employee–supervisor dyad (Graen and Scandura, 1987; Liden et al., 1993; Graen and Uhl-Bien, 1995). High-quality LMX is characterized by social exchange relationships that give way to mutual trust, commitment, reciprocity, and loyalty among members of the dyad. In these situations, subordinates receive resources, rewards, and challenging job assignments that help them develop and be efficient in their work role (Liden et al., 1997). As such, high LMX reflects a relational context where socioemotional exchanges are ubiquitous (Dansereau et al., 1975; Vidyarthi et al., 2010). In contrast, low-quality LMX is characterized by economic exchange based on give and take inputs where transactions are limited to the terms of tangible employment contracts (Blau, 1964; Liden et al., 1993). There has been abundant research showing that high-quality LMX is associated with a host of positive outcomes including heightened organizational commitment, job performance, and organizational citizenship behaviors (e.g., Gerstner and Day, 1997; Anand et al., 2011; Dulebohn et al., 2012; Rockstuhl et al., 2012; Martin et al., 2016).

A significant number of studies have also been devoted to identifying the antecedents of LMX. These antecedents have been categorized into follower characteristics, leader characteristics, characteristics of the interpersonal relationship with the leader, and contextual variables (Dulebohn et al., 2012). Among these antecedents, less attention has been devoted to follower characteristics, and when these characteristics were investigated, the studies mostly focused on the dispositional traits of positive and negative affectivity (Dulebohn et al., 2012; Tse et al., 2018). In this research, we focus on employees' work locus of control as a driver of LMX. As a personality trait, locus of control reflects a relatively stable belief that the environment can either be influenced (i.e., internal locus of control) or that events are driven by chance or fate (i.e., external locus of control) (Rotter, 1966). Because it affects how individuals interpret events and the way they act across multiple situations (Rotter, 1966), locus of control provides important insights into human behavior in organizations (Spector, 1982). Rooted in Rotter's (1954) social learning theory, the locus of control represents the implicit expectancies that individuals hold regarding their ability to obtain valued outcomes through their own actions (Rotter, 1966; Lefcourt, 1976; Wang et al., 2010). Internals view themselves as masters of their own fate and have strong behavior-reward expectancies (Rotter, 1966; Spector, 1982; Johnson et al., 2015) while externals view their lives as being governed by external forces and have a low sense of agency (Ng et al., 2006; Galvin et al., 2018). As a context-specific trait, work locus of control represents the extent to which individuals believe that the rewards they obtain at work result from their actions (Spector, 1988; Harris et al., 2007; Wang et al., 2010). Individuals who possess an internal work locus of control have better interpersonal skills in the work context and are more socially astute and able to influence others (Ng et al., 2006; Wang et al., 2010). Therefore, one can expect them to develop higher LMX relationships with their supervisor. However, although previous research has empirically examined the relationship between locus of control and LMX, this research has been cross-sectional (e.g., Martin et al., 2005; Harris et al., 2007; Kauppila, 2014; Hao et al., 2019), providing no evidence for a longitudinal effect. As we explain below, demonstrating that work locus of control predicts that LMX is an important endeavor that elucidates its role as a driver of LMX development. The first goal of our study is thus to extend the current line of work and examine whether work locus of control drives change in LMX over time.

Second, this study aims to explore a contextualized view of the contribution of locus of control to LMX. Specifically, we introduce role clarity as a boundary condition in this relationship. Role clarity refers to situations where role expectations are clearly defined and specified to employees (Rizzo et al., 1970). Such situations may be appealing to internals. Indeed, the locus of control literature suggests that internals have a strong need for achievement (Yukl and Latham, 1978; Spector, 1982), feel intrinsically motivated to achieve desired goals (Ng et al., 2006), and are confident in the instrumentality of their efforts to achieve performance goals (Spector, 1982). Following this reasoning, we posit that internals will feel more confident in their ability to influence their environment (e.g., the relationship with supervisors) when the expectations regarding their role are clearly specified (Lam and Schaubroeck, 2000). In other words, when role expectations are clearer, internals may perceive that the link between their actions and the outcomes they obtain (e.g., LMX) is stronger, thereby increasing their sense of agency. Thus, we propose that the contribution of work locus of control to LMX will be stronger when role clarity is high.

Third, the present study purports to look at LMX at both a construct level and a dimension level. Liden and Maslyn (1998) conceived LMX as a multidimensional construct. Their measure encompasses four dimensions: affect, loyalty, contribution, and professional respect. However, although their measure and approach have been largely endorsed among LMX scholars, research has primarily adopted a unitary view of LMX (Dulebohn et al., 2017). Therefore, the examination of the antecedents, correlates, and outcomes of LMX at the construct level tends to ignore that associations may vary across LMX dimensions. This may be problematic as such practice assumes that the relationships between LMX and other constructs in its nomological network are homologous at the construct and dimension levels (Wong et al., 2008). To account for this potential discrepancy, this study will examine whether the proposed main and interactive effects of work locus of control on change in LMX across time generalize from the construct level to the dimension level. As work locus of control is thought to lead to stronger behavior-reward expectancies, we reason that an internal work locus of control should particularly impact LMX's behavioral dimensions (i.e., loyalty and contribution) when role clarity is high.

The present study contributes to the LMX literature from three perspectives. First, by examining work locus of control as a driver of LMX over time, we break new ground by suggesting that individuals' interpersonal skills and dispositional

capacity to influence others make some employees more likely to develop high-LMX relationships with supervisors. As such, this study counterbalances the dominant perspective that LMX relationships are bound to parties' willingness to engage in social exchange relationships (e.g., Anand et al., 2010, 2018; Lord et al., 2016). This counterbalanced view suggests that employees' dispositions may play a role in how LMX develops from its early stages (Graen and Scandura, 1987; van Breukelen et al., 2006). Moreover, to demonstrate that these effects hold over time, we used a multiwave design that controlled the autoregressive effects of LMX and its dimensions, which answers the call of researchers to use designs that allow examining longitudinal relationships between antecedent variables and LMX (e.g., Dulebohn et al., 2012; Martin et al., 2016). Second, this study promotes a contextualized view of the relationship between work locus of control and LMX. As locus of control "functions in part as an evaluation of the environment" (Johnson et al., 2015, p. 1570), its effects are likely stronger in environments that provide opportunities to reinforce people's agency (Galvin et al., 2018). Therefore, this study is a plea for conceiving LMX development as the result of the joint influence of the person and situation (Ozer, 2008). Finally, by studying the proposed relationships at LMX's construct and dimension levels, this study underlines the importance of considering the dimensions of LMX as separate components of a social exchange relationship (Maslyn and Uhl-Bien, 2001; Sin et al., 2009) that may differ in responsiveness to work locus of control and role clarity.

THEORETICAL BACKGROUND AND HYPOTHESES

Work Locus of Control and LMX: A Construct Level Perspective

As a relationship-based model of leadership (Graen and Uhl-Bien, 1995; Liden et al., 1997), LMX reflects the quality of social exchange relationships between employees and supervisors. One of the fundamental assumptions of the model is that leaders develop relationships of a distinct quality with different subordinates (Wayne et al., 1997; Schriesheim et al., 1999; Martin et al., 2005). High LMX reflects situations where the exchange relationship is based on mutual trust and commitment, with subordinates benefiting from intrinsic rewards, challenging assignments, and opportunities to grow, while low LMX refers to situations where economic exchange relationships represent the rule, and subordinates complete their duties in exchange for a given salary and tangible assets (Dienesch and Liden, 1986; Graen and Scandura, 1987; Wayne et al., 1997).

Among individual traits that have been studied as antecedents to LMX, positive and negative affectivity and the Big-Five personality trait of extraversion have attracted the most attention (Dulebohn et al., 2012). While less studied as a predictor of LMX, the locus of control has nonetheless characteristics that make it a relevant antecedent. In this study, we focus on work locus of control because it is a domain-specific personality measure that reflects the individual's chronic perception of control within the work context and as such may exhibit improved validity over general locus of control (Lievens et al., 2008; Wang et al., 2010). People with an internal work locus of control tend to attribute the rewards they obtain at work to their personal efforts (Spector, 1988) and generally perceive their efforts as being instrumental to obtaining rewards and attaining valued goals (Lam and Schaubroeck, 2000). They also have a strong need for achievement, indicating that they strive to meet the standards of performance prevailing in their workplace, seek personal growth and learning opportunities, and have a sense of agency in obtaining positive outcomes from their environment (Spector, 1982; Allen et al., 2005; Ozer, 2008). Supporting this view, meta-analytic results indicate that internals obtain higher salaries and experience heightened career satisfaction (Ng et al., 2005).

As supervisors are agents that represent the organization (Erdogan and Enders, 2007) and influence the promotion and reward decisions that apply to subordinates (Webster and Beehr, 2013), the quality of exchange relationships with them is critical for those who want to get ahead in the organization. For instance, research has found LMX relationships to be positively associated with promotability ratings (Scandura and Schriesheim, 1994; Wayne et al., 1999), particularly when relationship or organizational tenure is high (Harris et al., 2006). Research also indicates that strong LMX relationships help subordinates gain influence in the organization's network (Sparrowe and Liden, 2005). These results suggest that developing high LMX relationships is a useful means for getting ahead and pursuing career goals in the organization. As locus of control typically involves a social learning process whereby the individual identifies the events and behaviors that are causally related to valued rewards (Rotter, 1966; Galvin et al., 2018), internals may perceive more quickly than externals that a good LMX relationship is a milestone toward desired outcomes and that their behavior can make a difference in developing LMX. Moreover, as internals cultivate interpersonal relationships (Ng et al., 2006) and are more effective than externals to influence others (Wang et al., 2010), they are likely to generate more positive relationships with their supervisors. Thus, we expect an internal work locus of control to drive LMX. This effect should also persist over time (i.e., longitudinally) because internals maintain consistent expectancies that their relational environment is responsive to their actions, resulting in cumulative reinforcements (Galvin et al., 2018). The above discussion leads to the following hypothesis.

Hypothesis 1: Internal work locus of control will be positively related to change in LMX over time.

Work Locus of Control and LMX: A Dimension Level Perspective

Numerous studies have adopted a unidimensional view of LMX (Dulebohn et al., 2017). However, it is likely that the nature of overall LMX reflects different combinations of its dimensions depending on circumstances (Liden and Maslyn, 1998; Maslyn and Uhl-Bien, 2001). Unfortunately, the few studies that have explored LMX dimensions separately have focused on their consequences (for exceptions, see Maslyn and Uhl-Bien, 2001;

Lee, 2005) instead of their antecedents (e.g., Greguras and Ford, 2006). According to role theory, roles are inherently multidimensional (Katz and Kahn, 1978). Thus, people may endorse different roles in the workplace (Liden and Maslyn, 1998) and depending on what roles are salient in exchange relationships, different types of LMX are likely to emerge (Dienesch and Liden, 1986; Liden et al., 1997; Liden and Maslyn, 1998). The multidimensional approach to LMX (Liden and Maslyn, 1998) acknowledges that members may take on different roles, leading to different currencies of exchange being salient to LMX (Dienesch and Liden, 1986; Law et al., 2010) depending on the resources and opportunities that are valued by the dyad members (Graen and Cashman, 1975).

Liden and Maslyn's (1998) multidimensional framework identifies four dimensions within LMX: affect, loyalty, contribution, and professional respect. *Affect* refers to the mutual affection that LMX partners feel for one another. Such affection is driven by interpersonal attraction and is essentially an attitude toward the other member of the dyad. Internals are known to develop friendly relationships with others and to cultivate constructive social relationships (Ng et al., 2006). Building an affect-based relationship with the supervisor may help internals get access to resources from the supervisor and attain their desired goals. For example, internal work locus of control has been found to be positively related to leader consideration and social support at work, and to be negatively related to interpersonal conflict at work (Wang et al., 2010). By extension, one may expect internal work locus of control to be positively associated to LMX's affect dimension (i.e., LMX-Affect). Again, one may expect this relationship to hold over time as internals maintain a consistent perception over time that the environment (e.g., the supervisor) is responsive to their actions (Galvin et al., 2018). This leads to the following hypothesis.

Hypothesis 2a: Internal work locus of control will be positively related to change in LMX-Affect over time.

Loyalty (e.g., LMX-Loyalty) is the second dimension of LMX. It refers to the expression by one member (e.g., the supervisor) of public support for the other member, his or her goals, and character (Liden and Maslyn, 1998). An example of item measuring this dimension is "My supervisor would defend me to others in the organization if I made an honest mistake" (Liden and Maslyn, 1998, p. 56). Loyalty differs from the socioemotional dimension of affect as it is behavioral in nature and refers to the dyadic members' concrete behaviors that manifest support to each other. Through social learning, internals acquire implicit knowledge regarding what actions may help them earn the support of powerful others such as supervisors (Rotter, 1966; Spector, 1982, 1988). As loyalty reflects behavioral support, it represents a strong manifestation of the outcomes pursued by internals. Moreover, internals may themselves be loyal to their supervisors because this can help them achieve desired goals. For example, leaders were found to be more likely to ask loyal members to take on tasks that required independent judgment and responsibility (Liden and Graen, 1980). Therefore, being loyal to the leader allows individuals with an internal locus of control to benefit from more autonomy in carrying out their tasks (Liden and Maslyn, 1998), which is a central concern for internals (Ng et al., 2006). Thus, we propose the following hypothesis from a longitudinal perspective.

Hypothesis 2b: Internal work locus of control will be positively related to change in LMX-Loyalty over time.

The third dimension of LMX, *contribution* (i.e., LMX-Contribution), refers to the perception by members of the dyad that each member engages in work activities that benefit the mutual goals of the dyad (Liden and Maslyn, 1998). As loyalty, contribution is behavioral in nature: it reflects actions undertaken by the members of the dyad that help the attainment of the dyadic goals. LMX-Contribution also involves the completion by subordinates of tasks that go beyond their job description and the facilitation of such activities by the supervisor. Since internal work locus of control is a task-related construct (Henson and Beehr, 2018) that is positively related to job performance (Ng et al., 2006; Wang et al., 2010), individuals with internal work locus of control are bound to invest energies in activities that exceed expectations, thereby fostering LMX-Contribution (Maslyn and Uhl-Bien, 2001). They likely contribute time and energies to develop the relationship with their supervisor because internals have a strong need for achievement, put a premium on performance, and set difficult goals (Yukl and Latham, 1978; Spector, 1982). Moreover, this relationship should be sustained over time. Thus, the following hypothesis is proposed.

Hypothesis 2c: Internal work locus of control will be positively related to change in LMX-Contribution over time.

Professional respect is the fourth and last dimension of LMX. Contrary to the other dimensions, it has a more contemplative foundation as it connotes expert power and that "each member of the dyad has built a reputation" (Liden and Maslyn, 1998, p. 50) and excels in his or her work. Supervisors possessing such qualities may be perceived by subordinates as powerful and being able to facilitate career success in the organization by connecting subordinates to the larger organization's network. As such, individuals with an internal work locus of control may be tempted to develop effective relationships with such powerful supervisors because it provides more opportunities to access the desirable resources they pursue. They may also gain knowledge and skills as a result of close interactions with a respected supervisor (Liden and Maslyn, 1998), which would help them achieve better performance. Thus, we propose the following hypothesis, which is framed within a longitudinal perspective.

Hypothesis 2d: Internal work locus of control will be positively related to change in LMX-Professional respect over time.

The Moderating Role of Role Clarity

The extent to which employees are given clearly defined jobs and receive sufficient information to effectively fulfill their role (Rizzo et al., 1970) is an important means by which the work context exerts influence on employees. The variations in employees' work

role expectations are captured by role clarity, which refers to the sufficiency of information provided to employees regarding the expectations associated with their role in the organization (Kahn et al., 1964). Thus, it represents the extent to which such expectations are fully understood by employees (Rizzo et al., 1970). Role clarity is often attributed to the supervisor because he or she assigns the goals and the responsibilities associated with the employee's role (Panaccio and Vandenberghe, 2011). When role clarity is high, employees understand what is expected of them and are cognizant of the available means to carry out their job tasks, while in situations of low role clarity, employees lack an understanding of what is expected of them, hence, of what it takes to attain performance goals (Newman et al., 2015).

All LMX relationships are contextualized, meaning that situational factors may influence the development of exchange relationships with the supervisor (Liden et al., 1997; Nahrgang and Seo, 2015). For instance, it may be more difficult for employees to exert energies in developing favorable relationships with their supervisor when they have to continuously struggle to understand what is expected of them and to find the appropriate manner in which tasks must be completed. Such situations may be particularly frustrating as employees tend to attribute the responsibility of them to supervisors. Moreover, low role clarity would limit the ability of employees to match appropriate behaviors to role requirements, resulting in lower performance (Tubre and Collins, 2000). In such situations, employees would focus on trying to understand the key responsibilities of their jobs instead of investing energies in developing the relationship with the supervisor. The reverse would be true when role clarity is high. When role expectations are clear and understood, employees may feel confident in finding their ways to get their job done. On empirical grounds, role clarity has been found to be positively related to LMX (Gerstner and Day, 1997; Dulebohn et al., 2012; Gregersen et al., 2016).

We posit that role clarity will also moderate the relationship between work locus of control and LMX. Indeed, it is likely that internals will feel more in control of their environment when role clarity is high (Wang et al., 2016). As internals have a strong need for achievement, their sense of agency and influence will be heightened when job expectations are clearly defined. As Spector (1982) noted, internals actively seek and function better in environments where control is achievable. Therefore, we suggest that the perception of causality between internals' actions and outcomes such as LMX will be increased when role expectations are clearly communicated, leading to a stronger relationship between internal work locus of control and LMX when role clarity is high. This leads to the following hypothesis.

Hypothesis 3a: Internal work locus of control will interact with role clarity such that it will be more (vs. less) strongly related to LMX over time when role clarity is high (vs. low).

Looking at LMX at the dimension level, it seems likely that role clarity moderates the relationship between internal work locus of control and specific LMX dimensions. We specifically posit that the association between internal work locus of control and the *behavioral* dimensions of LMX (i.e., loyalty and contribution) is more likely to be subject to moderating effects by role clarity. Indeed, one may expect that when job responsibilities are clearly specified (i.e., high role clarity), internals will be particularly able to obtain *behavioral inputs* from their supervisor [i.e., having supervisors publicly defending the employee (loyalty)] and engage themselves in *behavioral dedication* to the relationship (contribution). LMX-Loyalty and LMX-Contribution are indeed tangible outcomes, while the other LMX dimensions reflect an attitude (affect) and a contemplative judgment (professional respect) that represent objective outcomes less sought after by internals. In sum, a context of clear job responsibilities allows internals to obtain tangible indications of support by their supervisor (loyalty) and demonstrate dedication to contribute above and beyond job requirements to the relationship with the supervisor (Liden and Maslyn, 1998). This is because a clear definition of their role helps internals obtain and demonstrate indications of desired outcomes, which we expect to hold over time. Thus, we propose the following, remaining hypotheses.

Hypothesis 3b: Internal work locus of control will interact with role clarity such that it will be more (vs. less) strongly related to change in LMX-Loyalty over time when role clarity is high (vs. low).

Hypothesis 3c: Internal work locus of control will interact with role clarity such that it will be more (vs. less) strongly related to change in LMX-Contribution over time when role clarity is high (vs. low).

MATERIALS AND METHODS

Procedure

Participants were recruited through the personal contacts of the research team, the university's research panel, and the alumni association's mailing list, in Eastern Canada. They were asked to participate in a three-wave study about leadership and workplace attitudes. Data for this study were from Time 1 and Time 2. To participate in the study, respondents were to be employed, aged 18 or more, and were to have an identifiable supervisor. Participants were informed that their participation was voluntary and were assured of the confidentiality of their responses. Responses were collected through online surveys using a 6-month time lag. To encourage participation, respondents were given a $5 gift card upon completion of each wave of the surveys. They completed a French or an English version of the questionnaires. Work locus of control, role clarity, LMX, and demographics were measured at Time 1, while LMX was also measured at Time 2. To strengthen the robustness of our design, our analyses controlled for the autoregressive effect of the dependent variable at Time 1 (i.e., overall LMX or LMX dimensions) when examining the effects of the independent variable (e.g., work locus of control) and

the moderator (e.g., role clarity) on Time 2 overall LMX or LMX dimensions.

Sample

Initially, 1,003 participants completed the Time 1 questionnaire, among whom careless respondents (n = 3) were excluded, and 655 participants completed the Time 2 questionnaire (for a 66% response rate). To determine if participant attrition was randomly distributed, we conducted a logistic regression analysis to evaluate if Time 1 variables (i.e., work locus of control, role clarity, LMX, LMX-Affect, LMX-Loyalty, LMX-Consideration, and LMX-Professional respect) and demographics (i.e., gender, age, organizational tenure, and tenure with supervisor) influenced the probability of participating at Time 2 (Goodman and Blum, 1996). The logistic regression model was significant [$\chi^2(11) = 31.77$, $p < 0.01$]. However, none of the predictors were significant in the equation, suggesting that attrition over time was randomly distributed.

As our study includes participants who completed both measurement times (n = 655) and excludes participants who changed supervisors between Time 1 and Time 2 (n = 231), 424 usable responses remained at Time 2. In this final sample, average age was 29.08 years (SD = 9.97), and organizational tenure was 4.37 years (SD = 5.48). Participants (75% women) have been working with their current supervisor for an average time of 2.36 years (SD = 2.85). They worked in various industries, including health care and social assistance (12%), retail trade (12%), finance and insurance (9%), and educational services (8%). They were affiliated with small organizations (<100 employees; 48%), midsize organizations (101 to less than 1,000 employees; 26%), or large organizations (>1,000 employees; 26%). Most participants worked full time (61%) and had at least a bachelor's degree (72%).

Measures

All scale items were measured using a five-point Likert-type scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). To create French versions of English scales, a standard translation–back-translation procedure was followed (Schaffer and Riordan, 2003).

Work Locus of Control

Participants rated their level of work locus of control at Time 1 using the 16-item scale developed by Spector (1988). This scale includes eight items measuring external work locus of control (e.g., "Getting the job you want is mostly a matter of luck") and eight items capturing internal work locus of control (e.g., "People who perform their jobs well generally get rewarded for it"). We reversed scores on the external work locus of control items so that a higher score on the overall scale reflected internal work locus of control (for a similar procedure, see Ng et al., 2006; Wang et al., 2010). The internal consistency for this scale was 0.84.

Role Clarity

Role clarity was assessed at Time 1 using an adapted version (Panaccio and Vandenberghe, 2011) of Rizzo et al.'s (1970) five-item scale (α = 0.90). A sample item is "I know exactly what is expected of me."

LMX

The 12-item multidimensional scale (LMX-MDM) developed by Liden and Maslyn (1998) was used to measure LMX at Time 1 (α = 0.93) and Time 2 (α = 0.93). In this measure, the four dimensions of LMX are each represented by a three-item scale: affect (e.g., "I like my supervisor very much as a person;" αs = 0.89 at Time 1 and 0.89 at Time 2), loyalty (e.g., "My supervisor would come to my defense if I were "attacked" by others;" αs = 0.86 at Time 1 and 0.90 at Time 2), contribution (e.g., "I do not mind working my hardest for my supervisor;" αs = 0.84 at Time 1 and 0.81 at Time 2), and professional respect (e.g., "I am impressed with my supervisor's knowledge of his/her job.;" αs = 0.93 at Time 1 and 0.91 at Time 2).

RESULTS

Confirmatory Factor Analyses

Confirmatory factor analysis (CFA) through Mplus 7.31 (Muthén and Muthén, 2010) with maximum likelihood (ML) estimation was used to examine the dimensionality of our constructs. Results for CFA models are reported in **Table 1**. First, as several of our hypotheses considered LMX dimensions separately, we examined the dimensionality of the LMX measure at both Time 1 and Time 2. A four-factor LMX model distinguishing among affect, loyalty, contribution, and professional respect at Time 1 yielded a good fit to the data, $\chi^2(48) = 147.43$, CFI = 0.97, NNFI = 0.96, RMSEA = 0.070, SRMR = 0.040, and outperformed a one-factor model, $\chi^2(6) = 895.72$, $p < 0.001$. Similarly, the four-factor LMX model at Time 2 obtained a good fit as well, $\chi^2(48) = 171.76$, CFI = 0.97, NNFI = 0.96, RMSEA = 0.078, SRMR = 0.041, and proved significantly superior to the one-factor model, $\chi^2(6) = 767.22$, $p < 0.001$. These results suggest that LMX dimensions can be considered separately.

Second, we tested the distinctiveness of our variables (i.e., work locus of control, role clarity, LMX-Affect, LMX-Loyalty, LMX-Contribution, and LMX-Professional respect, at both Time 1 and Time 2) using an overall CFA. The errors of LMX's parallel items were allowed to correlate across time (Geiser, 2012). In order to simplify the model (Little et al., 2013), the 16 items pertaining to work locus of control were aggregated using a parceling approach. Specifically, items related to external work locus of control were randomly assigned to two parcels and internal work locus of control items were randomly assigned to another two parcels. Results of CFA analyses are presented in **Table 1**. Our hypothesized 10-factor model yielded a good fit, $\chi^2(438) = 1166.49$, CFI = 0.93, NNFI = 0.92, RMSEA = 0.063, SRMR = 0.077. Using a nested sequence approach (Bentler and Bonett, 1980), we then compared this model to more parsimonious models. Our hypothesized model outperformed a seven-factor model that either combined Time 1 LMX dimensions [$\chi^2(24) = 987.19$, $p < 0.001$] or Time 2 LMX dimensions [$\chi^2(24) = 870.88$, $p < 0.001$], a three-factor model combining Time 1 and Time 2 LMX dimensions [$\chi^2(39) = 1{,}575.98$, $p < 0.001$], and a one-factor model [$\chi^2(45) = 4{,}667.77$, $p < 0.001$]. Overall, these results

TABLE 1 | Fit indices for confirmatory factor analysis models.

Model	χ^2	*df*	$\Delta\chi^2$	Δdf	NNFI	CFI	RMSEA	SRMR
Time 1 LMX								
(1) Four-factor model	147.43*	48	–	–	0.96	0.97	0.070	0.040
(2) One-factor model	1,043.14*	54	895.72*	6	0.68	0.74	0.208	0.088
Time 2 LMX								
(1) Four-factor model	171.76*	48	–	–	0.96	0.97	0.078	0.041
(2) One-factor model	938.98*	54	767.22*	6	0.71	0.76	0.197	0.084
Overall confirmatory factor analysis model								
(1) Theorized 10-factor model	1,166.49*	438	–	–	0.92	0.93	0.063	0.077
(2) Combining Time 1 LMX dimensions	2,153.68*	462	987.19*	24	0.82	0.84	0.093	0.087
(3) Combining Time 2 LMX dimensions	2,037.37*	462	870.88*	24	0.83	0.85	0.090	0.086
(4) Combining Time 1 and Time 2 LMX dimensions	2,742.47*	477	1,575.98*	39	0.76	0.79	0.106	0.091
(5) One-factor model	5,834.26*	483	4667.77*	45	0.45	0.49	0.162	0.121

*N = 424. NNFI, non-normed fit index; CFI, comparative fit index; RMSEA, root-mean-square error of approximation; SRMR, standardized root mean square residual; LMX, leader–member exchange; *$p < 0.01$.*

suggest that LMX dimensions and all the constructs altogether were distinguishable.

Descriptive Statistics and Correlations

Descriptive statistics, correlations, and reliability coefficients are presented in **Table 2**. These correlations are in the expected direction. Time 1 work locus of control was positively related to Time 2 LMX ($r = 0.33$, $p < 0.01$), Time 2 LMX-Affect ($r = 0.29$, $p < 0.01$), Time 2 LMX-Loyalty ($r = 0.29$, $p < 0.01$), Time 2 LMX-Contribution ($r = 0.26$, $p < 0.01$), and Time 2 LMX-Professional Respect ($r = 0.25$, $p < 0.01$). Interestingly, role clarity was also positively related to Time 2 LMX ($r = 0.25$, $p < 0.01$), Time 2 LMX-Affect ($r = 0.22$, $p < 0.01$), Time 2 LMX-Loyalty ($r = 0.21$, $p < 0.01$), Time 2 LMX-Contribution ($r = 0.14$, $p < 0.01$), and Time 2 LMX-Professional Respect ($r = 0.25$, $p < 0.01$).

Hypothesis Testing

To test our hypotheses, we conducted a series of multiple regression analyses using SPSS (version 26). We first centered all variables including controls (i.e., Time 1 LMX or LMX dimensions, work locus of control, and role clarity) following Dawson's (2014) recommendations. Hypothesis 1 predicted that work locus of control would be positively related to Time 2 LMX, controlling for Time 1 LMX. As can be seen in **Table 3** (Model 2), controlling for the autoregressive effect of LMX ($\beta = 0.60$, $p < 0.001$), Time 1 work locus of control was positively related to Time 2 LMX ($\beta = 0.17$, $p < 0.001$). Hypothesis 1 is thus supported. **Table 4** reports multiple regression results for LMX dimensions used as separate dependent variables. As can be seen (**Table 4**, Model 2s), controlling for their respective autoregressive effect ($\beta = 0.61$, 0.52, 0.45, and 0.59, all $p < 0.001$, respectively), Time 1 work locus of control was positively related to Time 2 LMX-Affect ($\beta = 0.13$, $p < 0.001$), Time 2 LMX-Loyalty ($\beta = 0.16$, $p < 0.001$), Time 2 LMX-Contribution ($\beta = 0.17$, $p < 0.001$), and Time 2 LMX-Professional respect ($\beta = 0.14$, $p < 0.001$). These results provide support for Hypotheses 2a–d.

Hypotheses 3a–c predicted moderating effects of role clarity in the relationship between work locus of control and overall LMX and specific LMX dimensions. Results of the moderated regression analysis for overall LMX are presented in **Table 3**. We first added centered Time 1 role clarity (Model 3), which was non-significant ($\beta = -0.01$, *ns*). However, the interaction between Time 1 work locus of control and Time 1 role clarity (Model 4) significantly predicted Time 2 LMX ($\beta = 0.10$, $p < 0.01$; $\Delta R^2 = 0.01$, $p < 0.01$), controlling for Time 1 LMX ($\beta = 0.60$, $p < 0.001$). **Figure 1** graphically represents the pattern of this interaction, following Aiken and West's (1991) guidelines. The relationship between Time 1 work locus of control and Time 2 LMX was significantly positive at high levels (1 *SD* above the mean) of Time 1 role clarity [$t(421) = 5.02$, $p < 0.001$], but this relationship was non-significant at low levels (1 *SD* below the mean) of it [$t(421) = 1.41$, *ns*]. The analysis of the regions of significance for this interaction (Preacher et al., 2006) indicated that the relationship between Time 1 work locus of control and Time 2 LMX was significantly positive when Time 1 role clarity exceeded the standardized value of -0.66. Hypothesis 3a is thus supported.

Hypotheses 3a–b predicted that Time 1 role clarity would moderate the relationship between Time 1 work locus of control and Time 2 LMX-Loyalty and LMX-Contribution, respectively. Results are reported in **Table 4**. We first added centered Time 1 role clarity (Model 3s), which was non-significant for both Time 2 LMX-Loyalty ($\beta = 0.01$, *ns*) and Time 2 LMX-Contribution ($\beta = -0.01$, *ns*). However, as can be seen in Model 4, controlling for Time 1 LMX-Loyalty ($\beta = 0.52$, $p < 0.001$), Time 1 work locus of control interacted with Time 1 role clarity to predict Time 2 LMX-Loyalty ($\beta = 0.14$, $p < 0.001$; $\Delta R^2 = 0.02$, $p < 0.001$). **Figure 2** illustrates the pattern of this interaction. Simple slope tests (Aiken and West, 1991) indicated that the relationship between Time 1 work locus of control and Time 2 LMX-Loyalty was significantly positive [$t(421) = 5.16$, $p < 0.001$] when Time 1 role clarity was high (1 *SD* above the mean), while this relationship was non-significant [$t(421) = 0.40$, *ns*] when it was low (1 *SD* below the mean). The analysis of regions of significance (Preacher et al., 2006) indicated that the relationship between Time 1 work locus of control and Time 2 LMX-Loyalty was

TABLE 2 | Means, standard deviations, and correlations among studied variables.

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(1) Age (years)	29.08	9.97	–															
(2) Gender (1 = Male; 2 = Female)	1.75	0.43	-0.06	–														
(3) Organizational tenure (years)	4.37	5.48	0.66**	–0.04	–													
(4) Tenure with supervisor (years)	2.36	2.85	0.40**	–0.02	0.57**	–												
(5) LMX (T1)	3.84	0.78	–0.03	0.15**	–0.10	0.05	(0.93)											
(6) LMX-Affect (T1)	3.82	0.95	–0.03	0.13**	–0.06	0.03	0.86**	(0.89)										
(7) LMX-Loyalty (T1)	3.83	0.95	–0.05	0.06	–0.05	0.09	0.85**	0.69**	(0.86)									
(8) LMX-Contribution (T1)	3.92	0.86	–0.03	0.12*	–0.06	0.07	0.75**	0.52**	0.50**	(0.84)								
(9) LMX-Professional respect (T1)	3.79	1.03	–0.05	0.17**	–0.13**	–0.01	0.85**	0.65**	0.62**	0.50**	(0.93)							
(10) Locus of control (T1)	3.61	0.56	0.14**	0.02	0.08	0.07	0.28**	0.27**	0.26**	0.21**	0.18**	(0.84)						
(11) Role clarity (T1)	3.73	0.83	–0.05	0.13**	–0.03	–0.01	0.39**	0.36**	0.33**	0.26**	0.33**	0.19**	(0.90)					
(12) LMX (T2)	3.66	0.83	0.01	0.17**	–0.01	0.07	0.63**	0.61**	0.53**	0.42**	0.53**	0.33**	0.25**	(0.93)				
(13) LMX-Affect (T2)	3.65	1.01	–0.04	0.15**	–0.06	–0.00	0.58**	0.64**	0.48**	0.33**	0.47**	0.29**	0.22**	0.87**	(0.89)			
(14) LMX-Loyalty (T2)	3.66	1.03	–0.01	0.12*	0.03	0.08	0.52**	0.51**	0.55**	0.32**	0.35**	0.29**	0.21**	0.86**	0.70**	(0.90)		
(15) LMX-Contribution (T2)	3.77	0.88	0.08	0.12*	0.05	0.12*	0.42**	0.33**	0.30**	0.48**	0.29**	0.26**	0.14**	0.74**	0.48**	0.53**	(0.81)	
(16) LMX-Professional respect (T2)	3.59	1.07	0.01	0.19**	–0.05	0.04	0.57**	0.53**	0.42**	0.30**	0.61**	0.25**	0.25**	0.86**	0.69**	0.62**	0.51**	(0.91)

*Ns = 422–424. T1, Time 1; T2, Time 2. Reliability coefficients are reported in parentheses along the diagonal. *p < 0.05; **p < 0.01.*

TABLE 3 | Results of moderated linear regression analysis for Time 2 overall LMX.

Step	Variable(s) entered	Model 1	Model 2	Model 3	Model 4
(1)	Time 1 LMX	0.64***	0.60***	0.60***	0.60***
	R^2	0.41***			
(2)	Time 1 Locus of control		0.17***	0.17***	0.17***
	ΔR^2		0.03***		
(3)	Time 1 Role clarity			–0.01	–0.00
	ΔR^2			0.00	
(4)	Time 1 Locus of control × Time 1 Role clarity				0.10**
	ΔR^2				0.01**

*LMX, leader–member exchange. Except for ΔR^2 rows, entries are standardized regression coefficients. Final model statistics: Model 1: F(1, 420) = 292.67, p < 0.001, R^2 = 0.41; Model 2: F(2, 419) = 161.86, p < 0.001, R^2 = 0.44; Model 3: F(3, 418) = 107.69, p < 0.001, R^2 = 0.44; Model 4: F(4, 417) = 83.71, p < 0.001, R^2 = 0.45, **p < 0.01; ***p < 0.001.*

significant and positive when Time 1 role clarity exceeded the standardized value of −0.42. Hypothesis 3b is thus supported. In contrast, as shown in **Table 4** (Model 4), controlling for Time 1 LMX-Contribution (β = 0.46, $p < 0.001$), Time 1 work locus of control did not interact with Time 1 role clarity to predict Time 2 LMX-Contribution (β = 0.06, *ns*), which disconfirms Hypothesis 3c. **Table 4** (Model 4s) also indicates that Time 1 role clarity does not moderate the relationship between Time 1 work locus of control and Time 2 LMX-Affect (β = 0.06, *ns*) and Time 2 LMX-Professional respect (β = 0.06, *ns*).

DISCUSSION

Based on a two-wave design that controlled for the autoregressive effects of overall LMX or its dimensions, this study demonstrates that subordinates with an internal work locus of control develop social relationships of a higher quality with their supervisor over time. As such, the present study provides strong evidence that subordinates' individual differences may act as major drivers of the development of LMX relationships. Moreover, this effect was found to be stronger when the work context offered the necessary conditions for such beneficial outcomes. Indeed, the relationship between internal work locus of control and LMX was stronger when individuals understood the expectations associated with their jobs (i.e., high role clarity). Such context allowed internals to be more confident in their ability to influence their environment, which enhanced their sense of agency. Using a dimensional approach to LMX, it was further found that only LMX's loyalty dimension was fostered by the interaction between work locus of control and role clarity, suggesting that internals were particularly effective at building on conditions of clearly defined job responsibilities to obtain a behavioral engagement from supervisors to defend their goals in the organization. Overall, this study advances research by identifying how employees' individual differences interact with features of the work context to build LMX relationships and which LMX dimensions are sensitive to this process. In the next sections, we discuss the implications of these findings for LMX research.

TABLE 4 | Results of the moderated linear regression analyses for Time 2 LMX dimensions.

		T2 LMX-Affect				T2 LMX-Loyalty				T2 LMX-Contribution				T2 LMX-Professional respect			
Step	**Variable(s) entered**	**M1**	**M2**	**M3**	**M4**	**M1**	**M2**	**M3**	**M4**	**M1**	**M2**	**M3**	**M4**	**M1**	**M2**	**M3**	**M4**
(1)	T1 LMX-Affect	0.65***	0.61***	0.62***	0.62***												
	T1 LMX-Loyalty					0.56***	0.52***	0.51***	0.52***								
	T1 LMX-Contribution									0.49***	0.45***	0.46***	0.46***				
	T1 LMX-Professional respect													0.62***	0.59***	0.58***	0.58***
	ΔR^2	0.42***				0.31***				0.24***				0.38***			
(2)	T1 Locus of control		0.13***	0.13***	0.13***		0.16***	0.16***	0.16***		0.17***	0.17***	0.17***		0.14***	0.14***	0.14***
	ΔR^2		0.02***				0.02***				0.03***				0.02***		
(3)	T1 Role clarity			-0.02	-0.02			0.01	0.02			-0.01	-0.01			0.04	0.04
	ΔR^2			0.00				0.00				0.00				0.00	
(4)	T1 Locus of control × T1 Role clarity				0.06				0.14***				0.06				0.06
	ΔR^2				0.00				0.02***				0.00				0.00

*LMX, leader–member exchange; M1, Model 1; M2, Model 2; M3, Model 3; M4, Model 4. Except for ΔR^2 rows, entries are standardized regression coefficients. Final model statistics, Model 4s: F(4, 417) = 80.44, $p < 0.001$, $R^2 = 0.44$ (T2 LMX-Affect); F(4, 417) = 57.29, $p < 0.001$, $R^2 = 0.36$ (T2 LMX-Loyalty); F(4, 417) = 38.25, $p < 0.001$, $R^2 = 0.27$ (T2 LMX-Contribution); F(4, 417) = 70.58, $p < 0.001$, $R^2 = 0.40$ (T2 LMX-Professional respect), ***$p < 0.001$.*

FIGURE 1 | Interaction between Time 1 work locus of control and Time 1 role clarity predicting Time 2 leader–member exchange (LMX), controlling for Time 1 LMX. Relationships are shown at 1 *SD* above and below the mean of Time 1 role clarity.

FIGURE 2 | Interaction between Time 1 work locus of control and Time 1 role clarity predicting Time 2 LMX-Loyalty, controlling for Time 1 LMX-Loyalty. Relationships are shown at 1 *SD* above and below the mean of Time 1 role clarity.

Theoretical Implications

Our research contributes to the LMX literature primarily in three ways. First, we provide new insights into how LMX develops by exploring the role of individual differences (i.e., internal work locus of control) as antecedents of LMX, thereby delving into a neglected area of research on LMX (Martin et al., 2005; Schyns, 2015). As such, we are taking a step away from leader-centric approaches that have usually focused on leader characteristics and behaviors to explain the development of LMX (Dulebohn et al., 2012). Our findings are in line with previous research that has consistently reported a positive relationship between internal work locus of control and LMX using cross-sectional designs (e.g., Martin et al., 2005; Harris et al., 2007; Kauppila, 2014; Hao et al., 2019). However, cross-sectional designs are known to provide weak evidence regarding the directional nature of relationships among variables. Establishing temporal precedence among variables and eliminating plausible alternative explanations like reverse causality can be better achieved by using two-wave designs where dependent variables are measured twice, allowing their baseline level to be controlled for Antonakis et al. (2010). Using that approach, we were able to show that

work locus of control acted as a driver of (change in) LMX relationships, thereby providing strong evidence that work locus of control temporally predicted how LMX relationships evolved over time. As such, our data provide support to the idea that dispositional characteristics such as work locus of control represent an important basis for the development of high-quality LMX relationships. In doing so, we heed the call of researchers who have invited researchers to use stronger designs (Dulebohn et al., 2012; Martin et al., 2016) in order to better understand how LMX relationships develop (van Breukelen et al., 2006), particularly as it comes to grasp the role of dispositional characteristics (Law et al., 2010).

Second, we highlight the importance of studying the contextual boundaries associated with the effects of work locus of control on LMX over time. This contextualized view is important to understand *when* these effects may take place. As such, our study shows that work locus of control influences LMX particularly well when role clarity is high. In contrast, when role expectations are unclear, the beneficial effects of an internal locus of control are hindered. Thus, the organizational context can help create the conditions that facilitate the development of high-quality LMX. Role clarity helps internals feel that they have control over, and the ability to act upon, their environment in order to establish constructive social exchange-based relationships with their supervisor. To the best of our knowledge, this study is the first to explore potential contextual boundaries associated with the relationship between work locus of control and LMX. In doing so, we extend prior research that has examined this relationship from a non-contextualized perspective and answer the call of prior researchers for considering moderators in the study of the effects of locus of control (Ng et al., 2006). Although the role of the work context has often been forgone in the LMX literature (Dulebohn et al., 2012), our research demonstrates that the context is an inherent element contributing to LMX development (van Breukelen et al., 2006). More broadly, the present study illustrates the value of adopting a combined person–situation approach to LMX relationships (Ozer, 2008).

Third, the present study offers a closer examination of LMX at the dimension level. Our results demonstrate that the main effect of work locus of control on change in LMX generalized to all dimensions of LMX (i.e., affect, loyalty, contribution, and professional respect), thereby revealing homologous relationships across construct and dimension levels of LMX (Wong et al., 2008). As such, employees with an internal work locus of control will be more prone to like, be loyal to, entertain professional respect perceptions of, and to be willing to help, their leader. This multidimensional approach uncovered that a specific "currency of exchange" (Law et al., 2010) may be more likely to emerge depending on the nature of the antecedents and contextual boundaries at play. Indeed, at the dimension level, only the loyalty dimension of LMX was impacted by the interaction between work locus of control and role clarity. Thus, when the work context allows internals to feel in control and to have a heightened sense of agency, they may be more inclined to demonstrate concrete behaviors of support toward their leader and have him or her engage in defending their interests and goals. This finding indicates that the adoption of a dimensional perspective to LMX can help identify which dimensions of the construct can be influenced by work locus of control as a function of the work context (i.e., clarity of role expectations).

Contrary to Hypothesis 3c, LMX's contribution dimension was not responsive to the interaction between work locus of control and role clarity. Ergo, internals are more prone to invest energies in the dyad's goals independently of the level of role clarity. This might be because, as research has shown, internals tend to have high task-related motivation (Henson and Beehr, 2018) and job performance (Ng et al., 2006; Wang et al., 2010), which may generalize across contexts. Thus, by taking a dimensional approach to LMX, we were able to disentangle the roles of different exchange components that underlie LMX to better understand the processes that create high-quality relationships with supervisors. Since most studies have adopted a unidimensional view of LMX (Dulebohn et al., 2017; Tse et al., 2018), it is plausible that researchers have missed specific dimension-level relationships that would have helped uncover the intricate antecedents and effects of LMX (Greguras and Ford, 2006; Wong et al., 2008; Tse et al., 2018). Multiple researchers (e.g., Zhou and Schriesheim, 2010; Schyns, 2015; Martin et al., 2016) have proposed that future research should differentiate among LMX dimensions and focus on specific exchange elements to gain a more accurate picture of how LMX relationships come about and how they affect organizational outcomes. As such, this study is an endeavor to take a step toward the multidimensional approach LMX researchers ought to take to further our understanding of leader–member relationships.

As it relates to the extent to which an individual is affected by external factors, the plasticity hypothesis (Brockner, 1988) brings an interesting perspective to our findings. This hypothesis stipulates that individuals with fewer internal resources (e.g., possessing an external work locus of control) react more strongly to cues from the external environment (e.g., role clarity) because the external context would provide needed resources (Fernet et al., 2010). As our argumentation suggests that internals are more responsive to the external environment (e.g., role clarity) because the external context allows them to gain control over events and eases their sense of agency, it is at odds with the plasticity hypothesis. Nonetheless, the plasticity hypothesis assumes that individuals differ in the importance they attribute to interpersonal relationships (Fernet et al., 2010) and on the extent to which they rely on external cues to derive their attitudes and behaviors (Pierce and Gardner, 2004). As such, internals, who may be less affected by their social environment (Pierce and Gardner, 2004), would rely more on their own dispositions to influence the context. This would explain why internals' sense of agency plays an important role in the development of LMX relationships.

Practical Implications

Given the obvious importance of an employee's relationship with his or her supervisor, a richer understanding of the drivers and dynamics of this relationship can lead to better organizational practices. Maximizing efforts to promote the development of high-quality LMX relationships can lead to beneficial outcomes

for individuals and organizations, including enhanced job satisfaction, organizational commitment, job performance, and reduced turnover (Dulebohn et al., 2012). Therefore, it may be beneficial to leaders to understand the nature of employees' work locus of control (i.e., internal vs. external) and its effects. In doing so, either through feedback from survey results or verbal questioning, leaders may get this knowledge and build on it to make the best of employees' personality. For example, they should make sure that employees with an internal work locus of control develop a clear understanding of their job responsibilities, which will help them gain the autonomy they desire to build a better relationship with the leader. Indeed, as shown in this study, ambiguity regarding role expectations hinders the potential benefits internals can get from the work context. Internals achieve better results in the workplace essentially because they invest time and energies to attain valued goals (Wang et al., 2010; Galvin et al., 2018). However, if they are not aware of what is expected of them and what means are available to achieve work goals, they may decide to flee such situations (Spector, 1982). Moreover, as work locus of control has been shown to have important motivational and attitudinal consequences, including enhanced LMX relationships in the current study, organizations would be well advised to include the assessment of this trait in recruitment and selection practices (Lam and Schaubroeck, 2000). For example, as internals possess a strong need for achievement (Spector, 1988; Galvin et al., 2018) and were shown in this study to develop stronger LMX relationships, organizations may benefit from hiring employees that exhibit an internal work locus of control. While doing so, organizations should be aware that providing these employees with clear expectations regarding their work role would increase the benefits of recruiting them. Similarly, the benefits of hiring internals would be increased in jobs requiring complex information processing (Spector, 1982) and in those where employees work closely with their supervisor when completing work duties.

On the other hand, one must not forsake employees with external work locus of control. As the present findings indicate, these people have a harder time developing high-quality LMX relationships. Presumably, their sense of agency is lower compared to internals, hence they are less likely to be confident that their behaviors can influence the relationship with the supervisor. Therefore, leaders may want to reinforce externals' sense of control by empowering them and help them envision how their actions can alter their environment in a direction that results in achievable outcomes (e.g., task performance) (Lam and Schaubroeck, 2000). For instance, managers could provide more direct support to externals so as to help them maintain and develop constructive work relationships with supervisors, thereby instilling self-efficacy beliefs and the sense that they can obtain valued rewards and outcomes in the workplace (Lam and Schaubroeck, 2000). Managers should also be aware that they may have to invest more time and resources to instill a sense of control among externals. Similarly, leaders should ensure that externals are aware of the criteria and expectations they hold to help their relationship be constructive and grow over time. By clarifying how such contingencies ultimately lead to stronger performance, leaders would help externals be more confident in what actions can be done to foster LMX relationships. Moreover, as role clarity does not particularly help externals in developing LMX relationships, leaders should rely on their own communication efforts to build externals' sense of agency (Lam and Schaubroeck, 2000; Ng et al., 2006). Such efforts should target externals' understanding of the links between their own actions and desired outcomes.

Limitations and Future Research Directions

Despite its strengths, this study is not without limitations. First, all measures were self-reported. Thus, results might be subject to common method variance (Podsakoff et al., 2012). However, interaction effects are known to be unaffected by a positive method bias (Siemsen et al., 2010), suggesting that the moderating effects of role clarity are robust. Still, we took steps to reduce method variance effects by collecting data at two separate times using a 6-month time lag and we controlled for baseline levels of our outcomes (i.e., overall LMX or LMX dimensions), which is known to considerably reduce endogeneity effects (Podsakoff et al., 2003; Ployhart and Vandenberg, 2010). Future extensions of this study could use similar longitudinal designs to include the consequences of LMX. It would indeed be interesting to examine the indirect effect of work locus of control on change in LMX outcomes, such as affective organizational commitment or even job performance, as well as the potential moderating effect of role clarity on these relationships. This would also allow exploring how LMX dimensions play out as distinct mediators between work locus of control and LMX outcomes.

Second, as a single source of data was used for LMX, only the employee's perspective was considered, not the supervisor's perception of LMX. As such assessments refer to dyadic relationships, it would be of interest to consider both partners' views since supervisors and employees may evaluate the relationship using different aspects of LMX (Schyns and Wolfram, 2008; Zhou and Schriesheim, 2010). However, as we focused on the individual difference variable of work locus of control, we still believe that the employees' point of view of the relationship was particularly important. The next step would be to use a supervisor-rated measure of LMX in order to grasp how supervisors' perception of the relationship relates to, or is affected by, employees' work locus of control. As such, further research could measure LMX from both perspectives to examine whether different dimensions of LMX are affected by the employee's work locus of control across rating sources. Indeed, the potential divergence among supervisors' and subordinates' perceptions has been understudied in the LMX literature (Gooty and Yammarino, 2016). Since the level of agreement between rating sources may be lower vs. higher depending on the dimension of LMX that is considered (Sin et al., 2009), an interesting research avenue would also be to seek to identify which factors can explain diverging perceptions on LMX dimensions (Liden and Maslyn, 1998).

Third, by focusing on the individual characteristics of employees, this study has forgone how the individual traits of supervisors come into play. To have a more complete picture of the dyadic relationship, it would be worth exploring how the

employees' dispositions interact with supervisors' dispositions since relatively little is known about the relative influence of leaders' and followers' traits in LMX development (Dulebohn et al., 2012). As some studies have begun to evaluate how the similarity and the compatibility among leaders' and subordinates' characteristics influence the quality of their relationships (e.g., Nahrgang and Seo, 2015), it might be insightful to examine how employees' work locus of control interacts with supervisors' own work locus of control to influence the development of LMX and how such interaction affects LMX outcomes (Galvin et al., 2018).

Fourth, while our sample included participants from multiple industries and various types of organizations, indicating that our results can be applicable to a large variety of jobs, there are some limitations to the generalizability of our results. For instance, our sample comprised 75% women. As we controlled for the baseline levels of the outcomes (e.g., LMX and its dimensions), thereby predicting change in the outcomes across time, potential confounding effects by gender (and other factors) are limited. However, it might be interesting to replicate our study to examine the generalizability of the results to the larger working population. Moreover, our data were collected in an individualistic country, which makes the generalizability of our results to collectivistic countries uncertain. Cultural values may indeed influence how individual characteristics are enacted and how employees' relationships with their leader develop (House et al., 2004; Rockstuhl et al., 2012). For example, a culture with a performance orientation can represent a more thriving environment for internals because their need for achievement would be particularly valued. In contrast, a power distant culture may reduce opportunities for upward mobility, which may limit internals' potential for getting ahead and make their sense of agency less effective. As power distance promotes respect for authority, and tends to be associated with a collectivistic culture, LMX relationships in such cultures may be more affected by role-based loyalty and obligations (Rockstuhl et al., 2012). Thus, individual dispositions (i.e., work locus of control) may be less relevant to the development of high LMX relationships in collectivistic cultures. Further inquiry is warranted to understand how LMX relationships develop in different cultures.

DATA AVAILABILITY STATEMENT

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Research Ethics Board (REB) of HEC Montreal. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

CV designed the study. VR collected the data. Both authors developed the theoretical framework for the study, wrote the manuscript altogether, collaborated in developing the manuscript, read and approved the submitted version, and performed the data analyses.

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The Role of Change in the Relationships Between Leader-Member Exchange/Coworker Exchange and Newcomer Performance: A Latent Growth Modeling Approach

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This study examines whether and how the qualities of newcomers' interpersonal relationships [i.e., leader-member exchange (LMX) and coworker exchange (CWX)] relate to their initial performance and how changes in the qualities of these relationships relate to the changes in performance. To test a latent growth model, we collected data from 230 newcomers at six time points over a 6-week period. The results showed that LMX quality is positively related to initial newcomer performance; however, changes in LMX quality are not statistically significantly related to changes in newcomer performance. In contrast, an increase in CWX quality is positively related to newcomer performance improvement, but the initial quality of CWX does not predict newcomer performance. Furthermore, newcomers' psychological entitlement moderates the relationship between LMX quality and newcomer performance; newcomers' conscientiousness moderates the relationship between increases in CWX quality and improvements in newcomer performance. The findings increase our understanding of the newcomer exchange relationship-performance link over time and suggest that future newcomer socialization research explore the initial level of and the changes in these relationships simultaneously.

Keywords: leader-member exchange relationship, coworker exchange relationship, newcomer performance, psychological entitlement, conscientiousness

INTRODUCTION

Organizational socialization, which is at its most intense in the initial weeks and months after entry (Van Maane and Schein, 1979), is the process by which new employees acquire the knowledge and skills needed to perform their role and function effectively in the new environment (e.g., Allen et al., 2017). The early experiences of new employees are pivotal for determining their subsequent job attitudes and behaviors and whether they will remain with the organization (e.g., Bauer et al., 2007; Saks et al., 2007). Research highlights that employee socialization is influenced, to a large extent, by the relationships that employees develop in these early stages of

organizational entry (e.g., Fang et al., 2011). In this regard, previous research has identified "organizational insiders," such as leaders and coworkers, as key socializing agents (e.g., Ostroff and Kozlowski, 1992; Nifadkar et al., 2012). For instance, leaders, as supporters, provide knowledge and feedback to help the newcomers master work tasks and clarify their role identity (Jokisaari, 2013); coworkers as collaborators, communicate, coordinate, and cooperate to accomplish the tasks (Kelly and McGrath, 1985; Gersick, 1988, 1989; Ganegoda and Bordia, 2019). For newcomers, developing better interpersonal relationships allows better adjustment to life in a new organization (Saks and Gruman, 2012). Among other traditional outcomes (e.g., job satisfaction and commitment), we propose that newcomer performance could be the objective form of newcomer adjustment, as higher performance indicates a better adjustment to this job role.

Building on the argument that newcomers are socialized largely through interpersonal interactions with organizational insiders (Ashforth et al., 2007; Kammeyer-Mueller et al., 2013), previous research provides empirical support for a positive association between newcomer relationships with such insiders and their adjustment and performance (e.g., Liden et al., 1993; Major et al., 1995; Chen and Eldridge, 2011; Sluss and Thompson, 2012). However, to date, most of this research has focused on the relationship between newcomers and their supervisors, assuming that supervisors are the most influential source of localized socialization for newcomers (Ashforth et al., 2007; Sluss and Thompson, 2012). In contrast, there is a relative paucity of research exploring the role that coworker relationships play in newcomer socialization. Thus, while it is important to consider how vertical relationships (e.g., with one's supervisor) can impact newcomer adjustment, the salience of that topic in the current literature somewhat diminishes the importance of horizontal relationships that exist among coworkers and work teams (Banks et al., 2014).

Drawing upon social exchange theory (SET; Blau, 1964; Coyle-Shapiro and Conway, 2004), we suggest that newcomers' relationships with their leader and coworkers will have important consequences for their performance and that employee conscientiousness and psychological entitlement will moderate these effects. Our research contributes to the newcomer socialization literature in three main ways. First, we explore the relative effects of LMX and CWX in influencing newcomer performance. While previous research has demonstrated the effects of either LMX or CWX on newcomer adjustment, the current research explores the concurrent effects of both horizontal and vertical exchanges. For organizations, knowing where to focus their resources during newcomers' organizational entry is crucial. Our research contributes by extending the understanding of the relative effects of LMX and CWX on newcomer performance.

Second, our study provides an investigation of the change patterns of LMX and CWX during newcomers' early socialization process, and thus contributes to revealing the dynamic process of newcomer socialization and performance. Organizational socialization, by its very nature, is a dynamic process whereby newcomers adjust to and integrate within the organization (Allen et al., 2017). As far back as 1986, Fisher (1986, p. 103) noted that "socialization is a dynamic process in which individuals and organizations change over time. Many studies have failed to handle the time dimension appropriately." Despite this call being made over 30 years ago, a recent review of the organizational socialization literature (Allen et al., 2017) highlights that the failure to capture the dynamics of organizational socialization continues to be a major limitation of the literature. Although some research has considered both LMX and CWX as temporal frames of reference (Nahrgang et al., 2009; Guarana and Barnes, 2017), few studies have examined the interpersonal relationships that impact newcomer adjustment not only in terms of levels but also changes. Indeed, the level and the change of the qualities of LMX and CWX may often produce different forms of variance, which may capture unique information that is not accounted for in a single perspective (Ployhart and Vandenberg, 2010). Therefore, the present research adds to the literature by examining the longitudinal effects of LMX and CWX on newcomer performance during organizational socialization. Using latent growth modeling, we address calls to better understand the dynamics of both organizational socialization (e.g., Allen et al., 2017) and LMX (e.g., Castillo and Trinh, 2018). This research design allows us to examine how LMX/CWX predicts newcomer performance and trajectories of change in these constructs.

The third contribution made by this current research is to uncover the role that employee personality plays in shaping the effects of LMX and CWX on newcomer performance. To date, there is a lack of understanding around whether contextual factors exist that may help explain when LMX and/or CWX is more likely to influence newcomer performance. Building on social exchange theory and previous research, we argue that employees' level of psychological entitlement and conscientiousness will moderate the effects of LMX and CWX. Thus, whereas previous research has assumed that a high-quality relationship with one's leader and coworkers will be beneficial for newcomer adjustment (e.g., Sluss and Thompson, 2012), we argue that this relationship will be influenced by followers' personality.

THEORETICAL DEVELOPMENT

The early period of organizational socialization among newcomers is contingent on the interaction between the newcomers and organizational insiders (i.e., supervisors and coworkers). Such interactions and exchanges shape newcomers' knowledge and understanding of the job, role, group environment, and organizational culture (e.g., Slaughter and Zickar, 2006; Li et al., 2011). Past research has demonstrated that during the early stage of socialization, newcomers feel uncertainty about their surroundings (Ellis et al., 2015), which can be reduced by the positive interpersonal exchange relationships (i.e., LMX and CWX; Major et al., 1995). Several studies have revealed that the quality of LMX is positively associated with favorable outcomes during socialization (Dulebohn et al., 2012; Martin et al., 2016). Although more recent studies have noted the significant role coworkers play in the organizational life

(Baker and Omilion-Hodges, 2013; Omilion-Hodges et al., 2016; Omilion-Hodges and Ackerman, 2018), no study has yet explored the relative effect of LMX and CWX on newcomer performance. In addition, past studies have typically focused on interpersonal relationships cross-sectionally, neglecting the change in those variables and whether or how those changes influence the outcomes. The research of Nahrgang et al. (2009) assessed the quality of LMX over repeated timepoints and concluded that LMX quality changed considerably over a period of 8 weeks; however, it did not consider how newcomer performance will fluctuate with LMX quality. Although newcomer performance fluctuates during the early period of socialization (Chan and Schmitt, 2000), far less research has examined the dynamic nature of newcomer socialization and the specific impact of leaders and coworkers on newcomer performance. Therefore, our study examines whether and when the quality of interpersonal exchange relationships that a newcomer develops with leaders (LMX) and coworkers (CWX) simultaneously and relatively influence newcomer adjustment in a parallel fashion.

Scholars have increasingly adopted a SET (Blau, 1964) lens to understand how interpersonal exchange relationships in work settings influence workplace behavior (e.g., Lee et al., 2019a). SET is built on the principle of reciprocity (Gouldner, 1960) and posits that individuals will feel compelled to reciprocate a positive exchange from another individual. Based on this, Lyons and Scott (2012) investigated "homeomorphic reciprocity," in which one party initiates a favorable interaction (e.g., being helpful), and the other party also behaves favorably (e.g., being helpful), and similarly, unfavorable behaviors (e.g., being harmful) also begets behave unfavorable behavior (e.g., being harmful). The concept emphasizes the matching exchange between the two parties (Cropanzano et al., 2017). As such, the better the perceived quality of the LMX/CWX relationship, the more determined individuals are to invest in the social exchange relationship. As one initiates the exchange in kind, the other party reciprocates, and the relationship deepens, generating a self-reinforcing cycle (Cropanzano and Mitchell, 2005; Cropanzano et al., 2017). Accordingly, when a follower receives favorable treatment from their leader or coworker, it should create feelings of obligation to repay the other party by exerting increased effort as a means of reciprocation. This effort, in turn, should enhance followers' task performance. These arguments are well-supported by growing empirical work highlighting the positive association between LMX quality and follower performance (e.g., Dulebohn et al., 2012; Martin et al., 2016).

LMX and Newcomer Adjustment

Newcomers lack organizational experience and are required to simultaneously master their tasks and comprehend their role responsibility in a short period of time (Saks and Gruman, 2012). Leaders, as the formal authority in the organization, serve as a main channel for newcomers to learn about the job and the organization (e.g., Major et al., 1995; Jokisaari, 2013). More importantly, leaders can be flexible about the responsibilities they delegate and the work they assign. Compared to newcomers with low-quality of LMX, their counterparts with high-quality LMX can access more vertical resources (Tse and Dasborough, 2008; Fang et al., 2017). For example, when employees first enter a new organization, they normally feel uncertain about work and seek more referent information (e.g., about their job responsibilities), which may be best provided by their immediate supervisors who determine their job description. High-quality exchanges between leaders and newcomers facilitate the enquiry in this vertical relationship and clarify the role's responsibilities. Moreover, such frequent communications about work can also strengthen the newcomers' communicative relationships (Omilion-Hodges and Ackerman, 2018). Studies have also shown that high-quality exchanges can increase newcomers' and leaders' ability to adopt each other's perspectives (Parker and Axtell, 2001; Ganegoda and Bordia, 2019). In doing so, newcomers are more likely to understand leaders' expectations and execute tasks accordingly and effectively. More importantly, SET demonstrated that exchange goods are not limited to information (such as referent information about their own job responsibility), but also affect other elements (such as friendship; Homans, 1958; Omilion-Hodges et al., 2016). Frequent transactions and communications may generate a sense of mutuality and having an obligation to reciprocate. Previous research has shown that newcomers who perceive that they have high-quality LMX have a sense of relatedness and belonging beyond the employment contract (Ellis et al., 2019). All these feelings motivate the newcomers to work harder and feel obligated to repay leaders' kindness (Sluss and Thompson, 2012; Ellis et al., 2019). Meta-analyses across cumulative studies demonstrated that LMX quality is positively related to job performance (Dulebohn et al., 2012; Martin et al., 2016).

Despite the increasing empirical evidence supporting the association between LMX and job performance cross-sectionally, it is still unclear whether changes in the quality of LMX are related to changes in newcomer performance. Previous research has demonstrated the dynamic nature of LMX in the first few months of the relationship (Nahrgang et al., 2009). Thus, LMX quality may fluctuate greatly in the early stages of organizational entry. The effects of such changes on newcomer performance are not known. According to SET (Cropanzano and Mitchell, 2005; Cropanzano et al., 2017), the benefits (consequences from the high-quality exchange) could generate self-enforcing cycles. Integrating this knowledge with the dynamic nature of newcomer socialization, we argue that when newcomers' perceptions of the quality of LMX increase over time, newcomer performance is more likely to improve over time. With increasing LMX quality, newcomers may feel increased trust and support from leaders, which should generate increased feelings of obligation to reciprocate. Such obligation could encourage them to put more effort into work and thus translate to high job performance levels (Lee et al., 2019a). In contrast, if LMX quality decreases, it will be accompanied by decreased performance levels over time. Given the exchange of interpersonal relationships based on homeomorphic reciprocity (Cropanzano et al., 2017), if newcomers experience a decline in the quality of LMX, they may interpret this as an unfavorable exchange. Past research

has demonstrated that poor interpersonal behavior results in detrimental behaviors (Andersson and Pearson, 1999; Lyons and Scott, 2012). More importantly, if leaders, as the formal authorities and direct supervisors, engage in poor interpersonal behavior, newcomers are more likely to be confused by this fluctuation with respect to the quality of LMX and start to feel uncertain about their jobs, thus leading to a decrease in their job performance. Therefore, we expect that the quality of LMX will be associated with newcomer performance both initially and as it changes over time.

H1a: The quality of LMX is positively related to the initial level of newcomer performance.
H1b: Increases in the quality of the LMX relationship are positively related to increases in the level of newcomer performance.

Moderator: Psychological Entitlement

Social exchange theory emphasizes that individual exchanges do not produce invariant reciprocity because individuals can vary in valuing the rule of reciprocity (Cropanzano and Mitchell, 2005; Love and Forret, 2008; Lee et al., 2019a). Whether or not a high-quality LMX promotes newcomer performance depends on the newcomers' perspective on this relationship and the value they place on the rule of reciprocity. Psychological entitlement is an individual difference variable that captures the interest in power and inflated self-deserving minds. Psychological entitlement refers to an individual's belief that they deserve more without consideration of actual contributions (Snow et al., 2001; Naumann et al., 2002; Harvey and Martinko, 2009; Lange et al., 2019). Psychological entitlement is a dominance-oriented personality trait (Lange et al., 2019). Highly entitled people have an inflated sense of their own power and prestige, so in a vertical relationship with the leaders, they may be less likely to consider themselves subordinates. Previous research has demonstrated that, compared to those with low psychological entitlement, employees with high psychological entitlement do not feel as high a level of obligation to their leaders even when LMX quality is perceived as higher than that of their coworkers (Lee et al., 2019a).

Highly entitled newcomers focused more on the achievements or the gains of all the workers. Because they feel more deserved than other people, they are inclined to pay more attention to the privileged status they think they deserve (Lee et al., 2019b) and less attention to actual job performance. More importantly, as LMX quality increases, leaders may provide more critical feedback to the followers to improve the performance. However, critical feedback may challenge newcomers' positive self-image. Such a challenge may lead to disputes with their leaders and the inability to take feedback or advice seriously due to their self-serving mindset (Harvey and Martinko, 2009), which ultimately leads to poor performance.

Newcomers with a high level of psychological entitlement are more likely to lack the cognitive capacity to build an unbiased self-image (Harvey and Martinko, 2009; Harvey and Dasborough, 2015). This is also the reason that entitled individuals can maintain their inflated self-perceptions despite the objectively negative evidence. Therefore, when highly entitled newcomers experience a decrease in LMX, they are more likely to attribute this to their supervisors' having a biased perspective. The research of Harvey et al. (2014) showed that highly entitled employees are more likely to perceive themselves as victims of abusive supervision. They may consider this to be abusive supervision, thus leading to a decrease in newcomer performance. Overall, we propose that psychological entitlement moderates the relationship between increases in LMX quality and the increases in newcomer performance.

H2a: Psychological entitlement will attenuate the positive relationships between the initial quality of LMX and the initial level of newcomer performance.
H2b: Psychological entitlement will attenuate the positive relationships between changes in the quality of LMX and changes in newcomer performance.

CWX and Newcomer Adjustment

As highlighted in the previous section, leaders play a vital role during the newcomer socialization period. However, scholars found that newcomers' relationships with coworkers play a more important role than our previously assumed (Takeuchi et al., 2011; Nifadkar and Bauer, 2016; Omilion-Hodges et al., 2016; Omilion-Hodges and Ackerman, 2018). Thus, in the present study, we also investigated the effect of CWX on newcomer adjustment.

Even though leaders have formal resources that only they can offer, coworkers are also key for newcomers' adjustment to the organization and their role within it. With high quality CWX, newcomers may receive timely and referent information about their role in the organization and improve their task performance in a shorter time period. Past research on CWX showed that employees with high-quality CWX perform better due to their superior understanding of their role on the team (Chen et al., 2013). In team settings, many tasks require interdependence and rely on collaboration among team members (Wageman, 1995; Fang et al., 2017). Coworkers, as social models for newcomers, can provide newcomers with subtle and informal norms that leaders may not well understand, as they approach their team from a leader's perspective (Wang et al., 2015). High-quality CWX facilitates the socialization process through an atmosphere of congenial teamwork and effective cooperation, which can be better leveraged to yield a more efficacious adjustment. For instance, the research of Banks et al. (2014) pointed out that high-quality CWX facilitated collaboration within a team. Korte (2010) also revealed that high-quality CWX forms a spirit of camaraderie among coworkers and helps newcomers work through difficult tasks or unmet negative expectations in work. Moreover, the support that newcomers obtain from high-quality CWX can facilitate the newcomer socialization process. High-quality CWX can provide both tangible (e.g., transmit information and resources) and intangible support (e.g., emotional support; Chiaburu and Harrison, 2008). For instance, Tews et al. (2013) pointed out that high-quality coworker relationships serve as a buffer to help newcomers deal with uncertainty.

In addition to the work environment, collaborations and exchanges between newcomers and their coworkers may boost the newcomers' confidence at work. Being a new employee, newcomers should be eager to gain acceptance at work. Newcomers with high-quality CWX are more likely to feel accepted and empowered by their coworkers. Because newcomers are likely to work near or close to their coworkers daily, they need additional and more frequent assistance from and cooperation with their coworkers. They may be more eager to reciprocate their coworkers' efforts both immediately and later on. In line with our theorizing above, we further propose that newcomers experiencing an increase in CWX quality see an improvement in job performance as well. For example, an increase in CWX quality provides newcomers with more organizational information (e.g., about the organization's social, economic, and political environment) and a stronger foundation for collaboration and achieves an increase in newcomer performance. According to SET (Cropanzano and Mitchell, 2005; Cropanzano et al., 2017), once two parties start an exchange, positive patterns will be generated, and more rounds of reciprocation will occur. These reinforcing reciprocated rounds develop an atmosphere of congenial teamwork and facilitate collaboration. Furthermore, newcomers' increases in CWX quality may lead to an increase in their positive affect, which may lead to deposits in a psychological capital bank. Previous research has demonstrated that an increase in psychological capital is positively related to job performance (Peterson et al., 2011). Therefore, we argue that not only that high-quality CWX has a positive effect on newcomer performance initially but also that this association continues over time.

H3a: The quality of the CWX relationship is positively related to the initial level of newcomer performance.
H3b: Increases in the quality of the CWX relationship are positively related to increases in the level of newcomer performance.

Moderator: Conscientiousness

Although newcomers can benefit from the horizontal exchange relationship with their coworkers, there are still certain newcomers who may not have the sense to learn from or make efforts to collaborate with their coworkers. Conscientiousness refers to the tendency to be reliable, responsible, and self-disciplined and to act according to one's conscience (McCrae and John, 1992). Compared to less conscientious employees, highly conscientious employees present higher levels of emotional intelligence (Petrides and Furnham, 2001) and pay more attention to the relationship building (Roberts et al., 2009), which enhances trust and a friendly working atmosphere and facilitates team coordination. Therefore, we argue that a newcomer with high conscientiousness will be more likely to behave effectively at work when he or she has a better exchange relationship with his or her coworkers.

Highly conscientious people tend to devote more effort to perspective taking and appreciate the quality of relationships (Petrides and Furnham, 2001; Roberts et al., 2009). As time progresses, newcomers build higher-quality CWX relationships, and those who are high in conscientiousness are more likely to understand their coworkers' points of view and take their coworkers' advice, which facilitates the cooperation at work. Conversely, newcomers who are low in conscientiousness are less sensitive regarding the guidance and help from the coworkers (Greenhaus and Powell, 2006; Witt and Carlson, 2006). As they do not value the resources that coworkers provide, they are less likely to benefit from high-quality CWX. Moreover, newcomers with low conscientiousness and high-quality CWX may complain with their coworkers when they encounter obstacles instead of looking for professional help (Love and Forret, 2008). The research of Love and Forret (2008) showed that newcomers with high-quality CWX may not have a positive work attitude under troublesome circumstances. Hence, newcomers with low conscientiousness weaken the relationship between the quality of CWX and newcomer performance.

We further explore the potential moderation of conscientiousness in the relationship between the changes in CWX and the changes in newcomer performance. First, compared to less conscientious people, conscientious individuals tend to pay more attention to relationship goals, which focus on building high-quality relationships with others (Roberts et al., 2004, 2009). When newcomers experience an increase in CWX quality, they appreciate the comradeship formed with their coworkers. Thus, they devote more effort to accomplishing tasks more effectively and strengthening their comradeship. Second, conscientiousness pertains to a person's integrity at work. Highly conscientiousness newcomers do not take the increased quality of their CWX for granted, and they repay their coworkers with highly efficacious group work. Therefore, conscientiousness is likely to impact the efficacy of CWX as a help-eliciting, reciprocal exchange process. Specifically, the beneficial effects of CWX on newcomers' job performance are reciprocal-dependent. To the extent that highly conscientious newcomers have more alertness regarding the reciprocal exchange process, conscientiousness is likely to attenuate the hypothesized link between the increase in CWX and newcomer performance.

H4a: Conscientiousness will strengthen the positive relationships between initial CWX quality and initial level of newcomer performance.
H4b: Conscientiousness will strengthen the positive relationships between changes in CWX quality and changes in newcomer performance.

MATERIALS AND METHODS

Sample and Procedures

We collected repeated measures from newcomers in high-tech firms. A random sample of 350 newcomers who had first been employed by the firm less than 6 months previously was selected for this research. All the newcomers worked on product development and improvement teams. HR representatives explained to the prospective participants that they would complete six waves of surveys at 6-week intervals. By adopting this longitudinal design, we were able to observe meaningful changes in newcomers'

LMX and CWX relationships and in their performance. Initially, their immediate supervisors were also contacted to assess the newcomers' performance. The surveys were conducted online. At the end of each week, the participants received an email from the online system to alert them to complete the survey. The surveys were coded to allow us to match the participants across time. After the 6 weeks, we matched the six waves of data and skimmed them for possible abnormal response patterns. No such patterns were found.

At Time 1 (week 1), 350 newcomers were surveyed (we also asked their 70 immediate supervisors to assess their performance); 301 newcomers (representing a response rate of 86% of the full sample), and 61 supervisors completed surveys (representing a response rate of 87% of the full sample). At Time 2 (week 2), we sent the survey to all 301 newcomers who had previously responded and to their immediate supervisors. However, some of the newcomers had already left the original companies, and some of the supervisors did not respond. Thus, we obtained only 279 newcomer responses (80% of the full sample) and 56 supervisor responses (80% of the full sample). Then, in the 3rd week (Time 3), due to the aforementioned reasons, we received 261 completed responses from newcomers (75% of the full sample) and 53 supervisor responses (76% of the full sample). In the 4th week (Time 4), 249 newcomers and 50 supervisors filled out the surveys (71% of the full sample for newcomers; 71% of the full sample for supervisors). In the 5th week (Time 5), 237 newcomers and their supervisors participated (68% of the full sample). Finally, in the 6th week (Time 6), a total of 230 newcomer responses were received (66% of the full sample) and 46 supervisor responses were received (66% of the full sample). These high response rates were attributed to the encouragement provided by HR department and the salient value of our research topic (Roth and BeVier, 1998).

The average age of newcomer respondents was 25.56 years old (SD = 1.89). Forty percent of newcomer respondents were female. Additionally, 20.5% of newcomer respondents had diplomas (a 3-year high school), 49.5% of newcomer respondents had college degrees, and 30% had more advanced qualifications. Approximately 67% (66.8%) of the supervisor respondents were male; they averaged 37.8 years old (SD = 4.5). Additionally, 8.8% had diplomas, 56.2% of supervisor respondents had college degrees, with the remaining 34.0% holding more advanced qualifications.

Measures

All measures that we used were originally developed in English. Although we collected our data in China, we strictly followed the translation and back-translation procedures of Brislin (1986).

Leader-Member Exchange Relationship

We used the 5-point Likert scale, LMX-7 scale developed by Graen and Uhl-Bien (1995). We asked the participants to describe to, during the past week, what kind of relationship they perceived that they had with their leader. A sample item was "During the past week, how would you characterize your working relationships with your leader?" Coefficient alpha for the scale was 0.88.

Co-worker Exchange Relationship

We adopt the LMX-7 measure (Graen and Uhl-Bien, 1995). The items were modified to reference one's relationship quality with their coworkers instead of their supervisors. A sample item was "During the past week, how would you characterize your working relationship with your co-worker?" Coefficient alpha for the scale was 0.89.

Psychological Entitlement

Psychological entitlement was measured at the beginning of the data collection (at the Time 1) using the scale developed by Campbell et al. (2004). The scale contains nine items. The participants were asked to indicate the extent to which the items reflected their own beliefs. A sample item was "I demand the best because I'm worth it." Coefficient alpha for the scale was 0.92.

Conscientiousness

Conscientiousness was measured at Time 1 using nine items taken from the Big Five scale from John and Srivastava (1999). The participants were asked to indicate the extent to which they agreed with the statement. A sample item was "I see myself as someone who is a reliable worker." Coefficient alpha for the scale was 0.91.

Job Performance

We measured job performance by using the scale from Liden et al. (1993). We asked the participants' immediate supervisor to assess his/her performance. The scale consisted of four items, including "Rate the overall level of performance that you observe for this member," "This member is superior (so far) to other new subordinates that I've supervised before"; "What is your personal view of this member in terms of his or her overall effectiveness?"; "Overall, to what extent do you feel this member has been effectively fulfilling his or her roles and responsibilities?" Coefficient alpha for the scale was 0.83.

Control Variables

We controlled gender, age, and education.

Analyses

We analyzed the data using a latent growth modeling (LGM) approach (McArdle, 2009) using R (lavaan package; R Core Team, 2015). The LGM approach is able to provide us the tool to directly observe the relationships among the changes of the variables. To access the fit of all models, we examined the chi square, the comparative fit index (CEI), the Tucker-Lewis index (TLI), the standardized root mean square residual (SRMR), and the root mean square of error of approximation (RMSEA). For the model fit, RMSEA $\leq$ 0.05 and SRMR < 0.08 represent an absolute model fit (Bollen, 1989; Browne and Cudeck, 1993; Marsh et al., 2004).

RESULTS

Table 1 presents descriptive statistics and intercorrelations for observed variables.

First, we examined whether focal study measures differ from each other at each of the six measurement occasions by a series of confirmatory factory analyses. The results, presented in **Table 2**, indicated that the hypothesized three-factor model (LMX, CWX, and job performance) provided an adequate fit to the data at each of the measurement waves (T1–T6):χ^2[132] ranges from 123.37 to 153.19, goodness-of-fit (CFI) ranges from 0.99 to 1.00, TLI ranges from 0.99 to 1.00, RMSEA ranges from 0.00 to 0.03. The evidence shows the repeated measures were distinct from each other over the six measurement occasions.

Next, due to the measurement invariance as a prerequisite for subsequent analysis using LGM (Chan, 1998), we examined the measurement invariance of repeated measures (i.e., LMX, CWX, and job performance) over the six measurement occasions. The measurement invariance results, presented in **Table 2**, indicated that each configural invariance model received reasonable fit to the data. More importantly, the addition of metric invariance constraints in each metric invariance model did not result in significantly worse fit to the data, supporting the metric invariance of the current measurement. Therefore, the measurement invariance tests satisfied the assumption for conducting LGM.

Hypothesis 1 predicts that (a) the initial status of and (b) increases in LMX are positively related to the initial status of and increases in newcomers' job performance over time, respectively. As shown in **Figure 1**, the initial factor of LMX is indeed positively and significantly related to the initial factor of job performance ($\beta = 0.45$, $p < 0.001$), supporting Hypothesis 1a. However, inconsistent with our expectation, the slope factor of LMX did not significantly related to the slope factor of job performance ($\beta = 0.14$, n.s.).

Hypothesis 2 states that psychological entitlement will moderate the relationship between the initial status of / increases in LMX and the initial status of/increases in newcomers' job performance. Partially supporting Hypothesis 2, the results, presented in **Table 3**, indicated that the relationship between the initial status of LMX and the initial status of job performance is significantly stronger ($\Delta\beta = 0.37$, $p < 0.05$) when psychological entitlement is lower ($\beta = 0.58$, $p < 0.001$) rather than it is higher ($\beta = 0.22$, n.s.). However, the results revealed that psychological entitlement did not moderate the link between the slope factor of LMX and the slope factor of job performance.

Hypothesis 3 predicts that (a) the initial status of and (b) increases in CWX are positively related to the initial status of and increases in newcomers' job performance over time, respectively. As shown in **Figure 1**, the slope factor of CWX is indeed positively and significantly related to the slope factor of job performance ($\beta = 0.32$, $p < 0.01$), supporting Hypothesis 2b. However, inconsistent with our expectation, the initial status of one's CWX did not significantly related to the initial status of one's job performance ($\beta = 0.01$, n.s.).

Hypothesis 4 states that conscientiousness will moderate the relationship between the initial status of /increases in CWX and the initial status of/increases in newcomers' job performance. Partially supporting Hypothesis 4, the results, presented in **Table 3**, indicated that the relationship between the slope factor of CWX and the slope factor of job performance is significantly stronger ($\Delta\beta = 0.50$, $p < 0.05$) when one's conscientiousness is higher ($\beta = 0.57$, $p < 0.01$) rather than it is lower ($\beta = 0.07$, n.s.). However, the results revealed that one's conscientiousness did not moderate the link between the initial status of CWX and the initial status of job performance.

DISCUSSION

This study aims to investigate whether newcomers' interpersonal relationships, during the socialization period are linked to their initial performance and their performance over time. More specially, we investigated whether high-quality LMX and CWX lead to better newcomer performance and whether newcomer performance improves over time with greater increases in the quality of LMX and CWX. The results of this study showed that initially, newcomers' LMX quality is positively related to newcomer performance, but an increase in LMX quality was not significantly related to an increase in newcomer performance; additionally, newcomers' CWX quality was not related to their performance, but changes in the CWX quality were related to improvement in newcomer performance over time.

Theoretical Implications

By investigating the relative effect between LMX and CWX, our study highlighted the important role of coworkers in the socialization period. Many scholars studying interpersonal exchange relationships have argued that newcomers' interaction and exchange with their leaders are central to newcomer adjustment at work (Jokisaari and Nurmi, 2009). Our study extends earlier research by showing that coworkers also play a role in newcomer socialization. Future research may take our findings into consideration when drawing conclusions about the implications of exchange relationships for newcomer socialization. Previous research has shown that the quality of newcomers' exchange relationships with the organizational insiders (e.g., leaders and coworkers) benefits newcomer performance (Tse and Dasborough, 2008), but our results show that two exchange relationships (i.e., LMX and CWX) facilitate newcomer socialization and do so in different ways. Support from supervisors is indeed most crucial at the beginning, and collaboration with coworkers becomes more essential thereafter. Thus, scholars should not simply focus on LMX, but also consider that the development of CWX quality can also greatly benefit for newcomer performance.

Moreover, our results show that there is no significant association between changes in the quality of LMX and changes in newcomer performance but that changes in the quality of CWX were significantly related to changes in newcomer

TABLE 1 | Means, SDs, and Pearson correlation coefficients.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. LMX1	-																						
2. LMX2	0.49	-																					
3. LMX3	0.35	0.42	-																				
4. LMX4	0.31	0.38	0.48	-																			
5. LMX5	0.33	0.38	0.37	0.42	-																		
6. LMX6	0.21	0.37	0.28	0.38	0.41	-																	
7. CWX1	−0.02	0.00	−0.08	−0.07	−0.10	−0.02	-																
8. CWX2	0.03	0.00	−0.06	−0.04	−0.04	0.07	0.47	-															
9. CWX3	−0.01	−0.03	−0.03	−0.06	−0.02	0.12	0.44	0.46	-														
10.CWX4	0.08	0.04	−0.07	0.03	−0.02	0.02	0.31	0.39	0.45	-													
11.CWX5	0.04	−0.03	−0.10	0.08	0.04	0.07	0.20	0.26	0.34	0.51	-												
12.CWX6	0.07	0.00	−0.06	0.05	0.02	0.07	0.26	0.35	0.34	0.44	0.51	-											
13.JOBP1	0.18	0.16	0.14	0.21	0.22	0.10	0.03	0.05	0.16	0.03	0.05	0.01	-										
14.JOBP2	0.16	0.19	0.20	0.09	0.19	0.13	0.00	0.09	0.04	−0.02	−0.02	0.07	0.47	-									
15.JOBP3	0.18	0.11	0.14	0.09	0.02	0.04	−0.01	0.03	0.00	−0.02	0.00	−0.04	0.37	0.56	-								
16.JOBP4	0.16	0.10	0.20	0.18	0.19	0.12	−0.02	0.08	0.10	0.01	0.01	0.04	0.39	0.26	0.43	-							
17.JOBP5	0.27	0.31	0.21	0.24	0.27	0.20	−0.07	0.05	0.07	0.01	0.08	0.11	0.38	0.27	0.23	0.45	-						
18.JOBP6	0.18	0.16	0.15	0.15	0.16	0.08	−0.01	0.07	0.14	0.06	0.17	0.22	0.26	0.25	0.21	0.35	0.49	-					
19.Pentitle	0.16	0.04	0.02	0.01	0.07	−0.01	−0.10	0.03	−0.03	−0.01	−0.01	−0.08	0.06	0.06	0.09	0.13	0.20	0.10	-				
20.Conscient	−0.02	0.03	−0.02	0.04	−0.01	−0.04	−0.03	0.04	−0.01	0.13	−0.03	0.00	−0.01	−0.03	0.06	0.00	0.04	0.03	0.28	-			
21.Gender	0.02	0.07	0.03	0.02	0.12	−0.06	0.07	0.02	−0.04	−0.05	0.02	0.00	−0.07	−0.03	0.00	−0.06	0.02	0.09	−0.05	−0.02	-		
22.Age	0.05	0.13	0.02	−0.13	−0.03	−0.05	0.03	0.00	0.03	0.03	0.01	−0.03	−0.02	0.01	0.01	0.03	−0.04	−0.05	−0.03	−0.03	0.02	-	
23.Education	0.01	0.14	0.06	0.04	0.01	0.10	0.08	0.03	0.15	0.02	0.06	0.07	0.09	0.00	0.00	0.03	0.09	−0.13	−0.06	−0.06	0.09	0.04	-
M	4.69	4.66	4.66	4.62	4.60	4.62	4.62	4.62	4.66	4.66	4.65	4.63	4.53	4.59	4.59	4.57	4.55	4.53	4.56	4.61	0.40	25.56	2.10
S.D.	0.51	0.57	0.56	0.55	0.56	0.54	0.54	0.55	0.57	0.56	0.53	0.57	0.59	0.62	0.61	0.62	0.61	0.59	0.58	0.56	0.49	1.90	0.70

N = 230. For all correlations above |0.12|, $p < 0.05$. LMX, leader member exchange; CWX, coworker exchange; JOBP, job performance; Pentitle, psychological entitlement. 1 = Time1; 2 = Time 2; 3 = Time 3; 4 = Time4; 5 = Time 5; 6 = Time 6.

TABLE 2 | Model fit statistics for testing discriminant validities and measurement invariance.

Model/variable	χ^2	*df*	CFI	TLI	SRMR	RMSEA	$\triangle\chi^2$	$\triangle df$
Measurement model (three factors: LMX, CWX, and JOBP)								
Measurement model T1	124.84	132	1.00	1.00	0.04	0.00		
Measurement model T2	146.47	132	0.99	0.99	0.04	0.02		
Measurement model T3	146.96	132	0.99	0.99	0.05	0.02		
Measurement model T4	153.19	132	0.99	0.99	0.05	0.03		
Measurement model T5	143.36	132	0.99	0.99	0.05	0.02		
Measurement model T6	123.37	132	1.00	1.00	0.04	0.00		
Longitudinal measurement invariance across four waves								
Configural invariance CFA	838.19	792	0.99	0.99	0.04	0.02		
Metric invariance CFA	910.18	867	0.99	0.99	0.05	0.02	71.84	75

LMX, leader member exchange; CWX, coworker exchange; JOBP, job performance.

performance. One possible explanation is that changes in the quality of LMX, whether it increases or decreases, may confuse newcomers, making the newcomers uncertain about their work role. Such confusion causes the unstable performance, and cannot generate a systemic change pattern. However, newcomers become more familiar with their coworkers than their superiors in work settings, so they are more likely to make sense of coworkers' behavior changes (Louis, 1980; Chen et al., 2011). Thus, an in-depth study is needed to further explore the underlying mechanism of the beneficial effect of these exchange relationships.

Our study also adds to earlier research on socialization by demonstrating how changes in the exchange relationship over time are related to changes in the key outcome of newcomer adjustment. Moreover, our study contributes to the literature by indicating that it may be appropriate to examine the initial level of and the changes in these relationships simultaneously. In terms of the link between LMX and CWX and performance, studies have often been concerned with whether newcomers have a good or bad relationship with their leaders; thus, it is particularly important for researchers to adopt a dynamic perspective that repeatedly tracks newcomers' LMX quality. This is because simply observing that a high level of LMX quality across newcomers is associated with a high level of performance is not direct evidence of increased performance or the positive trajectory of performance. Moreover, our research provides empirical evidence that increases in a newcomer's CWX quality over time, rather than in his or her initial CWX quality, positively predict his or her performance, demonstrating the importance of examining changes in CWX. Studies have often been interested in whether newcomers have perceived better or worse relationships with their leaders. However, past research neglected the resources that may be held by coworkers, given that they may have more experience with the tasks of newcomers than the latter do themselves. Moreover, our findings revealed a positive effect of change in CWX quality on change in newcomer performance, suggesting that newcomers who perceive increases in CWX quality experience an improvement in performance. This change-to-change effect extends prior research that has demonstrated a level-to-level effect of CWX on newcomers' behaviors (Nifadkar and Bauer, 2016). Our study findings are also consistent with the broader literature on newcomer performance, which states that researchers should not assume that the variables predicting the initial level of newcomer performance would also influence changes in newcomer performance (Ployhart and Hakel, 1998; Chen, 2005). Future research should, therefore, adopt a more dynamic perspective and use longitudinal designs to explore both intraindividual changes and interindividual differences in LMX/CWX and performance.

Our research also contributes to the LMX and CWX literature by identifying psychological entitlement and conscientiousness as novel boundary conditions. According to Blau (1964), every individual values the reciprocation differently. Perugini et al. (2003) demonstrated that people's responses to social exchange appear to vary signficantly. The positive effect of LMX/CWX on newcomer performance may depend on the degree to which a newcomer values the rule of reciprocation. This study provides support for Blau and Perugini et al.'s claim. Consistent with prior research (Lee et al., 2019b), psychological entitlement inhibits the vertical relationship between the quality of LMX and employee outcomes. We rationalize that this finding arises from self-inflated views on leaders' empowerment, which fit newcomers' inflated sense of their deservingness in this vertical relationship. Our findings also advance the horizontal exchange relationship (i.e., CWX) by identifying conscientiousness as a boundary condition that determines the extent to which the quality of CWX change impacts newcomer performance change. In line with prior conscientiousness research that views conscientiousness as a good quality, we found that the positive relationship between the change in the quality of CWX and change in newcomer performance is stronger for newcomers with high conscientiousness than for those with low conscientiousness. Our results show that employees with high conscientiousness are likely to sense the changes in these relationships and respond with better or worse performance. A newcomer's sense of the necessity to reciprocate and build a good working environment could influence the exchange relationship development process. An increase in the quality of CWX may not always explain how newcomer performance changes. Rather, conscientiousness is a necessary precondition for linking changes in the quality of CWX to newcomer performance.

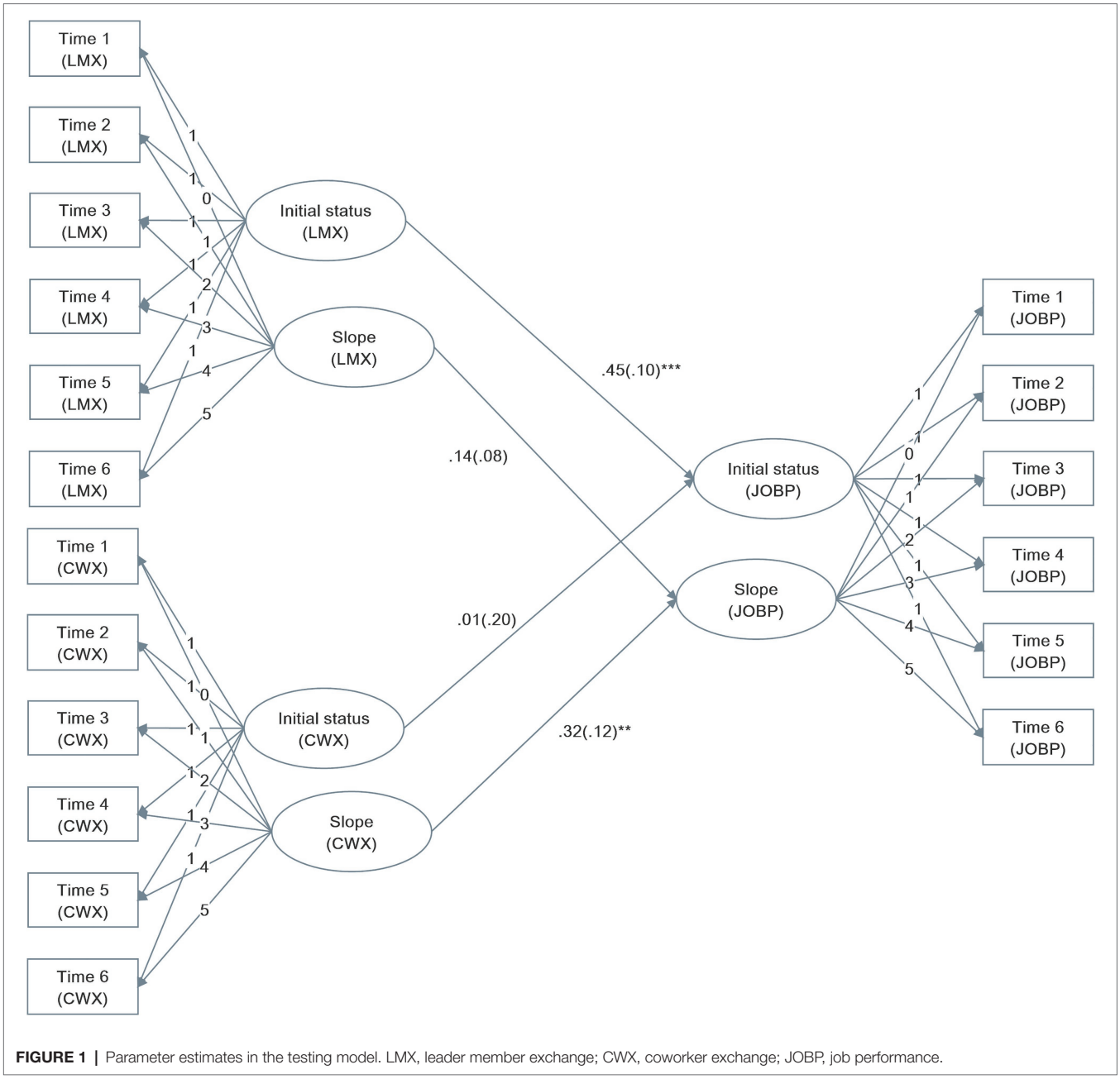

FIGURE 1 | Parameter estimates in the testing model. LMX, leader member exchange; CWX, coworker exchange; JOBP, job performance.

Practical Implications

Our findings have implications for future managerial practice. First, managers should encourage the development of a helping culture and build a friendly working environment. As our results suggested, newcomers' interpersonal relationships with their leaders and coworkers may affect their job performance in different ways. For employees starting a job in a new organization, quality interpersonal relationship building need not be limited to conventional LMX. Rather, the long-term CWX development may be leveraged to enhance their performance in the long run. Second, although managers should empower newcomers, they should also consider the personality of newcomers. Excessively high-quality LMX may lead highly entitled newcomers to focus less on their job and to mistake their empowerment for entitlement. Third, the effect of a good-quality relationship on job performance depends upon the level of the newcomer's conscientiousness. As shown in our findings, in the long term, conscientiousness newcomers may repay good quality with better long-term performance. In summary, our research provides insights into interpersonal relationships with short- and long-term views and encourages managers and newcomers to value both good-quality of LMX and good-quality CWX.

Limitations

Our research has several limitations. First, our study is limited in that we examine only the relationship of LMX/CWX to

TABLE 3 | Results of structural model analysis for high and low task uncertainty groups.

Moderator	$LMX_{initial}$ to $JOBP_{initial}$	LMX_{slope} to $JOBP_{slope}$	$CWX_{initial}$ to $JOBP_{initial}$	CWX_{slope} to $JOBP_{slope}$	$\triangle\chi^2$	$\triangle df$
Psychological entitlement					4.61*	1
Low	0.58(0.12)***	0.21(0.13)	–0.17(0.55)	0.36(0.16)*		
High	0.22(0.13)	0.03(0.10)	0.11(0.19)	0.31(0.20)		
Conscientiousness					5.12	1
Low	0.41(0.15)**	0.07(12)	0.02(0.27)	0.07(0.16)		
High	0.50(0.12)***	0.21(0.11)*	0.12(0.24)	0.57(0.17)**		

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

newcomer performance. In addition to the dispositional factors (e.g., psychological entitlement and conscientiousness) in our study, there may still be other situational (e.g., leadership style) or other dispositional factors (e.g., self-efficacy) that impact newcomer performance. Future research is needed to further uncover the boundary conditions of the positive linkage between LMX/CWX and performance. Second, given our focus on newcomer adjustment, we only examined newcomer in-role performance. Prior research has already demonstrated that organizational citizenship behavior is a crucial outcome of LMX and CWX (Götz et al., 2020). Future research should also pay attention to the newcomers' out-role performance and out-role performance improvement. Moreover, we also encourage future scholars to explore other proximal outcomes such as organizational commitment. Past research indicated that the increased newcomers' feedback-seeking behavior with their leaders formed a strong exchange relationship, and contributed to increases in organizational commitment (Vandenberghe et al., 2021). Third, our findings may have limited generalizability because we collected our research data from China. Although our framework did not involve any contextual factors, we still cannot neglect the influence of national cultures. Chinese relationship philosophy in particular may have had some systemic influence on our data. Thus, we encourage the future research to examine our research questions in other countries. Fourth, although we observed the changes in LMX/CWX and performance, we did not examine different forms of change (e.g., nonlinear change trajectories). Future research should consider the different forms of change to further uncover the dynamic relationships between newcomers and their leaders and coworkers.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

AUTHOR CONTRIBUTIONS

C-RL and JL conceived the project and designed the study. JL drafted the manuscript, conducted many revisions, and oversaw the whole research process. C-RL collected and analyzed the data. AL provided the guidance, commented on the drafts, and conducted many revisions. XL provided the guidance and commented on the final draft. All authors contributed to the article and approved the submitted version.

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Examining the Moderating Effects of Work Unit Size and Task Analyzability in the Relation Between Leader's Communication Style and Leader-Member Exchange

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There is a consensus regarding the impact of the leader's communication on the relationship with their followers and on the achievement of organizational outcomes. This study seeks to contribute to clarifying the impact that contextual factors have on the leader's communication in order to know how leaders should adjust their communication style, depending on the job characteristics, to build high quality relationships with their followers. Therefore, the current research examines the moderating role of two context factors in the effectiveness of leaders' communication in generating the leader-member relationship. Through a moderation analysis on a sample of 149 white-collar workers, this research study analyzes how *work unit size* and *task analyzability* interact regarding six dimensions of leader communication style in relation to LMX. Results suggest that the work unit size moderates the relationship between two dimensions of leader's communication style (preciseness and verbal aggressiveness) and LMX. Specifically, the positive effect of preciseness on LMX smooths as the work unit size increases. The negative effect of verbal aggressiveness on LMX becomes more intense as work unit size increases. Furthermore, task analyzability moderates the positive relationship between emotionality and LMX for low levels of task analyzability. As a result, this study contributes by deepening on why leaders' communicative behaviors can have favorable/unfavorable results in specific contexts and on how a leader can modulate his/her communication style according to the context, in order to improve the LMX. Implications are discussed.

Keywords: leader-member exchange theory (LMX), leader's communication style, work unit size, task analyzability, organizational communication, managerial communication

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INTRODUCTION

Communication plays a crucial role in management (Christensen and Cornelissen, 2011; Taylor, 2011). There is a general consensus regarding the impact of a leader's communication on the achievement of organizational outcomes (Robichaud et al., 2004; Johanson et al., 2014). Nevertheless, how leaders should adapt their communication style to different situations and work

conditions is an issue that still needs to be studied in more detail. In recent decades, the need to incorporate contextual factors into the research of the relationship between variables has been recognized as an imperative to obtain more accurate results (Rousseau and Fried, 2001; Johns, 2006; Bamberger, 2008). This study seeks to contribute to clarifying the impact that contextual factors have on the leader's communication in order to know how leaders should adjust their communication style, specifically depending on the characteristics of the work unit and the task, in order to build high-quality relationships with their followers.

According to the Leader-Member Exchange Theory (Dansereau et al., 1975; Graen and Schiemann, 1978; Liden and Graen, 1980), leadership is a relationship between a leader and a subordinate. The leadership relationship is created and maintained through day-to-day interactions in the executions of their roles (Fairhurst, 1993). From a communication perspective, the relationship is created through communicative interactions/exchanges to share the vision, establish goals, coordinate, inform, instruct, motivate, delegate, negotiate, gather opinions and suggestions, make participative decisions, provide feedback and coaching. Leader and followers use the available means depending on if the job is executed in physical or remote working, e.g., face-to-face, telephone conversations, text messaging, physical and virtual meetings, emails, chats, videoconferencing, social media, and other formal and informal channels in the organization.

In the same line, leaders create a different relationship with each subordinate. With some collaborators, it can become a high-quality relationship that is characterized by high levels of respect, trust, and mutual support, while with others, it is a medium or low-quality relationship (Graen and Uhl-Bien, 1995). To achieve the objective of deepening in the understanding of how communication contributes to the quality of the leadership relation, a multidimensional model of the leaders' communication style (de Vries et al., 2009, 2010) has been used. A multidimensional model can allow for the identification of the communicative behaviors that should be adjusted depending on the context. According to de Vries and colleagues (de Vries et al., 2011; Bakker-Pieper and de Vries, 2013), the leaders' communication style encompasses 24 facets in six dimensions (*expressiveness, preciseness, verbal aggressiveness, questioningness, emotionality and impression manipulativeness*), which are always somehow present and constitute the leader's personal and unique communication style.

This study seeks to contribute to the understanding of the relationship between leader communication style and LMX incorporating two context variables. This study analyzes if work unit size (WUS) and task analyzability (TA) are contextual variables that the leader should consider to adapt his/her communication style to achieve high LMX relationships with their followers. Nowadays, it is common for frequent changes in the business world (mergers and acquisitions, restructuring, rightsizing). Workgroups, goals, and tasks are transformed, and leaders must adjust their leadership styles, which could, at the same time, require adjustments to their communication style. The *work unit size* can be a relevant contextual variable for communication studies as a leader's resources, like time and support, could change and affect the quality and frequency of communication exchanges as the work unit grows or shrinks. In the same way, *task analyzability* (Wood et al., 1987; Campbell, 1988) has been included in the study. A higher or lower degree of task structure may mean, for the subordinate, different levels of difficulty and may affect the requirements of the leader's communication. Unstructured tasks, due to their high ambiguity, may increase the need for greater information, support or feedback from the leader, whereas structured tasks, because they could be demotivating, may increase the need for contact that is more frequent, humor and emotion in the leader's communication.

The paper is organized as follows: We first introduce the theoretical framework used to test our hypotheses and to explain our contribution. We then describe the data, the variables, and the method used. The following section describes the main results. Finally, we discuss the main findings and describe the study's contributions and implications, its limitations, and topics for future research.

The Role of Context

Few concepts are as complex and challenging to define as context. It is an amorphous concept in that it encompasses the relevant theory for the study of the phenomenon itself, everything that surrounds it, and the temporal conditions in which it occurs (Bamberger, 2008: 839). In other words, the context in which a leader exercises leadership includes both the opportunities and the restrictions (Johns, 2006), which must deal in the day-to-day. Contextual factors could explain why some communication behaviors of leaders are appropriate in certain circumstances and unfavorable in others. Conceptually, the environmental conditions act as forces that can affect the results, such as changing the causal direction between the variables, reversing the signs of the relationships, explaining curvilinear effects or precarious relationships, or even jeopardizing the validity of the results (Johns, 2006).

In the study of a phenomenon, different levels of context are distinguished. Johns (2006) proposes two levels of analysis: a broad dimension (omnibus context) and a particular dimension of factors that shape behaviors or attitudes (discrete context). The *broad context* is concerned with the occupation of those who make up the team, the location, the time, and the rationalization; while the *discrete context* comprises the specific situational variables that directly influence behavior or moderate the relationship between variables related to the task (e.g., autonomy, structuring, variety, interdependence, complexity, accountability, resources), the social context (e.g., density, social structure, social influence) and physical aspects (e.g., infrastructure, temperature, lighting). Joshi and Roh (2009), in their meta-analysis on the role of contextual factors in the investigation of team diversity, present a broad relationship of contextual factors considered by researchers, including characteristics associated with the task, the leader, and the team.

In order to answer the question regarding which contextual factors are relevant for our study, it is necessary to consider their nesting (Griffin and Mathieu, 1997; Perlow et al., 2004; Taylor, 2011). The LMX happens inside a work unit, which develops

a specific function or project and has certain characteristics. These make it appropriate to consider the level of the work unit as the one immediately above, using a multilevel approach to sensitize the conclusions regarding the relationship between communication and LMX.

Among the diversity of variables at the work unit level found in the literature (Joshi and Roh, 2009) that could influence the relationship between the leader's communication style and the LMX, our interest is focused on the size of the work unit and the complexity of the task, both discrete context variables (Johns, 2006). On the one hand, the WUS of the group has been incorporated because: a) the quality and frequency of communication contacts can be affected as the work unit grows and b) the current business dynamics make frequent changes in organization structure due to restructuring processes, mergers and acquisitions, project implementation, expansions or payroll reductions, which leads to variations in the size of the work units. Leaders find themselves in the situation of adjusting in their leadership styles according to the group's size, which may be reflected in their communication style. On the other hand, the structuring of the task has been incorporated into the study as a contingent factor because structured (non-challenging) or unstructured (challenging) tasks demand different levels of effort from the subordinate that may affect the communication requirements with their leader. The following sections will discuss how these two variables could influence the relationship between leader's communication on the LMX.

Communication Style and LMX

The basis in this study is the relationship between the leader's communication style and the quality of the relationship between the leader and the subordinate. The Leader-Member Exchange Theory (LMX) (Graen and Uhl-Bien, 1995) explains leadership as a dyadic relationship. Leaders do not relate to all their subordinates in the same way but create relationships of varying levels of quality with each one. LMX is built through day-to-day exchanges in which communication is the mechanism of interrelation and when the LMX is high, the relationship exhibits respect, trust and mutual obligation (Graen and Uhl-Bien, 1995). To achieve that, a leader's communication characteristics must contribute to being perceived as a competent communicator, capable of exercising interpersonal influence through interactions (Bambacas and Patrickson, 2008; Johanson et al., 2014). To be perceived as a competent communicator, a leader should expose communicative behaviors that have been extensively studied in the management literature.

This study proposes that the communication style of the leader influences the LMX. An epistemological issue may arise regarding whether the leader's communication style determines the leader-follower relationship (LMX) or whether it is the LMX that determines communication. The leader's communication is based on his/her lifelong background. From birth, the human being begins to develop his/her ability to interact with others through communication. Therefore, at the moment he/she becomes a leader brings lifelong communication habits and behaviors, which are used when he/she occupies a managerial position and ultimately influences his/her collaborators. We all have a communication style that distinguishes us from the others, and that has been created since childhood. Over time, this style accumulates the effect of variables such as age, life experience, personality, and character, among others (de Vries et al., 2011). This personal way of communicating explains the level of influence or persuasion, the quality of our human relationships, and, to a certain extent, whether or not we are perceived as a leader (Ruben and Gigliotti, 2016). The communication style involves the content of the messages and the way we deliver them. Subordinates and other organization members perceive us through our way of communicating, how we interact with them in different situations. Contrasting these perceptions with his/her mental model of leader (Lord et al., 2001) produces the acceptance or rejection of the leadership proposal.

This does not exclude that LMX may in turn influence the way the leader communicates, since the interactive nature of communication and its bidirectionality create the dynamics of mutual influence between both interlocutors (Lee and Kim, 2021). The leader can be influenced and react with a particular communication style, which in turn will influence the LMX. This dynamic can lead to a virtuous or vicious circle, which generates a strengthening or deterioration of the LMX. Being the leader in a superior hierarchical position than the subordinate, his/her power to influence is greater than that of subordinates to influence the leader. Nevertheless, although we consider this influence to be smaller, it does not mean that it does not exist.

The literature recognizes that there are different patterns in the leader's communication according to the quality of the LMX (Omilion-Hodges and Baker, 2017). In situations in which the leader and subordinate achieve a high-quality LMX, frequent and timely exchanges of information, support and trust can be observed (Campbell et al., 2003). The leader provides supportive communication that, in turn, favorably impacts the subordinate's dedication to working and facilitates the relationships among coworkers (Michael et al., 2005). Similarly, Mueller and Lee (2002) demonstrate that in high-quality LMX relationships, the leader's communication is characterized by openness, trust, empathy and attention to the employees, who receive enough valuable information to carry out their work. In contrast, in cases of low-quality LMX, communication patterns are characterized by antagonism and adversity (Fairhurst and Chandler, 1989).

The communication characteristics that influence interpersonal relationships, in general, are well-researched (McCroskey et al., 2001). The communication characteristics that have been studied are, for example, assertiveness (Deluga and Perry, 1991), Machiavellianism (Teven et al., 2006), defensive tendencies (Baker, 1980; Becker et al., 2005), communication apprehension (Teven et al., 2006; Madlock et al., 2007) and verbal aggressiveness (Infante et al., 1992; Martin and Anderson, 1998).

There is a gap in the literature about how leaders should modulate their communication in different contexts (Omilion-Hodges and Baker, 2017; Jian and Dalisay, 2018). In order to contribute, this study uses an integrated model to measure the leaders' communication style (de Vries et al., 2009, 2010; Bakker-Pieper and de Vries, 2013) that identify 24 facets organized in six dimensions. From a contingency approach, we propose that the leader may and should modulate the communication style for

achieving better results in his/her leadership. Workers perceive their leader through his/her behaviors and the integrated model addresses the issue using a multidimensional perspective based on observable communicative behaviors.

A "leader communication style" is defined as "a distinctive set of interpersonal communicative behaviors geared toward the optimization of hierarchical relationships in order to reach certain group or individual goals" (de Vries et al., 2010, p. 368). De Vries and colleagues report the multidimensionality of the construct, in which they identify 24 facets, organized into the following six dimensions: *expressiveness, preciseness, verbal aggressiveness, questioningness, emotionality, and impression manipulativeness.* These are traits (not types) of the leader's communication style and are always present in the way a person communicates. Their particular combination constitutes our typical and personal way of communicating.

Expressiveness

(Facets: talkativeness, conversational dominance, humor and informality). This dimension includes the leader's predisposition to talk, in a frequent and eloquent way. For example, this trait is perceived when the leader acts in a casual and informal way, without creating unnecessary barriers, showing an open, non-conflictive attitude, good humor, and with a suitable level of conversational adroitness toward all kinds of interlocutors. Moreover, it is perceived in the leader's predisposition to express his/her ideas and lead the discussion, determining the topics to be discussed.

Preciseness

(Facets: structuredness, thoughtfulness, substantiveness, and conciseness). The leader shows accuracy in the communication of thoughts, through a logical and well-organized sequence of the different parts of the messages. The leader structures the message in a concise and pertinent manner, and without dwelling on matters that are irrelevant to the purpose. The leader thinks carefully before saying something, choosing words with care and weighing the answers before expressing them. The messages are concise and involve important topics, avoiding trivial ones.

Verbal Aggressiveness

(Facets: anger, authoritarianism, derogatoriness, and non-supportiveness). This trait includes the open expression of displeasure or anger about issues or people. The leader's communication style manifests a low level of respect for others' opinions. Discourages dialog, humiliates, hurts feelings and makes others look like fools. The subordinates feel that the leader neither gives attention to them nor understands their problems or needs and that he/she offers little support and treats people in a distant and cool way.

Questioningness

(Facets: unconventionality, philosophicalness, inquisitiveness, and argumentativeness). This trait is shown when the leader stimulates discussions about the future, engages in philosophical conversations and solicits different points of view. Usually the leader uses questions to stimulate others to delve into a topic, seeking to challenge the team intellectually. The leader likes to promote healthy debate and exchange of opinions, through the open discussion of new ideas, including wild or bizarre ones.

Emotionality

(Facets: sentimentality, worrisomeness, tension, and defensiveness). The leader manifests high levels of sentiment, including emotions and moods, when communicating during conversations. The leader tends to show concern, anxiety, and stress about daily routine issues. As a mechanism for protecting against dissenting opinions or criticisms, the leader copes poorly with critical remarks.

Impression Manipulativeness

(Facets: ingratiation, charm, inscrutableness, and concealingness). This trait refers to communicative behaviors related to the leader's concern of controlling or manipulating others' opinions. The leader expresses opinions different from what he/she really thinks, hiding the true way of thinking or information in order to appear better and gain acceptance from third parties, including boasting about ideas or achievements. He/she can show gentle, kind and courteous behavior, even with people or situations that he/she dislikes, in a polite and politically correct way.

The six dimensions are part of the personal communication style and we expect they correlate with LMX. According to the literature, expressiveness, preciseness, questioningness and emotionality benefit the leader-member bond (Campbell et al., 2003; Michael et al., 2005; Johanson et al., 2014; Lloyd et al., 2017; Jian and Dalisay, 2018), while verbal aggressiveness (Fairhurst and Chandler, 1989; Bakker-Pieper and de Vries, 2013) and impression manipulativeness affect it negatively (Teven et al., 2006).

Work Unit Size (WUS)

The size of a work unit refers to the number of positions formally grouped within a single unit reporting to the same superior. It is a structural variable that is taken into consideration in decisions regarding work unit configurations (Mintzberg, 1980) because it moderates their effectiveness (Campion et al., 1996). The WUS should be adjusted based on the characteristics of the tasks. A team that is too large could be difficult to manage and could cause its members to lose interest due to lack of individual participation, while the opposite —teams with too few members— could experience too much workload, and the work unit could lack the resources necessary to complete the tasks and achieve its goals (Dyer et al., 2013). From another perspective, when the activities carried out in the work unit are standardized and normalized, the units may have a greater number of job positions because processes and results are well defined and require less direct supervision. However, when activities require coordination among members and constant adjustments, the units tend to be small because more communication is required and this may only occur if the work unit is small (Mintzberg, 1980).

The results reported in the literature about the impact of WUS on LMX are contradictory (Schyns et al., 2010). Green et al. (1996) studied the relationship between demographic and

organizational variables on LMX (one of them is the size of the work unit). They concluded that the WUS is negatively related to the LMX quality, confirming similar results found in a previous study carried out by the same authors in 1983, in the branch offices of a bank. However, Cogliser and Schriesheim (2000) came to different conclusions; they did not find support for their hypothesis that WUS has a significant relationship with LMX. The relationship they found was negative but not significant. Our study seeks to contribute to this vein to determine if WUS influences the creation and maintenance of high-quality relationships with subordinates through communication.

According to Keyton and Beck (2008), when communication is not adapted to WUS, problems may arise, as the time a leader has to interact with each team member is reduced. Because the leader's time is a finite variable, the greater the WUS, the less time the leader will have to interact with each one. It is expected that the fewer resources a leader dedicate to each member; this will affect the communication characteristics, such as the duration, content, channel employed and communication climate. This effect on communication will affect the LMX quality. We thus propose the following hypothesis:

Hypothesis 1 (H1): *WUS moderates the relationship between the leader's communication style and LMX.*

Variations in the size of the work unit may mean that leaders must adapt their communication style to a given situation, redistributing their resources of time and attention to satisfy the workers' needs and to not affect the work unit's performance (Keyton and Beck, 2008). Expressiveness is the dimension that measures the talkativeness, conversational dominance, informality, and humor of the leader. This trait is perceived when the leader communicates in an open, casual, informal, and frequent way without creating unnecessary barriers. His/her expressiveness is positively related to LMX (de Vries et al., 2010; Brown et al., 2019). Considering that leaders have finite resources of time and availability to distribute their attention to all their workers, a larger WUS can reduce the opportunity and quality of contact with all the group members. Workers may perceive the leader's communication expressiveness as insufficient to construct a high-quality LMX relationship and/or obtain complete information regarding the work unit's objectives and goals. We propose the following hypothesis:

Hypothesis 1a (H1a): *WUS moderates the positive relationship between expressiveness and LMX in such a way that the relationship is weakened when WUS is higher.*

The preciseness in the leader's communication style is related to the accuracy in the delivery of thoughts, through a logical and well-organized message. The message is presented in a concise, direct and relevant structure, without irrelevant content. Preciseness is positively related to LMX (de Vries et al., 2010; Brown et al., 2019) since it favors the understanding of the task, the objectives, the expectations and the vision of the boss. In small groups, the leader's message is received directly by the workers who have an even greater chance of obtaining immediate feedback from the leader himself. In groups with a greater number of collaborators, it is not possible for the leader to communicate one by one, so it is possible that the message has to be retransmitted by a third person or that the message is received through deferred channels. In addition, it may happen that the worker is not able to get direct feedback from the boss if he has not understood something. The positive impact of precision on the LMX in the latter case may be affected, reducing the intensity of the relationship as the group grows. We propose the following hypothesis:

Hypothesis 1b (H1b): *WUS moderates the positive relationship between preciseness and LMX in such a way that the relationship is weakened when WUS is higher.*

The verbal aggressiveness dimension is recognized by the literature as a destructive feature of communication that dramatically affects interpersonal relationships due to its potential to damage the receiver's self-concept and psychological wellbeing (Infante et al., 1992). When the size of the unit increases, leaders are faced with a greater work demand, which makes their leadership style more impersonal, autocratic and strict and reduces their opportunities for interacting with their subordinates (Hemphil, 1950). Schyns et al. (2012) found that in large groups, to build high-quality LMX relationships, leaders needed to show high levels of kindness and politeness, characteristics that are the opposite of verbal aggressiveness. Therefore, the following hypothesis is proposed:

Hypothesis 1c (H1c): *WUS moderates the negative relationship between verbal aggressiveness and LMX in such a way that the relationship is strengthen when WUS is higher.*

The questioningness dimension is displayed in inquisitive characteristics, which stimulate the discussion of issues, proposing the exchange of opinions and witty, unconventional and curious expressions. Large WUS reduces the possibilities of close interactions of all the members with the leader (Schriesheim et al., 2000; Hare and Hare, 2003). Additionally, workers tend to increase the expression of their opinions when the unit is smaller rather than larger (LePine and Van Dyne, 1998). At the same time, even if a leader intends to foster everyone's participation, the time availability could reduce the frequency and possibility of involvement of all members. Therefore, we propose that:

Hypothesis 1d (H1d): *WUS moderates the positive relationship between questioningness and LMX in such a way that the relationship is weakened when WUS is higher.*

Emotionality, in leaders' communication, is measured through the exteriorization of behaviors related to worry, anxiety and stress. It is expected that these behaviors can interact with WUS so that if a group is small, closeness with the leader can help the group members to satisfactorily understand and accept the leader's emotionality. In contrast, in large groups, there is a greater physical and psychological distance between the subordinates and leader (Schyns et al., 2010), and it is possible for group members not to have access to all the information about the work unit that allows them to interpret the leader's emotionality, thus leading to their rejection. Therefore, the following hypothesis is proposed:

Hypothesis 1e (H1e): *WUS moderates the positive relationship between emotionality and LMX in such a way that the relationship is weakened when WUS is higher.*

The impression manipulativeness dimension, also known as Machiavellianism or relational manipulation, comprises behaviors in which the leaders' messages are neither open nor transparent and instead, hide their true thoughts or intentions in order to achieve acceptance or to ingratiate themselves with their interlocutors. These behaviors affect the LMX negatively (Bakker-Pieper and de Vries, 2013) because they generate distrust in the leader and erode the perception of ethics and integrity that are required from a leader. In small groups, in which the frequency of contact is higher and there is a smaller psychological distance, it can be expected that greater intensity of this dimension does not cause, *per se*, the negative impact on LMX. On the other hand, in large groups, due to a greater psychological distance and a smaller possibility for the leader and subordinate to know each other, a higher level of manipulation would affect the LMX more intensely. Therefore, the following hypothesis is proposed:

Hypothesis 1f (H1f): *WUS moderates the negative relationship between impression manipulativeness and LMX in such a way that the relationship is strengthen when WUS is higher.*

Task Analyzability (TA)

The characteristics of the task may affect the work team's performance and deserve the ample attention that the literature has paid them (Loher et al., 1985; Fried and Ferris, 1987). Task analyzability has been studied for its ability to explain phenomena at both the individual level and the group level (Wood et al., 1987; Campbell, 1988).

Separating the task from its doer, Wood (1986) identified the following three components of tasks: the resulting product, the required information, and the acts necessary for carrying it out. Moreover, he derived the following three dimensions, to measure its complexity: First, component complexity (as a function of the number of actions necessary to carry out the task); Second, coordination complexity (making reference to the relationship between information-acts-product to execute it, which involves times, frequencies, intensity, and location); and third, dynamic complexity (relating to the change through time which the actions and information suffer, which obligates the doer to adapt). Based on this, task complexity can be determined from an objective perspective, independent of who performs it, and it is directly related to its attributes, i.e., the accessibility of information, diversity of information and rate of change (Campbell, 1988). From this point, tasks may be classified based on the following four characteristics: first, the presence of multiple paths to obtain the product or result; second, the presence of multiple desired results; third, the presence of interdependencies in conflict between the paths and various desired results (the achievement of one result enters into conflict with the achievement of another desired result); and fourth, the presence of uncertainty (limited information) or possible connections between multiple paths and results (Campbell, 1988).

Therefore, measuring the complexity of a task is not easy, given that although attributes of the task itself can determine its complexity objectively, an observer, who will contribute his point of view based on his own perception, experience, and knowledge, should evaluate and grade it. Searching for objectivity in the measurement of complexity, Withey et al. (1983) developed an instrument to measure complexity using two dimensions. The first refers to the number of exceptions that a worker must make while carrying out the task, which is equivalent to the task's *variety*, which is expressed in the frequency of unexpected or different events that occur in the conversion process. When the number of exceptions in high, the worker cannot predict possible problems, and the tasks become unique. When few exceptions occur, the task is repetitive. The second characteristic is the level of *structure* (*analyzability*) of the task. When a work process is structured, it can be understood as a sequence of previously identified steps known to the worker, which can be followed as a computational process. In contrast, when a task is not very structured (low analyzability), the sequence cannot be established objectively, which means that the worker must spend time thinking about how to carry out the task or solve the problem, as there are many paths for achieving it and many potential results (Withey et al., 1983). Highly varied tasks that are not very structured are the most challenging for workers.

The intensity of the challenge of a task is a function of the variations in the perception of the subjects who must carry it out, and this perception is reflected in the biases an individual has, based on his or her experience, familiarity with the task, frames of reference and attitudes (O'Reilly et al., 1980). This study has not included the *variety* dimension because we consider that analyzability includes variety in some way. When variety is low, the worker performs the same tasks repeatedly since there are no new tasks. By carrying out the same tasks, the worker knows the steps to carry them out, which is equivalent to the structuring being high and is able to perform them in a computational process. From the opposite perspective, a wide variety of tasks may be equivalent to the worker having to face different and probably unfamiliar tasks, which requires a lot of thinking about how to do the tasks and effort to find ways to solve them. What is considered relevant is the level of analyzability because this will determine the level of challenge a worker faces when dedicating effort to finding different ways to resolve the task, as less structured tasks can have multiple ways to carry them out and multiple possible results (Withey et al., 1983).

This study aims to answer whether TA moderates the relationship between the leader's communication style and the LMX. A fundamental pillar of LMX theory is the emphasis on the relational process of leadership. In the execution of the tasks, the leader and the worker interact, and in this interchange, LMX is born and develops (Ferris et al., 2009). Leaders promote performance through goal-setting processes, which require reciprocal interactions between leaders and followers (Locke and Latham, 2002). The leader provides information on the task to be carried out, clarifies the expected results, provides the resources, support, and feedback. The worker must perform the task using his/her knowledge, experience, skills, motivation, and efforts to achieve the objectives. The LMX theory

recognizes that it is through different types of exchanges that leaders differentiate the way they interact with their subordinates (Dansereau et al., 1975).

The literature recognizes that leaders adapt their leadership styles to the characteristics of the task and those of their subordinates (Dunegan et al., 2002; Dóci and Hofmans, 2015). Leaders can be assumed to have the knowledge, experience, and motivation to guide their subordinates successfully. However, Dóci and Hofmans (2015) propose that leaders activate different cognitive mechanisms depending on situational circumstances. Based on the literature, we propose that the task can be a variable that activates these different leadership mechanisms since the studies carried out on its role as an antecedent, consequence, and moderator have provided evidence of its impact on the worker and leadership.

The task is one dimension of core job design that impacts the psychological state of individuals by increasing the experienced meaningfulness of the work and explaining motivation, performance, and satisfaction (Hackman and Oldham, 1976). Martin et al. (2016) report a meta-analysis that examines the relationship between LMX quality and a multidimensional model of work performance, in which task dimension as a dependent variable is positively related to LMX. Additionally, they report that trust, motivation, empowerment, and job satisfaction mediate the relationship between LMX and task.

Dunegan et al. (1992) studied the moderating role of task complexity in the relationship between LMX and performance. They report that when the task challenge is either very high or very low, the relationship between LMX and performance is higher. However, when the task challenge is moderate, the relationship between LMX and performance is not significant. They supplemented their studies on the moderating role of task characteristics in a later study (Dunegan et al., 2002). They found evidence of the moderating role of three characteristics of the task: role conflict (inconsistent or contradictory assignments or obligations), role ambiguity (uncertainty about job duties and responsibilities), and intrinsic task satisfaction (person's sense of connection and compatibility with a task) on the relationship between LMX and performance.

Considering the association between leadership and the task, the leader might need to adapt his/her communication style according to the characteristics of the task to achieve the expected results and the adequate performance of the worker. There is a gap in the literature regarding the moderating role of task complexity in the relationship between the leader's communication and the LMX.

When workers are required to perform highly uncertain or challenging (less structured) tasks, they expect the leader to clarify and communicate the necessary information adequately; define the goals, products, and expected results; and provide support, which will contribute to success. On the contrary, if subordinates perceive that a task is not very demanding or feel that their skills and knowledge are sufficient to carry out the task, the leader's clarifications could be considered unnecessary, controlling, demotivating and unsatisfactory (House, 1996). The characteristics of the task and the worker's level of professionalism/mastery could make unnecessary the leader's intervention (Kerr and Jermier, 1978; Howell and Dorfman, 1981) and affect communication requirements.

Michael et al. (2005) report that supportive supervisor communication influences LMX, affecting contextual and task performance. Their results suggest that when supervisors show their employees consideration, respect, and support through their communication exchanges, higher LMX are likely. Furthermore, the quality of the relationships that subordinates have with their supervisors influences their job dedication and interpersonal facilitation behaviors. Supportive supervisor communication creates an overall supportive environment and relationship quality that translates into higher employee contextual and task performance (Michael et al., 2005).

A part of the workers' perception regarding task significance may be explained by the leaders' influence through their messages. The perception of leaders can influence the perception of workers regarding the characteristics of the task (Griffin, 1981). Leaders can influence how workers perceive and interpret their work context, how the workers assess task significance and how involved they become in their tasks through their actions and verbal and non-verbal messages (Shamir et al., 1993). They personify their mission and vision, just as they frame through their messages the ideological content, values and intellectual reasoning, demonstrating the mental frame that inspires and guides them. Based on the literature, it can be expected that the leaders' communication behavior influences the workers' perceptions and values when facing structured or less structured tasks, which leads to the following hypothesis:

Hypothesis 2 (H2): *TA moderates the relationship between the leader's communication style and LMX.*

This study seeks to go beyond the analysis of the moderating effect of TA on the communication style-LMX relationship, by determining which dimensions of the leaders' communication style are, that moderate the mentioned relationship. More leader intervention is necessary when workers face less structured tasks than when they face structured tasks (House, 1996). Leaders can help subordinates increase their self-esteem and self-worth through the communication of trust and of high-performance expectations (Shamir et al., 1993), and therefore, it is proposed that leader expressiveness can contribute to helping and clarifying for the unstructured task and improve the LMX quality.

Hypothesis 2a (H2a): *TA moderates the positive relationship between expressiveness and LMX in such a way that the relationship is strengthen when the task is less structured.*

Preciseness in the leader's communication style is exteriorized in the ability to structure messages concisely, clearly and professionally. No literature has been found that has studied the relationship between the preciseness of the leaders' communication and TA. Subordinates simply require the leader to clarify the mission and vision, along with instructions for their execution (House, 1996), and therefore, it can be estimated that the ability of leaders to articulate their messages with preciseness improves the LMX quality more when tasks are not structured, as preciseness reduces ambiguity.

Hypothesis 2b (H2b): *TA moderates the positive relationship between preciseness and LMX in such a way that the relationship is strengthen when the task is less structured.*

The verbally aggressive behavior of leaders toward their subordinates has been studied by Infante and Gorden (1985), who indicate that when less verbal aggressiveness is perceived in a leader, subordinates will be more open and prone to express their ideas and debate about what should be done and how it should be done. Given that less structured tasks offer a greater challenge, that situation could create a climate of occupational stress (Karasek, 1979), which sets off verbally aggressive behavior in leaders. According to Dóci and Hofmans (2015), leaders' behaviors tend toward authoritarianism and antagonism when they face tasks that they perceive as difficult to achieve, because of a loss of psychological resources. It can be expected that, when facing structured tasks, the relationship between verbal aggressiveness and LMX continues to be negative, but the intensity of the relationship will increase when the worker faces less-structured tasks. For tasks that are more challenging for the worker, subordinates can perceive leader aggressiveness as a lack of understanding and a lack of trust in their abilities, and this can contribute to higher occupational stress. It can also affect the workers' psychological wellbeing and, consequently, relates more negatively to LMX. Therefore, the following hypothesis is proposed:

Hypothesis 2c (H2c): *TA moderates the negative relationship between verbal aggressiveness and LMX in such a way that the relationship is strengthened when the task is less structured.*

Questioningness manifests itself in communication behavior in which leaders show their keen, inquisitive and curious thoughts by looking for unconventional solutions, stimulating open discussion and promoting participation. These behaviors improve the LMX quality (Bakker-Pieper and de Vries, 2013) and are associated with the intellectual stimulation dimension of transformational leadership (Bass et al., 2003). When workers must carry out structured tasks, following a pre-established and well-known sequence, a greater or lesser degree of questioningness in the leader communication style would not influence the LMX. However, for unstructured tasks, subordinates could require a leader to interact with them to stimulate the search for alternatives and promote dialog to find optimal solutions. As transformational leadership theory states, leaders who, through their messages, exteriorize a participative search for methods and results that go beyond conventional methods and results are perceived favorably, which in turn favors the LMX. Thus, we propose the following hypothesis:

Hypothesis 2d (H2d): *TA moderates the positive relationship between questioningness and LMX in such a way that the relationship is strengthened when the task is less structured.*

Emotionality in the leader communication style is associated with behaviors that exteriorize the leader's feelings, emotions, moods, worry, tension, and anxiety when facing an occupational challenge. Through verbal and non-verbal messages, leaders create ideological frames and shape the workers' assessment of task significance (Shamir et al., 1993). From there, workers can perceive the leaders' assessment of task relevance through those leaders' exteriorization of emotionality. When the task is unstructured, higher levels of emotionality may favor the LMX, because they could be interpreted as the task value and significance the leader assigns to the task. Therefore, the following hypothesis is proposed:

Hypothesis 2e (H2e): *TA moderates the positive relationship between emotionality and LMX in such a way that the relationship is strengthened when the task is less structured.*

As previously indicated, impression manipulativeness, which is associated with Machiavellianism, comprises communication behaviors that mask the true thoughts or intentions of the leader, who uses it to gain acceptance or ingratiation with others. These behaviors are negatively related to LMX (Bakker-Pieper and de Vries, 2013) because they generate distrust and take away from the perception of ethics and integrity, which are basic requisites of leadership (Ciulla, 2005). When a task is less structured and challenges workers, their resources of attention, time and interest are concentrated on the task, and so a higher or lower level of this trait would not affect the LMX. However, the negative effect will be stronger when the worker carries out highly structured tasks. When facing unchallenging tasks, the subordinates have more time and attention resources to dedicate to other issues. If they perceive leaders as acting with the intention to manipulate, they will feel greater rejection and distrust for leadership, causing the LMX to deteriorate. This leads to the following hypothesis:

Hypothesis 2f (H2f). *TA moderates the negative relationship between impression manipulativeness and LMX in such a way that the relationship is strengthened when the task is more structured.*

Figure 1 shows the suggested research model, which represents the moderating effect of WUS and TA on the relationship between the leader's communication style (expressiveness, preciseness, verbal aggressiveness, questioningness, emotionality, and impression manipulativeness) and LMX.

MATERIALS AND METHODS

Database

The database was built through the participation of 149 working professionals contacted as students in 18 classrooms in postgraduate programs at the ESAN School of Business in Lima, Peru. The survey was distributed in paper and took approximately 30 min to complete. Originally, 279 subjects responded to the survey about their perception of their leader's communication style and the characteristics of the group and the task they perform. Later on, there was a filtering process in which inconsistent or incomplete surveys were discarded and subjects were selected considering time under the command of the same leader.

The final sample was constructed with subjects who have completed 12 months under the command of the same leader to ensure that the leader-follower relationship has been able to go

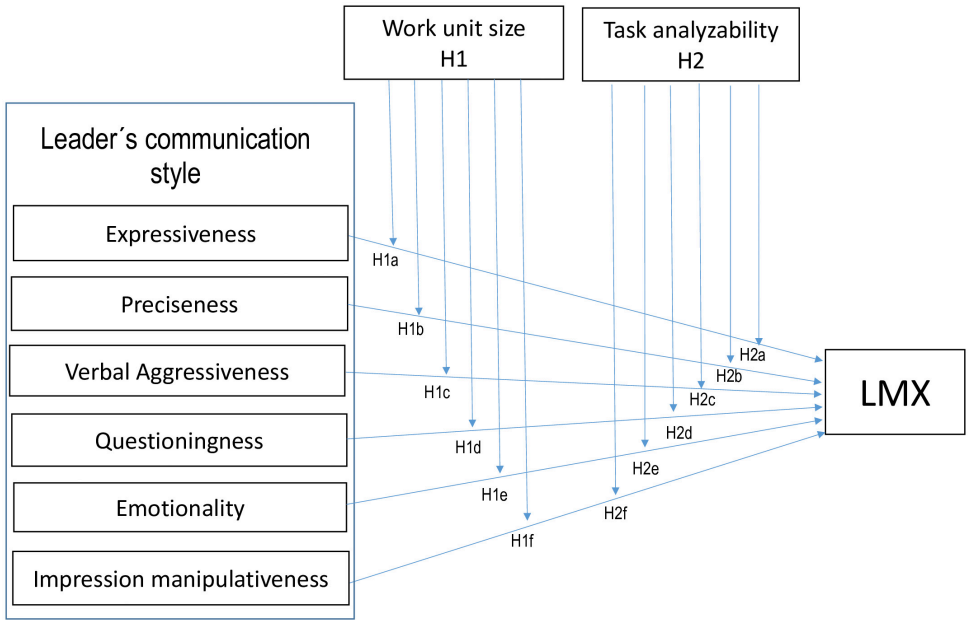

FIGURE 1 | The research model.

through the stages of its evolution until it reaches maturity and stability. According to Graen and Uhl-Bien (1995), the LMX goes through evolutionary stages, during which the communicative exchanges could vary.

At the beginning of the relationship, they both act as "strangers". The relationship develops in the formal framework of hierarchical dependency, with a transactional nature (I give something-you give something) and contractually. Then, either party makes an "offer" to develop a better working relationship aimed at the subordinate's career development, which once accepted encourages the duo to move to the second phase: "known," with more frequent exchanges, begin to share more information and resources, both personally and in employment matters. The next phase, of "mature association", is recognized because the exchanges are highly developed, reciprocal, unpaid, on more extended periods, individuals count on each other in relationships of loyalty and mutual support. They are behavioral and emotional exchanges: mutual respect, trust, and an implicit obligation to grow as in a process. Not all leader-subordinate dyads are formed at the same rate of advancement, and some even remain in the "unknown" phase, do not evolve, and are defined as low-quality LMX relationships. To ensure that the dyads have had the opportunity to go through the different evolutionary stages of the LMX, this study's sample was made up of subjects who have worked 12 months under the same leader's command.

Another relevant characteristic of the sample is that this is a workgroup with a high level of education, as 81% report having completed a university degree: 26% of the respondents have obtained a master or doctoral degree and 55% have completed undergraduate studies. 18% indicate technical or high school studies. About the job, 48% of the respondents are assistants or analysts and 52% are managers; the respondents have an average of 12 years of work experience. They work for private companies (76%), governmental entities (16%), socially owned enterprises (0.07%) and mixed private-public organizations (8%). Regarding the sociodemographic characteristics of the respondents, 69% are male, between 21 and 69 years of age, with an average age of 36 years. Finally, 97% are Peruvian citizens.

Instrument

The instrument was built of items to measure the variables to be studied and was translated into Spanish, submitted to a test-retest process and validated by a panel of three professional translators.

Leader Communication Style

The *Communication Styles Inventory* (de Vries et al., 2011) which was adapted for the subordinates to evaluate the communication style of their direct leaders, was applied. It is composed of 96 items, organized in 16 items for each of the six dimensions. Examples of the items are: "My leader always have a lot to say" (expressiveness); "He always express a clear chain of thoughts when argue a point" (preciseness); "When he feels others should do something for him, he asks for it in a demanding tone of voice" (verbal aggressiveness); "In discussions, he often put forward unusual points of view" (questioningness); "When he is worried about something, he finds it hard to talk about anything else" (emotionality); "In discussions, he/she sometimes express an opinion he/she do not support in order to make a good impression" (impression manipulativeness). The items were answered on a Likert type scale of five categories, in which 1 was equivalent to "totally disagree" and 5 was equivalent to "totally agree." The reliability of the instrument was measured by Cronbach's alpha (**Table 2**).

TABLE 1 | Fit Indices of Leader-Member Exchange, Task Analyzability, and Leader's Communication Style Dimensions.

Fit measures	LMX	Task analyzability	Expressiveness	Preciseness	Verbal aggressiveness	Questioningness	Emotionality	Impression manipulativeness
$\chi 2$	28.30**	2.88	35.90*	97.40	154.00***	37.60*	46.00	48.60*
df	14.00	2.00	23.00	104.00	90.00	24.00	54.00	32.00
CFI	0.99	1.00	0.98	1.00	0.98	0.98	1.00	0.98
TLI	0.98	0.99	0.96	1.00	0.98	0.97	1.01	0.98
RMSEA	0.06	0.04	0.04	0.00	0.05	0.05	0.00	0.04
SRMR	0.07	0.03	0.05	0.05	0.07	0.06	0.05	0.06

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Leader-Member Exchange

Graen and Uhl-Bien's (1995) instrument of seven items were used. One example of the items: "My leader understands my job problems and needs". The items were answered on a Likert type scale of five categories, in which 1 was equivalent to "totally disagree" and 5 was equivalent to "totally agree." The scale shows a high level of reliability ($\alpha = 0.89$).

Work Unit Size

An open question was included as follows: "Approximate number of people who report to the same leader as you do."

Task Analyzability

It was measured using the four indicators of the instrument proposed by Dunegan et al. (1992), based on the work of Withey et al. (1983): "There is a clearly known way to do the major types of work I normally encounter." "There is a clearly defined body of knowledge of subject matter that can guide me in doing my work." "There is an understandable sequence of steps that can be followed in doing my work." "I can actually relay on established procedures and practices to do my work". The items were answered on a Likert type scale of five categories, in which 1 was equivalent to "totally disagree" and 5 was equivalent to "totally agree". The level of reliability of the scale is $\alpha = 0.86$.

Control Variables

The instrument included questions for the control variables of age and gender of the subordinate and of the leader.

In order to check the construct validity of the major variables, confirmatory factor analysis was carried out (**Table 1**). All measurements show a good model fit regarding CFI and TLI. According to Hu and Bentler (1999), values over.95 show a good model fit. In the case of LMX and questioningness, SRMR and RMSEA show slightly higher values than the acceptable threshold (0.05). Verbal aggressiveness and impression manipulativeness show slightly higher only in SRMR than the acceptable values (0.05). In spite of these, all items have factor loadings higher than.40 and CFI and TLI are adequate, therefore it is possible to conclude that communication styles, LMX and TA have a good model fit.

RESULTS

The data were processed and filtered to ensure information quality. Normal averages and standard deviations were observed. Statistical processing for the validation of the hypotheses was carried out using multiple hierarchical regressions with RStudio, Version 1.1.463. Regarding the risk of common method bias (Podsakoff et al., 2003), Harman's single factor test was applied. It was found that forcing a single factor, it explains 21.88% of the variance. Additionally, 31 factors explain more than 77% of the variance. Because one single factor does not explain the majority of the variance, it is believed that the possibility of uniform method bias is not a limitation of this study. **Table 2** presents the averages, standard deviations, and correlations between the variables of the study and the reliability indicators (Cronbach's alpha) are included in the upper diagonal.

The LMX correlates with the moderator variable of *TA*, as do the following five leader's communication style variables: *preciseness, verbal aggressiveness, questioningness, emotionality,* and *impression manipulativeness*. There is no sign of correlation with *expressiveness* and *WUS*. The *WUS* variable does not correlate with any variable in the study. The *TA* variable correlates with the following four dimensions of leader communication style: *preciseness, verbal aggressiveness, emotionality,* and *impression manipulativeness.*

Model 1 (**Table 3**) displays the results of the regression of the six dimensions with LMX without the moderator variables. This model is statistically significant, and the following four dimensions have significant betas: expressiveness, preciseness, verbal aggressiveness and questioningness. Impression manipulativeness and emotionality do not display a significant relationship. Overall, there is a positive relationship between LMX and expressiveness, LMX and preciseness and LMX and questioningness. Verbal aggressiveness has a negative relationship with the outcome. Both age and gender of leaders and of subordinates were used as control variables.

To test Hypothesis 1, a multiple linear regression was carried out (Model 2). WUS shows a negative direct effect on LMX while controlling for communication style, TA, gender and age of leaders and subordinates. In addition, this variable shows a significant moderation effect in the relationship between preciseness, verbal aggressiveness, and LMX. Therefore, H1 is partially accepted as H1b and H1c are confirmed.

Results show that H2 is also partially accepted. TA shows a positive direct effect while controlling for communication style, WUS, gender, and age of leaders and subordinates. In this case, there is a significant moderation effect of TA in the relationship between emotionality and LMX, while controlling for the other

TABLE 2 | Descriptive Statistics, Correlations, and Reliability.

		Mean	*s.d.*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
1.	LMX	3,80	0,89	***(0.89)***											
2.	Work unit size	13,32	11,51	−0,08											
3.	Task Analyzability	3,83	0,88	0,33**	0,03	***(0.86)***									
4.	Expressiveness	3,11	0,61	0,08	−0,03	−0,13	***(0.72)***								
5.	Preciseness	3,62	0,66	0,65**	−0,07	0,28**	−0,03	***(0.88)***							
6.	Verbal Aggressiveness	2,60	0,79	−0,54**	0,04	−0,24**	0,32**	−0,66**	***(0.89)***						
7.	Questioningness	2,89	0,42	0,12**	0,13	−0,03	0,35**	−0,01	0,18**	***(0.77)***					
8.	Emotionality	2,64	0,76	−0,44**	0,07	−0,18*	0,26**	−0,64**	0,71**	0,25**	***(0.85)***				
9.	Impression Manipulativeness	2,59	0,77	−0,36**	0,00	−0,26**	0,38**	−0,46**	0,61**	0,36	0,62**	***(0.79)***			
10.	Age of Subordinate	35,91	8,66	0,08	0,09	0,08	−0,11	0,09	−0,12	−0,17	−0,03	−0,14			
11.	Gender of Subordinate			0,07	0,11	0,01	−0,04	0,08	−0,14	0,01	−0,15	−0,01	0,14		
12.	Age of Leader	46,50	9,46	0,18*	0,02	0,07	0,04	0,13	−0,08	−0,05	−0,13	−0,04	0,27**	0,00	
13.	Gender of Leader			0,15	0,24**	0,08	0,02	−0,02	0,00	0,08	−0,10	0,05	0,03	0,20*	0,18*

***. Correlation significant at the 0.01 level (bilateral).*
**. Correlation significant at the 0.5 level (bilateral).*
N = 149.

communication styles, WUS, age and leader of leaders and subordinates. In that case, H2e is accepted.

In order to further understand the moderating effect of WUS and TA in the relationship between communication styles and quality of the LMX, a Johnson-Neymann procedure was used. The moderation analysis indicates that there is a positive direct effect between preciseness and LMX (Model 2, **Table 3**). This relationship is moderated by WUS, as preciseness has a stronger relationship with LMX in small groups ($B = -0.77^{**}$, e.t = 0.16 with WUS equal to 2) and as the WUS becomes bigger it smooths and becomes non-significant when the group is bigger than 20 people (**Figure 2**).

There is a negative relationship between verbal aggressiveness and LMX (Model 2, **Table 3**). This relationship is moderated by WUS, when the group size is higher than 13 people ($B = -0.51^{***}$, e.t = 0.1) and becomes stronger as group size is bigger (e.g., $B = -1.05^{***}$, e.t = 0.19, with WUS equal to 25 people). Therefore, the WUS enhances the relationship between verbal aggressiveness and LMX (**Figure 3**).

Even if there is no significant relationship between emotionality and LMX (Model 2, **Table 3**), there is a negative relationship when TA moderates the relationship between the aforementioned variables. When TA has lower values (values between 1 and 2), the relationship between emotionality and LMX is negative ($B = -0.75^{**}$, e.t = 0.34 with TA equal to 1 and smooths as TA increases ($B = -0.46^{*}$, e.t = 0.23 with TA equal to 2 and becomes non-significant when TA is higher than 2. In other words, TA has a damper effect on the relationship between emotionality and LMX (**Figure 4**).

It is possible that higher levels of TA (values higher than 5) could show a positive relationship between emotionality and LMX but this Hypothesis needs to be tested because in this study TA's values ranged from 1 to 5.

Model 2 (**Table 3**) also indicates a significant relation between leader gender and LMX. Men that are leaders have higher levels of LMX ($B = 0.42$, e.t = 0.13) than women that are leaders while controlling for communication styles, age, gender from subordinates.

DISCUSSION

The results of Model 1 (**Table 3**), without including the moderating variables, show a significant relationship between four dimensions of a leader's communication style on the LMX. Expressiveness, preciseness, and questioningness positively affect LMX, while verbal aggressiveness is negatively related. Preciseness shows the most significant impact ($\beta = 0.58$, $p < 0.001$). The leader's ability to construct messages concisely, professionally, and well-structured makes it easier for the subordinate to understand the instructions, expectations, and vision, which strengths LMX. Verbal aggressiveness is the second in impact level ($\beta = -0.35$, $p < 0.05$) with a negative impact on the LMX. The communicative behaviors of anger, authoritarianism, derogatoriness, and non-supportiveness weaken the quality of the LMX by causing barriers in the worker and rejection of the leader's proposal. Questioningness ($\beta = 0.30$, $p < 0.01$) and expressiveness ($\beta = 0.24$, $p < 0.01$) strengthen the quality of the LMX by showing the leader's proclivity to stimulate discussion about new ideas, intellectual challenge through conversations transcendent and promote participation and the exchange of opinions by an open, frequent, informal and in a good mood communication.

Emotionality and impression manipulativeness are not significantly related to LMX. In high power distance societies, leader-subordinate relationships tend to be polarized and highly emotional (Hofstede and Hofstede, 2001), which could explain that the emotionality dimension (communicative behaviors that show concern, anxiety, and stress about daily routine issues) is not a relevant factor associated with leadership since it is taken for granted. Along the same lines, the impression manipulativeness in vertical societies can be accepted and deemed necessary to

TABLE 3 | The Moderating Effect of Contextual Variables on the Relationship between Leader's Communication Style and LMX.

Variables	*Model 1*		*Model 2*	
	B	*e.t.*	*B*	*e.t.*
Age of Subordinate	0.00	0.01	0.00	0.01
Gender of Subordinate	−0.04	0.12	0.03	0.11
Age of Leader	0.01	0.01	0.00	0.01
Gender of Leader	0.31**	0.13	0.42**	0.13
Expressiveness	0.24**	0.10	0.22*	0.10
Preciseness	0.58***	0.12	0.46***	0.11
Verbal aggressiveness	−0.35*	0.11	−0.51***	0.10
Questioningness	0.30**	0.14	0.47**	0.14
Emotionality	0.10	0.11	0.07	0.12
Impression manipulativeness	−0.16	0.10	−0.13	0.10
Work unit size (WUS)				
WUS			−0.01*	0.01
WUS*Expressiveness			0.00	0.01
WUS*Preciseness			−0.03*	0.01
WUS*Verbal aggressiveness			−0.05***	0.01
WUS*Questioningness			0.03	0.02
WUS*Emotionality			0.02	0.01
WUS*Impression manipulativeness			−0.01	0.01
Task Analyzability (TA)				
TA			0.19**	0.07
TA*Expressiveness			0.15	0.01
TA*Preciseness			0.03	0.01
TA*Verbal aggressiveness			−0.15	0.01
TA*Questioningness			0.27	0.02
TA*Emotionality			0.29*	0.01
TA*Impression manipulativeness			−0.09	0.01
R^2	0.52		0.69	
Adjusted R^2	0.49		0.62	
F	15.1***		10.30***	

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

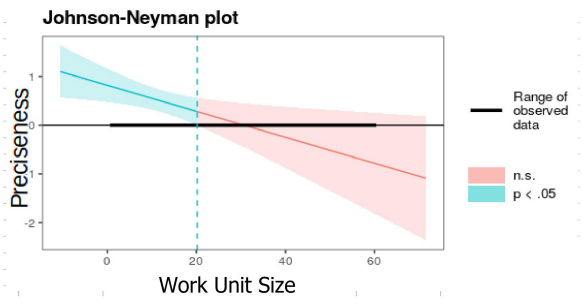

FIGURE 2 | The moderating effect of WUS on the relationship between preciseness and LMX.

uphold the system's privileges, status symbols, and prevalence of those "at the top."

Two sets of hypotheses were proposed to explore the moderating effect of the contextual variables work unit size

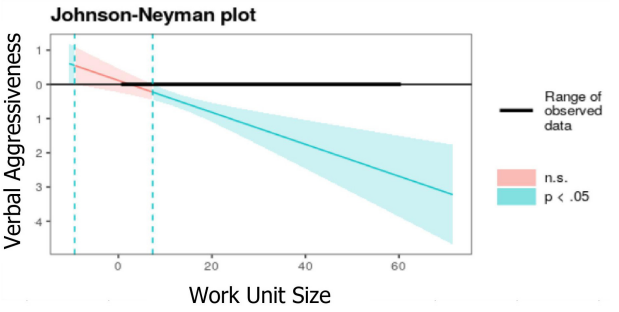

FIGURE 3 | The moderating effect of WUS on the relationship between verbal aggressiveness and LMX.

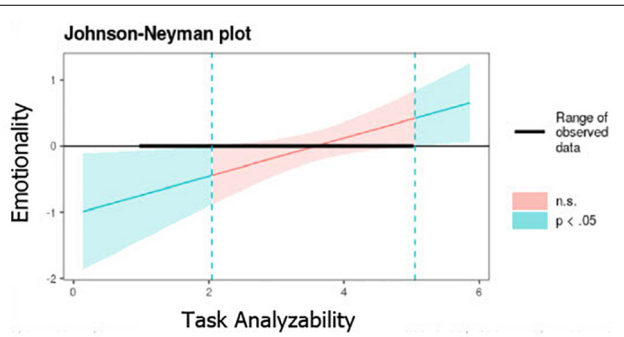

FIGURE 4 | The moderating effect of TA on the relationship between emotionality and LMX.

(WUS) and task analyzability (TA) on the relationship between leader's communication style and LMX (Model 2, **Table 3**).

WUS shows a direct negative relationship on LMX (β = −0.01, $p < 0.05$) when controlling all the other variables, which implies that the leader's ability to maintain high-quality LMX relationships decreases as the WUS grows. When exploring the moderating effect of WUS on the relationship between the leader's communication style and LMX, two dimensions show significant effect: preciseness (β = −0.03, $p < 0.05$) and verbal aggressiveness (β = −0.05, $p < 0.001$). The other dimensions of the leader's communication style are not sensitive to the moderating effect of the growth of the WUS. Preciseness and verbal aggressiveness show negative betas. In preciseness, whose effect is naturally positive, it decreases as the work unit grows. Regarding verbal aggressiveness, whose natural effect is negative, as the work unit grows, the effect becomes more negative, damaging the LMX with greater intensity.

The Johnson-Neyman procedure used to measure the moderation analysis indicates that preciseness has a stronger relationship with LMX in small groups ($B = -0.77^{**}$, e.t = 0.16) with WUS equal to two, but as the WUS grows, the relationship smooths and becomes non-significant when the group is more extensive than 20 people. Regarding the moderating effect of WUS on the negative relationship between verbal aggressiveness and LMX, it appears when the group is greater than 13 people ($B = -0.51^{***}$, e.t = 0.1) and becomes more intense as the group

grows. In other words, the negative effect of the leader's verbal aggressiveness on the relationship with subordinates will be most substantial as the group becomes large.

Task analyzability (TA) shows a direct positive relationship on LMX ($\beta = 0.19$, $p < 0.01$) when controlling all the other variables, which implies that structured tasks contribute to the quality of the LMX. In other words, when performing structured (low complexity) tasks, the worker maintains good LMX quality with his supervisor.

Although emotionality did not show a significant relationship with LMX (Model 2, **Table 3**), when the moderating effect of TA is incorporated, it is observed that emotionality is the only dimension that shows a significant positive relationship with LMX ($\beta = 0.29$, $p < 0.05$). This means that leader's emotionality contributes positively to the LMX when TA is in the equation. The Johnson-Neymann procedure shows that TA negatively moderates the relationship ($B = -0.75^{**}$, e.t = 0.34) between these variables for values lower than two on a scale of 1 to 5 (low structured tasks and therefore more complex and difficult to perform). In other words, TA has a damper effect on the relation between emotionality and LMX when tasks are low structured (**Figure 4**). If the worker performs unstructured and complex tasks, the leader's emotionality (communicative behaviors that show concern, anxiety, and stress about daily routine issues) are less favorable to the LMX.

Theoretical Implications

Leader's communication has deserved an extensive attention in the literature from various ontological, epistemological and methodological perspectives (Fairhurst and Connaughton, 2014). The literature widely recognizes the impact of the leader's communication on organizational results (Phillips et al., 2004). This research uses the construct "leader's communication style" and a multidimensional six-dimensional model (de Vries et al., 2009, 2011) to fill the existing gap in the literature about how the leader should adapt his communication style to the context to achieve high-quality LMX. An essential contribution of this approach is the empirical evidence that allows us to identify which dimensions of the leader's communication style contribute to strengthening or weakening the quality of the LMX in the different contexts or situations that leaders face. The theoretical contribution of this study aims to open a research line on leader's communication from a contingent approach.

High-quality LMX relationships are seen more often when leaders display communication behaviors of openness and support, provide information to reduce ambiguity and make sure their exchanges are timely and high-quality (Campbell et al., 2003; Michael et al., 2005). Additionally, frequent, empathetic, trust-inspiring, kind communication, which shows a willingness to listen, contributes toward a strengthening of the leader-member bond (Mueller and Lee, 2002). The results obtained without considering the contextual variables validate the results reported in the literature, as relationships between four dimensions of the leader's communication style and LMX were found. Expressiveness, preciseness, and questioningness have a favorable effect on LMX, while verbal aggressiveness is negatively related.

Emotionality and impression manipulativeness are not significant in the context of this study. Peru is a high-power distance and collectivist society (Hofstede, 2016). From his theory of cultural dimensions, Hofstede (Minkov and Hofstede, 2011a,b) propose that in high power distance societies decision structures are centralized, with a high concentration of power and information at the top of the organizational structure. The leader's behaviors are formal and autocratic. The leader exercises strict supervision, which is satisfactorily perceived by subordinates and contributes to performance and productivity. Superior-subordinate relationships are polarized and often emotional, explaining why emotionality dimension (sentimentality, worrisomeness, tension and defensiveness) is not a trait required for high-quality LMX as it is taken for granted. In the same line, communicative behaviors related to impression manipulativeness (ingratiation, charm, inscrutableness, and concealingness) are accepted as usual and even necessary to maintain the vertical relationship system in the parameters of control, agreeableness, polite and politically correct way.

The existence of a direct relationship between WUS and LMX is a question that remains open due to the contradictory results reported in the literature. The present results coincide with those found by Green et al. (1996), in the sense that the size of the work unit does negatively affect the LMX quality. From a communication perspective, evidence has been found that the impact of leader communication on LMX is sensitive to WUS through the interaction with preciseness and verbal aggressiveness dimensions.

As shown in the results of the first model without moderators, preciseness plays an important positive role in leaders' communication style. Leaders must be aware that communicating in a direct, concise, structured way contributes to LMX as it facilitates the understanding of the leader's messages, vision, needs, and expectations, reducing ambiguity and helping subordinates to clarify how to achieve better performance. Additionally, this feature must be modulated considering the size of the work unit. When the group is small, the impact of preciseness is strong, but the effect is diluted as the group grows. Because of this, the leader must look for ways to communicate to strengthen his/her messages, since preciseness will lose its effect as new members join the work unit. According to the results obtained, the positive effect of preciseness disappears when the group exceeds 20 workers, something that contributes to the field of the relationship between communication and leadership.

Verbal aggressiveness is a trait that also plays an important role in the leader's communication because of its effect on LMX, as could be seen in the results obtained in Model 1. The negative effect on the quality of interpersonal relationships is widely recognized in the literature. The results obtained from the moderation analysis indicate that this trait is sensitive to the size of the work unit. The *per se* negative effect intensifies as the group grows so that when the group exceeds the number of 13 the effect is even more negative. This evidence is a warning light so that leaders are careful with their communications. In small groups, closeness to the leader, access to information, frequency of contact and higher levels of trust can create tolerance for

verbal aggressiveness, as the subordinates know the leader better and are better informed regarding the demands and challenges of management. On the other hand, when a group is large, subordinates, who perceive this behavior more negatively, which could be explained by the greater psychological distance from the leader and less information regarding the demands that the leader faces, less tolerate verbal aggressiveness. It is recommended for leaders to consider this when leading large groups; they should refrain from the exteriorization of verbal aggressiveness and increase the frequency of contact with their subordinates so that their LMX quality is not affected.

Regarding *TA* as a context variable, the moderation analysis has shown that it could condition the relationship between the leader communication style and the LMX quality through the emotionality dimension. Although this dimension was no significant in the model without moderation, it becomes significant when it interacts with TA. This interaction becomes evident when a worker carries out low structured tasks (low TA), that is to say, tasks in which there is not a predetermined sequence and the worker needs to think and decide how to solve the problem. The moderation effect is evident in the lowest level of TA (1 to 2, on a 5-point scale). When tasks are low structured, perceiving in the leader communicative behaviors that express concern, anxiety, tension or stress positively contributes to the quality of the LMX as they may be interpreted by a subordinate as sensitivity and understanding of the complexity and difficulty of the challenge that the worker must face. The results also show that it is possible that, in levels of TA higher than 5, the moderation effect appears. This could be understood under the Job Characteristic theory (Hackman and Oldham, 1976) which explains that when a task is well known, structured and not challenging, the leader can contribute to motivation giving significance through his concern, anxiety or tension. This issue needs to be explored in future studies.

The results obtained in this research contribute to expanding the understanding of the relation between LMX and communication from a contingent perspective. A leader's communication style is a vital instrument in the construction of the LMX bond and leaders should be aware that the effect of their style could be different according to the context. The size of the work unit and the task analyzability are at least two context variables that they should consider when interacting with their followers.

Management Implications

These findings have managerial implications as they confirm that leaders possess, in their own communication styles, a tool for improving the quality of their relationships with subordinates and favoring their leadership. The subjects of our study are white-collar professionals, most of whom have completed higher education. Managing personnel of these characteristics is a challenge, so the leader must consider the implications of his/her communication style on LMX and the achievement of results.

Followers appreciate that their leader communicates openly and loquacity, somewhat informally and in a good mood, because these behaviors promote trust and reduce unnecessary barriers. Additionally, they appreciate that their leader communicates in a precise, concrete, direct, structured way without going around the bush or presenting irrelevant information. Due to information and communication technologies, we are currently exposed to an overload of information. We have to pay attention to emails, telephone, meetings, documents. If we consider that the sample subjects are knowledge workers, they are professionals whose production are ideas, solutions, proposals, initiatives that others must value to be implemented. They need their leaders to be good communicators with high levels of expressiveness, precision, and questioningness. Encouraging dialog, exchanging opinions, questioning ideas to find new approaches, and thinking "outside the box" are communicative behaviors that will favor LMX and performance.

Conversely, the verbal aggressiveness, which is observed in communicative behaviors such as the open expression of displeasure or anger about issues or people, irritability, authoritarianism, is rejected and affects creating good LMX relationships. Leaders with highly aggressive verbal behaviors tell people what to do and expect their obedience; when asking for something, the tone of voice is demanding. They manifest little respect for others' opinions, discourage dialog, humiliate, hurt feelings, and make others look like fools. The subordinates feel that the leader neither gives attention to them nor understands their problems or needs, offers little support, and treats people in a distant and impersonal way. They will be less likely to approach the leader to inquire or report, which will reduce the possibility of high-quality LMX and affect team performance.

As the group grows, the favorable effect of preciseness in creating the LMX fades, possibly because the leader will be less likely to interact one-on-one with each member of the team. That is why, to manage the team and achieve results efficiently, the leader must reinforce precision by using communication techniques such as reinforcement (sending messages through several channels simultaneously). Communicating a message face to face and then sending it by email will be better than sending it to the entire large group by instant messaging. Being visible frequently could let them know the leader's communication style through virtual meetings, podcasts, videos will also be favorable. Using written channels such as the institutional magazine, the Web, flyers, or other documents could raise the perceived preciseness.

When the leader manages large groups, the negative effect of verbal aggressiveness explained above increases as the group grows and should modulate these communicative behaviors, reducing them to a minimum. When the leader has few collaborators, the continuous daily work creates closeness and mutual knowledge that can help understand and even forgive the aggressive behaviors of the leader. However, when the group is large, the worker's infrequency with the leader makes his/her aggressive verbal behaviors hit much more intensely, thus deteriorating the LMX and affecting his/her chances of achieving good management results.

Professional or knowledge workers usually perform low analyzability (complex) tasks. In this context, the leader's communicative behaviors associated with emotionality deteriorate the LMX. Leaders are under pressure for their position's responsibilities, which can lead them to express

concern, anxiety, and stress about daily routine issues. Furthermore, as a mechanism for protecting against dissenting opinions or criticisms, the leader copes poorly with critical remarks. These emotional behaviors will affect the quality of the LMX because they will generate rejection. The knowledge worker must think about how to solve the tasks, which are complex in themselves, and seeing the tense and anxious leader does not help them.

The LMX theory is based on the dynamic co-creation of the leader-follower link, in which both contribute for better or for worse. This is a complex dynamic, in which the context determines the behavior of both (Uhl-Bien, 2021). It is hoped that the findings of this research can be incorporated into management training programs at universities and leadership training institutions.

Limitations and Future Lines of Research

This study contributes by deepening the understanding of which dimensions of leader communication style should be modified to improve the quality of the LMX relation according to the context, contribution that could be useful in leadership training at business schools.

While our study's findings have important implications for the theory and practice of leadership, as with all studies it has a number of limitations. First, this contribution should be interpreted taking into consideration that it was obtained through a sample of subjects (subordinates) who all have advanced educational degrees and ample work experience as managers, and therefore, the results may not be generalized. This professional group, known in the literature as "white collar" workers, possess characteristics that limit generalization to the entire working population, and therefore, it is necessary for future studies to replicate the research with a more representative sample. Second, and in line with the first limitation, the sample size is small, and the study is cross-sectional, so we may consider this as a pilot study. Third, our data represent a single country, which prevents the results to be generalized worldwide.

These limitations open up avenues for future research. Further research may identify other applications by studying samples of other strata in the working population. From a contingency perspective, the line of research on leader communication and its relationship with LMX offers multiple paths. There are many contextual characteristics and elements that the literature shows have an impact on workgroups, and these could be considered for future research to contribute to management practices. Future lines of research should include not only the impact of virtuality, digitization, artificial intelligence, but the different ways the job is executed, either physically, remotely or a combination of the two, being the last two accelerated by the forces that have been unleashed by the COVID-19 pandemic. As another future line of research, it could be interesting to see the differences in other countries. The cultural context may influence the moderating effect of the different variables. Additionally, the fact that the leader and subordinate belong to different cultures or ethnicity may have an influence on their communication style and LMX.

Conclusion

There is not much research on how context variables affect communication behaviors in the business environment. The results obtained in this research add value from two perspectives. It's important to know what traits of a leader's communication must be modulated according to WUS and TA., but it is also good to know which ones do not need so much attention. This may help leaders to be more aware of their communicative behaviors in order to focus on those that could help or harm the results of leadership on a day-to-day basis.

From an academic perspective, this paper contributes to the field of organizational behavior, having presented a study on communication from a contingency approach. Six dimensions of a leader's communication style have been explored because they influence interpersonal relationships with subordinates; they are ever-present as they are the constitutive elements of the communication style itself (de Vries et al., 2011; Bakker-Pieper and de Vries, 2013). Leaders must be aware of the impact that their communication styles have on their effectiveness to build high-quality leader-member relationships. Leaders should be sensitive to context factors as WUS and TA and modulate the way they communicate with subordinates to enhance LMX. For large groups, the leader must be aware of his/her preciseness and verbally aggressiveness, when communicating. The positive effect of preciseness perceived by subordinates on a leader's messages will decrease as the group grows. Additionally, there must be a reduction of verbal aggressive behaviors because their negative effect is more harmful as a group grows. It is important also to consider the degree of TA to be carried out by the workers to interact sufficiently with each one. When the task to be carried out is low structured (low analyzability), an increase of emotionality may contribute to building high-quality LMX relationships. Perceiving the leader's tension, anxiety, worrisomeness, and defensiveness could enhance LMX as the subordinate understands that his/her leader understand the complexity and challenge of the task he/she must face.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, on request, without undue reservation.

AUTHOR CONTRIBUTIONS

Both authors listed have made substantial, direct and intellectual contributions to the work, and approved it for publication.

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A Moderated-Mediation Analysis of Organizational Justice and Leader-Member Exchange: Cross-Validation With Three Sub-samples

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In an increasingly competitive work world, managers—whose links with subordinates, and their perceptions thereof, are critical components in that relationship—need to monitor employees' mindsets to facilitate their productivity. Our paper investigates organizational justice perceptions as an antecedent to two important outcomes: organizational citizenship behaviors and counterproductive work behaviors. The moderating effect of leader-member exchange and the mediating effect of work motivation were incorporated into a parsimonious moderated-mediation model designed to assist managers in achieving the stated objective. The model was tested on 3,293 Romanian workers, randomly divided into sub-samples of 1,098, 1,098, and 1,097 participants. Indicating high data consistency and credibility for the most part, in each sub-group, all the variables associated as predicted, with the notable exception of LMX. Implications, limitations, and suggestions for future research are discussed, with emphasis on the investigation's cultural context.

Keywords: counterproductive work behavior, leader-member exchange, moderated-mediation, organizational citizenship behavior, organizational justice, work motivation

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INTRODUCTION

Traditionally, in the workplace, the relationship between employers and employees was marked by a top-down hierarchical arrangement whereby the association between the two parties was largely formal and authoritarian (Tziner and Rabenu, 2018). Workers were instructed to do a job for which they received due compensation and job security, and loyalty to the organization was a given. Today, it appears we are living and working in a new era where the dynamics between employers and their employees, especially in western, advanced societies, are rapidly changing.

This work world—primarily the product of advances in technological development, globalization, and increasing competition—has been outlined as VUCA (Volatile, Uncertain, Complex, and Ambiguous; see Bennett and Lemoine, 2014). To achieve a competitive advantage, organizations are increasingly hiring talent that is expert, skilled, and flexible. These individuals are highly knowledgeable, independent-minded, and not necessarily interested in staying in one place of work at any one time (Rabenu, 2021). Looking to the future, organizations are increasingly flat,

teamwork is more widespread, and greater equanimity between employees and their managers is the order of the day (Tziner and Rabenu, 2018).

Under those circumstances, the need to draw out the best from workers is becoming an ever-greater challenge to management. To that end, we might ask what aspects of the work environment best enhance employees' motivations to be loyal, hardworking, and productive. Whether external to the workplace or pervading around workers on the job, the environment arouses feelings among the employees. The emotional baggage can be damaging, in which case adverse perceptions of the job experience are likely evident. Alternatively, the employees have an overall warm feeling about their work, which gives rise to positive responses to the job demands.

Management would want to have insight into the precursors of the positive perceptions likely to inspire their workers to be more amenable and productive at work. Of critical significance in the search for the links in that equation is the role of the leader-subordinate relationship. In sum, an appropriate research objective would be to derive a functional paradigm that highlights the links between employee perceptions and positive behaviors at work.

In our search for the answer to this salient objective, we adopted three well-known theories that underpin the dynamics of work interactions. The theories focus on (1) *social exchange* theory (SET; Blau, 1964), (2) *reciprocity* theory (Gouldner, 1960), and (3) *equity* theory (Adams, 1965) (see below) and precisely encounter mechanisms that influence people's affective states. Thus, the theories are pertinent to the work environment within which employees foster their emotions (e.g., Colquitt et al., 2009). Concerning the current investigation, we emphasize, in particular, the role of employees' of organizational justice perceptions (attitude) and work motivation (a dynamic state) derived from such mechanisms.

Thus, in the current research, we chose to tease out the relationships between a demarcated set of variables related to organizational justice perceptions, leader-member exchange (LMX), work motivation, and the outcomes of organizational citizenship behavior/workplace misbehavior, all of which been associated, on the one hand, with "negative" organizational events, such as: turnover (Bernerth and Walker, 2012) and burnout (Faragher et al., 2013) and, on the other hand, with enhanced productivity (Wang et al., 2010).

Underlying the theories is the notion that there is a mutual association between antecedents and outcomes, such that positive outcomes at work reinforce the antecedent behaviors (and vice versa). There is an underlying assumption that interactions in the workplace are much a give-and-take business, for better or worse (Gouldner, 1960; Blau, 1964; Adams, 1965). The individual worker will strive for a balance (equilibrium) between resources expended (such as time and effort) and outcomes (such as status, acknowledgment, and rewards). Imbalance (dissonance) would likely be rectified in destructive ways (Adams, 1965).

Figure 1 outlines the proposed relationships between the variables. The ultimate objective of the model is to provide managers with a tool to measure (and predict) the potential productivity of their employees. In our model, perception of organizational justice serves as a relevant personal attribute to measure employees' attitudes to the work environment. LMX is seen as a potential mediator, and work motivation as a moderating variable on work productivity outcomes. Organizational citizenship behaviors (OCBs) and counterproductive work behaviors (CWBs) are considered likely work outcomes.

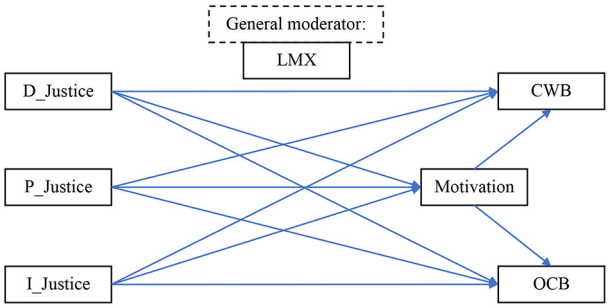

FIGURE 1 | Model for the current research. D_Justice, distributive justice; P_Justice, procedural justice; I_Justice, interactional justice; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

Specifically, we proposed to examine:

(1) The *association* between organizational justice perceptions (distributive, procedural, and interactional) and positive (i.e., OCB) and negative (i.e., CWB) outcomes;
(2) The role of work motivation as a *mediational* mechanism in our model; and
(3) The *moderating* effect of LMX on the overall model.

Notably, our investigation researches the association between the variables in the model employing the *moderated-mediation approach*, a seemingly under-used statistical approach. This is also called conditional indirect effects, and in this type of statistical analysis the effect of a predictor variable X on a(n) criterion/outcome variable Y through a mediator variable M differs depending on levels of a moderator variable Z. In other words, either the impact of X on M and/or the effect of M on Y depends on/conditioned by the level of Z (Muller et al., 2005; Preacher et al., 2007).

Thus, according to our model (**Figure 1**), the relationship between the precursor, personal levels of organizational justice (independent variable A), and possible outcomes (C) are affected by the levels of LMX (the mediator, B), which, in turn, moderates work motivation levels (D), that influence the degree to which the employees exercise OCB or indulge in CWB.

Notably, the associations among the variables in **Figure 1** have been investigated (e.g., Eskew, 1993; Karriker and Williams, 2009; Al-A'wasa, 2018; Ugaddan and Park, 2019), but mostly in Western countries, including the USA, Australia, Canada, and the UK. To a much lesser extent, these relationships have been investigated in East-European or post-communist countries. Hence, Romania was chosen to be the focus of the study. Romania is an ex-communist working environment appeared

to present a prime opportunity to test the universality of the relationships in our model. Of course, referring to Delery and Doty's (1996) contingency theory, we might expect that the operational exigencies operating in Romania at any one time to differ qualitatively from western modes of operation in the workplace—a theme to which we shall return.

CENTRAL ATTITUDES AND CRITICAL PERSONAL STATES

Perceived Organizational Justice

Perceived organizational justice, a broad term to describe how employees view the manner in which they are treated in the workplace. Generally, a "high" level of perceived organizational justice would indicate, for instance, that employees are content with the level of information, resources, and feedback they receive or the degree of respect accorded them by superiors (e.g., Ambrose and Schminke, 2009).

Our research model broke the independent variable, organizational justice, into its three components: (a) distributive, (b) procedural, and (c) interactional justice (e.g., Colquitt et al., 2001). *Distributive justice* reflects perceptions regarding the fairness of outcomes, such as bonuses (see Adams, 1965), where notions of equality and equity play a role. *Procedural justice* reflects perceptions of the processes that lead to these organizational outcomes. These include ethics, accuracy, consistency, lack of bias, and representation of all concerned (Leventhal, 1980); managerial processes considered essential to maintaining institutional legitimacy. *Interactional justice* reflects the degree of fairness perceived in the way employers communicate or treat employees during the implementation of policies, procedures, processes, and outcomes. The underlying premise is that employees need to be treated with compassion, respect, dignity, and caring (e.g., Bies and Moag, 1986). We employed all three categories in our investigation.

When employees perceive that their relationship with their immediate manager/supervisor and their organization (as a whole) is satisfactory or balanced, they will be more disposed to mutually reciprocate by investing higher degrees of time, energy, creativity, and work-intensity behaviors (Pan et al., 2018). In other words, the employees are infused with high work motivation.

Work Motivation

Tziner et al. (2012) indicated that work motivation is an inner mechanism that energizes individuals through thought and action to persevere until they achieve their goals. However, external forces also impinge on those processes. Pinder (2014, p. 11) extended that notion to incorporate an (additional) intrinsic energetic force that stirs the motivation beyond an individual's being. In the work context, these underlying energies initiate job-related behavior and "determine its form, direction, intensity, and duration" (Pinder, 1998, p. 11). In that vein, work motivation emanates from the *interaction* between the external organizational and societal environments and a person's characteristics (Latham and Pinder, 2005).

Often, the external forces are critical: a recession or pandemic can create stressful and uncontrollable pressures at work, to be blamed, perhaps, on the organization. However, in the daily run of things, as Fein and Klein (2011) commented, individual attributes constitute a significant source influencing value-laden perceptions and attitudes—and motivational levels subsequently—and the subjective assessment of the payoff of outcomes in the workplace.

In essence, we predict a flow of cause and effect: For instance, research has indicated that organizational justice correlates to high-quality LMX that, in turn, may lead to greater levels of mutual engagement, trust, and respect between managers and their employees (subordinates). Ultimately, the higher work motivation generated leads to enhanced attainment of work goals. Rewards follow, and they foster high organizational citizenship behaviors and low workplace misbehavior. In sum, the increased motivation drives the employee to higher levels of participation in the organizations' activities. Thus, in our present model, we highlighted perceptions of organizational justice as an individual antecedent to motivation.

Organizational Justice and Work Motivation

Organizational justice, or employee perceptions of fairness, in the workplace appears to impact employees' drives to work. For example, workers who perceive that they are being treated fairly regarding bonus distribution or how managerial decisions are reached feel obliged to mutually reciprocate the fair treatment they received (Gouldner, 1960; Blau, 1964). Hence, a balance is maintained between employees' input at work (e.g., effort, expertise, knowledge) and what they receive in return (e.g., good/better working conditions, monetary compensation, job prestige, more challenging work) (e.g., Adams, 1965).

From the above, we arrived at the following hypothesis:

H1: Organizational justice (distributive, procedural, interactional) positively associates with work motivation.

Organizational Citizenship Behavior

OCB consists of individual behaviors conducted by employees volunteering to contribute beyond their formal job duties to the organization, thus promoting its effective performance. The workers' contributions are discretionary, implicit, not overtly acknowledged by the organization's formal reward system (Organ et al., 2006). OCB is expressed in various forms, from dispositional tendencies (e.g., creativity and flexibility) to contextual factors (e.g., overtime and assisting colleagues) (e.g., Ahmad et al., 2020; Erum et al., 2020). These discretionary activities are greatly valued by management and represent an escalating contribution to the workforce, especially in today's increasingly dynamic and competitive organizational environment. Also, kindly refer to Podsakoff et al.'s (2009) meta-analysis in order to glimpse at the significance of this abounding phenomenon.

Among those contributions, we can recount that OCB enables the efficient allocation of limited resources by facilitating maintenance operations and freeing up resources

for productivity (Organ et al., 2006). Furthermore, OCB allows workers and managers to carry out their jobs through more efficient and mindful scheduling, planning, and problem-solving (Podsakoff et al., 2009) while contributing to the quality of service (Lin et al., 2008). Organizations that nurture citizenship behavior are more attractive environments in which to work. They can hire the best employees and retain them (e.g., George and Bettenhausen, 1990). Because OCB is a *discretionary* indicator of loyalty and high motivation, it is highly pertinent that research seeks out those factors that augment or restrict OCB.

Organizational Justice and OCB

Positive perceptions of organizational justice may invoke a greater work drive (i.e., motivation), an *attitudinal* outcome of such perceptions. However, as noted, the distributive, procedural, and interactional variants of OCB are also likely to be reciprocated by roughly-equal positive action (Gouldner, 1960; Blau, 1964). The workers' additional efforts "compensate" the perceived fair treatment (see also Ahmad et al., 2020). Thus, we hypothesize the following:

H2: Organizational justice (distributive, procedural, interactional) positively associates with OCB.

Counterproductive Work Behavior and Workplace Misbehavior

In recent years, misbehavior at work has received increasing attention. On different sides of the same coin, a distinction has been made between (a) counterproductive work behaviors (CWBs) (Cohen-Charash and Mueller, 2007) and (b) workplace misbehaviors (WMBs). As implied, CWB is viewed by the organization as employees' deliberate actions operating against or in contrast to the organization's best interests (Gruys and Sackett, 2003, p. 30). The disreputable activities affect almost every aspect of the organization's functioning, including procedure, productivity, and, often, the workers themselves (e.g., Spector et al., 2006; Aubé et al., 2009). Concomitantly, CWB causes damage at all levels, psychological, sociological, and economic (Aubé et al., 2009; Bodankin and Tziner, 2009).

Consider, for example, the association between procedural *in*justice and CWB that might be mediated by the degree to which employees perceive a conflict between their work groups' norms and the organization's rules ("perceived normative conflict") (Zoghbi Manrique de Lara and Verano Tacoronte, 2007). In such a case, the employees' perceptions lead them to a state of reluctance to comply with the rules of the organization (Cohen-Charash and Spector, 2001).

From the subjective stance of the offended worker, work misbehavior is manifested by a reduction of input into the job that inclines toward balancing the process of social exchange (Greenberg and Scott, 1996). Adverse reactions toward the organization run the whole gamut of attitudes and behaviors from lower motivational levels and distrust of higher authority to the point of criminal retaliation (e.g., Skarlicki and Folger, 1997; Spector et al., 2006).

Organizational Justice and CWB

In that context, Chernyak-Hai and Tziner (2014) noted that the relationship between organizational justice and (CWB) manifests itself only when moderated by LMX. We suggest that the source of the employees' frustration with their supervisors might have been based on the employees' subjective feeling that their managers inappropriately rewarded them for the (high) investment of their personal resources. That perception lowers work motivation, and if the angst persists, the employees experience frustration. As indicated above, Chernyak-Hai and Tziner (2014) proposed that should employees encounter such imbalance and aversion, they would likely recoup the equilibrium through work misbehavior.

The effects that organizational justice perceptions have on behavior *at work* lead us to hypothesize that work motivation acts as a *mediator* in our model. That is to say that justice perceptions may affect workers' motivations to work—thus possibly eliciting enhanced positive or negative behaviors—independent of the *direct* effect of justice on the behavioral outcomes.

Based on the discussion above, we hypothesize further that:

H3: Organizational justice (distributive, procedural, interactional) negatively associates with CWBs.
H4: (Work) Motivation mediates the relationships between organizational justice (distributive, procedural, interactional) and CWBs.
H5: Motivation mediates the relationships between organizational justice (distributive, procedural, interactional) and OCBs.

Conditional (Buffering) Effect—Leader-Member Exchange

Now we discuss the proposed *moderating* effect of LMX. The leader-member dyadic relationship, we recall, is by definition a two-way process. Thus, for each "member," a unique response mode is called for by the "leader." Employees, being individualistic, will also respond to their supervisors in their distinctive ways. As indicated, based on the theoretical models cited, the subordinates will be more or less obligated (or reluctant) to reciprocate depending on whether the LMX relationship is high or low.

Beyond reciprocity, the positive effects of high LMX are many. The fortunate employee enjoys higher respect and trust, feedback and support, rewards, and improved career opportunities (Clarke and Mahadi, 2017). These benefits, in turn, cause employees to exhibit further positive attitudes and behaviors, such as job engagement (Aggarwal et al., 2020), work commitment, and OCB (e.g., Chernyak-Hai and Tziner, 2014; Islam et al., 2020a,b; see Rockstuhl et al., 2012 for a comprehensive analysis). The employees also benefit from lowers levels of exhaustion, a primary source of burnout (e.g., Huang et al., 2010). For all these reasons, LMX is considered a critical constituent of the workplace social network (Cole et al., 2002).

We have expressed the importance we attach to the role of individual attributes. In the context of this investigation, it is expedient to emphasize the effects of individuals' dispositional differences on motivational levels and, particularly, on LMX,

concerning which little research appears to have been conducted (e.g., Maslyn et al., 2017).

Furthermore, it appears that these relationships need to be studied in a broader range of cultural settings in order to establish the validity of the dyadic associations that appear to be consistent within a western setting (see Zagenczyk et al., 2015).

We return to the possibility that LMX serves as a moderator in our proposed model (see **Figure 1**) and reiterate the cause and effect nature of the LMX association. Thus, as intimated, the rewards (or otherwise) associated with LMX may profoundly influence employees' previously conceived attitudes to superiors at work. The more robust relationship with the managers is conducive to the internalization of (more) positive perceptions of justice. Thus, whatever opinions employees previously had of management may be moderated by the positive effect that the organizational justice has on their work motivation. As another example, high(er) LMX moderates the adverse effects deriving from justice perceptions that (in turn) gave rise to counterproductive work behavior. Based on this discussion, we hypothesize the following:

H6: Leader-member exchange (LMX) moderates the associations in the model (i.e., as a general conditional factor).

Hypotheses Summary

H1: Organizational justice (distributive, procedural, interactional) positively associates with work motivation.

H2: Organizational justice (distributive, procedural, interactional) positively associates with OCB.

H3: Organizational justice (distributive, procedural, interactional) negatively associates with CWBs.

H4: (Work) Motivation mediates the relationships between organizational justice (distributive, procedural, interactional) and CWBs.

H5: Motivation mediates the relationships between organizational justice (distributive, procedural, interactional) and OCBs.

H6: Leader-member exchange (LMX) moderates the associations in the model (i.e., as a general conditional factor).

METHODS

Participants

In the current study, 3,293 Romanian subjects in the study, 39% males and 61% females between the ages of: 18–25 (53.5%), 26–35 (23.3%), 36–45 (12.5%), 46–55 (9.0%), 56–65 (1.7%), and 65+ (0.1%). In terms of education, respondents had either completed high-school education (31.2%), tertiary or post-secondary education (7.8%), they are holding/studying a Bachelor's degree (41.5%), they are holding/studying a Master's degree (19.3%), or they holding/studying a PhD (0.2%).

At work, most subjects held managerial positions (83.5%), including: (a) head of office or team (15.6%), (b) head of department (6.9%), or (c) director or executive manager (3.5%); the remaining participants of this managerial group (74.1%) were not at all responsible for the work of other people. Lastly, their tenure ranges between: (a) 0–5 years (66.2%), (b) 6–10 years (14.4%), (c) 11–15 years (7.6%), (d) 16–20 years (4.5%), (e) 21–25 years (2.9%), and (f) 25+ years (4.3%).

Measures

Organizational Justice

Niehoff and Moorman's (1993) Justice Scale, comprising 20 items (Likert-types) between 1 (completely disagree) and 6 (completely agree), was employed as the measuring instrument. The measures reflected the three aspects of justice, as in the following examples: (1) *Distributive Justice*—"I consider my workload to be quite fair" ($\alpha = 0.83$, $M = 4.40$, $SD = 0.83$); (2) *Procedural Justice*— "All job decisions are applied consistently across all affected employees" ($\alpha = 0.88$, $M = 4.43$, $SD = 0.97$); and (3) *Interactional Justice*— "When decisions are made about my job, the general manager treats me with respect and dignity" ($\alpha = 0.89$, $M = 4.27$, $SD = 0.90$).

Work motivation. We assessed this variable employing the Work Extrinsic and Intrinsic Motivation Scale (WEIMS; Tremblay et al., 2009). There are 18 items (Likert-type) range from 1 (does not correspond at all) to 6 (corresponds exactly). For example, "The reason for being involved in my job is the satisfaction I experience when I am successful at doing difficult tasks" ($\alpha = 0.91$, $M = 4.04$, $SD = 0.83$).

Leader-Member Exchange

LMX was gauged by the Leader-Member Exchange Multi-Dimensional Measure (LMX-MDM attributed to Liden and Maslyn (1998). The measure includes 12 Likert-type items ranging from 1 (strongly disagree) to 6 (strongly agree). For example, "My supervisor would defend me to another in the organization if I made an honest mistake" ($\alpha = 0.85$, $M = 4.12$, $SD = 0.91$).

Counterproductive Work Behavior

A scale by Bennett and Robinson (2000) (Interpersonal and Organizational Deviance Scale; IODS) was employed to measure CWB. The scale consists of 19 items (Likert-type) between 1 (never) and 6 (every day). For instance, "I deliberately worked slower than I could" ($\alpha = 0.95$, $M = 2.10$, $SD = 0.98$).

Organizational Citizenship Behavior

OCB was gauged by a scale from Williams and Anderson (1991), namely, a 14-item scale (Likert-type) with response options between 1 (strongly disagree) and 6 (strongly agree). For example, "I help others who have been absent" ($\alpha = 0.83$, $M = 3.72$, $SD = 0.77$).

Procedure

We employed back-translation procedure suggested by Brislin's (1980). The items of the questionnaire were translated from English into Romanian. Care was taken to maximize semantic equivalence prior to the presentation of the questionnaire to end-participants. The translated questionnaires were administered by students (our research assistants) to respondents who formally consented that they wish to participate in our survey. The respondents were notified that the questionnaire was anonymous and confidential at all stages of its administration (acceding

to the necessary legislation of the European Union concerning ethical standards).

RESULTS

Common-Method Bias

Two methodologies were employed to test for the extent of possible common-method variance (CMV), accounting for variable intercorrelations in the results (see Podsakoff et al., 2003). The methods were: (a) Harman's single-factor method (all items are loaded into one common/marker factor) and (b) a common latent factor (CLF) method (all items are loaded into both their expected factors and one latent common method factor).

Based Harman's single-factor model, we notice that the results of the analysis accounted for only 25.49% of the explained variance (fit indices are suggested by, for example, Byrne, 2010; Islam et al., 2013; Shkoler and Tziner, 2017; Shkoler and Kimura,

TABLE 1 | Pearson correlation matrix.

	1	2	3	4	5	6	7
Distributive justice							
Procedural justice	0.84						
Interactional justice	0.87	0.88					
Motivation	0.53	0.56	0.54				
LMX	0.55	0.53	0.58	0.31			
CWB	−0.28	−0.27	−0.23	−0.15	−0.12		
OCB	0.34	0.33	0.35	0.27	0.33	−0.15	

All the correlations are significant at $p < 0.001$. LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

TABLE 2 | SEM path results with standardized regression coefficients and difference tests.

			Low LMX		*High* LMX		Difference test
Path			β	***Sig.***	β	***Sig.***	***Z*-score**
Distributive justice	→	Motivation	**0.18**	**0.001**	**0.14**	**0.002**	−0.34
Procedural justice	→	Motivation	**0.27**	**0.001**	**0.32**	**0.000**	1.28
Interactional justice	→	Motivation	**0.13**	**0.006**	**0.11**	**0.016**	0.14
Motivation	→	CWB	−0.04	0.310	0.02	0.207	1.62
Motivation	→	OCB	**0.12**	**0.000**	**0.10**	**0.000**	−0.84
Distributive justice	→	CWB	**−0.23**	**0.000**	**−0.25**	**0.000**	−0.69
Distributive justice	→	OCB	**0.15**	**0.002**	0.05	0.194	−0.97
Procedural justice	→	CWB	**−0.21**	**0.000**	**−0.22**	**0.000**	−0.70
Procedural justice	→	OCB	0.06	0.312	−0.03	0.478	−1.21
Interactional justice	→	CWB	**0.21**	**0.000**	**−0.17**	**0.004**	**−2.50****
Interactional justice	→	OCB	0.06	0.324	**0.20**	**0.000**	**2.18***

**$p < 0.05$, **$p < 0.01$. Bolded data are statistically significant. LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.*

TABLE 3 | Mediation (indirect) effects analyses.

					Low LMX			*High* LMX		
Paths					**LL**	**UL**	***Sig.***	**LL**	**UL**	***Sig.***
Distributive justice	→	Motivation	→	OCB	0.01	0.05	0.004	0.01	0.04	0.011
Distributive justice	→	Motivation	→	CWB	−0.03	0.01	0.233	−0.01	0.03	0.160
Procedural justice	→	Motivation	→	OCB	0.03	0.07	0.000	0.02	0.06	0.003
Procedural justice	→	Motivation	→	CWB	−0.04	0.02	0.309	−0.02	0.05	0.207
Interactional justice	→	Motivation	→	OCB	0.02	0.05	0.000	0.01	0.04	0.003
Interactional justice	→	Motivation	→	CWB	−0.03	0.02	0.292	−0.01	0.03	0.144

Analyses used bootstrapping (95% bias-corrected, 5,000 resamples). LL, lower limit of the CI; UL, upper limit of the CI; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

2020): $\chi^2(3,070) = 9{,}433.57$, $p = 0.000$, $\chi^2/df = 3.07$, CFI = 0.67, NFI = 0.66, GFI = 0.31, SRMR = 0.15, RMSEA (90% CI) = 0.24 (0.17–0.29), *p-close* = 0.000. Further, the CLF alternative model produced 23.17% of the explained variance: $\chi^2(2,991) = 7{,}115.34$, $p = 0.000$, $\chi^2/df = 2.38$, CFI = 0.70, NFI = 0.69, GFI = 0.47, SRMR = 0.12, RMSEA (90% CI) = 0.14 (0.05–0.21), *p-close* = 0.001. Notably, these figures do not exclude the possibility of same-source bias (CMV). However, following Podsakoff et al. (2003), we note that if the explained variance accounted for by the first emerging factor is statured <50% ($R^2 < 0.50$)—in conjunction with a poor model fit for each analysis—then the indication is that CMB is an improbable explanation of our findings.

Table 1 displays the zero-order intercorrelations in the research.

To test the model (see **Figure 1**), we employed a SEM with multiple-group analysis using the AMOS software (v. 23). The model has fit in the absolute sense: $\chi^2_{(df)} = 22.35(11)$, $p = 0.023$, $\chi^2/df = 2.04$, SRMR = 0.03, GFI = 0.98, CFI = 0.99, NFI = 0.98, NNFI = 0.96, RMSEA (90% CI) = 0.06 (0.04–0.07), *p-close* = 0.479. **Table 2** displays the findings from the path analysis made, while LMX is a moderator (*via* a Median-Split-Procedure: "*Low* LMX" = data *below or equal* to LMX's median, while "*High* LMX" = data *above* LMX's median), and also *Z*-tests to pinpoint where the differences in regression estimators, between the two LMX groups, are statistically significant. Also, **Table 3** portrays the indirect effects analysis for the mediation effects. **Figure 2** depicts the results on a path diagram.

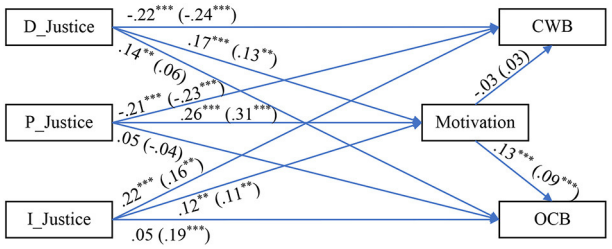

FIGURE 2 | Path diagram with SEM results. Data outside parenthesis = Low LMX group. Data inside parenthesis = High LMX group. D_Justice, distributive justice; P_Justice, procedural justice; I_Justice, interactional justice; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior. $^{**}p < 0.01$, $^{***}p < 0.001$.

As shown in **Table 2**, considering the between-groups comparison (Low LMX vs. High LMX), there are only two statistically significant differences in the correlational (bivariate) relationships between the variables. This finding designates that LMX is *not* a moderator.

Table 3 reveals that work motivation is a mediator, but *only* between the predictors: distributive, procedural, and interactional justice perceptions and the outcome: OCB. To the contrary, when CWB was the criterion, no mediation effect was found.

Table 4 summarizes the findings of the current research.

Further Analyses

As presented earlier in the paper, to test the research model (see **Figure 1**), a large sample was obtained, well above and beyond statistical requirements or rules of thumb. As such, we decided to divide this large sample into three randomly selected sub-samples to cross-validate the data and increase its credibility and accuracy.

Hence, three sub-samples, of almost equal size, were gleaned: (1) sub-sample 1 ($n_1 = 1{,}098$), (2) sub-sample 2 ($n_2 = 1{,}098$), and (3) sub-sample 3 ($n_3 = 1{,}097$). We then proceeded to use these as the basis for replicating the analyses. The results are

TABLE 4 | Summary of results from hypotheses testing.

Hypothesis/path					***Low*-LMX**	***High*-LMX**
Distributive justice	→	Motivation			Supported	N.S.
Procedural justice	→	Motivation			N.S.	Supported
Interactional justice	→	Motivation			N.S.	Supported
Distributive justice	→	OCB			Supported	N.S.
Procedural justice	→	OCB			N.S.	N.S.
Interactional justice	→	OCB			N.S.	Supported
Distributive justice	→	CWB			N.S.	N.S.
Procedural justice	→	CWB			N.S.	Supported
Interactional justice	→	CWB			N.S.	N.S.
Distributive justice	→	Motivation	→	OCB	Supported	Supported
Procedural justice	→	Motivation	→	OCB	Supported	Supported
Interactional justice	→	Motivation	→	OCB	Supported	Supported
Distributive justice	→	Motivation	→	CWB	N.S.	N.S.
Procedural justice	→	Motivation	→	CWB	N.S.	N.S.
Interactional justice	→	Motivation	→	CWB	N.S.	N.S.
LMX	**=**	***Moderator***			**Supported**	

N.S., not-supported; CWB, counterproductive work behavior; OCB, organizational citizenship behavior; LMX, leader–member exchange.

TABLE 5 | Means, standard deviations and reliability coefficients for each sub-sample.

	Sub-sample 1[a]			Sub-sample 2[b]			Sub-sample 3[c]			Total sample[d]		
Variable	***M***	***SD***	**α**	***M***	***SD***	**α**	***M***	***SD***	**α**	***M***	***SD***	**α**
Distributive justice	4.44	0.94	0.84	4.39	0.92	0.83	4.38	0.93	0.83	4.40	0.93	0.83
Procedural justice	4.44	0.99	0.89	4.42	0.95	0.88	4.42	0.97	0.87	4.43	0.97	0.88
Interactional justice	4.29	0.92	0.90	4.26	0.89	0.89	4.26	0.90	0.89	4.27	0.90	0.89
Motivation	4.05	0.86	0.91	4.00	0.82	0.90	4.09	0.81	0.91	4.04	0.83	0.91
LMX	4.13	0.91	0.84	4.11	0.89	0.84	4.11	0.93	0.86	4.12	0.91	0.85
CWB	2.07	0.97	0.95	2.15	0.98	0.95	2.08	0.97	0.95	2.10	0.98	0.95
OCB	3.74	0.79	0.84	3.72	0.74	0.82	3.70	0.76	0.82	3.72	0.77	0.83

[a]n = 1,098. [b]n = 1,098. [c]n = 1,097. [d]N = 3,293. LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

presented similarly to the Results section above, in **Tables 5–8** and **Figures 3–5**. In other words, we repeated the same analyses and data presentation format following the Results section, once for each sub-sample.

Table 9 summarizes the findings of the current research, for each sub-sample.

In sum, the analyses revealed that the three sub-samples demonstrate similar, but not identical, relationships to the total sample. This finding further augments the credibility of the data, results, and implications.

DISCUSSION

The goal of the current paper was to shed light on: (1) the relationship between organizational justice perceptions (distributive, procedural, and interactional) and positive (i.e., OCB) and negative (i.e., CWB) outcomes; (2) the mediational effect(s) of work motivation in the model; and (3) the moderation effect(s) of LMX in the model (see **Figure 1**). To this end, we employed a large-scale study in an East-European country: Romania.

The results revealed that most of our hypotheses were corroborated: (H1, H2, and H3) organizational justice (distributive, procedural, interactional) negatively associates with CWB and positively with work motivation and OCB; (H4) work motivation did not mediate between organizational justice and CWB; (H5) work motivation mediated *only* two of these relationships (first, distributive justice-motivation-OCB. Second, or procedural justice-motivation-OCB); and (H6) the LMX level, as a moderator, appeared to be a conditional factor in model, albeit *only partially*.

Implications and Future Suggestions

1. The overall results of the investigation replicate previously revealed associations between the variables in the model, albeit not totally, with the exception of the moderating effect of LMX. At the most basic level, we recommend that managements internalize the possible debilitating effects of their workers' negative perceptions of organizational justice in all its manifestations. Organizations are urged to create just and fair work environments that promote positive motivations and OCB while reducing counterproductive work behaviors—benefitting both the organizations and their employees.

Furthermore, we also recommend that management consistently monitors the motivation levels of their employees. As observed, work motivation acts as a *partial* mediator to OCB (i.e., justice → motivation → OCB). Management is thus encouraged to extend the opportunities to raise motivation at work and, consequently, increase OCB, among other positive outcomes in the workplace.

2. We note that in the final analysis, despite indications both theoretical and empirical, LMX did *not* moderate any of the relationships in the model as hypothesized (see **Figure 1**). That is to say that the exchanges between managers and their subordinates do not appear to act as a conditional factor. Several considerations might explain this outcome:

First, the result obtained in this investigation may simply correspond to Chernyak-Hai and Tziner's (2014) observation that the predicted organizational justice/counterproductive work behavior (CWB) relationship exists *only* when it is moderated by the *extent* of leader-member exchange. That is to say, that the composite (mean) measure of LMX in each of the three sub-groups was simply not sufficiently high to achieve the expected result.

It would also appear that the assumptions noted in the introductory discussion did not hold with this set of subjects. That is to say, the respondents of the survey did not necessarily view low-LMX as depletion of their resources. Nor did they view any negative perceptions entertained as a reaction to inappropriate rewards for the investment of their valuable personal resources.

Second (and likely related to the last comment), the above result was obtained in the specific Romanian cultural context, only two decades removed from its associations with Soviet culture. The possibility arises that the questionnaires employed in our investigation, and designed in the West, were not appropriate for the Romanian workers' mindset, even though they were semantically adapted to the Romanian language, as noted in the Method section. Furthermore, among the respondents, there may yet have been a lingering distrust of surveys of any kind that emerge from "higher authorities," a residual hangover from the Soviet system.

TABLE 6 | Pearson correlation matrix.

	1	2	3	4	5	6
D_Just	–					
P_Just	0.84/0.85/0.84/0.84	–				
I_Just	0.87/0.87/0.86/0.87	0.88/0.89/0.88/0.88	–			
Mot	0.53/0.53/0.53/0.52	0.56/0.55/0.56/0.55	0.54/0.54/0.23/0.55	–		
LMX	0.55/0.56/0.50/0.57	0.53/0.54/0.50/0.55	0.58/0.57/0.57/0.60	0.31/0.34/0.25/0.33	–	
CWB	−0.28/−0.28/−0.31/−0.23	−0.27/−0.29/−0.30/−0.23	−0.23/−0.22/−0.26/−0.19	−0.15/−0.15/−0.15/−0.17	−0.12/−0.16/−0.12/**−0.07**	–
OCB	0.34/0.36/0.31/0.35	0.33/0.35/0.31/0.33	0.35/0.36/0.33/0.28	0.27/0.26/0.32/0.28	0.33/0.35/0.32/0.34	−0.15/−0.12/−0.14/−0.84

*The correlations are presented as follows: total sample ($N = 3,293$) **and then** sub-sample 1 ($n_1 = 1,098$) **and then** sub-sample 2 ($n_2 = 1,098$) **and then** sub-sample 3 ($n_3 = 1,097$); i.e., total/1/2/3. All the correlations are significant at $p < 0.001$ (apart from a bolded correlation which is significant at $p < 0.05$). Data on the diagonal in bold and parentheses are the reliability coefficients (Cronbach's alphas). D_Justice, distributive justice; P_Justice, procedural justice; I_Justice, interactional justice; Mot, motivation; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.*

Moreover, beyond the challenges of reliability represented by surveys associated with misbehaviors at work (see Limitations, below), it is quite conceivable that what the Romanian subjects responded to on paper did not adequately reflect their true feelings or work behaviors. This supposition would apply primarily to LMX and perceptions of fairness at work, whereby norms that apply in the western world do not necessarily apply to the Romanian society, only recently having emerged from a repressive ethos. Put bluntly: "However the supervisor acts toward me is a bluff." This assumption is supported somewhat by Zagenczyk et al.'s (2015) observation that a "mismatch" between expectations from favorable LMX relationships and work outcomes can be a reality in the workplace. In their words: "Employees may have LMX perceptions which are *inconsistent* with the favorability of treatment that they receive" (Zagenczyk et al., 2015, p. 105).

Thus, while the model replicates previous findings in some respects, we cannot ascertain that the current results of this investigation *apropos* the LMX moderating effect are valid universally or that the surveys, in and of themselves, were reliable in the Romanian context.

Alternatively, we note the several references in our discussion to the effects of external and internal influences on employees' attributes, attitudes, and internal states. In contradistinction to external influences on the workplace, we chose to emphasize those individual characteristics that influence the build-up of positive and negative behaviors on the job. That the exchanges between employees (i.e., subordinates) and their managers did not appear to act as a conditional factor in our investigation could be explained by asserting that, specifically in the Romanian context, extraneous *external* factors impacted the respondents in a manner that militated against the effects of LMX on workers' behavior in their work environments.

Consider, for example, that there may be an unveiled cognitive process of attribution that should be explored in the future. Indeed, in contrast to the wary, conservative attitude described above, we could adduce that the (external) surrounding work ethos in Romania may be such that ex-Soviet Romanian employees would never even contemplate the thought that their immediate managers were unfair. Moreover, recalling the traditional, authoritarian approach to work and productivity in the open lines of our discussion, we could feasibly conceive that compliant Romanian workers are suspicious of attempts to intrude into their personal space. Thus, at work or when responding to questionnaires, the employees are reticent, despite the degree to which the experimenters complied with the ethical demands of the investigation.

Based on these kinds of presumptions, we recommend (1) adapting the surveys to the normative behaviors and attitudes that define the Romanian workplace and (2) replicating the study in various countries and cultural settings. These future studies would ultimately augment the external validity of the research (On the significance and value of replications, see Tziner, 2018).

Further, we recommend that future research focus on additional potential moderators and, specifically, on what might be labeled the classical internal indicators of

TABLE 7 | SEM path results with standardized regression coefficients for each sub-sample.

			Sub-sample 1 (n_1 = 1,098)				Sub-sample 2 (n_2 = 1,098)				Sub-sample 3 (n_3 = 1,097)			
			Low LMX		*High* LMX		*Low* LMX		*High* LMX		*Low* LMX		*High* LMX	
Path			β_1	***Sig.*$_1$**	β_1	***Sig.*$_1$**	β_2	***Sig.*$_2$**	β_2	***Sig.*$_2$**	β_3	***Sig.*$_3$**	β_3	***Sig.*$_3$**
D_Justice	→	Mot	**0.17**	**0.020**	**0.17**	**0.020**	**0.29**	**0.000**	0.06	0.447	0.04	0.544	**0.17**	**0.012**
P_Justice	→	Mot	**0.26**	**0.001**	**0.27**	**0.000**	**0.27**	**0.000**	**0.46**	**0.000**	**0.28**	**0.000**	**0.23**	**0.000**
I_Justice	→	Mot	0.12	0.128	0.12	0.166	0.06	0.376	0.04	0.682	**0.20**	**0.018**	**0.19**	**0.010**
Motivation	→	CWB	0.04	0.477	0.01	0.770	0.04	0.386	0.04	0.388	**−0.16**	**0.000**	0.04	0.371
Motivation	→	OCB	0.06	0.195	0.08	0.085	**0.20**	**0.000**	**0.13**	**0.007**	**0.15**	**0.002**	0.07	0.161
D_Justice	→	CWB	**−0.21**	**0.010**	**−0.28**	**0.000**	**−0.20**	**0.011**	**−0.37**	**0.000**	**−0.30**	**0.000**	−0.08	0.307
D_Justice	→	OCB	**0.15**	**0.048**	0.07	0.396	0.07	0.385	−0.05	0.589	**0.19**	**0.017**	**0.14**	**0.044**
P_Justice	→	CWB	**−0.37**	**0.000**	**−0.27**	**0.002**	**−0.24**	**0.004**	**−0.17**	**0.047**	−0.06	0.495	**−0.27**	**0.000**
P_Justice	→	OCB	0.12	0.200	−0.08	0.381	0.00	0.987	−0.01	0.941	0.03	0.734	−0.03	0.750
I_Justice	→	CWB	**0.36**	**0.000**	**0.25**	**0.011**	0.13	0.136	**0.18**	**0.045**	**0.21**	**0.024**	0.07	0.449
I_Justice	→	OCB	0.04	0.691	**0.23**	**0.019**	0.12	0.155	**0.21**	**0.038**	−0.01	0.943	**0.16**	**0.049**

Bolded data are statistically significant. D_Justice, distributive justice; P_Justice, procedural justice; I_Justice, interactional justice; Mot, Motivation; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

TABLE 8 | Mediation (indirect) effects analyses for each sub-sample 1.

					Low LMX			*High* LMX		
Paths					**LL**	**UL**	***Sig.***	**LL**	**UL**	***Sig.***
Sub-sample 1 (n_1 = 1,098)										
Distributive justice	→	Motivation	→	OCB	0.02	0.07	0.009	0.01	0.04	0.007
Distributive justice	→	Motivation	→	CWB	−0.04	0.00	0.210	−0.00	0.06	0.177
Procedural justice	→	Motivation	→	OCB	0.01	0.05	0.000	0.02	0.10	0.011
Procedural justice	→	Motivation	→	CWB	−0.04	0.02	0.357	−0.01	0.04	0.253
Interactional justice	→	Motivation	→	OCB	0.00	0.03	0.000	0.01	0.05	0.013
Interactional justice	→	Motivation	→	CWB	−0.02	0.09	0.402	−0.02	0.01	0.166
Sub-sample 2 (n_2 = 1,098)										
Distributive justice	→	Motivation	→	OCB	0.00	0.05	0.006	0.00	0.05	0.015
Distributive justice	→	Motivation	→	CWB	−0.02	0.02	0.194	−0.00	0.04	0.152
Procedural justice	→	Motivation	→	OCB	0.02	0.08	0.000	0.03	0.08	0.008
Procedural justice	→	Motivation	→	CWB	−0.03	0.00	0.231	−0.04	0.01	0.199
Interactional justice	→	Motivation	→	OCB	0.01	0.08	0.000	0.00	0.06	0.014
Interactional justice	→	Motivation	→	CWB	−0.01	0.03	0.167	−0.00	0.02	0.145
Sub-sample 3 (n_3 = 1,097)										
Distributive justice	→	Motivation	→	OCB	0.01	0.09	0.011	0.01	0.07	0.013
Distributive justice	→	Motivation	→	CWB	−0.03	0.01	0.255	−0.02	0.06	0.140
Procedural justice	→	Motivation	→	OCB	0.03	0.09	0.000	0.01	0.07	0.005
Procedural justice	→	Motivation	→	CWB	−0.06	0.02	0.338	−0.03	0.05	0.285
Interactional justice	→	Motivation	→	OCB	0.02	0.05	0.000	0.02	0.10	0.021
Interactional justice	→	Motivation	→	CWB	−0.03	0.03	0.352	−0.01	0.03	0.173

Analyses used bootstrapping (95% bias-corrected, 5,000 resamples). LL, lower limit of the CI; UL, upper limit of the CI; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior.

individual differences or attributes that serve as predictors. These indicators include emotional intelligence and the Big Five personality factors (openness, conscientiousness, extraversion, agreeableness, and neuroticism; see, for example, Staw and Cohen-Charash, 2005). In the light of previous comments, future investigations of this nature should also incorporate varied sources of "external" factors in the workplace/organization, such as: ethical organizational climate and organizational policy, likely to impinge on perceptions of organizational justice and, ultimately, on workers' sense of self, work motivation, and productivity (e.g., Arifin, 2020).

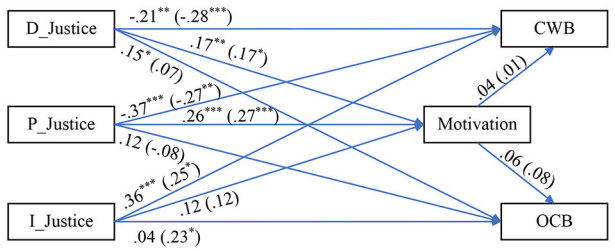

FIGURE 3 | Path diagram with SEM results (sub-sample 1, $n_1 = 1{,}098$). Data outside parenthesis = Low LMX group. Data inside parenthesis = High LMX group. D_Justice, distributive justice; P_Justice, procedural justice; I_Justice, interactional justice; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior. $^{*}p < 0.05$, $^{**}p < 0.01$, and $^{***}p < 0.001$.

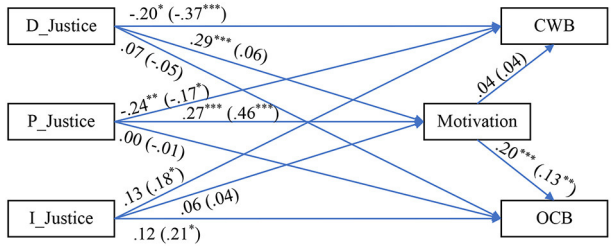

FIGURE 4 | Path diagram with SEM results (sub-sample 2, $n_2 = 1{,}098$). Data outside parenthesis = Low LMX group. Data inside parenthesis = High LMX group. D_Justice, distributive justice; P_Justice, procedural justice; I_Justice, interactional justice; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior. $^{*}p < 0.05$, $^{**}p < 0.01$, and $^{***}p < 0.001$.

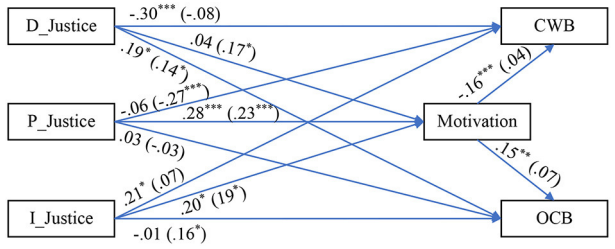

FIGURE 5 | Path diagram with SEM results (sub-sample 3, $n_3 = 1{,}097$). Data outside parenthesis = Low LMX group. Data inside parenthesis = High LMX group. D_Justice, distributive justice; P_Justice, procedural justice; I_Justice, interactional justice; LMX, leader–member exchange; CWB, counterproductive work behavior; OCB, organizational citizenship behavior. $^{*}p < 0.05$, $^{**}p < 0.01$, and $^{***}p < 0.001$.

3. We can learn from the lack of significant differences between the three samples employed in the current study. In themselves, each sub-sample is representative of the whole set to a great extent. However, the *total* sample is more representative of the population, such that one may assume the relationships that were found within that composite sample do better resemble reality. As per the central limit theorem, estimating that the larger a sample size in a given set is (i.e., $n \rightarrow \infty$), the more its distribution approximates a normal distribution (e.g., Rosenblatt, 1956). Therefore, we recommend using as large a sample size as is humanly possible, especially in cross-sectional studies (see also Limitations below).

4. In this investigation, we employed the *moderated-mediation approach*, which we noted was somewhat underused in statistical analysis of these kinds of investigations. In this instance, the lack of the moderating power of LMX might have brought this method into question. Nevertheless, in our opinion, given the possibilities to explain this outcome outlined above, there does not appear to be an objective reason not to replicate the employment of this procedure in further investigations according to the recommendations indicated above.

Limitations

Further to the discussion above, we now turn to specific limiting factors within the paradigm of this current research.

1. Self-report questionnaires are by nature subjective despite design attempts to overcome personal biases, prejudices, or preconceived notions about what constitutes negative behavior at work. Furthermore, even under conditions of anonymity, individuals might find it difficult to admit to behaviors, such as: theft, sabotage, or disparagement of others—even to themselves. Asking respondents to judge their hostile conduct at work is problematic due to denial processes that operate in the subconscious or because of the threats to one's self-esteem operating when coming to terms with the one's adverse behaviors.

Thus, the CWB questionnaire possibly poses a threat, and respondents are hesitant to report their misdeeds and poor relationships with others at work. This observation is supported by a similar study conducted by Chernyak-Hai and Tziner (2014), which revealed almost identical results for measurements of CWB. The results of such questionnaires are thus questionable. Indeed, in contradistinction to OCB, the effects on CWB as an outcome in our investigation were weak or non-significant.

2. As such, we might suggest that CWB measures obtained by (external) supervisors and co-workers might validate the results obtained by the subjective self-report questionnaires. However, objective these extraneous reports might be they also raise ethical issues concerning colleagues reporting on the "so-called" misdeeds of others at work for whom they may hold biased preferences or prejudices. Indeed, Berry et al. (2012) noted that the inter-rater reliability of "other-reported" measures/scales of CWB is typically low.

3. Additionally, we indicate that the single-sourced and cross-sectional data collected in the investigation was restrictive. Because it does not allow for corroboration of findings over time, the data limits the generalizability of the research.

4. Notably, our research was not directed toward a specific industry, sector, or type of employee, a point in favor of enhancing the external validity of the research. However, that approach also limits the construct validity of the results. These latter comments bring to mind.

Delery and Doty's (1996) observation, noted in the preliminary discussion. Based on contingency theory, they asserted that the optimal way to organize a company depends on the internal and external situation *pervading in that company at any one time.* This axiom raises the more profound question of

TABLE 9 | Summary of results from hypotheses testing (sub-sample 2, $n_2 = 1{,}098$).

Hypothesis/path					Sub-sample 1		Sub-sample 2		Sub-sample 3	
					***L*-LMX**	***H*-LMX**	***L*-LMX**	***H*-LMX**	***L*-LMX**	***H*-LMX**
Distributive justice	→	Motivation			Sup.	Sup.	Sup.	N.S.	N.S.	Sup.
Procedural justice	→	Motivation			Sup.	Sup.	Sup.	Sup.	Sup.	Sup.
Interactional justice	→	Motivation			N.S.	N.S.	N.S.	N.S.	Sup.	Sup.
Distributive justice	→	OCB			Sup.	N.S.	N.S.	N.S.	Sup.	Sup.
Procedural justice	→	OCB			N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Interactional justice	→	OCB			N.S.	Sup.	N.S.	Sup.	N.S.	Sup.
Distributive justice	→	CWB			Sup.	Sup.	Sup.	Sup.	Sup.	N.S.
Procedural justice	→	CWB			Sup.	Sup.	Sup.	Sup.	N.S.	Sup.
Interactional justice	→	CWB			Sup.	Sup.	N.S.	Sup.	Sup.	N.S.
Distributive justice	→	Motivation	→	OCB	Sup.	Sup.	Sup.	Sup.	Sup.	Sup.
Procedural justice	→	Motivation	→	OCB	Sup.	Sup.	Sup.	Sup.	Sup.	Sup.
Interactional justice	→	Motivation	→	OCB	Sup.	Sup.	Sup.	Sup.	Sup.	Sup.
Distributive justice	→	Motivation	→	CWB	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Procedural justice	→	Motivation	→	CWB	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Interactional justice	→	Motivation	→	CWB	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
LMX	**=**	***Moderator***			**Sup.**		**Sup.**		**Sup.**	

Sup., supported; N.S., not-supported; L-LMX, low LMX; H-LMX, high LMX; CWB, counterproductive work behavior; OCB, organizational citizenship behavior; LMX, leader–member exchange.

whether any replication, further in time, can be considered an accurate, valid replication, as external and internal circumstances are continuously subject to change.

DATA AVAILABILITY STATEMENT

The data set(s) generated and analyzed during the current study are not publicly available due to discretion and anonymity considerations, but are available from the corresponding author on reasonable request.

ETHICS STATEMENT

The current study was correlational, based on a survey, and not a manipulation of subjects. At the beginning of each questionnaire, we explained the general goal of the research, and informed consent was obtained from every participant included in the study. We ensured anonymity and discretion of the results and also ensured that the subjects knew they could drop their participation at any time they chose.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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