PSYCHOSOCIAL RISKS AND HEALTH AT WORK FROM A GENDER PERSPECTIVE: A CURRENT OVERVIEW

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PSYCHOSOCIAL RISKS AND HEALTH AT WORK FROM A GENDER PERSPECTIVE: A CURRENT OVERVIEW

Topic Editors: **Eva Cifre,** Universitat Jaume I, Spain **María Vera,** Universidad Pablo de Olavide, Spain



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Editorial: Psychosocial Risks and Health at Work From a Gender Perspective

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Keywords: psychosocial risk, health, work, gender, sex, gender identidy, mental health - state of emotional and social well-being

Editorial on the Research Topic

Psychosocial Risks and Health at Work From a Gender Perspective

The number of working women is continuously increasing and becoming more significant (78.1% of men and 66.6% of women in Europe EU28, European Commission, 2018). This has been reflected in the presence of a gender dimension on the occupational health psychology (OHP). However, this gender dimension has not been included in OHP research or practice, which mostly still considers men as the single measure (i.e., *androcentrism*). Thus, there is a clear need to consider gender effects on OHP issues. This special issue seeks to inform the global community about advances on it.

A comprehensive international, multifactorial, interdisciplinary, and intentional effort is crucial to understand how different aspects of the work-life are influencing the occupational psychosocial health in the same way as or in a different way from different genders. This research topic in *Frontiers in Psychology* includes 11 papers from across the globe that address psychosocial health at work from a holistic point of view, considering individual, work, social, and organizational factors that influence women's and men's psychosocial health at work. In this vein, these papers cover a range of topics and address gender issues going further sex–gender dichotomy (men–women), including top issues in the area, such as the LGBT community and gender identity.

The present e-book consists of different types of papers (one conceptual analysis paper, one hypothesis and theory paper, and nine original research) that combine different methodologies to shed new insights regarding this topic, both by comparing sex and gender. And not only from psychology, but also from other related fields (i.e., management, sociology, education, and medicine).

The e-book starts with a review paper by Gartzia et al. who analyze research on gender stereotypes and identity and emotions as psychosocial antecedents of organizational stress in the PsycINFO database during the period 1980–2017. Authors conclude that androgynous individuals may have the potential to develop a wide range of emotional competencies that are required to deal with and improve emotional experiences at work. Gender identity also seems to play a crucial role to perceive employability in youngsters in Spain. Cifre et al.'s original study shows that masculine traits are still the most searched by organizations, independently of their sex (men–women), so young individuals with more masculine characteristics and less feminine ones are those that feel more employable.

Several of the contributions focus on work-family conflict (WFC), a phenomenon in which sex, gender identity, and organizational factors interact. Carvalho et al. find among a multigroup study on Portuguese employees that job demands and lack of control could contribute to employees'

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stress and, once individuals' energy was drained, WFC could emerge, affecting negatively mental health. No differences between men and women were found. Following with mental health, Zhou et al. found on a sample of Chinese female employees that WFC affects the level of self-reported mental health, and this relationship functioned through the two sequential mediators of negative affect and perceived stress.

In the same vein, Emanuel et al. explored, among Italian heterosexual couples, the relationship between one worker's perceived job insecurity and family life satisfaction of both the person and his/her partner. Results show a spillover effect. These effects were similar among men and women, showing that there are some changes among men and women in perceiving their family and work roles, as well as in the degree in which these roles are central to their identity. However, these differences between women and men still appear when we focus on the family domain. In this line, Cerrato and Cifre confirm, in a sample of Spanish employees, inequality in household chores, as men focus on traditionally masculine duties for men and feminine ones for women. Also, women's involvement is more than double than their partners, which has negative consequences in the family sphere for women and the workplace for men. Then, the traditional gender role model seems still active. Finally, Barnard explores the work-life experiences of South African women in their midlife through focus groups, based on the socioanalytic method of social dream drawing. Findings show how women's projective identification with outdated gender role norms may perpetuate a gendered notion of work-life balance, which consistently challenges their well-being.

Furthermore, three papers focus on organizational factors affecting occupational health at work of women and men. Firstly, Kowalczuk et al. concentrate on the phenomenon of horizontal segregation by assessing the influence of psychosocial hazards as a factor affecting the presence of men in the nursing profession. The authors found, among Polish nurses, that the profession was assessed more negatively by men than by women. The more significant psychosocial hazards experienced by men nurses

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may affect the low representation of men among practicing nursing staff. Secondly, García-Izquierdo et al. focus on the phenomenon of vertical segregation, examining the presence of female directors both at board meetings and an audit and remuneration committees and CEO pay and remuneration. Results corroborate that the incorporation of women appears to exert a positive effect in terms of higher wage moderation, and restraint in the use of long-term variable remuneration systems. Finally, Conesa and González-Ramos, through interviews with Spanish women and men researchers, highlight discriminatory practices toward women academics, which create psychological harm and feelings of being unwelcome, putting their career progression at risk.

Finally, García Johnson and Otto develop an integrative model of gender equality in the workplace for HRM academics and practitioners, beyond white, heterosexual, and cisgender women. Authors underscore the importance of industry–university collaboration and offer a starter's toolkit that includes suggestions for diagnosis, intervention, and applied research on gender-based discrimination and harassment.

To sum up, these 11 papers included in this e-book provide new avenues for future research to understand how different work factors affect men and women at work, with the final aim of contributing to a healthier and fairer society for all of us.

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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Emotional Androgyny: A Preventive Factor of Psychosocial Risks at Work?

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Although previous studies have acknowledged the connections between gender and emotional competences, more research is needed on how gender and emotion interact to influence psychosocial risks at work. This paper addresses how gender stereotypes and emotions simultaneously act as psychosocial antecedents of organizational stress. Following the principles of psychological androgyny, we propose that a combination of communion and agency can serve as a preventive factor at work and lead to healthier responses by providing a wider range of emotional competences to deal with organizational demands. Following previous methodological approaches, we include a quantitative review about scientific research on occupational health in the PsycINFO database during the period 1980–2017 from a multidimensional gender perspective that differentiates between studies addressing the topic from either sex, gender or gender identity dimensions. Finally, we propose new analytical directions to deal with psychosocial hazards at work by underscoring some of the complex ways in which gender and emotional competences influence psychosocial risks at work.

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EMOTIONAL ANDROGYNY: A PREVENTIVE FACTOR OF PSYCHOSOCIAL RISKS AT WORK?

Every-day work experiences with potentially major psychological consequences for employees depend on individual characteristics and workplace features that include physical, emotional, and social work (Patterson et al., 1997; Grandey, 2000). At the organizational level, many workplace characteristics can be a critical source of stress, ranging from work design and practices associated with ergonomics (Hoke, 1997; Patterson et al., 1997) to organizational climate (Bond et al., 2010), leader–employee relationships (Blanchard, 1993; Cooper and Cartwright, 1994; Hornstein, 1996), or supervisor styles and support (Babin and Boles, 1996). Employees individual characteristics and competences are also important because the experience of stress is dependent on individuals' abilities to cope with such demands placed on them by their work (Coté, 2005; Hackney and Perrewé, 2018). Thus, emotion regulation strategies are critical to how employees respond to work stressors (see Coté, 2005) and emotion regulation is an important predictor of job strain (Ashforth and Humphrey, 1993; Grandey and Brauburger, 2002; Pugh, 2002).

Although researchers have acknowledged the relevance of emotion regulation strategies on how employees respond to work stressors, they have only begun to raise concerns about their gendered nature. This approach is important because the experience, expression and regulation of emotions as well as expectations about men's and women's functions are deeply gendered

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(Frijda and Mesquita, 1994; Brody, 1997; Bindu and Thomas, 2006; Gartzia et al., 2012b). Consistent with gender stereotypes that prevail in Western societies, emotion expression and management is largely gendered (Brody and Hall, 2000; Fischer and Manstead, 2000). Women are socialized to be communal, with stronger emphasis on other-oriented emotional dimensions related to showing interest in emotions, being sensitive to what others feel, or expressing feelings. In contrast, men are socialized to be agentic, which implies more stress on self-confidence, strength, and assertiveness (Parsons et al., 1955; Stewart and McDermott, 2004). Despite the relevance of a critical examination of psychosocial risks and emotional competences from a gender perspective, examinations of whether and how emotional and psychosocial responses at work are gendered are rare (see Cifre et al., 2013, 2015).

To respond to this gap, the current article acknowledges the gendered nature of psychosocial risks at work and provides theoretical background to understand both workplace characteristics and subsequent employees' emotional responses from a gender perspective, which can shed light on the relevant issue of how male and female employees can potentially better respond to stressors at work. We first introduce the relevance of emotion and emotional competences for employees' psychological responses and work stress and outline the gendered nature of emotion. Second, we describe the most common psychosocial risks at work from a gender perspective, including a quantitative review about scientific research in the field during the period 1980-2017. To do so, we adopt an approach that explicitly differentiates between sex and gender dimensions, with particular emphasis on studies about gender identity. Finally, we adopt a social identity perspective that underscores the interactive roles of gender identity and emotional competences in reducing psychosocial risks at work. We discuss the potential application of "emotional androgyny" to deal with occupational hazards, suggesting that a theoretical and empirical approach based on the promotion of counter-stereotypical gender competences can be a particularly useful approach to understand psychosocial risks in organizational settings.

WORK AND STRESS FROM THE PERSPECTIVE OF EMOTION

Work is a critical source of stress (Ganster and Schaubroeck, 1991), with more than 40 million people suffering work-related stress across the EU (Paoli and Merllié, 2001). As a widespread occurrence, work stress is of the most common sources of disease at work with estimated annual losses of around ϵ 20 billion (European Foundation for the Improvement of Living and Working Conditions, 2007; Milczarek et al., 2009). Consistent with the relevance of the topic, the issue of how employees respond to workplace events from the perspective of mental health and psychological responses has become a relevant theme for practitioners (cf. King, 1995; Neville, 1998; Rajgopal, 2010) and the media (cf. Coleman, 1997). Likewise, academic research on work-related stress is growing rapidly (cf. Warr, 1990; Briner, 1994; Cooper and Cartwright, 1994;

Smith et al., 1995; Mark, 2008) with a particular focus on understanding explanatory mechanisms and identifying factors that may help employees overcome negative work experiences.

The critical relevance of stressful workplace events and subsequent affective experiences is captured in the foundations of Affective Events Theory (Weiss and Cropanzano, 1996), which addresses the causes and consequences of employees' work experiences and how they are inherently linked to emotions and moods. Emotions represent physiological states of arousal that provide cues about the environment and get individuals in a physical state to respond to the situation (Frijda, 1986). These tendencies to respond to environmental experiences producing emotion are based on primitive emotional tendencies (e.g., attack or escape) that occur in subtle ways in today's society and organizations. As proposed by general theories of emotion and stress (Lazarus, 1999), the experience of stress captures unfavorable person-environment relationships in which individuals alter their interpretations of such relationships to make them appear emotionally more favorable. Such an effort - called coping - also allows that people do not react inappropriately in terms of social behavior (Lazarus, 1991; Grandey, 2000).

As proposed by Affective Events Theory (Weiss and Cropanzano, 1996), affective experiences of employees at work are particularly relevant and have consequences at many dimensions of organizational behavior and health. Thus, underlying mechanisms associated with emotions and emotional competences are critical in understanding how work experiences influence psychosocial risks at work. Emotion regulation strategies are particularly relevant to how employees respond to work stressors (see Coté, 2005) and emotion regulation is an important predictor of strain (Ashforth and Humphrey, 1993; Grandey and Brauburger, 2002; Pugh, 2002). Generally speaking, emotion regulation refers to efforts to increase, maintain, or decrease certain components of emotion (Gross, 1999). Because the experience and expression of emotion is both intrapersonal (i.e., with effects of emotions on individuals' own behavior) and interpersonal (i.e., with effects of emotions on the behavior of other individuals; Frijda and Mesquita, 1994; Keltner and Kring, 1998; Morris and Keltner, 2000), emotional responses and emotion regulation strategies are also relevant mechanisms in how work experiences result in negative psychosocial outcomes like burnout, job dissatisfaction, or stress at different levels (see Grandey, 2000).

A growing number of studies based on the notion of emotional intelligence have also analyzed how understanding and regulating one's emotions and those of others promote emotional and intellectual growth and can have key effects on physical as well as psychological health (Mayer et al., 2008). Emotional intelligence is generally defined as the ability to pay attention, understand, and regulate emotions (Mayer et al., 2008). Research that analyzes this type of intelligence has grown substantially and has shown that it is an important predictor of variables such as satisfaction with life and the quality of interpersonal relationships (e.g., Ciarrochi et al., 2000), as well as psychological adjustment and reduction of work stress (e.g., Bar-On et al., 2000). The positive effect of emotional intelligence competences has been revealed not at the subjective-experiential level, but also with neuroendocrine correlates (Mikolajczak et al., 2007).

The relevance of emotional competences to overcome stress is clearly understood from the perspective of individual competences of employees (i.e., considering emotional competences as a relevant individual resource to better cope with environmental demands at work), but note that emotional competences are also a relevant buffer of psychosocial risks from the perspective of the organization (e.g., leadership styles, cultural norms, and shared values). The social learning theory of aggression postulates that reducing negative behaviors in an environment through reinforcement and modeling can reduce such abusive behavior by showing individuals that aggressive behaviors are not welcome in a social context (Bandura, 1983; Hackney and Perrewé, 2018). Thus, the rationale that emotional competences can be a preventive factor of psychosocial risk is fundamentally the same from the perspective of the "receiver" (e.g., an employee experiencing stress due to an abusive supervisor) and the "source" (e.g., the supervisor herself/himself displaying hostile behaviors directed toward the employee). From this perspective, it is understood that workplace structures would also benefit from self-regulation and awareness processes directed at reducing negative behaviors, values, and implicit norms.

Extending this viewpoint, Hackney and Perrewé (2018) developed a process model to understand antecedents and consequences of behaviors with potentially negative psychosocial effects at work (i.e., with a particular focus on workplace abuse). They argued that organizational factors (e.g., strong cultural norms supporting aggression) create contexts in which individual negative behavior is reinforced in subtle ways (e.g., by for instance allowing harassment of minorities and aggressive individual behavior but "pretending it was just a joke"; Hackney and Perrewé, 2018, p. 76). These environmental factors combine with the individual attitudes and emotional competences of people in powerful positions at work (i.e., leaders). Thus, leaders' ability to control themselves and use self-regulatory resources to resist temptations such as yelling to coworkers or making aggressive jokes is critical (Hackney and Perrewé, 2018).

THE GENDERED NATURE OF EMOTIONAL COMPETENCES

Consistent with the idea that women are more emotional than men and the thought that men and women are emotionally different (Brody and Hall, 2000), sex differences have traditionally emerged in emotional competences and responses (Hopkins and Bilimoria, 2008). For instance, emotion research has shown that women generally outperform men on tests about the ability to accurately decode others' emotion displays (see Hall et al., 1978). Women are socialized with communal traits that involve relational emotional competences associated with showing interest in emotions, being sensitive to what others feel, or expressing feelings. Men, in contrast, are socialized with agentic traits that involve stronger emphasis on self-confidence, strength, and assertiveness (Shields, 2002; Stewart and McDermott, 2004). Likewise, women are socialized to experience guilt, shame, and depression (Allen and Haccoun, 1976; Brody, 1997), higher levels of sense of failure and sadness (Oliver and Toner, 1990), intense fear (Speltz and Bernstein, 1976; Cornelius and Averill, 1980), and rumination on negative emotions (Nolen-Hoeksema, 1987).

Stemming from the large body of research analyzing gender and emotion, the possibility that women are more emotionally intelligent than men has also attracted attention among researchers. This supposed greater ability of women to be emotionally intelligent is in line with the widespread and uncontested idea that women are more "emotional" than men, as well as with previous studies showing that women have higher interpersonal sensitivity to verbal and non-verbal cues, are better at understanding emotional information and tend to empathize more than men (Lloyd, 1984; Tannen, 1990; Baron-Cohen, 2002; Shields, 2002; Brody and Hall, 2008). Not surprisingly, meta-analytical studies have shown that women are overall more emotionally intelligent than men (see Joseph and Newman, 2010). Acknowledging the complexity within the general umbrella of emotional intelligence, studies have also underscored the "masculine" nature of emotional dimensions with an agentic content, such as regulation of negative emotions in a way that is constructive to the self (see Gartzia and López-Zafra, 2016). Accordingly, men are often better than women at handling negative emotions and having an optimistic outlook (Livingstone and Day, 2005; Gartzia and van Engen, 2012).

Given stereotypical connections about femininity and emotionality, rules about the emotions that employees have to display at work are often gendered too. Likewise, although work-related stress is not limited to certain job positions, research has suggested that occupations such as those of social work – i.e., a stereotypically feminine occupation – represent particularly stressful work contexts (Lloyd et al., 2002). Because social work generally requires interpersonal interactions whereby emotional labor is particularly salient, social work is often seen as an inherently stressful occupation. An additional issue to consider is that social workers – generally women – often have an inherent disposition and motive in their choice of profession to be oriented to people and be helpful, which can be a particularly relevant contributor to stress (Borland, 1981; Egan, 1993; Acker, 1999).

The gendered nature of emotion is also manifest in managerial positions. For instance, research has shown that abusive behavior occurs when supervisors are not able to self-regulate aggressive behaviors such as expressing anger and yelling to employees (Baumeister, 2002; Mawritz et al., 2017). Because anger signals dominance and power, it is more closely associated with masculine roles and therefore male targets expressing anger are more often positively valued than female targets expressing such emotion (Brody and Hall, 2000; Shields, 2002). However, leaders who feel and express other emotions such as excitement and energize themselves are likely to similarly energize their followers, whereas leaders who feel negative emotions such as distress and do not regulate them are likely to similarly activate their followers in a negative way (George et al., unpublished). These asymmetries can also have important implications for psychosocial risks at work.

All in all, these asymmetries generate differences in the expectations and emotional resources of men and women to respond to environmental factors. Because emotional competences are key components to deal with workplace stressors and reduce stress (Ashforth and Humphrey, 1993; Grandey and Brauburger, 2002; Pugh, 2002; Coté, 2005), a critical examination of emotional competences from a gender perspective can shed light on the relevant issue of how - male and female - employees respond to psychosocial risks at work. However, general studies analyzing emotions have often been limited to the variable of sex as the main predictor of individual differences (see, for instance, Baron-Cohen, 2003). Importantly, the assumption that sex differences in emotionality prevail has primarily constituted an implicit assumption that has yet to be subjected to further exploration (Conway, 2001; Wester et al., 2002). Indeed, critical reviews of sex differences in emotions have shown that differences between men and women in emotionality are small, inconsistent, and context-dependent (see Ickes et al., 2000; Wester et al., 2002), suggesting that emotional dimensions are influenced by gender stereotypes and roles in complex ways.

Acknowledging these complexities, an increasing number of studies have called for the need to consider the role of communal and agentic traits when explaining the connections between gender and emotional competences. Because sex differences in emotional intelligence are due at least in part to identification with different gendered traits (Gartzia and van Engen, 2012; Gartzia et al., 2012a), examining withinsex gendered differences is also important to fully understand how men and women acquire different emotional intelligence profiles. This perspective is coherent with studies showing the incremental validity of gender identity traits over sex predicting emotional competences (i.e., women's higher scores in emotional attention and expression and men's higher scores in emotional repair; Guastello and Guastello, 2003; Gartzia et al., 2012a). Thus, a social identity approach can help underscore how going beyond gender stereotypes and incorporating counterstereotypical identity traits into the self can improve subsequent emotional responses in the workplace, thereby providing a context to better overcome psychological hazards.

OCCUPATIONAL RISKS FROM A GENDER PERSPECTIVE

Given the connections between emotions and psychosocial risks at work, understanding the gendered nature of emotions can inform occupational health researchers. However, because psychosocial risks at work can derive from a wide variety of sources, their associations with gender and emotional responses are also difficult to simplify. Men and women are socialized with different traits and expectations about their functions in social and organizational roles, resulting in fundamental differences in how they experience organizational life in relation to a variety of domains including promotion opportunities, salary, interpersonal relationships, number and distribution of working hours, or leadership styles (see Eagly et al., 2012; Hausmann et al., 2014). Likewise, men have compared with women higher career-related expectations of workplace commitment in terms of paid work hours, which are subsequently associated with better self-evaluations and emotional well-being (Gartzia et al., 2012b). Some of the effects associated with these differences are that women experience more emotional exhaustion at work, whereas men experience other symptoms like depersonalization (Purvanova and Muros, 2010).

Despite progress in gender equality at work, there is also a substantial gender gap in the domestic division of labor (Kan et al., 2011; Hausmann et al., 2014). With current organizations' work intensity (Chirico, 2017), a particularly common source of stress at work is the work-family conflict, namely a "form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus and Beutell, 1985). Results about sex differences in psychological reactions to work-life balance such as the work-family conflict, however, are inconclusive and the connections between gender and work-life balance are still unclear (e.g., Frone, 2003; Eby et al., 2005; Korabik et al., 2008). Because women often prioritize domestic interests by for instance taking maternity leaves or reducing their number of working hours (Hausmann et al., 2014), their career penalties due to domestic responsibilities can clearly represent an occupational risk factor associated with expectations about their feminine gender role. Indeed, the gender literature has repeatedly shown that women's greater assumption of domestic work is one of the most important factors for the persistence of gender discrimination and result in career penalties that can be very negative for women's advancement and status at work (Bittman et al., 2007; Eagly et al., 2012; European Commission, 2015). These asymmetries are likely to influence work-related stress given the generalized assumption that employees should prioritize the interests of the organization over personal interests as a signal of commitment (Powell, 1990).

Additional evidence about the influence of gender in how individuals are confronted with and respond to psychosocial risks derives from the rich literature on leadership and management. There is accumulated confirmation that prototypes about leadership effectiveness are consistent with a stereotypically masculine ideal whereby agentic traits (e.g., competence and selfdecision) prevail over communal and emotion-related features such as being sensitive to others' emotions (see Koenig et al., 2011). Thus, despite the growing interest on emotions at work (Brief and Weiss, 2002), the myth of rationality is deeply rooted in political and social organizations, and it is related to stereotypical masculinity and a belief in objectivity and reason (Collinson and Hearn, 1996; Fineman, 2010). As a consequence, socioemotional skills are often undervalued in organizations and particularly in areas of power where a Think manager-Think male stereotype prevails (Schein et al., 1996). The pervasiveness of this stereotype can be very important in the organizational practice because leaders' emotional responses and abilities to understand and regulate emotions are associated with a wide range of well-being outcomes and emotional responses from employees (see Avolio and Gardner, 2005; Bono and Ilies, 2006).

Taken together, these findings reveal the complexities implicit in how gender roles and expectations operate in organizations and result in psychological reactions for male and female employees. These complexities are only partially captured through the work and stress literature and the many inconclusive findings in relation to the effects of gender on the different forms of psychosocial risks at work. Implicit in our approach about the relevance of a critical gender perspective is the idea that to better understand these complexities, it is important to examine the different components through which the sex and gender dimensions differently operate in shaping employees' responses at work. Following previous research (e.g., Eagly et al., 2012), we use the term sex to denote the grouping of people into female and male categories and the term gender to capture the meanings that societies and individuals ascribe. In the next section, we provide a quantitative review about the prevalence of a sex vs. a gender perspective in the workplace literature.

ANALYTICAL SECTION: NUMBER AND TYPES OF GENDER ARTICLES IN THE LITERATURE

Following previous methodological approaches of addressing the state in the art in a given area of gender research by counting relevant papers in the previous literature (Eagly et al., 2012; Gartzia and López-Zafra, 2014, 2016), we examined research

in several psychosocial domains during the 1980-2017 period following the method of counting relevant journal articles from the PsycINFO database. Note that 2017 is the most recent date for which complete data are available in the database as of this writing. To assist this analysis, quantitative data about the growth of scientific research papers in relation to the most commonly studied psychosocial risks is provided. In particular, we included a review of the five psychosocial risks at work that have been shown to represent the most commonly studied dimensions of work-related stress in the literature and by public institutions in charge of safety at work in Europe (Paoli and Merllié, 2001; Leka et al., 2008): stress, abusive behavior, job insecurity, emotional labor, and the work-family conflict (see specific keywords below). As shown in Figure 1, the number of research articles about workplace stress in the period 1980-2017 (i.e., 9,805 articles) is substantially higher than the overall number of articles about other risks (4,084 articles in the work-family conflict category; 2,842 in the abusive behavior category; 536 articles in the job insecurity category; and 505 articles in the emotional labor category). These results point to the particular relevance of workplace stress and the work-family conflict in the occupational risk literature. However, this pattern of results varies when examined from a gender perspective, as explained below.

To accurately understand how psychosocial risks are linked to gender dimensions in previous research, we deconstructed the associations between gender and psychosocial risks into their component parts. One issue is whether psychosocial risks differently influence women and men at work, either generally or in relation to some particular stressors. Following previous



research (e.g., Eagly et al., 2012, 2014) using the term sex to denote the grouping of people into female and male categories, we included a category of studies explicitly examining sex differences and similarities in each psychosocial risk (i.e., "sex difference*" OR "sexual development" OR "sex hormones"). Following Hyde (2005), we refer to this perspective as a "sex differences" approach. Because some studies refer to differences between men and women as a "gender" difference, we also included this term ("gender difference") in the category of sex studies. As an additional category, we included studies that more broadly considered gender issues capturing more subtle meanings that societies and individuals ascribe to male and female categories in the context of psychosocial risks. In this count we included studies looking at gender stereotypes and roles with the following terms as keywords: gender OR masculine* OR feminine* OR "sex discrimination" OR "sex roles."

We contend that it is important to comprehensively distinguish between the components of sex and gender but we additionally acknowledge the theoretical difference between an inclusive gender perspective and a more specific approach dealing with gender identity traits, captured through the gender identity, gender role orientation, and androgyny literature (Bem, 1974; Spence and Helmreich, 1978; Spence and Buckner, 2000). To do so, and given the specific relevance of gender identities in gender research (e.g., Bem, 1974; Spence and Buckner, 2000; Bourne and Maxwell, 2010; Gartzia et al., 2012b), we included an additional count capturing studies that explicitly looked at gender identity dimensions through the following terms as keywords: "gender identity*" OR (gender AND communion) OR (gender AND expressiveness) OR (gender AND agency) OR (gender AND instrumentality) OR "gender role orientation" OR "gender ideology" (Bem, 1974; Spence and Helmreich, 1978). To avoid overlap between the sex, gender and gender identity categories, we forced our broad gender count to exclude the terms implicitly included in the other categories (i.e., by including the following code in the gender category: NOT "gender identity*" NOT "gender difference*" NOT "gender role orientation" NOT "gender ideology").

PSYCHINFO ANALYSES: RESULTS CLASSIFIED BY TYPE OF RISK

Workplace Stress

Although there are many available approaches to the study of psychosocial risks at work, work-related stress is a central dimension of study for occupational safety and health research (see Milczarek et al., 2009). Stress generally refers to the emotional and physiological reactions to stressors (Zastrow, 1984; Maslach et al., 1996) and is the most commonly studied psychosocial risk at work (see **Figure 1**). Research shows that prolonged stress is associated with a variety of mental health problems and emotional responses that can impair employees' effectiveness (Caughey, 1996; Collings and Murray, 1996; Taylor-Brown et al., 1982; Zastrow, 1984). Although issues of occupational stress, health and well-being have been mostly addressed from the perspective of physical (cf. Cooper et al., 1994) and mental health (cf. Cartwright and Cooper, 1993; Anderson and Grunert, 1997), addressing the study of psychosocial risks from the perspective of gender and emotion is relevant because work experiences inherently alter individuals emotionally, subsequently influencing their psychological and organizational responses. Indeed, stress at work is often defined as a "negative psychological state with cognitive and emotional components, and on its effects on the health of both individual employees and their organizations" (Cox et al., 2000).

Following these literatures, the following terms were used for our category of workplace stress in our counting process of articles in the 1980-2017 period: stress AND work OR burnout OR "work related stress." As shown in Figure 2, research in this field has increased gradually especially since the 2000s (growing from a total of 361 articles in 2000 to 1,599 in 2017). From a gender perspective, this pattern was also observed in relation to studies about workplace stress that considered gender generally and differences between men and women, although the number of studies considering these approaches are notably scarce (i.e., ranging from 15 articles in 2000 to 23 articles in 2017 in the gender category and 7 articles in 2000 to the same number in 2017 in the sex differences category). Remarkably, the interest in examining workplace stress from a gender perspective (i.e., including both general gender terms and a sex differences approach) showed a remarkable increase around 2005, probably due to the publication of a special issues or reviews about the topic. These counts point to the generally limited study of workplace stress from a gender perspective, being particularly absent the analysis of workplace stress from the perspective of gender identity traits (with a total of two studies in the overall 1980-2017 period).

These findings suggest that despite the growth of research in occupational health and the growing relevance given to the topic, gender research in general terms only represents a small proportion of articles within the workplace stress literature (1,97% of studies when considering gender broadly and 1,20% of studies when looking at sex differences), being particularly absent the consideration of how workplace stress can potentially be influenced by gender identities (0,02% of the total number of studies). As explained by social identity theories (Tajfel, 1978, 1982; Turner, 1987), social identities emerge from identifications with self-relevant groups and one's social position in terms of gender (i.e., being male or female) constitutes one of the most influential dimensions in the development of gendered personality traits and identity (Spence and Helmreich, 1978; Bem, 1981; Tajfel and Turner, 1986). As such, gender identity traits (i.e., communion and agency) are central dimensions of the self with critical effects on behavior and emotional responses. Given the centrality of gendered traits for ones' self-concept and behavior, the absence of studies looking at the connections of these gendered dimensions of personality with occupational stress is surprising.

The absence of a multidimensional gender approach in the workplace stress literature might help to explain previous inconsistencies in the field when considering the effects of gender variables indirectly (Hobfoll et al., 2003;



Gyllensten and Palmer, 2005), suggesting that further research is needed (Christie and Schultz, 1998; Gianakos, 2002). Acknowledging the particular situation of discrimination that women experience at work (Kan et al., 2011; Hausmann et al., 2014), some studies have provided evidence that women's experienced level of workplace stress is higher. A qualitative study investigating job stress among twelve managers in the English National Health Service reported that female managers were more at risk from managerial stressors compared to male managers (Jenkins and Palmer, 2004). In the same way, an Australian study showed that women experience higher levels of work stress than men, although they do not report worse mental health (Gardiner and Tiggemann, 1999). Michael et al. (2009) showed in a big sample of full-time working adults that women experience significantly higher levels of occupational stress. These findings are in line with previous research showing evidence of sex differences in both stressors and the severity of stress (Decker and Borgen, 1993). Contrasting this approach, other studies have shown similar levels of overall stress for male and female employees (e.g., Martocchio and O'Leary, 1989), underscoring the idea that factors like occupational level (i.e., being in a managerial position) and their connections to the subjective gendered experiences of men and women may play a stronger role (Spielberger and Reheiser, 1994). Likewise, it has been suggested that women experience higher levels of stress and burnout in general life but not specifically in the field of work (Etzion, 1984; Di Salvo et al., 1995).

In some cases, sex differences are argued to stem from women's greater exposure to specific psychosocial stressors (Ritsner et al., 2001). Burnout is a particularly relevant form of work stress inherently liked to negative emotional responses including emotional exhaustion, depersonalization and reduced personal fulfillment (Maslach and Jackson, 1981). In particular, it refers to the emotional fatigue produced by the tasks of work, depersonalization to the distance treatment that is applied to people who have to attend and low personal fulfillment reflects the low professional self-esteem that accompanies the exercise of one's profession (Maslach and Jackson, 1981). From a gender perspective, results are generally inconclusive about differences between men and women (Maslach et al., 2001). Going beyond a sex differences approach, Purvanova and Muros (2010) examined associations between gender and the two core components of work burnout (emotional exhaustion and depersonalization) and concluded that employees in gender-atypical occupations experience greater burnout and adverse health-related effects. However, women were more likely to report emotional exhaustion than men, whereas men were more likely to report depersonalization. Guthrie and Jones (2012) found similar results, with women and men experiencing similar differences in burnout levels, and differences emerging only by professional category.

Workplace Abuse

Another important psychosocial risk captures abusive behaviors at work. According to Hackney and Perrewé (2018), workplace abuse is one of the most prevalent negative experiences of employees at work and can result in many dysfunctional outcomes for both employees and employers (Maslach et al., 1981; Leka et al., 2003). These dysfunctional consequences include attitudinal outcomes (e.g., satisfaction, commitment, and turnover intentions), behavioral outcomes (e.g., subsequent abuse or absenteeism), and well-being outcomes (e.g., psychological distress, job tension, burnout, and depression; for a review, see Hackney and Perrewé, 2018). Consistent with previous research (Bowling et al., 2015), workplace abuse can be considered an inclusive concept that encompasses different forms of physical and nonphysical mistreatment at the workplace by a variety of agents (e.g., supervisors, customers, and coworkers).

Following this literature, in our count workplace abusive behavior includes a variety of related terms such as violence at work, workplace aggression, interpersonal mistreatment, mobbing, bullying, antisocial behavior, or workplace harassment (Hackney and Perrewé, 2018). In particular, the following terms were used in the counting process: "workplace violence" OR "social undermining" OR "abusive supervision" OR "antisocial behavior in organization*" OR "mobbing" OR "bullying at work" OR "sexual harassment" AND work. As shown in Figure 3, research regarding abusive behaviors has grown in a regular pattern (i.e., ranging from 171 articles in 2000 to 437 articles in 2017), with a small decrease during the 2010-2015 period and a new rise afterward. In the same way, the number of articles taking gender issues into consideration has also increased since the 1990's in relation to studies that have considered gender generally (i.e., increasing from 2 articles in 1990 to 36 articles in 2017) and to a lower extent in relation to studies that have focused on examining differences between men and women (increasing from 0 articles in 1990 to 8 articles in 2017). In both cases, increases in the number of studies were observed in the 2000's, with subsequent decreases particularly in relation to the analyses of sex differences. As in relation to workplace stress, the number of studies examining workplace abuse from the perspective of gender identity traits is virtually absent.

Having only a limited number of studies explicitly examining the influence of gender dimensions in workplace abuse can be problematic because the scarce research looking at these connections has shown the potentially relevant effects of gender in how employees experience and produce harmful workplace experiences (see Sojo et al., 2016). For instance, given the noticeable prevalence of sexism in our society, women are more likely than men to be targets of sexual harassment and discrimination (Schmitt et al., 2002). The adverse impact of these behaviors is greater in male-dominated work contexts (O'Connell and Korabik, 2000) and when sexism is widely accepted as the norm (Settles et al., 2006). Note however that the inherently varied and multidimensional nature of hostile environments at work often makes it difficult to capture these effects. Whereas sexual harassment is often experienced by women, harmful workplace experiences come from many sources and take many different forms and so the prevalence of sex differences in relation to broader forms of violence at work is often less obvious. These entail structural factors of discrimination over women such as working conditions by which stereotyped forms of masculine behavior are reinforced (e.g., talking about football or good-looking girls; Collinson and Hearn, 1996; Powell and Graves, 2003; Rojo and Esteban, 2005) as well as organizational contexts in which sexual attributes of women are exhibited even when it is not related to the work that is being carried out (e.g., waitress or hostesses wearing skirts and sexually provocative clothing). Given the unconscious prevalence of many of these discriminatory norms and cultural ideals in organizations, sexual harassment against women often goes unnoticed and is socially legitimized (Gruber and Bjorn, 1982; Rospenda, 2002). In relation to this, the meta-analysis by Topa Cantisano et al. (2008) showed that organizational elements (in particular, job-gender context, social support, and organizational tolerance) had a critical role as antecedents that lead to sexual harassment. These harmful workplace experiences can add to the general pressures from general discrimination and demands associated with women's role.

Mobbing is another specific form of violence, generally defined as "situations in the workplace where an employee persistently and over a long time perceives him- or her-self



to be mistreated and abused by other organization members, and where the person in question finds it difficult to defend him/herself against these actions" (Nielsen and Einarsen, 2012). One aspect of great relevance from a gender perspective in the conceptualization of workplace mobbing and other forms of violence is the imbalance of power between the parties (Zapf and Einarsen, 2005), which might lead women to generally suffer from this psychosocial risk to a greater extent than men. Yet, meta-analytical data examining the relation between workplace bullying and mental health and examining the influence of demographic variables (e.g., including sex of the bullied person) have shown null effects of sex as a moderator in the abovementioned relation (Verkuil et al., 2015). Contrasting these findings, Tamres et al. (2002) reported in their meta-analysis when examining sex differences in coping behavior that women were more likely to use coping strategies that involve verbal expressions while men tend to avoid ventilating their problems with others in bullying situations. In relation to cyberbullying, the prevalence of sex differences has also been reported to be null (Cowan, 2018).

Job Insecurity

Job insecurity, defined as a general concern about the continuance of work in the future or a perceived threat of several job characteristics such as one's position or career opportunities (Cheng and Chan, 2008), is also a relevant source of work stress with inconclusive findings from a gender perspective. Because the need for security and stability is a fundamental human need (Greenhalgh and Rosenblatt, 1984; Leka et al., 2008), job insecurity has been described as one of the most important

occupational risks. As our count of number of studies in the 1980–2017 period shows, however, job insecurity represents a relatively underesearched field of study, with only a total of 121 articles in 2017 (see **Figure 1**). Given the more focused study in this field, only the term "*job insecurity*" was used in the counting process for this category. It is interesting to note that research has also been generally limited from a gender perspective, with virtually no study explicitly incorporating gender-related variables as keywords in the 1980–2007 period (see **Figure 4**).

Contrasting these gaps in the job insecurity literature, and because job insecurity can derive from a wide variety of sources ranging from work conditions to leadership styles, the associations between job insecurity and gender should be further examined. Men usually have higher occupational mobility and promotions to managerial positions (Rosenblatt et al., 1999; Hausmann et al., 2014), so one view is that the threat of job loss should be less distressing to men than to women. Contrasting this view, there is evidence that men are more vulnerable to job insecurity than women because they are more sensitive to economic insecurity (Greenhalgh and Rosenblatt, 1984; De Witte, 1999) and the prevalence of the breadwinner role implicit in gender stereotypes. More recent meta-analytical evidence examining moderating effects of sex on the relationship between job insecurity and its consequences has shown null effects (Cheng and Chan, 2008). Among the explanations provided are female's increasing commitment to their jobs and career roles (Bradley, 1997) and the greater similarities between the breadwinner roles and occupational mobility of men and women in today's societies. Likewise, men have compared with women higher career-related expectations of workplace commitment in terms of paid work



hours, which are subsequently more likely to be associated with well-being (Gartzia et al., 2012b).

Interestingly, previous research has acknowledged the specific relevance of gender identity traits in the subjective experience of job insecurity. A study by Gaunt and Benjamin (2007) showed that traditional men (in terms of gender role ideology) experience greater job insecurity than traditional women, whereas egalitarian men and women exhibit similar degrees of job insecurity. Interestingly, job insecurity in traditional men and in egalitarian men and women was also related to loss of control stress, financial stress and stress expressions at home, whereas traditional women suffered less job-related stress. These findings underscore the relevance of further examining within-sex differences and how gender ideologies and identities might influence the relationships between job-related factors and stress. Because job insecurity has been described as one of the most important occupational risks (Greenhalgh and Rosenblatt, 1984), examining these relations is critical.

Emotional Labor

Emotional labor involves self-control of emotions by enhancing, faking, or suppressing emotions to modify the emotional expression, which can be detrimental for employees (Grandey, 2000; Miller et al., 2005). In today's society and organizations employees are often required to appropriately respond to these social demands by for instance managing emotions and expressing organizationally desired emotions (Grandey, 2000). In particular, many organizations have established rules regarding the emotions that employees have to show to influence the emotions of clients and stakeholders (Moreno-Jiménez et al., 2010). Drawing from the literature in this field, the following terms were used in our counting process for the emotional labor category: "emotional labor" OR "emotional work."

As shown in **Figure 5**, no articles about emotional labor were developed until the 2000's, when the term was fully introduced in the literature. Since then, research in this field has increased substantially (growing from a total of 11 articles in 2000 to 89 in 2017). From a gender perspective, this pattern is also observed in relation to studies about emotional labor that considered gender generally (i.e., increasing from 2 articles in 2000 to 6 articles in 2017). Although the explicit examination of sex differences in emotional labor is also present, findings show a substantially smaller interest in such approach with a particularly notorious decrease after 2010 (i.e., one article in 2000, 3 articles in 2010, and 0 articles in 2017). As in relation to the previous categories, the number of studies explicitly examining emotional labor from the perspective of gender identity traits is absent.

Although results are generally inconclusive in relation to sex differences in emotional labor (see Erickson and Ritter, 2001), there is some evidence that women are more likely to regulate emotions and suppress their true emotions in order to be effective at work, which has been linked to increased stress (Grandey, 2000). In general terms, women are socialized to behave in a warm and friendly manner (Deutsch, 1990) and are expected to express emotions (e.g., smile) to a greater extent than men in a variety of situations (e.g., Birnbaum et al., 1980; Deaux, 1985; LaFrance and Banaji, 1992). As such, women are expected to have a greater frequency of emotional display than men (Morris and Feldman, 1997). Interestingly, it has been argued that women may show many of these positive emotions because of the greater need for social approval implicit in their feminine gender role (Hoffman, 1972).



Acknowledging the differences between deep acting and surface acting, Johnson and Spector (2007) analyzed the relationship between deep acting and well-being related responses and found that sex was a moderator of the relationship between surface acting ("managing only observable expressions to obey display rules") and the outcomes. For surface acting, women reported more detrimental outcomes than men (i.e., reduced affective well-being and job satisfaction, as well as greater emotional exhaustion). Yang and Guy (2014) found that expressing emotions that are not actually felt is not associated with job satisfaction or turnover for men, whereas it reduces such responses for women. Contrasting these effects, in a study about the effects of emotional labor for frontline service workers employed in the services sector, Wharton (1993) found that women in jobs requiring emotional labor were more satisfied than men in the same jobs, suggesting that women did not experience more negative consequences but even experienced psychological reward. Based on the results of our counting process of articles and to our knowledge, previous studies have not explicitly considered emotional labor from the perspective of gender identities. Likewise, the potential effects of emotional intelligence competences on how emotional labor influences work outcomes and employees' well-being is unclear (Johnson and Spector, 2007), so additional research would be needed to better understand the connections between gender roles and identities, emotional competences and well-being outcomes resulting from emotional work.

Work-Family Conflict

Greenhaus and Beutell (1985) defined this particular type of conflict as "a form of interrole conflict in which the role pressures

from the work and family domains are mutually incompatible in some respect" (p. 77). In this approach, the work-family conflict is both bi-directional and multi-dimensional, such that one's family life can interfere with work, and vice versa. Following the rich literature in this field, the following terms were used in the counting process: "work-family" OR "work-life" OR "family friendly." As shown in Figure 6, research in this field increased gradually especially since the 2000s, when the concepts were more consistently established in the organizational behavior literature (growing from a total of 99 articles in 2000 to 740 in 2017). From a gender perspective, this pattern is also observed in relation to studies about workplace stress that have considered gender generally (i.e., increasing from 6 articles in 2000 to 109 articles in 2017) and to a substantially lower extent in relation to studies that have focused on examining differences between men and women (increasing from 3 articles in 2000 to 24 articles in 2017). In contrast, the number of studies examining workplace stress from the perspective of gender identity traits is virtually absent.

Although gender has been a variable of interest in numerous work–family studies (Eby et al., 2005; Bianchi and Milkie, 2010), the specific way in which gender is related to work-life balance is unclear and sex differences are inconsistent, as revealed in several reviews of the work–family literature (e.g., Frone, 2003; Eby et al., 2005; Korabik et al., 2008). Because there is accumulated evidence that this form of role conflict influences emotional responses at work such as emotional exhaustion, due to the negative effects derived from the tension produced by the incompatible pressures from the work and family domains (e.g., Lingard and Francis, 2005; Karatepe and Sokmen, 2006; Glaser and Hecht, 2013), understanding these relations is critical. A meta-analysis by Shockley et al. (2017) showed that men and women showed



similar work-family experiences overall, regardless of the specific subgroups that were examined in relation to characteristics such as the nature of the job, working time (full time vs. part-time), parenthood (parents vs. not parents), and the incomes of the partner (dual-earner couple vs. single-earner couple). To avoid a simplistic interpretation of these findings, Shockley et al. (2017) underscored the many complexities and intricacies involved in this phenomenon that required further study, as for instance looking at moderators like job autonomy and family boundaries. Because these spheres interrelate comprising both work-to-family and family-to-work demands (Greenhaus and Beutell, 1985), the specific ways in which these two associations are influenced by gender stereotypes and identities might also vary.

EMOTIONAL ANDROGYNY: A POTENTIAL RESOURCE TO REDUCE PSYCHOSOCIAL RISKS AT WORK?

Our count of scientific articles about the most commonly studied psychosocial risks at work in the in the 1980-2017 period (namely workplace stress, abusive behavior, job insecurity, emotional labor, and the work-family conflict) revealed a notorious absence of research explicitly examining the connections between gender and psychosocial risks at work, and particularly in relation to communal and agentic gendered traits. Likewise, our review of the literature examining the gendered nature of emotional competences revealed remaining challenges in our understanding of how gendered functions and identities interrelate to influence emotional responses and processes at work. Because emotional competences and regulation strategies have emerged as a key resource to reduce psychosocial risks in a variety of studies (Grandey and Brauburger, 2002; Pugh, 2002; Coté, 2005), further research capturing these complexities from a gender perspective is likely to be useful. In particular, given the numerous inconsistencies in the literature examining sex differences in psychosocial risks, we suggest that these associations can be better understood from a comprehensive gender perspective that goes beyond sex differences and acknowledges the many complexities involved in gendered variables and prescriptions.

Emotional intelligence researchers' holistic perspective of emotional competences and gender identity researchers' integrative approach of identity traits (see Mayer et al., 2008; Wood and Eagly, 2015, respectively, for comprehensive reviews) provide closely related viewpoints in relation to how individuals can successfully regulate emotions and behavior. Both research areas attempt to explain how integrative approaches of human behavior that incorporate a diverse range of socioemotional dimensions influence work experiences, although they differ in their focus. Emotion regulation and emotional intelligence research is concerned with how emotional life influences subjective experiences at work and how a wider range of emotional competences and regulation strategies leads to more adaptive behavior (e.g., Gross, 1999; Bar-On et al., 2000; Coté, 2005; Mayer et al., 2008). Gender identity research in turn explains how integrating counter-stereotypical elements into

one's identity can help people develop healthier emotional responses. Adding to these literatures, the specific issue of how gender might help understand psychosocial risks at work has too often been oversimplified, so a perspective that acknowledges both self-oriented (i.e., agentic or stereotypically masculine) and other-oriented (i.e., communal or stereotypically feminine) emotional competences can be critical to understand psychosocial risks at work.

The concept of androgyny and its relation to life adjustment has been often criticized based on methodological concerns about interactions of agency and communion as measured with the Bem Sex Role Inventory (BSRI, Bem, 1974) and the Personal Attributes Questionnaire (PAQ, Spence and Helmreich, 1978) and the idea that societies are inherently gendered and prescribe different roles and traits for men and women, making it difficult to develop androgyny in the practice (e.g., Whitley, 1983; Egan and Perry, 2001). Derived from these concerns, many researchers abandoned the field because of a seemingly lack of agreement about its operationalization and applicability. Nonetheless, the concept of androgyny provides theoretical basis to understand gender behavioral flexibility and how having a wider range of responses serve to adapt to the environment. Furthermore, the gender literature contains indications that psychological androgyny is associated with mental and social well-being.

The early literature on sex role orientations (i.e., gender identity) showed that psychological androgyny is related to higher self-esteem, relationship satisfaction, better physical health, and lower loneliness (see, e.g., Bem, 1974; Ickes, 1993; Helgeson, 1994). In contrast, there is evidence that people with stereotyped identities display poorer psychological adjustment and wellbeing (Osofsky and Osofsky, 1972; Whitley, 1983; Williams and D'Alessandro, 1994). Recent studies have also shown that combinations of communion and are relevant predictors of behavior beyond sex in dimensions generally associated with subjective well-being. In the particular domain of emotion, employees with counter-stereotypical gender profiles (i.e., androgynous employees) have shown to be better able than other individuals with stereotyped identities to understand and regulate emotions as measured with both self-report and ability-based measures (Gartzia and van Engen, 2012; Gartzia et al., 2012a). Likewise, gender identity traits help to explain sex differences in a wide range of behaviors and emotional dimensions including verbal processing or processing tasks of facial emotions (Bourne and Maxwell, 2010). The incremental validity of gender traits over sex predicting psychological and emotional responses has also been demonstrated using neurological correlates (Weekes et al., 1995; Bourne and Gray, 2009).

Previous research has also addressed the issue of the possible advantages of androgyny for organizations. For instance, there is accumulated evidence in the organizational behavior literature that groups with members who are able to fill both task oriented and people-oriented roles (i.e., instrumental and expressive) are more cohesive and perform more effectively (Mudrack and Farrell, 1995). Indeed, as Parsons and Bales pointed from their functional perspective of team roles (1953), there is usually an "equilibrium problem" of establishing cyclic patterns of interaction that move the group forward to accomplish the task, and patterns of interaction that restore the internal socioemotional balance disturbed by the pursuit of the task. From this perspective, task and relationship roles are a natural consequence of these two partly conflicting demands and implies that a combination of both communal and agentic traits are required for effective functioning (Bales, 1953; Belbin, 1993). Drawing from this research, recent studies have shown that androgynous individuals are more effective in several organizational functions (e.g., Gartzia and van Engen, 2012; Gartzia et al., 2012a). For instance, Gartzia and Van Knippenberg (2015) showed that compared to male leaders with stereotypically masculine agentic profiles, male leaders with communal traits (i.e., androgynous) increased behavioral cooperation of team members participating in a prisoner's dilemma game.

In a study with Israeli employees rating their managers in relation to gender role orientation (perceived communion and agency) and leadership styles as measured with the MLQ, Kark et al. (2012) showed that androgyny was more strongly related to transformational leadership and followers' identification than other personality dimensions, and furthermore that gender traits showed incremental validity over sex predicting such leadership styles. Relatedly, Gartzia and van Engen (2012), showed that sex differences favoring women in individualized consideration, positive contingent reward and emotional intelligence were at least in part explained by male leaders' lower identification with communal traits. These findings are consistent with Zaccaro's (2007) suggestion that the ability of leaders to display a mix of different traits is critical for effective leadership as it allows having an expansive behavioral repertoire and adapting one's behavior as the situation changes. This standpoint ultimately provides relevant counterpoints to the oft-quoted think manager-think male perspective in leadership (Koenig et al., 2011).

Drawing from this literature, we propose emotional androgyny as a promising dimension in understanding and reducing psychosocial risks at work. Emotional androgyny can be understood here as achieving a balance between stereotypically masculine and stereotypically feminine traits related to a broad variety of perceptual, affective, and behavioral emotional dimensions that can potentially reduce the effects of psychosocial hazards at work. Note that we do not attempt an exhaustive examination of the androgyny concept nor do we attempt to address all the associations that may exist between gender and emotional competences, since this is addressed in several other publications and debates (e.g., see Brody and Hall, 2000; Fischer and Manstead, 2000; Bindu and Thomas, 2006; Gartzia and van Engen, 2012; Gartzia et al., 2012a). We rather focus on providing an updated reflection of the theoretical and empirical relevance of the topic and its potential applicability to dealing with the many challenges associated with preventing psychosocial risks at work. This process is twofold.

At the organizational/structural level, developing more flexible and "androgynous" viewpoints may prove useful to reduce job strain by for instance promoting leadership styles that combine agentic traits and emotional competences (e.g., assertiveness, self-confidence, and regulation of negative emotions such as guilt) with communal traits and emotional competences (e.g., empathy, listening skills and attention to, understanding and regulation of others' emotions). Because leaders' traits and emotion regulation strategies are critical for employees' psychological responses and well-being at work (see Mayer et al., 2008; Hackney and Perrewé, 2018) as well as for their subsequent development of emotion regulation strategies in the organization (Mawritz et al., 2017), leaders' androgynous profiles might help reduce employees' psychosocial hazards and improve their physical, mental, and social well-being. Because leaders are generally responsible for applying organizational norms and procedures, their action and attitudes are detrimental to the application of such procedures (Folger and Bies, 1989; Foreman and Whetten, 2002) and thus leaders' capacity to affect the physical, mental and social well-being of workers is potentially linked to a wider number of occupational risks (e.g., work-life balance policies and culture, strategic decisions about job conditions, or regulations about exemplary behavior at work). The incorporation of more androgynous managerial profiles might be particularly useful in dynamic and complex work environments in which competition and innovation is critical. Because these dynamic organizational environments often lead to failure experiences and negative emotions that worsen employees' motivation and learning (Shepherd et al., 2011), efforts to successfully combine communal and agentic qualities can become critical.

Second, at the individual level, developing more flexible and "androgynous" identities will assist health concerns such as workrelated stress and its consequences by providing employees with a richer umbrella of emotional competences that help them cope with the demands placed on them by their work. As we have argued, individuals with stereotyped identities have limited emotional competences because stereotypically feminine (i.e., communal) and stereotypically masculine (i.e., agentic) traits are associated with different emotional competences - communion is related to emotional attention and regulation of emotion in others whereas agency is related to one's emotional repair (Gartzia et al., 2012b). The occupational health literature has shown that employees' emotional resources and regulation strategies are critical to cope with organizational demands and psychosocial risks (Ashforth and Humphrey, 1993; Grandey and Brauburger, 2002; Pugh, 2002; Coté, 2005; Hackney and Perrewé, 2018) and so acknowledging the gendered nature of these strategies and their subsequent influence on the experience, expression, and regulation of emotions opens the door to new questions and insight about how to overcome current challenges in how men and women differently experience occupational risks.

CONCLUDING REMARKS

The aim of the current paper was to provide a critical approach about the multidimensional ways in which gender and psychosocial risks interrelate, focusing on emotional competences and their dynamic gendered nature as a useful framework to address the many challenges that these associations pose. With the relevance of emotional competences to prevent and deal with psychosocial risks and work-related stress (Ashforth and Humphrey, 1993; Grandey and Brauburger, 2002; Pugh, 2002; Coté, 2005), developing a critical approach to understand the multifaceted associations between emotion, organizational demands, and gender is of potential importance for the work and stress literature. However, our analysis of scientific articles in psychosocial risks revealed that analyses about the multidimensional ways in which gender is associated with employees' hazards at work have been clearly narrow. We gave specific attention to gendered dimensions that are open to change, focusing on the notion of gender identities and androgyny. Androgynous individuals may have the potential to develop the wide range of emotional competences that are required to deal with and improve emotional experiences at work. Thus, the integration of this approach allows us to pose new theoretical and methodological directions to further understand the psychosocial processes that affect women's and men's stressful workplace experiences. We hope that these propositions will foster the development of cumulative knowledge of the gendered

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nature of occupational risks at work in a way that a sex differences approach alone might not do.

AUTHOR CONTRIBUTIONS

LG conceived the original idea and the computational framework. JB encouraged LG to perform counts about the scientific literature and supervised the findings of this work. JP developed the analyses and performed literature reviews. LG took the lead in writing the manuscript. All authors discussed the results and contributed to the final manuscript.

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Sex, Gender Identity, and Perceived Employability Among Spanish Employed and Unemployed Youngsters

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Young people find it difficult to access to the labor market, particularly in countries like Spain with a dramatically high rate of unemployment. A further problem is that this labor market is not gender-neutral. This has been demonstrated repeatedly in the literature, with women typically being at a disadvantage. This highlights the need to study issues related to employability from a gender perspective, beyond including sex as a mere control variable. This analysis is relevant given the gender biases in organizations and in society in general that hinder the advancement of gender equality in organizations. Accordingly, our aim is to study both sex (male vs. female) and four profiles of gender identity based on dimensions of masculinity and femininity (i.e., feminine, masculine, undifferentiated, and androgynous) in relation to perceived employability in an exploratory way in two samples of employed (N = 181) and unemployed (N = 246) Spanish youngsters (i.e., below 30). The results show different patterns for employed and unemployed youngsters regarding sex, gender identity and their interaction in relation to perceptions of being employable. Concerning sex, women seem more confident about their employment chances when unemployed. In contrast, men feel more confident about their employment chances within their organization than women when employed. Concerning gender identity, the androgynous gender profile in the employed sample (in both men and women) scored highest on perceived employability. Results of the sexgender identity interaction show that being feminine associates with the highest level of perceived employability for an unemployed man and the lowest for an unemployed woman. Moreover, both unemployed men and women androgynous score the highest in perceiving employability (except feminine men). Our findings highlight that sex and gender identity do play a role in shaping employability perceptions of young men and women in different labor contexts (employment and unemployment). This reinforces the need of changes against discrimination at work and in job search from a feminist approach to arrive at a more equal society.

Keywords: qualitative and quantitative, perceived employability, gender identity, sex, employment, unemployment, youngsters

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INTRODUCTION

The labor market and employment are gendered in multiple ways. For instance, young men under 29 in Spain are more likely to be unemployed (9,73% men and 8,41% women) and women are more likely to work part-time (7,3% men and 24,2% women) (Active Population Survey, by the Instituto Nacional de Estadística [INE], 2018). Additionally, segregation still exists across jobs and sectors (i.e., horizontal segregation) and in hierarchal structures of the organizations (i.e., vertical segregation) (i.e., Hakim, 1993; Huffman et al., 2010; Baird, 2012; Organization for Economic Co-operation and Development [OECD], 2018).

Despite these findings, gender has not yet attracted much attention in employability research. Employability concerns the individual's chance in the internal and/or external labor market (Forrier et al., 2009) and is advanced as critical research area to achieve sustainable working lives (De Vos et al., 2018). Employability studies have primarily included gender as a control variable (e.g., Kalyal et al., 2010; De Cuyper and De Witte, 2011; González-Romá et al., 2018) but from a fairly narrow perspective, namely in terms of sex and without any gender interpretation. There are some hints to the role of gender in the conceptual and theoretical debate about employability (e.g., Fugate et al., 2004) and work related studies (Kanfer et al., 2001; Smith et al., 2005), yet empirical studies are lagging behind. More specifically, gender identity, or the degree in which the person assumes gender roles as part of their identity, has not been considered in employability research. While sex may determine how individuals are viewed by labor market actors, assumed gender roles are more likely to be stronger predictors of how individuals approach and behave in relation to the labor market.

Accordingly, our aim is to examine the relationship between gender and employability. We approach gender broadly in terms of both sex and gender identity. Sex and gender are sometimes used interchangeably, although both refer to conceptually distinct attributes. According to the World Health Organization [WHO] (2011), sex refers to the different biological and physiological characteristics of males and females, such as the reproductive system, chromosomes, hormones, etc. Gender refers to the socially constructed characteristics of women and men such as norms, roles and relationships of and between groups of women and men. To simplify, in this study, we will use the word "sex" to consider these sex/gender differences, and "gender identity" as the assumed roles derived of that sex distinction.¹ We conceive employability as the individual's appraisal of his/her chance in labor market, coined perceived employability. Those appraisals may concern the internal (i.e., within the current organization) or the external (i.e., with another employer) labor market and jobs in general or better jobs. We focus upon appraisals, as they are the main drivers for career behavior (Van Hercke et al., 2014; Forrier et al., 2015). In particular, if men and women perceive different chances in the labor market, they will behave accordingly, and this may contribute to gender segregation.

A strong feature of this study is that we explore differences in perceived employability based on sex and gender identity in a sample of employed and unemployed individuals in Spain younger than 30. Those samples are particularly well suited for a number of reasons. First, young adults have grown-up in a more gender equal society and therefore they may not follow the traditional gender roles or incorporate those roles to their identity. Hence, it would be interesting to examine if and how sex and gender identity affects employability. Second, employability has particular resonance among young adults who enter the labor market, particularly in Spain: The situation in Spain is certainly worrisome, with general unemployment above 17% (Instituto Nacional de Estadística [INE], 2018 second trimester) and the unemployment among young adults double this percentage (36.3%, Active Population Survey, first semester 2018). Youngsters who have obtained a job may experience high levels of job insecurity due to the instability of their jobs (i.e., Peiró et al., 2007). Perceived employability has particular resonance in this context since it reduces job insecurity (De Cuyper et al., 2012), buffers the negative consequences associated with job insecurity (e.g., Silla et al., 2009; Kalyal et al., 2010; Green, 2011) and promotes job search (Koen et al., 2013), and well-being (De Cuyper et al., 2017) among the unemployed. Third, the two different samples will help to cross-validate results across different labor market conditions, namely employment and unemployment.

Sex, Gender, and Perceived Employability

As human beings are embedded into a culture, it is difficult to disentangle sex and gender in colloquial language and scientific writing (Wood and Eagly, 2015). Sex often connotes sexuality, while gender consists of the meanings ascribed to male and female social categories within a culture. However, in a practical way, sex and gender are generally difficult to distinguish. For example, we do not know whether our choices and behaviors are due to only biological variables (sex) or their interaction with our society norms (gender). Thus, it is challenging to differentiate male-female (sex) from men-women (gender).

Sexual differences are framed by gender roles, which are strongly enchained in society, and refers to the shared beliefs that apply to individuals on the basis of their socially identified sex (Eagly, 1987; Eagly et al., 2004). Men and women tend to specialize in different behaviors in most cultures, and this has led to different beliefs about what men and women can and should do (Wood and Eagly, 2010). Those beliefs are often described along

¹Definitions according to David (2009):

Gender and sex: The condition of being female, male, neuter, or androgynous. In recent times there has been a differentiation between sex and gender in describing human beings and to a lesser extent other animals such that sex refers to the biological aspects of femaleness and maleness while gender refers to the cultural, social, and psychological aspects of being defined as female or male.

Gender identity: Is the identification of one-self as female or male; that means that gender identity is a cognitive process distinct from gender role behaviors.

Gender role: It is a learned set of behaviors associated with women or men. These behaviors are so strongly associated with each sex that the set of behaviors comes to define masculinity or feminity in any given culture. The underlying basis for gender roles is biological sex differences, but most authorities agree that gender role behaviors are learned.

two dimensions: agency and communion. Men are assumed to be agentic, typically described as being masterful, assertive, competitive and dominant. Conversely, women are assumed to be communal along descriptions such as friendly, unselfish, concerned with others and emotionally expressive. Thus, jobs that require those agentic or communal characteristics will be perceived as more suitable for men or for women, respectively. Also those gender roles will foster women's and men's interests toward not only different kind of jobs (horizontal segregation), but also toward which level they might aspire to assume (vertical segregation) and even how important should be working on the public sphere.

According to the Social Role Theory (Eagly, 1987), men would stereotypically be more oriented to work in the public sphere (breadwinner) and being encouraged by society to take up this role. Traditionally, it is expected that men would show agentic traits that will allow them to work in the public sphere providing support to their family. By comparison, women would stereotypically be more oriented to work in the private sphere (care-taker). Based on this traditional division of labor, it is expected that women would show communal traits and be oriented toward occupations related to care taking (i.e., nursering, teaching) and less orientation toward working in the public sphere, and when doing so, working in jobs compatible with their private sphere "responsibilities."

Socially embedded gender roles may affect employment chances in two ways, obviously interrelated. First, employers may have views on what are gender-appropriate jobs, and may recruit and hire accordingly. This affects the labor market chances of men and women differently. For example, Heilman (2012) analyzed how gender stereotypes promote gender bias in the workplace, and this hampers women promotion. Second, gender roles may influence the way men and women themselves approach the labor market and the available employment choices. Assigned gender roles may influence first career choice and then the perception of competence or success in getting and maintaining a job (Correll, 2001). This idea has attracted some attention from career scholars, for example along insights from Social Cognitive Career Theory (for an illustration, see Williams and Subich, 2006). Common to both perspectives is the idea that certain jobs are "for men" (masculinized jobs) or "for women" (feminized jobs); or that only one a person from a specific sex (e.g., male) might have more chances to get to the top level of organizations (e.g., managers). Therefore, sexual differences might affect employability of women and men.

Taking this one step further, sex differences may likewise affect perceived employability. Perceived employability concerns chances a person sees in the internal (i.e., perceived internal employability, with the current employer) and the external labor market (i.e., perceived external employability; with another employer). The distinction between internal and external employability is generally accepted (Rothwell and Arnold, 2007): the underlying idea is that perceived employability is shaped through the interaction between personal and contextual features, and the distinction between perceived internal and external employability accounts for different contextual dynamics. For example, perceptions of internal employability may in part be shaped through Human Resources practices and internal promotion opportunities and perceptions of external employability through the general economic climate (Van Hercke et al., 2014). Chances in the labor market may refer to any job (i.e., perceived quantitative employability) or better jobs (i.e., qualitative employability). The focus upon quantity vs. quality is relatively new and unexplored, though first results are promising (see e.g., De Cuyper and De Witte, 2011). The underlying idea here is that the perceived quality of job opportunities is a signal of employee's worth in the labor market and a stronger urge for career progression. The combination leads to four types of perceived employability: perceived internal quantitative employability, perceived internal qualitative employability, perceived external quantitative employability and perceived external qualitative employability. The four types can be meaningfully distinguished and related differently to work behaviors. Then, although we might expect that men would have higher perceived employability than women in general, it seems interesting to explore if this holds across the different aspects of perceived employability. A plausible assumption is that gender differences are particularly salient in the external labor market, when employers do not have person-specific information and hence rely more easily on general stereotypes. Another assumption could be that gender differences are larger when quality indicators are accounted for.

Based on these argument, we propose the following research question to further explore the influence of sex and gender on perceived employability:

RQ1: Do men and women differ in perceived internal quantitative, perceived internal qualitative, perceived external quantitative and perceived external qualitative employability?

Gender Identity and Perceived Employability

When people incorporate the cultural meanings of what it is to be a man or a woman into their own psyches, gender becomes part of their identities (Wood and Eagly, 2015). Through these gender identities, individuals may think and act according to these gendered aspects of their selves (Wood and Eagly, 2010), including their approach to the labor market.

Thus, gender identity may likewise affect perceived employability. A plausible assumption is that individuals who adopt a masculine identity might be more oriented toward working in the public sphere and thus more actively seek out employment opportunities than those with a feminine identity, who might more oriented to the private sphere. Also, there are certain characteristics that are regarded as masculine who seems be desirable to certain work/employment domains (i.e., competitiveness, leadership). Accordingly, more masculine individuals (men or women) might feel a higher perceived employability than the feminine ones.

Yet, this picture becomes much more complicated when considering that gender identity is fluid rather than binary. Said differently, gender identity based on gender-stereotypical personality traits should not be conceived as a strict divide between men-masculine and women-feminine. Instead, individuals might score high on both masculinity and feminity. This has led to four gender identity profiles that are commonly accepted in the literature (e.g., Bem, 1974): feminine (high on feminity, low on masculinity), masculine (low of feminity, high on masculinity), undifferentiated (low on both feminity and masculinity) and androgenous (high on both feminity and masculinity). Some studies (i.e., Gartzia et al., 2012) found that individuals with an androgenous profile show higher emotional intelligence, which leads to a better adaptation to different situations. This is because they might show the masculine or the feminine traits contingently as required by the situation. In this sense, we might expect these people will perceive to be more employable as they might adapt better to different jobs profiles. Our point here is that gender identity might play a role, though which role exactly and how the different gender identity profiles compare to each other in relation to perceived employability is unclear. Accordingly, our second research question is as follows:

RQ2: Do individuals with different gender identity profiles differ in perceived internal quantitative, perceived internal qualitative, perceived external quantitative and perceived external qualitative employability?

Sex, Gender Identity, and Perceived Employability

As we stated before, employability research has considered gender interchangeably with sex as a covariate or predictor and has not extensively studied the role of gender identity. We extend this by examining the combined effect of sex and gender identity in perceived employability, which portraits a more complex scenario. Only few studies have analyzed the combined effects of sex and gender identity on psychosocial variables at work (i.e., on perceived stress by students; Jones et al., 2016), although none of them in actual occupational settings. With respect to perceived employability, a plausible assumption is that women who strongly identify with the female identity may be less oriented toward the labor market than men who strongly identify with the male identity who actively seek and pursue more job opportunities. However, the question is how men and women with gender identity profiles different to the ones that traditionally would be assigned based on their sex (i.e., non-masculine men, non-feminine women) appraise their employability. For example, it has been found that women working in STEM jobs need to reduce their feminity expression to better integrate in this stereotypically masculine jobs (i.e., Eisenhart and Finkel, 1998; Faulkner, 2000). Additionally, studies in the police force, as a male-dominated field has found that gender-dissimilarity in police teams was related to perceived gender-work identity conflict for women, but not for men (Veldman et al., 2017). Men might also be affected by noncongruity between their sex and gender identity. It is known that masculine identification correlates with positive attitudes toward male and female gender identity types that conform to traditional gender norms (i.e., masculine men, feminine women), but negative attitudes toward feminine men (Glick et al., 2015), which might affect young men looking for or maintaining a stereotyped feminine job. The following research questions address these issues:

RQ3: How do sex and gender identity interact in relation to perceived internal quantitative, perceived internal qualitative, perceived external quantitative and perceived external qualitative employability?

MATERIALS AND METHODS

Sample and Procedure

Sample 1: Employed

Data were collected by a consultant group specialized in human resources, and hired for this specific purpose. The consultant group approached their clients' employees with an invitation to participate in the survey during June and October 2015. Invitations were sent to members under 30 years with at least 2 years of work experience employed in 20 production, retail and service organizations. Questionnaires were completed online and through paper-and-pencil. Participation was voluntary and confidential. Respondents were provided with an individual feedback report about psychosocial risks factors at work as token of appreciation.

The final sample for this study consisted of 181 employees. About half of the sample was male (47% male and 53% female), and mean age was 26.1 (SD = 3.2). Regarding education, 1.1% did not obtain a degree, 8.4% completed basic education, 17.3% professional education, 8.4% high school, 40.2% university, and 24.6% postgraduate studies. Regarding occupational position, 13.6% were managers, 35.2% qualified staff, and 51.2% had auxiliary or apprentice jobs.

Sample 2: Unemployed

The researchers contacted the public employment service of the Valencian Community (Spain). This employment service invited individuals younger than 30 years who were unemployed for at least 6 months at the moment of participation (but who had had at least 2 years of work experience) and available for work and searching for a job to a compulsory activity as part of their reemployment plan. Once there, the researchers asked them to participate in the research project. They were asked to complete the questionnaire, voluntarily and confidentially. The data collection was exclusively in paper-and-pencil. In exchange for their collaboration, researchers provided participants with a free training course about the use of emotional regulation during their search for a new job.

This sample included 237 unemployed people. About half of the sample was male (52% male and 48% female) with a mean age of 26.7 (SD = 2,4). Regarding education, 10.2% did not obtain a degree, 40% basic education, 23.4% professional education, 14% high school, 7.7% university studies, and 4.7% had postgraduate studies. Finally, participants have been, on average, 22.9 months unemployed (SD = 19.02).

Instruments

Sex: Participants were asked to indicate their identified gender: man (0) or woman (1).

Gender identity: Participants completed the short 12-items Spanish version of Bem Sex-Role Inventory (BSRI, Bem, 1974), validated by Mateo and Fernández (1991). This is a measure of gender expression that includes six items of masculinity, (e.g., dominant) and six items of femininity (e.g., kind). Participants answered using a 7-point Likert scale ranging from 1 (never) to 7 (always). Following Carver et al. (2013) and Vafaei et al. (2014), we used the median split method to compute the four gender identity profiles. Firstly, we calculated the median for the masculine and feminine scales. Secondly, individual scores for each participant on the femininity scale and the masculinity scale were calculated and compared to the median. Thirdly, groups were created following this rules: (1) if the participant's mean scores on both the masculine and feminine scales were equal to or above the median that participant was classified as androgynous; (2) if the participant mean score was below the median on both the feminine and masculine scales, the participant was classified as undifferentiated; (3) those participants whose mean score were equal to or higher than the median on the masculine scale and lower on the feminine scale were classified as masculine; (4) those participants who were equal to or higher than the median on the feminine scale and lower on the masculine scale were classified as feminine. In the Spanish version of the BSRI-12, Mateo and Fernández (1991) found the coefficients of internal consistency ranged from 0.83 to 0.94.

Perceived Employability was measured with the Spanish version of the scale developed by De Cuyper and De Witte (2010) and De Cuyper and De Witte (2011) in Sample 1 (employed). We used four dimensions, with four items each: (1) Internal quantitative (e.g., I am optimistic that I could find another job, if I looked for one); (2) Internal qualitative, (e.g., I am optimistic that I could have a better position within the company); (3) External quantitative (e.g., It would be very easy to get a similar job in another company); and (4) External qualitative (e.g., I am optimistic that I could find a better job elsewhere, if I looked for one). The original studies report good internal consistency with the following reliabilities (Cronbach's a): 0.91, 0.94, 0.95, and 0.96, respectively. In Sample 2 (unemployed), we adapted the scale described above to fit the situation of the unemployed individuals. In particular, we focused upon the external labor market. Thus, perceived internal employability was not considered and included in this version of the scale as it has no meaning for unemployed individuals. Moreover, we changed the four items for External quantitative (e.g., I can easily find a job.) and the four items for External qualitative, (e.g., I can easily find a better job than I had previously) from "find another job" to "find a job." In all cases, participant answered on a 7-point Likert scale from 0 (strongly disagree) to 6 (strongly agree).

Data Analysis

We performed three steps to analyze the data. First, we ran descriptive analyses with specific attention to gender and sex frequency distributions in both samples. Second, confirmatory factor analyses were performed to validate the four (Sample 1) and the two (Sample 2) dimensions of the perceived employability scale. The goodness-of-fit of the models was

evaluated using absolute and relative indexes. The three absolute goodness-of-fit indexes calculated were: (1) the χ^2 goodness-offit statistic; (2) the Goodness-of-Fit Index (GFI); and (3) the Root Mean Square Error of Approximation (RMSEA). Additionally, we computed a relative index: Comparative Fit Index (CFI). Because the distribution of the GFI is unknown, no statistical test or critical value is available (Jöreskog and Sörbom, 1993). Values below 0.06 for the RMSEA are indicative of an acceptable fit (Hu and Bentler, 1999), whereas a cut-off value close to 0.95 for CFI is considered to indicate an adequate model fit (Hu and Bentler, 1999). Confirmatory factor analyses were performed with AMOS 21. Third, multivariate analysis of variance (MANOVA) were performed to test sex, gender and their interaction effects on dimensions of perceived employability. Post hoc analyses through Bonferroni test were performed to further analyze any significant differences. Multivariate analyses were performed with SPSS 22.

RESULTS

Descriptive Analysis

Table 1 shows means, standard deviations, alphas and correlations for each dimension of perceived employability in both samples. Qualitative perceived employability had lower means than quantitative perceived employability for both perceived internal and external employability and across samples. Correlations and reliability estimates (Cronbach's alpha) were as expected. Cronbach's alphas for gender identity were 0.80 for employee and 0.75 for unemployed.

In order to descriptively visualize the patterns of variability on perceived employability, **Tables 1**, 2 show the means, and standard deviations for perceived employability among the samples of employed (**Table 2**) and unemployed (**Table 3**) taking into account sex and gender identity: men and women (sex) and, within this, androgynous, undifferentiated, masculine and feminine (gender identity). Within each of these eight groups, means and standard deviations are shown.

Results in **Table 2** show that both employed men and women with an androgynous profile felt more employable on all the dimensions. The pattern was different in the unemployed sample (**Table 3**) feminine men and masculine women reported the highest levels of external qualitative and quantitative perceived employability. Note also that there are more feminine men and women in the unemployed sample compared to the employed one (n = 8 feminine men in the employed sample vs. n = 26 in the unemployed one; n = 27 feminine women in the employed sample vs. n = 50 in the unemployed one). The number of masculine unemployed women is the lowest (n = 7).

CFA

Confirmatory factor analyses were performed to test the four (sample 1) and the two (sample 2) dimensions of the perceived employability scale. As showed in **Table 4**, the hypothesized model provided a better fit to the data than the alternative one-factor model in both samples. These results, together with the reliability estimates (Cronbach's alpha; **Table 1**), support the **TABLE 1** | Means, standard deviations, and correlations for employed (n = 182) and unemployed (n = 237).

	Employed				Unemployed	ł	1	2	3	4
	М	SD	α	М	SD	α				
1. External quantitative	3.02	1.42	0.86	2.38	1.28	0.81	1	0.76***	0.21**	0.28***
2. External qualitative	2.63	1.29	0.86	2.10	1.24	0.79	0.88***	1	0.25***	0.35***
3. Internal quantitative	3.05	1.36	0.76						1	0.74***
4. Internal qualitative	2.35	1.28	0.79							1

***p < 0.001; **p < 0.01; S₁, Sample 1 (employed); S₂, Sample 2 (unemployed); under diagonal correlations of S₁, above diagonal correlations of S₂.

TABLE 2 | Descriptive statistics of employability by sex and gender identity among employees (n = 182).

	Men (<i>n</i> = 85)									Women (<i>n</i> = 97)								
	1 (<i>n</i> = 25)		2 (n = 20)		3 (n = 32)		4 (n = 8)		1 (<i>n</i> = 30)		2 (n = 17)		3 (n = 24)		4 (n = 27)			
	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD		
External quantitative	3.43	1.37	2.81	1.33	2.79	1.07	3.03	1.88	3.21	1.60	2.53	1.40	3.31	1.47	2.90	1.47		
External qualitative	3.16	1.28	2.43	0.98	2.36	1.16	2.44	1.76	2.93	1.51	2.13	1.08	2.59	1.38	2.68	1.15		
Internal quantitative	3.78	1.40	3.02	0.99	3.20	1.22	3.13	0.95	2.98	1.56	2.63	1.49	3.08	1.51	2.47	1.11		
Internal qualitative	2.96	1.38	2.43	0.94	2.60	1.18	2.38	1.08	2.44	1.51	1.81	1.01	1.96	1.44	2.02	1.09		

1 = androgynous; 2 = undifferentiated; 3 = masculine; 4 = feminine.

TABLE 3 | Descriptive statistics of employability by sex and gender identity among unemployed (n = 237).

	Men (<i>n</i> = 124)									Women (<i>n</i> = 113)								
	1 (<i>n</i> = 27)		2 (n = 37)		3 (n = 34)		4 (n = 26)		1 (<i>n</i> = 34)		2 (n = 22)		3 (n = 7)		4 (n = 50)			
	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD		
External quantitative	2.52	1.42	1.78	1.09	2.34	1.60	2.52	0.87	2.71	1.34	2.59	1.22	3.32	0.69	2.27	1.17		
External qualitative	2.27	1.44	1.32	1.03	1.88	1.53	2.34	0.95	2.32	1.24	2.48	1.17	2.96	0.85	2.16	1.04		

1 = androgynous; 2 = undifferentiated; 3 = masculine; 4 = feminine.

TABLE 4 C	Confirmatory fa	ctorial analysis	for employees (n = 181) and unemploy	/ed (n = 237) sample	s.
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Models	χ ²	df	GFI	RMSEA	TLI	CFI	IFI	$\Delta \chi^2$	Δdf
S1_Model 1D	802.86	104	0.54	0.193	0.49	0.56	0.56		
S1_Model 4D	321.83	98	0.81	0.112	0.83	0.86	0.86	$M_{4D} - M_{1D} = 481.03^{***}$	6
S2_Model 1D	181.84	20	0.84	0.186	0.80	0.86	0.86		
S2_Model 2D	174.28	19	0.85	0.186	0.79	0.85	0.86	$M_{2D} - M_{1D} = 7.56^*$	1

 S_1 = employed; S_2 = unemployed; S_1 _Model 1D = Sample 1, 1 dimension; S_1 _Model 4D = Sample 1, 4 dimensions; S_2 _Model 1D = Sample 2, 1 dimension; S_2 _Model 2D = Sample 2, 2 dimensions. *p < 0.05, ***p < 0.001.

validation of the newly created scale of perceived employability intended for unemployed individuals.

MANOVA

Finally, we performed MANOVA in order to analyze differences between sex and gender identity profiles and their interaction in perceived employability in both samples.

Sample 1: Employees

The main effect of sex in the four dimensions of perceived employability (RQ1) was not significant (Wilks' Lambda = 0.956,

p = 0.10, $\eta^2 = 0.044$), probably owing to the relatively small sample size. Analyzed separately, there were significant sex differences in perceived internal quantitative employability $[F_{(1,174)} = 5.15, p = 0.024, \eta^2 = 0.029]$ and perceived internal qualitative employability $[F_{(1,174)} = 6.96, p = 0.009, \eta^2 = 0.038]$. Men perceived to be more employable in the internal (quantitative and qualitative) labor market. There were no significant differences in perceived external quantitative employability $[F_{(1,174)} = 0.014, p = 0.906, \eta^2 = 0.000]$ and perceived external qualitative employability $[F_{(1,174)} = 0.003, p = 0.0954, \eta^2 = 0.000]$. The main effect of gender identity (RQ2) was not statistically significant (Wilk's Lamda = 0.917, p = 0.24, $\eta^2 = 0.029$). Analyzed separately, differences were significant for perceived external qualitative employability [$F_{(3,174)} = 3.15$; p = 0.026, $\eta^2 = 0.052$]. *Post hoc* analyses performed with Bonferroni showed significant differences between androgynous and undifferentiated gender profiles: the androgynous profile scored significantly higher than the undifferentiated profile. Differences were not significant in perceived external quantitative employability [$F_{(3,174)} = 1.56$, p = 0.200, $\eta^2 = 0.026$], perceived internal quantitative employability [$F_{(3,174)} = 1.56$, p = 0.200, $\eta^2 = 0.026$], perceived internal quantitative employability [$F_{(3,174)} = 1.76$, p = 0.157, $\eta^2 = 0.029$] and perceived internal qualitative employability [$F_{(3,174)} = 2.00$, p = 0.115, $\eta^2 = 0.033$].

The interaction effect of sex and gender identity to the different dimensions of perceived employability (RQ3) was not significant: Perceived external quantitative employability $[F_{(3,174)} = 0.874; p = 0.456, \eta^2 = 0.015]$ and perceived external qualitative employability $[F_{(3,174)} = 0.519, p = 0.670, \eta^2 = 0.009]$, perceived internal quantitative employability $[F_{(3,174)} = 0.582, \eta^2 = 0.011]$ and perceived internal qualitative employability $[F_{(3,174)} = 0.089, p = 0.966, \eta^2 = 0.002]$.

In concert, our conclusion is that both sex and gender identity relate to perceived employability. Employed men felt more employable, both quantitatively and qualitatively, in the internal labor market than women (RQ1), and employed individuals in the androgynous profile expressed higher qualitative internal employability than individuals in the undifferentiated profile (RQ2). The interaction between sex and gender identity was not significantly related to perceived employability in the sample of employed.

Sample 2: Unemployed

The main effect of sex (RQ1) was significant (Wilks' Lambda = 0.963, p = 0.013; $\eta^2 = 0.037$), for both perceived external quantitative employability [$F_{(1,229)} = 5.21$, p = 0.023; $\eta^2 = 0.022$] and perceived external qualitative employability [$F_{(1,229)} = 8.48$, p = 0.004; $\eta^2 = 0.036$]. Women perceived to be more employable than men.

On the contrary, there were no significant gender identity differences on the dimensions of eternal perceived employability (RQ2) (Wilks' Lambda = 0.959; p = 0.148; $\eta^2 = 0.020$). When analyzed separately: Perceived external quantitative employability [$F_{(3,229)} = 1.93$, p = 0.126; $\eta^2 = 0.025$] and perceived external qualitative employability [$F_{(3,229)} = 1.57$, p = 0.198; $\eta^2 = 0.020$].

Finally, the interaction between sex and gender identity (RQ3) was significant for perceived external qualitative $[F_{(3,229)} = 4.19, p = 0.006; \eta^2 = 0.052]$ but not for perceived external quantitative employability $[F_{(3,229)} = 2.49, p = 0.061; \eta^2 = 0.032]$. Although the interaction in perceived external quantitative did not meet commonly accepted significance levels, it showed a small but valuable effect size. We therefore detail the interaction in **Figures 1, 2**.

As the figures show, being feminine among the unemployed relates differently to perceived employability among men and women. Feminine men have the highest score in perceived external quantitative employability, whereas feminine women have the lowest. The highest perceived external qualitative employability scores are for masculine the lowest and worst for undifferentiated men.

Overall, we established that unemployed women felt more employable than men in the external labor market (RQ1). Gender identity did not relate to perceived employability when studied as a main effect (RQ2), yet the interaction with sex was significant in relation to perceived external qualitative employability and meaningful (though not significant) for perceived external quantitative employability (RQ3).

DISCUSSION

This study provides a gendered perspective on perceived employability among employed and unemployed Spanish youngsters for whom employability has particularly resonance. Spain has a high rate of unemployment among youngsters; hence, providing insight in the potential barriers to employability, both in terms of finding and maintaining employment is a core issue.

The pattern of results was perhaps most remarkable for sex differences (RQ1). Employed young men perceived more chances in the internal labor market, both quantitatively and qualitatively, than women, but not in the external labor market. Thus, young men perceive that they have more employment opportunities within their organization than young women. This is in line with the available evidence and discussion regarding sex disparities in employment and promotion in organizations (i.e., Cifre et al., 2015; Quinn and Smith, 2018). It furthermore aligns with the idea that men, women, and organizational policies might routinely engage in practices of "doing gender" that reproduce gender inequality, even if unconsciously (i.e., Schilt, 2006; Huffman et al., 2010). In sum, these differences in perceived internal employability might be rooted in societal, cultural, and organizational barriers that preclude females to have same opportunities as men (i.e., glass ceiling). It is however against the idea often advanced in employability and career studies that individuals themselves carry most responsibility over their career (Forrier et al., 2018). It seems that women still today perceive boundaries to employment opportunities within the organization, possibly due to the perception of stereotyped bias (Heilman, 2012) for women's career progress. However, we did not identify sex differences regarding external perceived employability. A plausible explanation could be that there is a common feeling that there are few job opportunities out there, so youngsters who have a job are very much focused upon keeping the present job: they may have become risk-averse owing to the recent crisis.

The pattern of results for unemployed was quite different. Unemployed young women perceived to be more employable, both quantitatively and qualitatively, than men. These results agree with those showed by official figures on Spanish employment among youngsters: women more easily find a job, though those jobs are often of lower quality (i.e., part-time jobs).



This may seem at odds with women's perception of "qualitative employability." It could be that women consider part-time jobs in a positive way, for example in view of facilitating workhome issues. This pattern also seems to suggest that individuals take contextual features into account when appraising their labor market chances. A further explanation is that men are traditionally seen as "bread provider": when unemployed, men may feel they failed, and this may cause a loss of self-confidence and self-efficacy, and ultimately show lower perceptions of being employable. An related explanation is that men, more than women, are penalized for being unemployed by the environment such as potential future employers, peers and partners, and this may well translate into lower feelings of being employable.

Gender identity was related to perceptions of employability in the employed sample, but not in the unemployed sample (RQ2). Among the employed, androgynous men and women score higher in all dimensions of perceived employability, yet the difference was significant only for perceived external qualitative employability in comparison to the undifferentiated profile. Androgyny refers to an adaptive personality character structure in which masculine and feminine traits are integrated in a person regardless of their sex (Barberá, 1998). The expression of these traits in an integrated or separate way will depend on the situation (Bem, 1977; Baldwin et al., 1986), which make them more adaptable to different situations. Those balanced feminine-masculine traits are supposed to be an advantage when obtaining an external job, as it seems that they show higher levels of emotional intelligence (Gartzia, 2010; Gartzia et al., 2012) than people with a more stereotyped identity. Besides, although not statistically significant, men and women with a masculine gender identity score higher in perceived employability. So, it seems that there is a trend for unemployed masculine men and women to perceive that they have more chances in the labor market than the other profiles, maybe because this market value mostly personality traits associated with masculinity (i.e., agentic traits).

Also interesting is the analysis of the interaction between sex and gender identity (RQ3). Overall, men identify mostly with masculine traits (32.1%) and less with feminine ones (15.8%), while women identify mostly with feminine traits (37.4%) and less with the masculine ones (14.2%). Thus, it seems that although research on gender identity is based on stereotyped gender traits that began on the seventies of twentieth century (i.e., masculine men, feminine women), this profile is still validated among young people 40 years later, at least in Spain. Nevertheless, we can see a different trend if we focus on unemployed vs. employed sample. There were proportionally more feminine men and women in the unemployed compared to the employed sample, and conversely, more masculine women in the employed sample. Again, these results might suggest that masculine traits are still the most searched by organizations, independently of their sex (men-women), so young individuals with more masculine traits and less feminine ones are those that feel more employable. This result, together with the previous one regarding the highest



internal perceived employability by employed men, could address to what is called the theory of gendered organizations by Acker's (1990). This theory proposes that pervasive gender inequities are produced and legitimized through institutionalized policies, communication patterns, organizational bodies, social structures, and divisions of labor, perpetuating disparities in power that explicitly and implicitly advantage men over women. This theory has been recently confirmed even in so seemingly gender neutral organizations such as academia (Conesa Carpintero and González Ramos, 2018; Hanasono et al., 2018).

Although sex by gender interaction is not significant to account for any difference in perceived employability (RQ3) in employees, it was significant among those who are unemployed. First of all, it is worthy to remark that young unemployed women score higher than men in perceived employability, except those with a feminine profile. Besides, it seems that women with high masculine gender identity are those that perceive the highest external quantitative and qualitative employability, even much more than masculine men. Therefore, it seems that "masculine" or more agentic women (as suggested before) feel that they adapt better to the requirements of the labor market, so they feel prepared when searching for a new job. This is especially interesting since the highest score in perceived employability among unemployed men is the lowest score for unemployed women: being feminine (or androgynous in the case of men). It seems that to distinguish from other in the job search, both must adopt a gender identity theoretically incongruent with their sex: men must show feminine traits while women masculine ones. Surprisingly, these results are unexpected regarding the role congruity theory (Eagly and Karau, 2002), which proposes (focusing on female leaders) that perceived incongruity between the female gender role and leadership roles leads to two forms of prejudice (a) perceiving women less favorably than men as potential occupants of leadership roles and (b) evaluating behavior that fulfills the prescriptions of a leader role less favorably when it is enacted by a woman. However, in this case it seems that this role incongruity seems to promote a higher level of perceived employability among unemployed. However, this theory is based on perception of others. In this case, perceived employability is about self-perceptions. So, going a step further, it seems that explained before, youngest might feel that being gender-incongruent might open new options in the labor market, since it can differentiate them from the rest of the competition and give them access to new job niches (i.e., care of others jobs in the case of men). Nevertheless, being undifferentiated or masculine are the worst options for unemployed men perceived employability, as it might seem that they do not accomplish their bread-winner gender role according to the social role theory (Eagly, 1987). Summing up, it seems that showing personality traits incongruent with their sex might be a differential component to increase their perceived employability in a different way to men and women.

Theoretical and Practical Implications

This study moves employability research forward. It highlights the role of sex, gender identity and their interaction in

shaping perceptions of employability across employed and unemployed youngsters. Though the pattern of results is far from straightforward, it is clear that perceived employability is dependent upon sex and gender, in both employed and unemployed youngsters.

Concerning sex, women seem less confident about their chances of maintaining or improving their job within an organization, while men are less confident about their chances to obtain a new job when unemployed. While these findings may appear conflicting, they align with gender roles: women still are disadvantaged in organizational life, yet men are penalized more heavily when unemployed. This aligns with Social Role Theory (Eagly, 1987) which posits that women are expected to perform roles in the private sphere, whereas society expects men continue developing the "bread-winner" role in the public one. So men are more supported to do that and, if not, they are penalized.

Concerning gender identity, the androgynous gender profile in the employed sample (both men and women) scored higher on perceived external qualitative employability, probably because they can more easily adapt to different situation and adaptability is traditionally seen as key to employability (Forrier et al., 2015).

Concerning sex and gender identity interaction, results show that those young unemployed that identified with an incongruent sex-gender identity profile (i.e., masculine women and feminine men) presented the highest levels of perceived employability. These results go a step beyond the role congruity theory (Eagly and Karau, 2002) which proposes that perceived incongruence between the female gender role and leadership roles leads to prejudice that might affect women negatively. In this case, it seems that both unemployed men and women feel that when displaying those incongruent traits, they have more opportunities in the labor market. However, this should not imply that we should encourage the expression of incongruent gender identity. Current research has shown than higher levels of congruence between one's inner self-concept and outward expression of their identity (action authenticity) may allow one to focus and to enjoy work, and this brings about positive outcomes such as job satisfaction (Martinez et al., 2017).

Overall, our conclusion is that sex and gender identity do play a role in shaping employability perceptions. One practical implication of these results is that employability is not all about upskilling and increasing competences, but (at least in part) also structurally determined (see e.g., Forrier et al., 2018). Perceptions of being employable are affected by who you are or how have you been categorized by birth (sex), by the associated roles you are expected to play (gender), and less so by who you feel you are (gender identity). These results are especially dramatic if we consider that we are focusing on young individuals (under 30), who are continuously receiving messages about what to do to be more employable, seeming that employability falls entirely under their responsibility or under their control. However, it seems that is our society itself which has a hard work to do to break stereotypes associated to men and women at work that would mean a step forward to equal access to the labor market.

This results highlight that more structural elements, such as gender roles (as expressed in sex and gender differences), should

be feature more prominently in employability studies, and not just as control variables.

Study Limitations

This study has been performed with young employed and unemployed people in Spain. Therefore, as our sample was younger than 30, we cannot generalize this results to older age groups. Different patterns may emerge within different age groups. So although it was interesting to examine that gender identity still followed gender stereotypes in young generations, future studies should confirm these results including a wider range of age.

Also the study was focused on the Spanish context. Future studies should replicate these findings in a cross-national study, to examine the role played by cultural contexts when predicting perceived employability. Spain has been traditionally a catholic country with a strong patriarchal model. It would be interesting then replicating this study in Northern Europe countries with a more liberal model and where gender equality is almost a reality.

This was an exploratory study, where the relationship between sex, gender identity and perceived employability has been analyzed in a descriptive way. Future longitudinal studies could go a step forward analyzing from a gendered point of view more complex models including antecedents (e.g., self-efficacy/selfesteem or perceived barriers to career) and consequences of perceived employability for careers and occupational health.

Finally, our samples are relatively small, so it would be interesting replicating these results with a larger sample. However, this study includes two samples (employed and unemployed) that allows us to examine sex/gender and gender identities taking into account structural variables such as the employment status.

Strengths

A particular strength is that we situate this gendered perspective in two samples of employed and unemployed Spanish youngsters, for whom perceptions of employability have particular resonance.

In addition, we provided a broad account on both gender and perceived employability. With respect to gender, we included sex, gender identity, and their interaction. With respect to perceived employability, we included combinations of perceived chances in the internal and external labor market, and perceived overall and qualitative chances.

To perform this study, we have created a new scale for perceived qualitative and quantitative external employability for the unemployed sample, based on the existing scale for perceived external qualitative and qualitative employability. Reliability indices and CFA show that this (Spanish) scale has appropriate psychometric properties to be used in future studies.

Finally, although our study was based on heteronormativism, considering binary only men-women, we included the interaction between sex and gender identity to go beyond the stereotyped assigned men-masculine and women-feminine associations. We hope that this study represents a step forward in understanding the role of sex/gender and gender identities in organizations in particular and in societies in general.

CONCLUSION

In conclusion, our results highlight the importance of sex and gender identity for employability. Young people sex (men/women) as well as gender identity they assume (agentic vs. communal traits) will affect their perceived employability, and the way they approach to the labor market. This labor market is still gendered (i.e., employed men perceive that have more chances to get a better job into their organization, unemployed masculine men and women perceive they have more chances in the labor market). The implication is that we might shift the focus and responsibility from the individual to include also other stakeholders (e.g., employers, policy-makers,...). Only being aware of the stereotyped bias performed by organizations and assumed by individuals, we will be able to contribute to build more equal societies. From a feminist compromise, those changes should be promoted from all different social fields, including science. Hope this article contributes to it.

ETHICS STATEMENT

All participants provided written informed consents before to complete the survey, in accordance with the Declaration of Helsinki, and researchers guaranteed the anonymity of data. The

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AUTHOR CONTRIBUTIONS

All authors contributed to this work. EC designed the study, collected the data, wrote the first version of the introduction and the discussion of the manuscript, and was the supervisor of the research team, so works as first author. MV and IS-C performed data analysis and wrote the first version of the "Materials and Methods" and "Results" section. NdC reviewed and included the employability literature in the "Introduction" and "Discussion" section. All of them repeatedly revised the manuscript. All authors approved the final version of the manuscript to be published.

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Does Work-Family Conflict Mediate the Associations of Job Characteristics With Employees' Mental Health Among Men and Women?

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Job characteristics are important to work-family conflict (WFC). Additionally, is well established that WFC has a negative impact on mental health. As such, this research aims to examine the role of WFC as a mechanism that explains the relationship between job characteristics (i.e., those establishing by the Job Demands-Control-Support Model) and workers' mental health. Moreover, based on gender inequalities in work and nonwork roles, this study analyzed gender as moderator of this mediation. Specifically, the relationship between job characteristics and WFC and the relationship between WFC and mental health could be stronger for women than for men. With a sample of 254 workers from a Portuguese services company, (61% males), and based on a multiplegroup analysis, the results indicated that the WFC mediates the relationship between job characteristics (i.e., job demands and job control) and mental health. It was reinforced that job demands and lack of control could contribute to employees' stress and, once individual' energy was drained, the WFC could emerge. Ultimately, may be due to the presence of this conflict that individuals mental health' is negatively affected. Contrary to our expectations, this relationship is not conditioned by gender (Z-scores were non-significant). The study results have implications for human resource management, enhancing the knowledge on the relationship between the WFC and workers' mental health.

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Carvalho VS, Chambel MJ, Neto M and Lopes S (2018) Does Work-Family Conflict Mediate the Associations of Job Characteristics With Employees' Mental Health Among Men and Women? Front. Psychol. 9:966. doi: 10.3389/fpsyg.2018.00966 Keywords: work-family conflict, gender, the Job Demands-Control-Support Model, workers' mental-health, job characteristics

INTRODUCTION

The European Mental Health Action Plan for 2013–2020 underlines that mental health is one of the top public health challenges, affecting about 25% of the population every year (World Health Organization [WHO], 2015). Mental health is considering a chronic condition resulting either from an acute, intense confrontation with a stressor, such as is the case in a post-traumatic stress disorder or from the continuing presence of a stressor which may not necessarily be intense (Houtman and Kompier, 2011). Goldberg and Hillier (1979) have aided understanding of individual mental health through somatic symptoms (e.g., headaches), anxiety/insomnia (e.g., loss of sleep), social dysfunction (e.g., social withdrawal), and depression symptoms (e.g., thoughts of

the uselessness of life). One of the proposed actions that the WHO highlighted to 2013–2020 is the need to "reduce psychosocial and job-related stress, enhance stress management and introduce simple programs to promote well-being in the workplace" (World Health Organization [WHO], 2015, p. 11). Therefore, a comprehensive understanding of mental health in the workplace is sorely needed.

The Job Demands-Control and Support model (JDCS; Karasek, 1979; Karasek and Theorell, 1990) is perhaps the most extensively tested and empirically validated model which, in its simplest form, explains workers' mental health as a function of job characteristics: job demands, job control, and job support. Empirical evidence points to high job demands negatively predicting workers' mental health, while job autonomy and job support positively predict workers' mental health (Luchman and González-Morales, 2013). The work-to-family conflict (WFC) defined as "a form of inter-role conflict in which the role pressures from the work domain are, to some extent, incompatible with the family domain" (Greenhaus and Beutell, 1985, p. 77), is also known for its negative impact on workers' mental health (Frone, 2000; Michel et al., 2011; Carvalho and Chambel, 2016). Moreover, research has shown that job characteristics are relevant to the WFC emergence (Michel et al., 2011). This suggests that the WFC may have a crucial role in explaining the relationship between job characteristics and workers' mental health.

However, studies have highlighted that men and women may also perceive how their work conflicts with their family in distinct ways (Powell and Greenhaus, 2010). In fact, the traditional "ideal worker" (Kelly et al., 2010) understands the idea of a man as the earner of the primary paycheck within the family. This idea is in line with the gender ideology, according to which, women are the primary caregivers of the family (Kelly et al., 2010). Nowadays, the increasing proportion of women in the workplace (Powell and Greenhaus, 2010) has given rise to an overload of their role, since they need to accomplish their work and family responsibilities concomitantly. In accordance with OCDE (Organisation for Economic Co-operation and Development), women in Portugal, where the present study was developed, carry out more unpaid work as compared to other European countries. Specifically, Portuguese women spend more than 5 h per day in unpaid work compared to a bit more than one and a half hours for men (European Commission, 2016). Thus, women, when compared with men, may perceive more interference of job characteristics in their family life (Grönlund, 2007; Castro, 2012; Walsh, 2013), and their mental health may be more affected by their WFC (Walsh, 2013).

By integrating the JDCS theory, we explore the effect of job characteristics on workers' mental health by testing a moderatedmediation model, where the WFC acts as the mediator and gender as the moderator of this mediated relationship.

This is a promising study in terms of its contribution to research and practice. First, this article responds to the recommendation made by Schaufeli and Taris (2014), stating that it is important to conduct research in order to clarify the mechanisms that explain the relationship between job characteristics and mental health. By the same token, Hayes (2012) also stressed that understanding the mechanisms of the relationship between two variables is more important than establishing the relationship itself. Thus, our goal is to understand the role of the WFC in the relationship between job characteristics and workers' mental health. To our knowledge, there are no previous studies establishing this link. A previous study by Chambel et al. (2017) examined this mediation relationship, however, it focused on a specific sample of contactcenter workers, where the majority of participants were single and had no children. Thus, the authors chose to measure the work-to-life conflict instead of the WFC. In the present study, we seek to understand the work and family relationship of a sample of individuals with children and/or who are married or in a common-law relationship. Second, the results of previous studies have proven to be inconclusive as far as gender differences in the WFC (Powell and Greenhaus, 2010) are concerned. Thus, research regarding men and women and their work-family experiences are sorely needed (Grönlund, 2007). Therefore, our study may provide new insights into gender differences in the relationship between job characteristics and the WFC and between the WFC and workers' mental health. Furthermore, it contributes to a more comprehensive line of research, focusing on mediation and moderation (Hayes, 2012). Third, this study was conducted in a Portuguese context where gender issues are particularly worrisome. In line with most European countries, 47.5 % of women in Portugal make up the labor force (PORDATA, 2017). However, the gender pay gap, i.e., the difference in average gross hourly wage between men and women across the economy, is 16.3% in Europe and 17.8% in Portugal (Eurostat, 2017). As previously mentioned, for the paid and non-paid work total, women work more than men (European Commission, 2016). Thus, it is quite clear that although women in Portugal pursue a professional career, they are still required to live up to gender expectations (Vieira et al., 2014). Furthermore, there is a lack of institutional and organizational support to balance work and family responsibilities (Matias and Fontaine, 2015). Hence, this study may provide some clarity on the gender issues and work-family relationship in Portugal, namely by offering further understanding on how to prevent the WFC and promote mental health in men and women, thus contributing to the design of more effective policies in this area. Lastly, by testing the importance of the WFC in the relationship between job characteristics and workers' mental health, this study may extend the generalizability of the importance that both job characteristics and the WFC have on workers' mental health. Generally, we hope to contribute to the design of interventions and policies related to workplace mental health prevention and promotion.

Theoretical Background and Hypotheses The Mediating Role of the WFC

As Luchman and González-Morales (2013) advanced, the JDCS (Karasek, 1979; Karasek and Theorell, 1990) is an influential theory for understanding how job characteristics, i.e., demands and resources (control and support) contribute to employee mental-health. Job demands (e.g., workload; time-based demands) may be understood as a perceived lack of potential loss of personal resources for dealing with

job requirements (Luchman and González-Morales, 2013). Autonomy refers to the ability to make decisions about work, the ability to be creative and to use and develop new skills, or professional development (Karasek, 1979). A worker has autonomy when he/she has the opportunity to use skills and decision authority (the individual's ability to make a decision on the work itself). Social support is understood as an interpersonal transaction that may include an emotional expression of concern, instrumental assistance, or information (Johnson and Hall, 1988). Although the JDCS model includes supervisory and co-worker support as social support since they represent workers' social capital at work (Nahapiet and Ghoshal, 1998) the present study has only taken supervisory support into consideration, as the organization involved in this study was characterized by a welldefined hierarchy without teamwork.

The JDCS stated that jobs with low demands, high autonomy, and high support predict workers' well-being. For example, an employee that have heavy workload but enjoy take his/her own decision about how work should be accomplished and perceived that if he/she needs his/her supervisor listen to his/her doubts and give suggestions when needed, more easily fell encouraged to face the work challenges and, consequently, the mental health is positively affected. On the contrary, jobs with high demands, low autonomy, and low support are fatal to employees' mental health (Luchman and González-Morales, 2013).

The WFC is grounded on theories of role stress and interrole conflict (Kahn et al., 1964) which argue that each individual has limited resources (e.g., time, energy, and attention) to spend on life roles (Goode, 1960). Conflicts occur when individuals' work participation conflicts with family participation (Greenhaus and Beutell, 1985). Lapierre and Allen (2006) stated that WFC is evoked by the demands of the work role that, in turn, deplete individual' resources (e.g., time, energy, emotions) required to participate in the family role. Therefore, the presence of job characteristics that exhaust workers is fatal for the WFC emergence, whereas the presence of job characteristics that help workers to face work demands are important to prevent the WFC. As such, evidence has shown that job demands are a threat to the work-family balance by promoting WFC (Michel et al., 2011). On the contrary, autonomy enables a worker to deal with the demands which, in turn, may prevent the WFC through the management of time and space devoted to work or family roles (Grzywacz and Marks, 2000). Akin to autonomy, supervisory support is related to lower levels of workers' WFC (e.g., Kossek et al., 2011). According to these results, job characteristics may be seen as important antecedents to a myriad of WFC.

ten Brummelhuis and Bakker (2012) also acknowledge that the WFC depletes personal resources and restrains accomplishment in the family domain. This framework, in line with the conservation of resources theory (Hobfoll, 2002), defends that as a result of a loss of resources, mental-health is threatened. It is, therefore, not surprising that a number of prior empirical studies have found that the WFC is negatively related to workers' mental health. For example, high levels of the WFC have been found to be associated with increased levels of metabolic syndrome in younger workers, in addition to shortened hours of sleep (Berkman et al., 2015). Other stress-related outcomes that have

been observed to be WFC outcomes are anxiety (Frone, 2000), substance abuse (Frone, 2000), psychological ill-being (Neto et al., 2016), and poor perceived health (Carvalho and Chambel, 2016).

Taken together, in the presence of high demands, low autonomy and low support the individual's stress arises which affects the performance of the individual in the family role. For example, the individual arrives at home strained and do not contribute to the trivial housework and, as a consequence, a marital discussion emerged. Ultimately, the individual feels that cannot afford the demands of the work and family roles which evoke thoughts of the uselessness of life or loss of sleep. Indeed, considering the effects of job characteristics on WFC and the effects of WFC on mental-health, we argue that WFC could explain the relationship between job characteristics and mental health.

Therefore, we predict that:

Hypothesis 1: The WFC mediates the relationship between job characteristics (i.e., job demands, job control, and supervisory social support) and workers' mental health.

The Moderating Role of Gender

The moderating role of gender is of particular interest in our model in both the relationship between job characteristics and the WFC and in the relationship between the WFC and workers' mental health. According to Powell and Greenhaus (2010), role identities are socially defined and individuals acquire beliefs about social roles expected for women and for men. Indeed, women are viewed as more family-centered and men are viewed as more work-centered (Kelly et al., 2010). Consequently, men are usually less involved in family activities (i.e., parenting; domestic tasks) (Powell and Greenhaus, 2010) whereas women accumulate more professional work and family responsibilities (Greenhaus and Powell, 2006). Furthermore, according to boundary theories, individuals tend to either segment their work and family in separate spheres or to integrate work and family domains in permeable boundaries (Powell and Greenhaus, 2010). Considering the aforementioned, women, compared to men, have to make extra efforts to adapt their daily agenda in order to keep the boundaries more permeable, which can predict high levels of the WFC (Powell and Greenhaus, 2010). Thus, we are of the opinion that the perception of job characteristics, such as autonomy and supervisory support, which allow individuals to balance their work and family spheres, will be more valuable for women than for men. On the contrary, as women tend to make more efforts to integrate work and family, job demands may be more easily depleting and give rise to a conflict in these domains. In line with the argument of Greenhaus and Beutell (1985), "segmenters" are less likely to allow job demands to interrupt the time devoted to family. In other words, the relationship between job characteristics and the WFC may be stronger for women in comparison to men. Our argument is in keeping with previous findings. For instance, the qualitative study of Castro (2012), conducted in a company in Mexico, concluded that accomplishing work time demands is viewed as a sign of masculinity, thus maintaining women connected to traditional family roles. This means that it is more acceptable for men to deal with these time demands than for women. Hence, this particular job demand more easily creates a WFC for women than for men. Using the Job-Demand Control model (Karasek and Theorell, 1990), Grönlund (2007) analyzed the differences between men and women and observed that the WFC in women is lower when job autonomy is high. In the same vein, Walsh (2013), conducting research in a hospital, concluded that the WFC affects both men and women, but women tend to depend on social support to reduce burnout and decrease turnover when compared with men. Thus, autonomy and supervisory support may be seen as crucial characteristics that enable women to balance their work and family demands.

Moreover, when the WFC occurs, it may have stronger implications for the mental health of women than of men. As mentioned above, women are more involved in family activities while also accumulating professional work (Powell and Greenhaus, 2010). Thus, the increased likelihood of role conflict and the lack of personal resources to deal with conflict (ten Brummelhuis and Bakker, 2012) may have stronger negative consequences for women than for men. This argument is also in line with previous research. For instance, the study of Walsh (2013), which explored how factors relating to the work-life interface affected the well-being of a sample of hospital doctors, concluded that female doctors were more likely to experience job burnout than men. The longitudinal study of Kinnunen et al. (2007) also suggested that there might be gender differences in the WFC and well-being across time. More specifically, their findings revealed that unlike men, the WFC perceived at time 1 by women significantly predicted job dissatisfaction, parental distress, and psychological symptoms at Time 2, 1 year later. Taking this together, we established the following hypothesis:

Hypothesis 2: The mediating role of the WFC is moderated by gender. This variable interacts: first, with job characteristics, so the relationship between job characteristics and the WFC is significantly stronger for women than for men; and second, with the WFC, so the relationship between the WFC and mental health is significantly stronger for women than for men.

MATERIALS AND METHODS

Procedure and Participants

The Ethics Committee of the Lisbon Academic Medical Center approved the study and data collection protocol. This study is an observational study which was carried out before 2013 (last update of the Declaration of Helsinki). No medical experiments were conducted and no sensitive data was collected, therefore the Ethics Committee did not require a formal consent return. However, a statement of study objectives and purposes and an anonymity and confidentiality warranty were set out at the beginning of the questionnaire, along with the professional identification and contact of the main researcher. Respondents were asked to read these statements before proceeding to answer the questionnaire. They were also informed that their participation was voluntary and they could also freely participate in or give up the study anonymously, at any moment, without any further consequences.

The questionnaire link was forwarded by the researcher team to the company contact point, who sent it to respondents via e-mail, in which they were also informed of the respective board of director's authorization to conduct the study, after a presentation of the research protocol. There was no incentive (cash or otherwise) for participating in this study. The respondents were employed at a nationwide technological and services company with a population of 631 workers. Of all the workers invited to answer the questionnaire, 312 (49.44%) responded.

Since the goal of this study was to gain an in-depth understanding of the work and family relationship of workers, the questionnaires of workers who reported having at least one child and/or who were married or in a common-law relationship and obtained 254 answers were selected: 100 (39.4%) women and 154 (60.6%) men. The mean age of the respondents was 52.83 years (SD = 6.29). A large percentage of the participants (44.1%) had completed secondary schooling and 29.1% of the participants had graduated from university. All respondents worked full-time. The majority of the respondents were married or cohabiting (87.0%) and had children (77.2%). As may be observed in **Table 1**, the demographic characteristics of women and men were similar. According to the Head of Human Resources, the sample characteristics are in line with the demographic characteristics of the company workers.

Measures

Job Characteristics

Job characteristics were measured using the Job Content Questionnaire (Karasek et al., 1998), which was used in a previous Portuguese study (Carvalho and Chambel, 2016). Items for job demands were: workload and time pressure (7 items) – "I have too much to do" (women $\alpha = 0.85$ and men $\alpha = 0.89$); job control (4 items) – "I have the opportunity to decide how to organize my work" (women $\alpha = 0.85$ and men $\alpha = 0.83$); supervisory social support (4 items) – "My supervisor is concerned about the welfare of those under him" (women $\alpha = 0.91$ and men $\alpha = 0.89$). Items were scored on a four-point rating scale from (1) "totally disagree" to (4) "totally agree." In order to examine the psychometric

TABLE 1 Demographics of the sample.

Sub-sample	Women (<i>n</i> = 100)	Men (<i>n</i> = 154)
Age (mean)	<i>M</i> = 51.59	M = 53.63
	(SD = 7.61)	(SD = 6.24)
	min = 27; max = 62	min = 28; max = 65
Education (%)		
Secondary	64%	61.7%
Graduation or higher	36%	38.3%
Had children (% Yes)	74.00%	79.20%
Married or cohabiting (% Yes)	77.00%	93.50%

properties of the measure, we performed a CFA. First, we tested a three latent factor model (i.e., job demands, job control, and supervisory social support) through CFA and then we compared this structure with an alternative model, where all the items loaded onto a single latent factor. The three latent factor model showed an acceptable fit to the data [women's sample: $\chi^2(85) = 141.86$, p < 0.001; SRMR = 0.07; IFI = 0.93; CFI = 0.93; RMSEA = 0.07; men's sample: $\chi^2(85) = 204.96$, p < 0.001; SRMR = 0.07; IFI = 0.91; CFI = 0.91; RMSEA = 0.07]. The alternative tested model did not show an acceptable fit to the data, [women's sample: $\chi^2(87) = 523.36$, p < 0.001; SRMR = 0.12; IFI = 0.65; CFI = 0.65; RMSEA = 0.13; men's sample: $\chi^2(87) = 484.07$, p < 0.001; SRMR = 0.13; IFI = 0.58; CFI = 0.57; RMSEA = 0.22], and differed significantly from the three factor structure model [women's sample: $\Delta \chi^2$ (2) = 381.05, p < 0.01; men's sample: $\Delta \chi^2$ (2) = 279.11, p < 0.01], which appears to suggest that job demands, job control, and supervisory social support consist of three different and broader types of job characteristics.

Work-Family Conflict

We measured the WFC using 14 items from the extended scale of Carlson et al. (2000). Example items included "After work, I am too tired when I come home to do some of the things I'd like to do" and "My job takes time from me that I would like to spend with my family/friends." The items were answered on a five-point rating scale that ranged from "hardly ever" (1) to "almost always" (5), (women and men $\alpha = 0.92$). This scale has previously been validated for the Portuguese population (Vieira et al., 2014). In order to examine the psychometric properties of the measure, we performed a CFA. We tested a one-factor model, where all the items loaded onto a single latent factor. This single latent factor model showed an acceptable fit to the data [women's sample: $\chi^2(73) = 143.14$, p < 0.001; SRMR = 0.06; IFI = 0.94; CFI = 0.94; RMSEA = 0.06; men's sample: $\chi^2(73) = 168.70$, p < 0.001; SRMR = 0.06; IFI = 0.93; CFI = 0.93; RMSEA = 0.07), which appears to suggest that the work-family conflict (WFC) consists of one broader variable.

Workers' Mental Health

This variable was measured with a Portuguese version of the General Health Questionnaire (GHQ: Goldberg and Hillier, 1979), which includes four dimensions: somatic complaints (7 items, "Have you recently been feeling perfectly well and in good health?," women $\alpha = 0.74$, men $\alpha = 0.82$); anxiety (7 items, "Have you recently lost sleep over worry?," women $\alpha = 0.90$, men $\alpha = 0.91$); social dysfunction (7 items, "Have you recently been taking longer over the things you do?," women $\alpha = 0.84$, men $\alpha = 0.82$); and depression (7 items, "Have you recently felt that life is entirely hopeless?," women $\alpha = 0.87$, men $\alpha = 0.81$). In the GHQ-28, the respondent is asked to compare his/her recent psychological state with his/her usual state. The response scale ranged from 1 (not at all) to 4 (much more than usual). This scale had previously been validated for the Portuguese population (Monteiro, 2011). The GHQ-28 is designed for the detection of non-specific psychiatric disorders

among individuals in community settings. It focuses on break in normal functioning and not on permanent traits, but also considers the appearance of new and distressing experiences (Goldberg and Hillier, 1979).

In order to examine the psychometric properties of the measure, we performed a CFA. First, we tested a four latent factor model (i.e., somatic complains, anxiety, social dysfunction, and depression) through CFA and then we compared this structure with an alternative model, where mental health was considered an overarching second-order variable and somatic complaints, anxiety, social dysfunction and depression dimensions first-order latent variables (Goldberg and Hillier, 1979). The four latent factor model showed an acceptable fit to the data [women's sample: $\chi^2(334) = 469.76$, p < 0.001; SRMR = 0.06; IFI = 0.92; CFI = 0.92; RMSEA = 0.06; men's sample: $\chi^2(334) = 643.51$, p < 0.001; SRMR = 0.08; IFI = 0.90; CFI = 0.90; RMSEA = 0.07]. The alternative tested model also showed an acceptable fit to the data [women's sample: $\chi^2(346) = 468.14$, p < 0.001; SRMR = 0.06; IFI = 0.92; CFI = 0.92; RMSEA = 0.06; men's sample: $\chi^2(346) = 621.57$, p < 0.001; SRMR = 0.08; IFI = 0.90; CFI = 0.90; RMSEA = 0.07]. In the women's sample, these two models did not differ significantly $[\Delta \chi^2]$ (2) = 1.62, p = 0.45], however, in the men's sample, these models differed significantly $[\Delta \chi^2 (2) = 21.94, p < 0.01]$ and the data was observed to fit better with the model that considered a second-order variable including the four dimensions as first-order latent variables. Thus, we considered somatic complaints, anxiety, social dysfunction, and depression to consist of four different dimensions in the same broader construct of poor mental health (women $\alpha = 0.93$ and men $\alpha = 0.92$).

Control Variables

Age may be related to the WFC (Michel et al., 2011). Thus, we controlled for age (in years). It would be also important to include tenure as a control variable. However, due to confidentiality reasons, the human resources department did not allow us to collect this demographic variable. Though, we collect age. We also recognize that despite tenure and ages were time-related variables, they are distinct. However, in a typical traditional organizational where this study was conducted the workers come in early age to the company and remain a great amount of time working in the same place. This fact helps us to think that age is proportional to tenure. Thus, we control age and we think that in this vein we are controlling the work experience too – i.e., tenure.

Statistical Analyses

As proposed by Anderson and Gerbing (1988), we followed a two-step approach to analyze our results. Structural equation modeling (SEM) and, in particular, multiple group analysis with the AMOS software package (Arbuckle, 2003) was used, first to test several measurement models through confirmatory factor analysis (CFA) and then to compare various competing structural models. In all analyses, the maximum likelihood estimation method and the covariance matrix were used.

RESULTS

Measurement Models and Descriptive Analysis

Following established recommendations (Hu and Bentler, 1999), evaluation of the overall goodness of fit of the models was based on the combination of several fit indices. Models were compared based on chi-square difference tests, and on other fit indices: the standardized root mean square residual (SRMR), the incremental fit index (IFI), the Bentler comparative fit index (CFI), and the root mean square error of approximation (RMSEA). For IFI and CFI, values above 0.90 represent a good model fit, and for SRMR and RMSEA, values equal to or below 0.07 indicate a good model fit.

For each sample, we initially performed a CFA on the full measurement model (Anderson and Gerbing, 1988). This model (five-factor model) included all observed items loading on their respective latent variables (job demands, job control, supervisory social support, WFC, and workers' mental-health). Workers' mental-health had four indicators (observed variables resulting from the sum of the GHQ-28 subscales items): somatic symptoms, anxiety/insomnia, social dysfunction, and depression symptoms. The latent variables were allowed to correlate with each other. We then conducted Harman's single-factor test (Podsakoff et al., 2003), which involves a CFA in which all variables are allowed to load onto one general factor (one-factor model). In addition, as we were using more than one sample, we tested whether or not components of the measurement model were invariant (i.e., equivalent) across samples of women and men. Therefore, we ran multiple group CFA on the single scales. Results indicated that, in general, items were equivalent across samples.

The one-factor model showed a poor fit to the data across samples [women's sample: $\chi^2(490) = 1314.89$, p < 0.001; SRMR = 0.12; IFI = 0.65; CFI = 0.65; RMSEA = 0.13; men's sample: $\chi^2(490) = 1733.19$, p < 0.001; SRMR = 0.13; IFI = 0.62; CFI = 0.62; RMSEA = 0.13]. The five-factor model obtained a good fit across samples [women's sample: $\chi^2(480) = 669.27$, p < 0.001; SRMR = 0.07; IFI = 0.92; CFI = 0.92; RMSEA = 0.06; men's sample:

 $\chi^2(480) = 738.90, p < 0.001$; SRMR = 0.07; IFI = 0.92; CFI = 0.92; RMSEA = 0.06], and all standardized regression coefficients were significant at the 0.001 level. Furthermore, in both samples, the five-factor model fit the data significantly better than the onefactor model [*women's sample*: $\Delta \chi^2(10) = 645.62, p < 0.001$; *men's sample*: $\Delta \chi^2(10) = 994.29, p < 0.001$]. These analyses showed that, across samples, the factor structures of the research variables were consistent with the conceptual model and also that the manifest variables loaded on the latent variables as intended.

Table 2 shows the means, standard deviations and correlation matrix obtained separately for women's and men's samples. Analyzing the correlations among the studied variables we found a significant negative relationship between supervisor support and WFC for both women (r = -0.33, p < 0.01) and men (r = -0.24, p < 0.01), a significant positive relationship between job demands and WFC for women (r = 0.55, p < 0.01) and for men (r = 0.49, p < 0.01), and a significant negative relationship between job control and WFC for women (r = -0.35, p < 0.01) and for men (r = 0.27, p < 0.01). Regarding the relationship between WFC and mental health we found a significant positive for both women and men (r = 0.63, p < 0.01; r = 0.69, p < 0.01, respectively). Thus, the correlations are in the expected direction of our hypothesis.

As expected, the job characteristics in both samples were significantly related to the WFC. As predicted, the WFC was significantly related to workers' mental health across samples.

Structural Models

In order to test our hypotheses, we performed a multiple group analysis. This analysis was performed according to the instructions of Byrne (2010), and by using the critical ratio for the difference between parameters method. As recommended, we first tested the structural models separately for the two subsamples (i.e., women and men), to determine whether it was a full or partial mediation test. We confronted two structural models for both samples: a full-mediation model, which included direct structural paths from job characteristics to the WFC and from the WFC to workers' mental-health, and a partial-mediation model

TABLE 2 | Means, standard deviations, and correlation matrix obtained separately for women (n = 100) and men (n = 154) samples.

Variables	Won	nen	Me	en	1	2	3	4	5	6	7	8	9	10	
	М	SD	М	SD		$m{r}$ for women (below the diagonal) and for men (above the diagonal)									
(1) Age	51.59	6.20	53.63	6.24	_	-0.07	-0.03	-0.05	-0.05	0.09	0.03	0.05	0.03	0.06	
(2) Job demands	2.88	0.67	2.69	0.67	-0.04	-	-0.10	-0.00	0.49**	0.32**	0.39**	0.20*	0.21*	0.39**	
(3) Sup. support	3.17	0.59	2.95	0.69	0.00	-0.20*	-	0.38**	-0.24**	-0.25**	-0.21**	-0.30**	-0.15	-0.30**	
(4) Job control	2.85	0.65	2.77	0.64	-0.00	-0.03	0.33**	-	-0.27**	-0.15	-0.23**	-0.28**	-0.13	-0.26**	
(5) WFC	2.72	0.74	2.55	0.70	0.07	0.55**	-0.33**	-0.35**	-	0.56**	0.73**	0.27**	0.42**	0.68**	
(6) Somatic c.	1.07	0.50	0.72	0.47	-0.03	0.23*	-0.19	-0.21*	0.49**	-	0.72**	0.40**	0.45**	0.89**	
(7) Anxiety/ins.	1.13	0.66	0.91	0.61	0.05	0.36*	-0.24*	-0.36**	0.68**	0.74**	-	0.34**	0.56**	0.91**	
(8) Social dys.	0.99	0.36	0.96	0.32	-0.03	0.21*	-0.00	-0.28**	0.39**	0.46**	0.55**	-	0.29**	0.61**	
(9) Depression	0.39	0.51	0.25	0.34	0.02	0.13	-0.15	-0.32**	0.48**	0.48**	0.58**	0.48**	-0	0.55**	
(10) GHQ total	1.06	0.44	0.86	0.39	0.00	0.33**	-0.20	-0.34*	0.63**	0.88**	0.93**	0.73**	0.60**	-	

**p < 0.01; *p < 0.05.

in which we added direct structural paths from job characteristics to workers' mental health. The model that best fit the data for both sub-samples of workers (women and men) was then tested in a multiple group analysis, including both sub-samples analyzed at the same time, with a view to inspecting invariance across the sub-samples (baseline model). The fit of this model was then compared to an alternative model in which we constrained all coefficient paths to be equal in the women and men subsamples (fully constrained model: fixed measurement weights and fixed structural weights). Finally, by using the AMOS 22.0 program, Z-scores (i.e., the critical ratios for differences between two parameters) were also calculated for the baseline model in order to ascertain whether gender differences were statistically significant for the different relations among the studied variables. A Z-score above +1.645 or below -1.645 would indicate that observed differences were significant at $\alpha = 0.10$. A Z-score above +1.96 or below -1.96 would indicate that observed differences were significant at $\alpha = 0.05$. A Z-score above + 2.575 or below -2.575 would indicate that observed differences were significant at $\alpha = 0.01$.

The full-mediation model fit the data well across samples [*women's sample*: $\chi^2(511) = 710.35$, p < 0.001; SRMR = 0.07; IFI = 0.92; CFI = 0.92; RMSEA = 0.06; *men's sample*: $\chi^2(511) = 755.58$, p < 0.001; SRMR = 0.07; IFI = 0.93; CFI = 0.93; RMSEA = 0.06]. We then tested an alternative partial-mediation model with paths from job characteristics to workers' mentalhealth. These models also provided an acceptable fit in both the women's and men's samples [*women's sample*: $\chi^2(508) = 707.14$, p < 0.001; SRMR = 0.07; IFI = 0.92; CFI = 0.92; RMSEA = 0.06; *men's sample*: $\chi^2(508) = 774.41$, p < 0.001; SRMR = 0.07; IFI = 0.92; CFI = 0.92; RMSEA = 0.06; *men's sample*: $\chi^2(508) = 774.41$, p < 0.001; SRMR = 0.07; IFI = 0.92; CFI =

The full-mediation model was then tested in a multiple group analysis. We started by estimating a baseline model that included the two sub-samples at the same time, and where the structural paths were freely estimated for each group (i.e., the structural paths were unconstrained). The baseline model showed a good fit $[\chi^2(1022) = 1472.88, p < 0.001;$ SRMR = 0.07; IFI = 0.92; CFI = 0.92; RMSEA = 0.04]. We then went on to constrain all the coefficient paths to analyze invariance across the groups (fully-constrained model). The fully-constrained model showed an acceptable fit to the data $[\chi^2(1106) = 1612.61, p < 0.001;$ SRMR = 0.07; IFI = 0.91; CFI = 0.91; RMSEA = 0.04]. However, by comparing the fully-constrained model with the baseline model, we observed a significant drop in the fit $[\Delta \chi^2(84) = 139.73]$, p < 0.001], which means that some coefficients were different across the two groups under study. Finally, in order to understand whether the significant differences suggested by the comparison between the fully-constrained model and the baseline model were in the relationships among the studied variables, we observed the critical ratios for differences between two parameters. The unstandardized coefficients obtained for the baseline model are presented in Figure 1, and in Table 3 the Z-scores for the differences between the two sub-samples are presented.

Hypothesis 1 predicted that the WFC would mediate the relationship between job characteristics (i.e., job demands, job control, and supervisory social support) and workers' mental health. Regarding Figure 1 and Table 3, the results obtained indicated that for both sub-samples, the relationship between supervisory social support and the WFC was not significant (for women: B = -0.12, n.s.; for men: B = -0.11, n.s.; $Z_{\text{women-men}} = -0.09$, n.s.), however, both job demands and job control were significantly related to WFC levels, namely: whereas job demands presented a positive relationship (for women: B = 0.95, p < 0.001; for men: B = 0.78, p < 0.001; $Z_{\text{women-men}} = 0.54$, n.s.), job control appeared to contribute negatively to the WFC (for women: B = -0.35, p < 0.001; for men: B = -0.33, p < 0.001; $Z_{\text{women-men}} = -0.12$, n.s.). In addition, we found that for both sub-samples, the WFC was significantly related to workers' mental-health (for women: B = 0.44, p < 0.001; for men: B = 0.39, p < 0.001; $Z_{\text{women-men}} = 0.50$, n.s.). Thus, our hypothesis 1 was partially supported regarding the role of the WFC in explaining the



Job Characteristics, WFC and Mental-Health

TABLE 3 Unstandardized coefficients for the baseline model ($n = 254$) and	
Z-scores for differences for gender.	

	Dependent variables									
	W	FC	Mental health							
Gender	Females B	Males B	Females B	Males B						
Supervisor support (as independent variable)	-0.12, n.s.	–0.11, n.s.	n.a.	n.a.						
Job demands (as independent variable)	0.95***	0.78***	n.a.	n.a.						
Job control (as independent variable)	-0.35***	-0.33***	n.a.	n.a.						
WFC (as independent variable)	n.a.	n.a.	0.44***	0.39***						
Z-score for differences	Females vs.	Males	Females vs.	Males						
Supervisor support (as independent variable)	–0.09, n.s.		n.a.							
Job demands (as independent variable)	0.54, n.s.		n.a.							
Job control (as independent variable)	-0.12, n.s.		n.a.							
WFC (as independent variable)	n.a.		0.50, n.s.							

WFC, work-to-family conflict; **p < 0.05; ***p < 0.01; n.a., non-applied; n.s., non-significant.

relationship between job demands and job control with workers' mental health. However, as regards the relationship between supervisory social support and workers' mental health, we found no support for the mediating role of the WFC. As for the proposed moderating effect of gender (hypothesis 2), given that the critical ratios for the difference between parameters method (i.e., *Z*-scores) revealed non-significant group differences between women and men in the studied relationships, our hypothesis 2 was refuted by the data. Furthermore, we observed that age did not contribute to explaining variance, namely: for all the studied variables, we found non-significant relationships with age.

Additional Analysis

Previous research (e.g., Karasek, 1998) acknowledges the possibility of the relationship between demands and outcomes (e.g., mental health) present a curvilinear relationship (i.e., an inverted U-shaped relationship). Accordingly, at a certain level demands can contribute positively to the workers' outcomes by leading to individuals' state of activation and energizing (Sawang, 2012; Hofmans et al., 2015). However, when demands are too high or excessive it could lead to a negative impact on workers' outcomes (e.g., employees can feel fatigued and exhausted) (Sawang, 2012; Hofmans et al., 2015). To explore this possibility, we perform additional analyses using SPSS 25.0 version to both samples. More precisely, we used the curve estimation procedure which allows screening the data graphically to determine how the independent variable and the dependent variable are related (i.e., linearly or curvilinear).

To strength the results observed by performing the curve estimation procedure, we also performed hierarchical multiple regression analysis. First, to test the main effect of demands on mental health, demands were entered at step one. Second, to determine the non-linear relationship between demands and mental health, the quadratic term (i.e., demands squared) was entered at step two (the quadratic term was calculated by squaring the appropriate continuous variable, as suggested by Aiken and West, 1991).

The results of the linear and curvilinear estimates are represented in Figures 2, 3. Linear regression assumes that a straight line properly represents the relations between demands and the mental health. As can be observed in both figures, the linear model (represented by a continuous line) overlaps to the curvilinear model (represented by a dashed line). As such, there is low evidence for a curvilinear relationship between demands and mental health. At Table 4, the model summary and parameter estimates for the linear and curvilinear (quadratic) models are provided. Once again, we observe better indicators for the linear model [women's' sample: F(1,152) = 25.42, p < 0.01; *men's sample*: F(1,98) = 9.54, p < 0.01] than for the curvilinear model [women's' sample: F(2,151) = 12.88, p < 0.01; men's sample: F(2,97) = 4.73, p < 0.01 in both samples. Furthermore, through the hierarchical multiple regression analysis performed, we observed a significant link between demands and mental health at step one [women's' sample: B = 0.19, p < 0.01; men's sample: B = 0.20, p < 0.01]. However, when demands squared (the quadratic term) was introduced at step two, once the linear relationship was controlled for in the same model, nonsignificant relationships were found between demands squared and mental health [women's' sample: B = -0.01, n.s.; men's sample: B = 0.03, n.s.).

DISCUSSION

In this study, we examined an integrated and mediation moderated model in order to verify (1) the mediating role of the WFC in the relationship between job characteristics and workers' mental health and (2) the role that gender plays as moderator of this relationship. The findings of our study seem to contribute to the idea that the WFC is important in explaining the relationship between job characteristics and workers' mental health. Nevertheless, we also found that this relationship is not moderated by gender.

Regarding our mediation hypothesis, we observed different results concerning job characteristics. As expected, and in accordance with previous findings, we verified that both demands and control are potential important job characteristics for the emergence of the WFC (Grzywacz and Marks, 2000; Michel et al., 2011). This result reinforces the argument that job demands are a source of strain which depletes workers' resources and evokes conflict in the family domain. On the contrary, job autonomy could prevent the WFC, since there is a possible negative contribution to the presence of the WFC. In fact, job demands and job autonomy are considered the core characteristics of the Job Demand-Control (Karasek, 1979). Furthermore, the



WFC is significantly related to workers' mental health, as also demonstrated by a number of studies (e.g., Berkman et al., 2015; Carvalho and Chambel, 2016; Neto et al., 2016). This finding seems to emphasize not only the crucial role that job characteristics play in the WFC but also the crucial role that the WFC has in explaining the relationship between job characteristics and workers' mental health. However, the relationship between supervisory support and the WFC is not significant. This result may be related to the fact that we analyzed general social support and not work-family support specifically and, as stressed by the meta-analysis of Kossek et al. (2011), the work-family specific constructs of supervisory support [e.g., family supportive supervisor behavior (Hammer et al., 2009)] are more strongly related to the WFC. Another reason which may justify this finding could be the specific context of the organization where this study was conducted. In this organization, the work-family relationship is more dependent on organizational general rules and practices than on supervisory attitudes and actions.

Surprisingly, the present findings suggest that overall, men and women perceived the relationship between job characteristics and the WFC and the relationship between the WFC and their mental health equally. Considering the Portuguese context, in which dual-earner families are prevalent and traditional gender expectations subsist (Vieira et al., 2014), this finding reveals that the effects of work on Portuguese citizens are so critical, that gender does not excel. However, this unexpected result may be due to a number of different reasons. First, it is essential to underline the current Portuguese reality where, due to the economic crisis, Portuguese citizens are experiencing several austerity measures which have brought about increased job demands (e.g., longer working hours) (Ioakimidis et al., 2014) and job insecurity. In fact, Portuguese work values also point to security and stability as being crucial for workers (Chambel, 2013). Therefore, the impact of work on families' lives is identical for men and women. Second, it may be possible for men and women to present identical results even though they differ in the way they manage their work and family life or in the way they use organizational solutions to deal with their work and family life. Third, despite the subsistence of gender expectations, it should also be noted that there are increasingly more egalitarian attitudes toward men and women across the world (e.g., Nohe et al., 2015) which, hopefully, will spread to Portugal in the near future. Finally, it is also necessary to draw attention to the fact that the mean age of the respondents was 52.83 years. Hence, we may deduce that the majority of respondents were not parents of young children, which is usually related to more family demands. Thus, for the respondents of this sample, particularly the women, family management may be easier. These hypotheses require further research in order to obtain a better understanding



TABLE 4 | Results for the linear and curvilinear (quadratic) regression models for the relationship between job demands and mental health.

Equation	R ²	F	df1	df2	p	bo	b ₁	<i>b</i> ₂
Linear	(0.14) 0.09	(25.42) 9.54	(1) 1	(152) 98	(0.00) 0.00	(0.18) 0.36	(0.20) 0.19	
Quadratic	(0.15) 0.09	(12.88) 4.73	(2) 2	(151) 97	(0.00) 0.01	(0.36) 0.29	(0.05) 0.24	(0.03) -0.01

The values presented on the right side of the brackets refer to the females; the values presented within brackets refers to the males.

of the possible differences between men and women in their work-family relationship.

Limitations, Future Studies, and Practical Implications

This study has some limitations that should be mentioned. First, the study used a self-report measure (questionnaire) that entails the problems of common method variance and consistency bias, however, as referred to by Spector (2006), common method variance concerns associated with heavy reliance on self-reported data measurements may be overstated. Second, analyses are based on a cross-sectional design. Hence, it is not possible to draw inferences regarding causal relations among the variables since the arrows that are depicted in **Figure 1** should be interpreted as associations. Thus, the causal ordering suggested by these results requires further confirmation in future longitudinal research. Third, this study was conducted in only one Portuguese organization which may compromise the generalizability of the results. Based on these limitations, future studies should continue to analyze our theoretical model. Moreover, as suggested by the meta-analysis of Kossek et al. (2011), the influence of work characteristics on the WFC depends on their relationship with this conflict. Hence, future studies should measure the family supportive supervisor behavior scale created by Hammer et al. (2009) and create job demands and autonomy scales that evoke the relationship with the family role. Furthermore, it is important to recognize that throughout the study we use the term 'gender' to mention the variable 'biological sex' that was used to measure male and female. Our option is solely related to the easy match between this construct and the literature on the WFC. However, the psychological implications of being male or female acknowledged in the gender construct are not integrated into this study. Thus, as stated by Powell and Greenhaus (2010), to fully understand the gender implications, future studies should include the measure of gender belief systems. Future studies should also include different demands using the Job Demands-Resources Model (Schaufeli and Bakker, 2004) and explore the possibility of curvilinear relations between different types of demands and workers' outcomes.

In terms of theoretical and practical implications for the field of occupational health psychology, this study has built on prior research as it advances the WFC as a contributory mechanism to the explanation of the job characteristics and workers' wellbeing relationship, as claimed by Schaufeli and Taris (2014). It should also be noted that the present study may provide some clues for the development of intervention agenda considering prevention of the WFC and, consequently, prevention of workers' mental health deterioration. This study reinforces that

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job characteristics should be priorities in the future agenda. Furthermore, the results suggest that any intervention designed to reduce the WFC may have effective results for both men and women.

AUTHOR CONTRIBUTIONS

All the authors participated in the development of the article, giving suggestions and by making constant reviews. However, MN was more involved in the data collection, VC and MC were more involved in writing the article and SL in the statistical analysis.

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Work–Family Conflict and Mental Health Among Female Employees: A Sequential Mediation Model via Negative Affect and Perceived Stress

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After the implementation of the universal two-child policy in 2016, more and more working women have found themselves caught in the dilemma of whether to raise a baby or be promoted, which exacerbates work-family conflicts among Chinese women. Few studies have examined the mediating effect of negative affect. The present study combined the conservation of resources model and affective events theory to examine the sequential mediating effect of negative affect and perceived stress in the relationship between work-family conflict and mental health. A valid sample of 351 full-time Chinese female employees was recruited in this study, and participants voluntarily answered online questionnaires. Pearson correlation analysis, structural equation modeling, and multiple mediation analysis were used to examine the relationships between workfamily conflict, negative affect, perceived stress, and mental health in full-time female employees. We found that women's perceptions of both work-to-family conflict and family-to-work conflict were significant negatively related to mental health. Additionally, the results showed that negative affect and perceived stress were negatively correlated with mental health. The 95% confidence intervals indicated the sequential mediating effect of negative affect and stress in the relationship between work-family conflict and mental health was significant, which supported the hypothesized sequential mediation model. The findings suggest that work-family conflicts affected the level of self-reported mental health, and this relationship functioned through the two sequential mediators of negative affect and perceived stress.

Keywords: work-family conflict, mental health, negative affect, perceived stress, affective events theory, conservation of resources model

INTRODUCTION

An old saying in China states that the husband is the breadwinner and the wife is the homemaker; this saying illustrates the clear division of gender roles in the traditional Chinese family. Based on social role expectations, women have more responsibility in taking care of the family, especially in terms of housework and children. However, in the 1950s, President Mao appealed to the masses saying that women could "hold up half of the sky," which resulted in more and more women entering the labor force. This change led to women playing important parts in the occupational arena. The United States Bureau of Labor Statistics (2012) conducted a survey that showed the

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Greenhaus and Beutell (1985) defined work-family conflict as a special form of inter-role conflict that arises when there are incompatible demands between work and family roles. Work-family conflict has two directions. Work-to-family conflict (WFC) occurs when experiences and commitments at work interfere with family life, and family-to-work conflict (FWC) arises when family responsibility interferes with work life. The negative consequences of work-family conflict for women and their families have been well established (Allen et al., 2000; Aryee et al., 2005; Amstad et al., 2011). Individuals with high levels of work-family conflict report more depressive symptoms (Zhang et al., 2017), more marital problems (Barling and Macewen, 1992; Higgins et al., 1992), poorer health status (Frone et al., 1997), and reduced life satisfaction, well-being, and quality of family life (Aryee et al., 1999; Stoeva et al., 2002). Therefore, a high level of work-family conflict has been associated with a variety of physical and psychological health problems. In general, these findings are indicative of a negative relationship between work-family conflict and mental health.

Mental health is a positive state or a state of well-being in which individuals can realize their abilities, cope with normal life pressures, work productively and fruitfully, and make a contribution to the community or society (World Health Organization [WHO], 2004). According to the definition of mental health, there are three core components: wellbeing, effective functioning in one's personal life, and effective functioning in the community. This definition was built on two philosophical traditions: the hedonic tradition is focused on feelings of happiness, whereas the eudaimonic tradition is focused on optimal functioning in individual and social life (Waterman, 1993; Keyes, 1998). Keyes (2002) took both the hedonic and the eudaimonic approaches into account and proposed an integrated theory of positive mental health, which encompasses emotional, psychological, and social wellbeing. Research by Keyes et al. (2010) has demonstrated the importance of mental health. Specifically, poor mental health is closely related to future mental illness (Keyes et al., 2010), the probability of all-cause mortality (Keyes and Simoes, 2012), suicidality, academic impairment among college students (Keyes et al., 2012), and other negative outcomes. Additionally, positive mental health was related to desired workplace outcomes, such as less absenteeism

(Keyes, 2007) and less unprofessional behaviors (Dyrbye et al., 2012).

Studies on mental health have also tried to identify variables that play a role in the experience of well-being. Sociodemographic variables (e.g., age, gender, and marital status), socioeconomic indicators (e.g., education and employment), and life conditions (e.g., urban/rural settings and residence) have been shown to influence well-being and mental health (Khumalo et al., 2012). Furthermore, responsibilities and expectations for family or work such as financial roles, marital roles, and parenting roles are often prescribed according to gender, which may influence the prevalence and experience of mental health (Keyes, 2002). Indeed, a significant gender difference in the relationship between work conflict and family conflict has been reported (Duxbury and Higgins, 1991). As such, conflicts between work and family life often affect mental health and these are influenced by gender.

As mentioned above, work-family conflict experienced by women working full-time has been a focus of psychological research. Many researchers have discussed the underlying factors that influence women's work-life balance, and they have tried to find external factors to eliminate negative outcomes for women's mental health. However, few studies have explained the mechanism of how work-family conflict impacts mental health. In the present study, we examined the role of negative affect and perceived stress in the relationship between work-family conflict and mental health.

A considerable amount of literature has examined the relationship between work–family conflict and strain over the last three decades (Bedeian et al., 1988; Allen et al., 2000; Amstad et al., 2011). The potential outcomes can be categorized into three types, which are the physiological, psychological, and behavioral reactions to environmental demands, threats, and challenges (i.e., stressors). These outcomes include responses such as health issues, well-being, and depression (Geurts et al., 2003; Greenhaus et al., 2006). Nohe et al. (2014) conducted meta-analytic path analyses on 33 longitudinal studies that had repeatedly measured WFC or FWC and strain, and results supported the common assumption that WFC/FWC predict strain.

Many researchers have considered the Conservation of Resources (COR) model as an appropriate framework for workfamily studies. The COR model proposes that individuals seek to acquire and maintain resources (Hobfoll, 1989). If resources are lost or are threatened, individuals experience distress and decreased well-being. When individuals lose their identity in the process of managing both work and family roles, their resources (e.g., time, energy) gradually decline, leading to exhaustion, restlessness, and even depression. As a result, individuals experience less well-being and mental health when the demands are too high.

Extant research consistently supports that employees suffer negative consequences from work-family conflict, including decreased physical health, diminished emotional well-being and increased life distress (Frone et al., 1991; Parasuraman et al., 1996). Additionally, two meta-analyses have documented small to medium effect sizes between work-family conflict and health or well-being (Allen et al., 2000; Mesmer-Magnus and Viswesvaran, 2005). Neto et al. (2016) have used COR to analyze the development of WFC over time and have found that work-family conflict at Time One and Time Two decreased the employee psychological well-being at Time Two and Time Three, respectively. Therefore, we could infer the following:

Hypothesis 1a: WFC would be negatively related to mental health.

Hypothesis 1b: FWC would be negatively related to mental health.

In addition to the direct relationship between work-family conflict and mental health, we speculated that perceived stress and negative affect are key variables that mediate the effect of work-family conflict on mental health. Stress has become part of research literature since its introduction in 1930s. Specifically, stress was defined as a perception of acute or chronic psychological or physical pressure that causes negative changes in the individual's body (Lyon, 2000). Cooper et al. (1987) described the conflict between work and home lives as a source of stress. According to COR model, stress is a reaction to an environment in which there is the threat or an actual loss in resources, or lack of an expected gain in resources. It follows that an individual who experience the loss of these resources, or the threat of such a loss, may therefore experience stress. The COR model explains stress outcomes for both intra- and inter-role stress, which will then lead to a negative "state of being," including job and life dissatisfaction, depression, anxiety, and physiological tension (Grandey and Cropanzano, 1999). Therefore, it appears that work-family conflict has an indirect relationship with mental health through stress.

A number of empirical studies have reported that work-family conflict is associated with increased levels of stress (Amstad et al., 2011; Sharma et al., 2016). Additionally, some research has found that when stress was taken into consideration, work-family conflict had an indirect relationship with physical health and life distress (Frone et al., 1991; Adams et al., 1996). In particular, as a person's resources from one role are drained so that they cannot complete another role, they may experience a negative state of being regarding both roles. Consequently, these negative states may result in their experience of a high stress level. This distress caused by stress may lead to dissatisfaction with life and to illness. Therefore, based on the literature reviewed, we could infer the following:

Hypothesis 2a: Stress would fully mediate the relationship between WFC and mental health.

Hypothesis 2b: Stress would fully mediate the relationship between FWC and mental health.

Affect refers to a mental state involving evaluative feelings (Parkinson et al., 1996). It is an umbrella term that includes a wide range of dispositions, moods, emotions, and generalized affective reactions to events, objects, and daily experiences. The construct domain of affect includes both trait-based individual differences that influence how one characteristically views and interprets the world, as well as state-based reactions that may range from somewhat transitory and specific states (e.g., moods, emotions) to more general affectively oriented evaluative judgments (e.g., job satisfaction, life satisfaction). Previous research has examined the effect of trait-based affect on work-family conflict. For instance, Stoeva et al. (2002) found that negative affect, as a theoretically and empirically independent affective trait, not only had an indirect effect on WFC through job stress and family stress, but it also moderated the effect of family stress on FWC. By contrast, the relationship between state-based affect and workfamily conflict is less understood (Judge et al., 2006). Williams and Alliger (1994) found that unpleasant mood spilled over from family to work but pleasant moods had little spillover. Negative affect seems to be a critical mediator of the relationship between work-family conflict, especially for women (Rothbard, 2001; Greenhaus et al., 2006). Therefore, in the present study, we focused on the effect of state-based negative affect to investigate the subjectively experienced affective states caused by workfamily conflict in order to explore the mechanism underlying the relationship between work-family conflict and outcomes.

According to Affective Events Theory (AET; Weiss and Cropanzano, 1996), specific events at work create discrete emotional reactions, which in turn lead to spontaneous work attitudes and behaviors. This theory proposes that affective experiences at work have an immediate effect such that affect influences attitudes and behaviors when an individual is in a particular affective state. This emphasis on intra-individual differences in attitudes and behavior highlights the importance of studying affective events as they unfold over time. Accordingly, we applied AET to events at home; that is, individuals' family demands also have effects on their affective states. Based on this perspective, we assumed that if more work-family conflicts happened in women's daily lives, they might experience more negative affect, and such negative affective experiences would have a negative influence on their work behavior and wellbeing. Researchers have found that state-based negative affective experiences (e.g., anxiety, tension, worry, frustration, guilt, distress, irritation) are positively related to both work-family conflict (Frone et al., 1997; Geurts et al., 2003; Matthews et al., 2006; Livingston and Judge, 2008) and greater juggling of work and family responsibilities (Williams et al., 1991; Williams and Alliger, 1994). Therefore, we could infer the following:

Hypothesis 3a: Negative affect would fully mediate the relationship between WFC and mental health.

Hypothesis 3b: Negative affect would fully mediate the relationship between FWC and mental health.

Although recent progress has been made in understanding how negative affect or perceived stress can separately influence well-being, significant gaps remain in knowledge about the relationship between negative affect and stress. Stress is concerned with unsatisfying life events that we want to change; however, affect is a basic research topic which is important for psychological and physical well -being, and social functioning (Lazarus, 2006a).

Further, affect come and go quickly with changes in circumstances (Lazarus, 2006b). Ekman and Cordaro (2011) propose open affect programs, which guide behavior

automatically and involuntary. Within-subjects research has shown that negative affect is strongly correlated with perceived stress (Watson, 1988), and the stress and affect systems are tightly coupled (Montpetit et al., 2010). According to the COR model and AET, resources loss is directly related to changes in anger and depressive mood (Hobfoll, 2001), in which case employees struggling with WFC or FWC experience far more negative affect that continues to drain their physical and psychological resources. As such, perceived stress results in decreased well-being.

Physiological studies shed light on the relationship between affect and perceived stress. At a biological level, the level of cortisol is an indication of perceived stress. It has been established that hypothalamic-pituitary-adrenal (HPA) axis activity and increases in cortisol are associated with work–family imbalance (Bergman et al., 2008) and negative affect (Buchanan et al., 1999). In addition, there is increasing evidence to demonstrate that negative affect plays a mediating role in the relationship between stressful events and cortisol secretion (Van et al., 1996; Buchanan et al., 1999; Hanson et al., 2000). Based on these studies, we could infer the following:

Hypothesis 4a: Negative affect and stress would have a sequential mediating effect on the relationship between WFC and mental health.

Hypothesis 4b: Negative affect and stress would have a sequential mediating effect on the relationship between FWC and mental health.

MATERIALS AND METHODS

Participants and Procedure

This study was approved by the institutional review board of the Beijing Normal University. Four hundred fifty-six full-time female employees in mainland China were recruited in this study through a women's online community; however, 105 participants who worked less than 40 h per week were excluded. The average age of the participants was 30.98 (SD = 6.40), and 47.86% of them were mothers. They held positions across many different types of organizations (such as government departments, public institutions, state-owned enterprises, private enterprises, and foreign-funded enterprises). All participants provided informed consent online, and then they were instructed to complete a survey online, and their data was kept completely anonymous.

In the sample of 351 valid participants, 41.03% were single, 50.71% were married, and 8.26% were in other types of relationships. For length of employment, 22.79% had been working for less than 3 years, 23.08% between 3 and 5 years, 24.22% between 6 and 10 years, 24.22% between 11 and 20 years, and 5.70% more than 21 years. In terms of hours of work per week, 47.01% worked between 40 and 45 h, 25.93% between 46 and 50 h, 11.40% between 51 and 55 h, 7.41% between 56 and 60 h, and 8.26% more than 61 h. Regarding level of education, 32.19% had a degree at the junior college level or below, 53.56% had an undergraduate degree, 13.96% had a master's degree or above, and one participant did not respond.

Measures

Work–Family Conflict

Work-family conflict was measured by the Work-Family Conflict and Family-Work Conflict Scales developed by Netemeyer et al. (1996). The questionnaire consists of two subscales: WFC (Cronbach's $\alpha = 0.89$) and FWC (Cronbach's $\alpha = 0.89$). Respective example items are, "*The demands of my work interfere with my home and family life*" and "*The demands of my family or spouse/partner interfere with work-related activities*". All 10 items are rated on a 7-point scale, ranging from 1 (*completely disagree*) to 7 (*completely agree*).

Negative Affect

Negative affect was measured by the Negative Affect subscale of the Positive and Negative Affect Schedule (PANAS) developed by Watson et al. (1988). The scale consists of 10 negative affect items, and respondents indicate the extent to which extent they had experienced each negative affect during the past few days on a 5-point scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). Items such as "*Distressed*" and "*Upset*." Cronbach's alpha for the subscale was 0.88. The 10 items are sorted into 5 balanced parcels based on item-total correlations for inclusion as indicators of negative affect latent construct (Little et al., 2013).

Perceived Stress

We used the 10-item version of the Perceived Stress Scale (Cohen et al., 1983) to assess the degree to which participants experience life as stressful. Items such as "*How often have you been upset because of something that happened unexpectedly?*" and "*How often have you felt that you were unable to control the important things in your life?*" were accompanied by a 5-point scale ranging from 0 (*never*) to 4 (*very often*). Higher scores indicate greater perceived stress. Internal consistency reliability was 0.87. The 10 items are sorted into 5 balanced parcels based on item-total correlations for inclusion as indicators of the perceived stress latent construct.

Mental Health

Mental health was measured by the 14-item Mental Health Continuum Short Form (MHC-SF) developed by Keyes (2009), which was adapted from the 40-item Mental Health Continuum-Long Form (MHC-LF). The MHC-SF includes three components: emotional well-being (3 items), psychological well-being (6 items), and social well-being (5 items). Respective example items are "During the past month, how often did you feel happy?", "During the past month, how often did you feel that you had something important to contribute to society?" and "During the past month, how often did you feel that you liked most parts of your personality?". Respondents indicate the frequency of having experienced each feeling over the past month by rating the item from 1 (never) to 6 (everyday). Cronbach's alpha was 0.92 for the MHC-SF full scale, and 0.89 (emotional well-being), 0.77 (social wellbeing), and 0.90 (psychological well-being) for the three subscales.

Control Variables

We controlled for participants' age since past research has shown that negative affect decreased with age for all generations (Charles et al., 2001). Age may also have an effect on women's perception of conflict, perceived stress, and well-being.

RESULTS

Common Method Variance

Work–family conflict, negative affect, perceived stress, and mental health were measured by self-report questionnaires so there might be the problem of common method variance (CMV). We addressed this issue using Podsakoff and his colleagues' recommendations (Podsakoff et al., 2003).

We first examined a single-factor model using Harman's single-factor test. This test revealed a poor fit to the data in the sample ($\chi^2/df = 6.106$, CFI = 0.463, TLI = 0.437, RMSEA = 0.121, SRMR = 0.122). Also, we conducted an exploratory factor analysis (EFA) to check the data for work–family conflict, negative affect, perceived stress, and mental health. If only one factor emerged from the EFA or the largest one could explain most of the variance, there would be serious common method biases. The results showed that 8 factors were extracted, with the largest one accounting for 28.637% of the total variance. Second, we added an orthogonal latent common method factor to the theoretical model. The fit of this model was poor ($\chi^2/df = 2.507$, CFI = 0.850, TLI = 0.834, RMSEA = 0.066, SRMR = 0.186). Overall, these results suggest that common method bias was not a problem underlying the present data.

Descriptive Statistics and Correlation Analysis

Scale means, standard deviations, and inter-correlations of the research variables are shown in **Table 1**. Hypothesis 1 predicted that WFC (1a) and FWC (1b) would be negatively related to mental health. Pearson correlation analysis was used to examine the relationships between the variables. Both women's perceptions of WFC (r = -0.193, p < 0.01) and FWC (r = -0.271, p < 0.01) were significant negatively related to mental health. Furthermore, both WFC and FWC were significant negatively related to the three components of mental health (i.e., emotional

well-being, social well-being, psychological well-being). Thus, Hypotheses 1a and 1b were supported.

Mediating Effects of Perceived Stress

We examined the fit of the models and the indirect effects by using structural equation modeling, which estimates the indirect effects of an antecedent variable (work-family conflict) on an outcome variable (mental health) via a mediator (perceived stress). In addition, we compared the model fit indices of the fully mediated model to partially mediated models. If changes in fit indices are not significant and if none of direct effect path coefficients are significant, we can accept the fully mediated model.

The fully mediated model with perceived stress as the only mediator was acceptable ($\chi^2/df = 2.331$, CFI = 0.916, TLI = 0.907, RMSEA = 0.062, SRMR = 0.060) and all path coefficients were statistically significant (0.227 < $|\beta|$ < 0.760). More importantly, this fully mediated model's fit was not significantly worse than the partially mediated model with the direct path from WFC to mental health only ($\Delta \chi^2 = 0.180$, $\Delta df = 1$, p = 0.671), or the partially mediated model with the direct path from FWC to mental health only ($\Delta \chi^2 = 0.449$, $\Delta df = 1$, p = 0.503). Additionally, none of the direct effect paths between workfamily conflicts and mental health were significant in the partially mediated models. Considering that the fully mediated model was more parsimonious than the partially mediated models, we chose to accept the fully mediated model and reject the partially mediated models. Therefore, Hypotheses 2a and 2b were supported, and perceived stress fully mediated the relationship between work-family conflict and mental health.

Mediating Effects of Negative Affect

We used the same data analysis procedure to examine negative affect as a mediator. The results for the fully mediated model indicated the model was acceptable ($\chi^2/df = 2.272$, CFI = 0.918, TLI = 0.911, RMSEA = 0.060, SRMR = 0.071). Consistent with our prediction, all path coefficients were significant (0.184 < $|\beta|$ < 0.400) and the indirect effects of negative affect on the relationship between work–family conflict and mental health were significant. This fully mediated model's fit was significantly worse than the partially mediated model with both direct effect paths from WFC to mental health and from FWC to mental

	М	SD	1	2	3	4	5	6	7
(1) WFC	3.742	1.496	-						
(2) FWC	2.411	1.317	0.430**	-					
(3) NA	0.992	0.758	0.258**	0.258**	-				
(4) Stress	1.636	0.660	0.283**	0.300**	0.566**	-			
(5) MH	42.920	14.347	-0.193**	-0.271**	-0.341**	-0.644**	-		
(6) EWB	8.536	3.503	-0.263**	-0.262**	-0.347**	-0.561**	0.773**	-	
(7) SWB	15.191	5.680	-0.165**	-0.260**	-0.274**	-0.511**	0.887**	0.567**	-
(8) PWB	19.194	7.123	-0.129*	-0.210**	-0.298**	-0.615**	0.927**	0.612**	0.710*

N = 351. WFC, work-to-family conflict; FWC, family-to-work conflict; NA, negative affect; MH, mental health; EWB, emotional well-being; SWB, social well-being; PWC, psychological well-being. *p < 0.05, **p < 0.01 (two-tailed test).

health ($\Delta \chi^2 = 11.434$, $\Delta df = 2$, p < 0.01). Based on the results of the model comparison and the significance of path coefficients, we accepted the partially mediated model with both direct effect paths ($\chi^2/df = 2.254$, CFI = 0.920, TLI = 0.912, RMSEA = 0.060, SRMR = 0.057), and the path coefficients between the variables were significant (except from WFC to mental health). The 95% CIs for indirect effects of negative affect in the relationship between work–family conflict and mental health were [-0.122, -0.025] and [-0.104, -0.012]. Thus, Hypotheses 3a and 3b were supported, and negative affect fully mediated the relationship between WFC and mental health, and it partially mediated the relationship between FWC and mental health.

Sequential Mediation Analyses for Negative Affect and Perceived Stress

Taking WFC and FWC as the antecedent variables, negative affect and perceived stress as mediators, and mental health as the outcome variable, we constructed a fully mediated model, and checked the fitness of the model and significance of each path. The model fit information revealed that the fully mediated model was acceptable ($\chi^2/df = 2.100$, CFI = 0.918, TLI = 0.912, RMSEA = 0.056, SRMR = 0.069).

Hypothesis 4a and 4b posited sequential indirect effects of negative affect and perceived stress in the relationship between work-family conflict and mental health. The path coefficients between the variables in the fully mediated model were significant (0.189 < $|\beta|$ < 0.750). The 95% CI for sequential mediating effects of negative affect and perceived stress were [-0.172, -0.049] and [-0.150, -0.028] respectively, indicating the sequential mediating effects were significant. As present in Table 2, this fully mediated model fit significantly worse than partially mediated model with direct paths from workfamily conflict to perceived stress and from negative affect to mental health (i.e., model 6; $\Delta \chi^2 = 21.454$, $\Delta df = 3$, p < 0.01). Considering the results of the model comparisons and the significance of path coefficients, we accepted the model 6 (χ^2/df = 2.073, CFI = 0.921, TLI = 0.914, RMSEA = 0.055, SRMR = 0.057), and all path coefficients were significant $(0.116 < |\beta| < 0.850$, see Figure 1). The 95% CIs for sequential mediating effects of negative affect and perceived stress were [-0.172, -0.043] and [-0.146, -0.021] respectively, indicating that the sequential mediating effects were significant (see Table 3). Therefore, Hypothesis 4a and 4b were supported,

and negative affect and perceived stress appear to have sequential, fully mediating effects, in the relationship between work-family conflict and mental health.

As shown in **Table 3**, the results of separated mediation effects of negative affect and perceived stress were not consistent with the previous analyses. The indirect effects of negative affect in the relationship between work–family conflict and mental health were not significant, but the indirect effects of perceived stress were significant (p < 0.05). The 95% CIs for the indirect effects of negative affect were [-0.002, 0.067] and [-0.004, 0.054] respectively, and the 95% CIs for the indirect effects of perceived stress were [-0.193, -0.005] and [-0.204, -0.017] respectively.

DISCUSSION

Although the effects of women's work-family conflict on wellbeing have been well-documented, the role of negative affect and perceived stress in this relationship has been somewhat inconclusive. In the present study, we used a sample of full-time female employees and attempted to uncover how both negative affect and perceived stress are related to self-reported mental health. The results support the important roles that negative affect and perceived stress play as mediators in the relationship between work-family conflict and mental health. Work-family conflict was a predictor of mental health not only through negative affect and perceived stress separately, but also through a sequential mediating effect of negative affect and perceived stress. The results support the integrated model of work-family conflict, and further indicate the directions for improving women's well-being.

These results are consistent with AET theory and the COR model, which posit that employees' behaviors or perceptions are influenced by events, objects, or daily experiences. On one hand, affective experiences have an immediate effect on attitudes or behaviors. As such, if a female employee experiences WFC or FWC, she will be more likely to feel unhappy, which influences her perception of well-being. These results are consistent with Eby et al. (2010) who proposed that affective experiences appear to be an important explanatory mechanism in the work and family interaction. On the other hand, if female employees perceive stress due to devoting their energy or time to WFC or FWC, women may come to believe that they cannot be happy or enjoy their life. As such, if female employees and family roles, they will feel the loss of resources and they may also

Model	χ²	df	$\Delta\chi^2$	CFI	TLI	RMSEA	SRMR
Model 0: sequential fully mediated model	1155.177	550		0.918	0.912	0.056	0.069
Model 1: partially mediated model with path WFC \rightarrow MH	1155.169	549	0.008	0.918	0.911	0.056	0.068
Model 2: partially mediated model with path FWC \rightarrow MH	1153.775	549	1.402	0.918	0.911	0.056	0.065
Model 3: partially mediated model with path WFC \rightarrow stress	1143.565	549	11.612**	0.920	0.913	0.056	0.061
Model 4: partially mediated model with path FWC \rightarrow stress	1142.667	549	12.510**	0.920	0.913	0.056	0.058
Model 5: partially mediated model with path NA \rightarrow MH	1150.629	549	4.548*	0.919	0.912	0.056	0.070
<i>Model 6:</i> partially mediated model with paths WFC \rightarrow stress, FWC \rightarrow stress, and NA \rightarrow MH	1133.723	547	21.454**	0.921	0.914	0.055	0.057

WFC, work-to-family conflict; FWC, family-to-work conflict; NA, negative affect; MH, mental health. *p < 0.05, **p < 0.01 (two-tailed test).



TABLE 3 | Indirect effects for the sequential mediating effects.

Path	Standardized coefficient	95% Cl Lower	95% Cl Upper
WFC→NA→stress	0.126	0.054	0.199
WFC→NA→MH	0.032	-0.002	0.067
WFC→stress→MH	-0.099	-0.193	-0.005
$WFC \rightarrow NA \rightarrow stress \rightarrow MH$	-0.107	-0.172	-0.043
FWC→NA→stress	0.099	0.027	0.170
FWC→NA→MH	0.025	-0.004	0.054
FWC→stress→MH	-0.110	-0.204	-0.017
$FWC \rightarrow NA \rightarrow stress \rightarrow MH$	-0.084	-0.146	-0.021
NA→stress→MH	-0.474	-0.582	-0.366

WFC, work-to-family conflict; FWC, family-to-work conflict; NA, negative affect; MH, mental health.

feel stressed, and this combination leads to worse mental health. Sharma et al. (2016) demonstrated that work–family conflicts led to stress among nursing staff, which subsequently had an impact on their psychological health. The present study obtained results that are consistent with this past research, though the present study examined these findings in a different population.

We also found support for the sequential mediating effects of negative affect and perceived stress. Female employees' workfamily conflict was related to their self-rated mental health, and this relationship was mediated by their negative affect and perceived stress, which is consistent with what has been conjectured in prior research on work stress (Hanson et al., 2000). It is understandable that WFC and FWC could lower mental health through negative affect or perceived stress separately. Similarly, these relationships may function through both negative affect and stress. Furthermore, the direct effects were not significant, indicating that negative affect and perceived stress explained the relationships.

Sequential mediation analyses were conducted to examine the roles of negative affect and perceived stress in the relationships between work-family conflict and mental health. The results revealed that negative affect mediated the relationship between WFC/FWC and perceived stress but not the relationship between WFC/FWC and mental health; this finding was inconsistent with the results in the analyses for separate mediation effects of negative affect. It is possible that the reason for insignificant indirect effects of negative affect was the relationship between negative affect and perceived stress. Prior studies indicate that negative affect strongly correlates with perceived stress, and these systems tightly coupled (Watson, 1988; Montpetit et al., 2010). Considering that the relationship between positive and negative affect appears to be independent (Diener and Emmons, 1984), another possible reason was that emotional well-being subscale was measured by three positive affect items. This measurement may have influenced the estimation of path coefficient from negative affect to mental health. Therefore, it will not impair women's mental health until they suffer from stressful experience caused by work-family conflict and negative affect.

Theoretical Implications

There are at least four reasons why the results of the present study are considered theoretically important. First, the present study highlights the effect of affect in the relationship between workfamily conflict, stress, and mental health. Previous studies have examined the relationship between work-family conflict, stress, and some negative outcomes through the model of stressorstress-strain. However, the effect of affect in this interaction has not been fully understood. Some studies have treated affect as the outcome of stress, which overlooks the possibility that affects may play a role in the functional mechanism. Therefore, our study complements the stressor-stress-strain model by explaining the mediating effect of negative affect.

Second, the present study examined multiple mediation models to understand the relationship between work-family conflict and mental health. If future research replicates these results, it suggests that work-family conflict leads women to experience negative affect, and the accumulation of negative affective experiences leads to stress, which impairs well-being. This argument suggests that future researchers should conduct experiments to explore the sequence of negative affect and perceived stress.

Third, there has been considerable debate as to whether negative affect or perceived stress explains more of the variance in this relationship between work–family conflict and mental health. From the results of our sequential mediation model, we propose that the relationship between conflict and well-being may be more complex than previously thought. Specifically, we found that both negative affect and perceived stress can function as mediators in this relationship and perceived stress may play a larger role. These results suggest that both directions of conflict (WFC and FWC) are related to mental health, and the researcher should not conflate stressors and perceived stress.

Finally, the most important contribution made by the present study is the examination of the sequential mediating effects of negative affect and perceived stress. Although past research has claimed that negative affect and perceived stress play critical roles in determining employees' well-being, empirical investigations of these important variables have been rather rare and incomplete. We found that the relationship between workfamily conflict and mental health was mediated by negative affect and stress. Specifically, this kind of relationship could be mediated respectively or successively.

Practical Implications

From a practical perspective, our study may provide some direction for organizational and individual interventions focused on the harmful effects of work–family conflict on mental health. Coping is an integral part of the process of emotional arousal and stress. The three concepts, (i.e., stress, affect, and coping), work together and form a conceptual unit, with emotion being the superordinate concept (Lazarus, 2006b). Therefore, this study indicates that in order to decrease the influence of work–family conflict on mental health, women should focus on negative affect regulation, and stress management. When work–family conflicts happened to full-time female employees, they should first realize what consequence it has caused to their affect, especially negative affect, and find ways to cope. In other words, working women are encouraged to evaluate their stress levels and reduce their stress through useful methods. For instance, mindfulness based stress

reduction (MBSR), acceptance and commitment therapy (ACT) and rational-emotive therapy (RET).

For organizations, leaders and Human Resources workers can provide training in emotion regulation to their employees to help them manage work–family conflicts and stress better, which may improve their level of happiness. For individuals, our study suggests that it is important to be aware of one's emotions, especially negative affect, and to learn skills to reduce or alleviate negative affect and manage stress.

Limitations and Future Research

The present study is the first study that has examined a sequential mediation model of the association between work–family conflict and self-reported mental health. However, there are several limitations that should be noted.

First, in order to better understand the relationship between work-family conflict and affect, our study focused on negative affect as a mediator, as previous studies have argued that affect has a two-dimensional structure consisting of positive and negative affect (Feldman Barrett and Russell, 1998; Stanley and Burrows, 2001). Positive affect refers to the experience of pleasant psychological states such as cheerfulness, alertness, and confidence. Negative affect refers to the experience of unpleasant psychological states such as anger, sadness, and fear (Gray and Watson, 2001). Findings from the work-family conflict perspective are associated with multiple demands, which are detrimental to individuals and invoke negative emotional responses and strain. On the contrary, work-family enrichment perspective suggests that there are benefits of role involvement which lead to gratification and positive affect (Rothbard, 2001). Future research may need to focus on the relationship between work-family enrichment and positive affect, and then explore the potential role of positive affect as a mediator.

Second, this study focused on the negative outcomes of workfamily conflict and its process. An extant meta-analysis suggests that there are reciprocal effects of WFC/FWC and strain (Nohe et al., 2014). As such, research could extend this model by taking reciprocal effects into account, and provide empirical evidence about how WFC and FWC are related to strain.

Third, our study used a cross-sectional research design, which cannot provide adequate support for causal relationships between variables. Compared to longitudinal design, cross-sectional designs may bias the estimation of mediation parameters even when mediation is complete (Maxwell and Cole, 2007). Although research has shown a strong relationship between negative affect and perceived stress (Paukert et al., 2006; O'Hara et al., 2014; Krieger et al., 2015), the results of present study support that negative affect is the antecedent variable of perceived stress. It is unclear whether negative affect. Future research may consider using a longitudinal design or daily diary methods to test the causal relationship between negative affect and perceived stress.

Forth, our study relied only on self-report measures. Multiple methods of assessment should be considered in future studies. For example, given that the level of cortisol is a signal of perceived stress, future research could include physiological measurements.

CONCLUSION

The present study suggests that there is a significant sequential mediating effect of negative affect and perceived stress in the relationship between work-family conflict and mental health among Chinese female employees who work full-time. Therefore, to improve Chinese female employees' mental health as a consequence of work-family conflict, it would be important to increase emotion regulation and stress management skills.

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AUTHOR CONTRIBUTIONS

SZ designed the study and collected the data. SZ and SD performed the data analysis and wrote the manuscript, so worked as co-first authors. XZ was the supervisor of the research team, and he repeatedly revised the manuscript with HG. All authors contributed to this work and approved the final version of the manuscript to be published.

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A Crossover Study From a Gender Perspective: The Relationship Between Job Insecurity, Job Satisfaction, and Partners' Family Life Satisfaction

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Emanuel F, Molino M, Lo Presti A, Spagnoli P and Ghislieri C (2018) A Crossover Study From a Gender Perspective: The Relationship Between Job Insecurity, Job Satisfaction, and Partners' Family Life Satisfaction. Front. Psychol. 9:1481. doi: 10.3389/fpsyg.2018.01481 **Background:** In the last years, many changes have involved the labor context: new ways of working, more flexibility and uncertainty, new and more insecure job contracts. In this framework, perceived job insecurity, worker's perception about potential involuntary job loss, has received renewed interest, also for those workers with a permanent contract in Italy. Consequences of job insecurity on work-related outcomes such as job satisfaction have been demonstrated; nevertheless, its possible effects outside the workplace seem to be underestimated so far. Moreover, literature highlighted the importance to consider gender as a possible moderator in the relationship between one partner's stressors and the other partner's strain.

Aim: According to spillover and crossover theories, this study aim was to investigate the relationship between job insecurity and family life satisfaction of both partners, through the mediation of job satisfaction. The model has been simultaneously tested in two groups, women and men, in a sample of permanent workers.

Method: The research involved a convenience sample of 344 employees with permanent contract (53% female) from different occupational sectors. Participants (focal persons) and their partners filled out a self-report questionnaire.

Results: The multi-group SEM indicated a full mediation of job satisfaction in the relationship between job insecurity on the one side, and both individual's and his/her partner's family life satisfaction on the other side in both groups.

Conclusion: These study findings highlighted how job insecurity may be indirectly and negatively related to both members' family life satisfaction, through the mediation of job satisfaction. As regards gender, similar spillover and crossover patterns emerged, contributing to that literature that highlights a greater similarity in the models of interaction between work and family among women and men. Interventions should be aimed at reducing perception of job insecurity among workers, including those with permanent contract. Employers should improve communication and flow of information

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about future organizational changes. Moreover, interventions useful to monitor and reinforce employees' job satisfaction should be planned. Finally, career practitioners may provide counseling and coaching projects aimed at strengthening employees' employability and their ability to deal with changes.

Keywords: job insecurity, job satisfaction, family life satisfaction, crossover, spillover, permanent workers

INTRODUCTION

Over the past years, many Western countries have passed through a period of economic slowdown and occupational uncertainty that triggered rapid changes in the working world (Direnzo and Greenhaus, 2011; Vostal, 2014). In this scenario, employment uncertainty increased, and the rise of sharing economy, the development of digital and technological tools, the shift toward new ways of working, the higher levels of flexibility supported by new job contracts suggest that job insecurity will persist in being an important characteristic in workers' lives. In Italy in 2015, in the frame of the so called "Jobs Act" (Law n. 183/2014), the legislative decree n. 23 introduced a new type of permanent employment contract with rising protections against unfair dismissal ("Contratto a Tutele Crescenti"). This type of contract, which implies permanent employment, restricted the reintegration possibilities for workers in the event of unlawful dismissal, inducing a perception of lower job stability and security than before.

It is in this perspective that job insecurity has been receiving a significant amount of interest from researchers in recent years (Lee et al., 2018). Several reviews summarized its consequences in the work domain, including job satisfaction (Sverke et al., 2002; Cheng and Chan, 2008; Keim et al., 2014; De Witte et al., 2016). Nevertheless, possible effects of job insecurity outside the workplace seem to be underestimated (Sora and Höge, 2014) and research on the family domain is still looking for univocal and coherent evidence.

Differences between permanent and temporary workers have been investigated (e.g., Silla et al., 2005), with temporary workers showing higher levels of perceived job insecurity and related consequences. However, changes in labor market, working cultures and types of employment contract indicate that also permanent workers may be worried about their job continuity, an issue that needs to be addressed in Italy. For these reasons, supported by spillover and crossover theories, this study aims at understanding whether job insecurity spills over into family-related outcomes and crosses over from the employee to his/her partner, considering job satisfaction as a potential mediator. Specifically, the study investigated the relationship between one worker's perceived job insecurity and family life satisfaction of both the person and his/her partner, through the mediation of job satisfaction of the person. These relationships have been explored in a sample of Italian permanent workers belonging to different occupational sectors, comparing women and men. Gender may be considered a possible moderator of the relationship between one partner's stressors and the other partner's outcomes because of differences between men and women in the traditional role requests and expectations and in

their way to react to events happening to their family members (Westman, 2001).

JOB INSECURITY AND JOB SATISFACTION

The present study considered job insecurity as a subjective perception resulting from an individual's interpretation of his/her current work condition that reflects the degree to which workers consider their jobs to be vulnerable. In fact, job insecurity is related to concerns about the maintenance of one's job (Sverke and Hellgren, 2002) that is the employee's fear to lose his/her occupation and to become unemployed (De Witte, 1999).

Several studies and meta-analyses (Sverke and Hellgren, 2002; Keim et al., 2014; Lee et al., 2018) focused on antecedents of job insecurity, at organizational and individual levels. In particular, microeconomic and social environments, such as labor market characteristics, organizational change and several organizational practices and conditions are potential determinants of job insecurity, in addition to subjective characteristics of the individual.

In literature, job insecurity is recognized as a powerful stressor (Sverke et al., 2002; Cheng and Chan, 2008; De Witte et al., 2016; Lee et al., 2018) that can have detrimental effects on mental and physical health (Hellgren and Sverke, 2003; Silla et al., 2005, 2009; De Witte et al., 2016), psychological well-being or burnout and emotional exhaustion (Mauno et al., 2005; De Cuyper et al., 2012; Kinnunen et al., 2014; Giunchi et al., 2016) as well as job attitudes (Vander Elst et al., 2014) and work performance (Cheng and Chan, 2008; Piccoli et al., 2017).

Studies that considered the negative association of job insecurity with job satisfaction (Hellgren et al., 1999; Urbanaviciute et al., 2015) are well established and provided convergent evidence. Job satisfaction is an emotional state that results from the assessment of an individual's job experience (Locke, 1976). Research has demonstrated that job insecurity is negatively associated with job satisfaction (Sverke et al., 2002), underlining the critical role of job insecurity in relation to organizational well-being. For example, in the studies of Sverke et al. (2002) and Cheng and Chan (2008), the metacorrelation with job satisfaction is nearly twice the one with mental well-being or physical health: this suggests that job insecurity is particularly related to decreased working wellbeing (e.g., job satisfaction). Heaney et al. (1994) considered a sample of United States car manufacture workers investigating the consequences of job insecurity and found that protracted job insecurity negatively predicted job satisfaction over time. Similar results were obtained later by Lim (1996), and

Preuss and Lautsch (2002). More recently, both Callea et al. (2017) and Chirumbolo et al. (2017) surveyed different samples of Italian workers finding significant negative effects on job satisfaction, also distinguishing between qualitative and quantitative job insecurity as separate, albeit related, predictors. Thus, we propose that:

Hypothesis 1: Focal person's job insecurity will be negatively associated with his/her job satisfaction.

FAMILY LIFE SATISFACTION: SPILLOVER AND CROSSOVER EFFECTS

Before focusing on available evidence and moving toward our study hypotheses, a theoretical premise is needed, in that we refer to the spillover and crossover hypotheses. Over 40 years ago Kanter (1977), arguing that "occupations contain an emotional climate as well that can be transferred to family life. A person's work and relative placement in an organization can arouse a set of feelings that are brought home and affect the tenor and dynamics of family life" (p. 47), gave rise to the so-called spillover theory, that is a worker's experience on the job carry over into his or her non-work experience, and vice versa (Larson et al., 1994). As Frone et al. (1992) pointed out, spillover hypothesis is only one among other hypotheses (e.g., compensation, segmentation, and congruence) trying to explain the intertwinement between work and family domains, although it received stronger scholarly attention and support so far (Edwards and Rothbard, 2000; Heller and Watson, 2005). Still these authors argued that multivariate studies examining the role of third-party variables, namely domain specific stressors, affecting originating domain and receiving domain satisfactions were needed in order to provide stronger empirical support to the spillover hypothesis. Among those variables, job insecurity can play a fundamental role, given its potential detrimental impact (see above) and its perduring preeminence among job stressors due to economic and organizational reasons.

The crossover effect is the process for which psychological well-being (or its absence) is passed from one individual to another (Westman, 2001). Westman (2001, p. 717) defined crossover as "the reaction of individuals to the job stress experienced by those with whom they interact regularly." The main research area in which the crossover effect is studied is work–family interference in order to understand how experiences lived in work and family "cross over" from one person to his/her partner (Parasuraman and Greenhaus, 2002). Some studies have been conducted also in order to investigate crossover effect in leader–follower relationship (Ten Brummelhuis et al., 2014). Scholars confirmed crossover effects regarding burnout (Bakker and Schaufeli, 2000), marital dissatisfaction (Westman et al., 2004), and work–family conflict (Westman and Etzion, 2005).

In regards to the process that underlines the crossover effect, Bakker and Demerouti (2013) identified two steps: firstly, the individual's working experiences are transferred to the family field, and secondly, behaviors and emotions in the family field are conveyed to significant others. The transmission may be considered a "contagion process" (Bakker and Schaufeli, 2000) meant as a mutual reaction toward the other partner. Moreover, Westman (2001) specified that the transfer of experiences from one partner to another one could take place through two main mechanisms: an affective and a behavioral crossover. The first mechanism is related to empathy: an individual in an intimate relationship imagines the condition of his/her partner and, doing so, can experience his/her feelings. The second mechanism is related to a series of behaviors (coping, undermining behavior, and social support) that one partner puts in place to deal with the source of stress and that may have a negative impact on the other one.

The crossover model was initially developed by Westman (2001) for strain feelings (e.g., burnout and depression), but other researchers studied also the crossover of positive feelings (e.g., engagement or flow; Bakker and Demerouti, 2007; Bakker et al., 2009). In this study, we took into account the effect of job insecurity on both focal person's and his/her partner's family life satisfaction, by the mediation of job satisfaction (of focal person). The negative effect of job insecurity on outcomes pertaining to other life fields (e.g., family life) have been examined to a lesser extent and in an erratic way, providing not definitive evidence.

We anticipated that research examining the impacts of job insecurity on the family domain is far from returning univocal and coherent evidence. Stewart and Barling (1996) found that job insecurity was negatively correlated with job satisfaction; moreover it had no direct effect on parenting style or children's behavior in Canadian elementary school. A study, which examined also crossover effects (Voydanoff and Donnelly, 1986), showed that job insecurity of fathers was positively linked to the amount of children's problems as observed by mothers. Job insecurity has been found to be directly related to amplified marital tension (Hughes and Galinsky, 1994) and reduced marital satisfaction of both partners (Larson et al., 1994). Later, Mauno and Kinnunen (1999b), arguing that the processes by which specific job stressors affect marital functioning had not yet been sufficiently specified, found that job insecurity impaired marital satisfaction, although through the intervening role of mediating variables, thus opening the way to the examination of potential mediators. They also examined crossover effects although finding inconsistent results. However, other studies (Riley and Eckenrode, 1986; Belle, 1987) suggested that empathy a wife feels for her partner may suggest she frequently feels his displeasures as if they were her own, resulting in crossover effects of satisfaction and dissatisfaction. Job insecurity experienced by an employee affects the family members by impairing their well-being, satisfaction, or performance due to the fact that an employee transfers his/her job-related worries to his/her spouse/partner or children (Mauno and Kinnunen, 1999b; Westman et al., 2001; Zhao et al., 2012; Kinnunen et al., 2013). Based on such evidence, we propose that:

Hypothesis 2a: Focal person's job insecurity will be negatively associated with his/her family life satisfaction (spillover effect).

Hypothesis 2b: Focal person's job insecurity will be negatively associated with family life satisfaction of his/her partner (crossover effect).

Finally, as already anticipated in previously cited studies (e.g., Mauno and Kinnunen, 1999b), it is plausible to expect that the negative relationship of job insecurity with the family domain is mediated by some intervening variables, job satisfaction in our case. It derives that closer attention should be devoted in examining the relationship between job and family satisfaction. Frone et al. (1994) contrasted the spillover hypothesis (i.e., job satisfaction causes family satisfaction) against the congruence hypothesis (i.e., the relationship between job and family satisfaction is characterized best as non-causal), finding support for this second one. Positive and negative long-term spillover effects between marital satisfaction and discord and job satisfaction through a 12-year panel survey have been found (Rogers and May, 2003). Heller and Watson (2005), through a diary study, highlighted a positive relationship between job satisfaction measured in the afternoon and marital satisfaction measured in the evening, which, in turn, predicted job satisfaction the following afternoon. Therefore, we hypothesized that:

Hypothesis 3: The negative relationship between job insecurity and family life satisfaction of both focal person (a) and his/her partner (b) will be mediated by job satisfaction.

GENDER DIFFERENCES

The study investigated potential gender differences with an exploratory perspective (without formulating specific hypotheses) and tested the three above mentioned study hypotheses separately for women and men. Indeed, previous studies found gender differences in crossover and spillover effects involving job insecurity; nevertheless, results seem not to be fully consistent (Mauno et al., 2017). According to Westman (2001), differences between women and men may be found in several aspects: (1) in the way they react to events happening to the other partner; (2) in the involvement level in family affairs; (3) in demands and expectations traditionally expected. Women are more involved in family activities and concerns and seem to be more vulnerable compared with men to stressors affecting their partners. For these reasons, Westman (2001) considered gender as a possible moderator of the relationship between one person's stress and his/her partner's strain.

Moreover, research related to perceptions of job insecurity and gender differences reported ambiguous results. Some studies have not observed gender differences (e.g., Berntson et al., 2010; Giunchi et al., 2016), others have highlighted that women experienced more job insecurity than men (e.g., Mauno and Kinnunen, 2002; Emberland and Rundmo, 2010). The general critical situation in the labor market for women could explain higher level of job insecurity and/or more negative job insecurity related consequences for them compared with men (Keim et al., 2014). On the other side, when studies underlined that men perceive more job insecurity this result could be explained according to the gender role theory, suggesting that family roles are more significant to women's identity, while work roles are more fundamental to men's identity (Barnett et al., 1995). Therefore, particularly in Italy, men may be more vulnerable to job insecurity and job loss, since they consider themselves, as the society does, as the "breadwinner" of their own families, while financial matters are considered a secondary responsibility for women (Ghislieri and Colombo, 2014).

In their review, Mauno et al. (2017) reported differences between women and men in the consequences of job insecurity on family-related outcomes. For example, Kinnunen and Mauno (1998) showed that job insecurity decreased work–family conflict only for women. In a longitudinal study a prolonged effect of job insecurity on negative work spillover into parenthood have been found only for women (Mauno and Kinnunen, 1999a). More recently, Richter et al. (2010) showed a mediation of workload in the relationship between job insecurity and work–family conflict only for men. Ford et al. (2007) in their meta-analysis found a moderation of gender in the direct relationship between job stress and family satisfaction, which was stronger for men.

MATERIALS AND METHODS

Ethics Statement

This study used a self-report questionnaire to involve human individuals; the procedure was applied in accordance with the standards of the national law of data treatment followed by the University of Turin and the University of Campania (Italy). The method did not imply medical or other kind of practices that could cause discomfort to involved persons, who were all adult healthy subjects anonymously involved; therefore, further ethical consent was not needed according to the Institutions. Helsinki Declaration (World Medical Association, 2001) and the Italian data protection law (Legislative Decree No. 196/2003) have been respected in the implementation of the study. Participants agreed to be involved voluntarily and without compensation; anonymity was respected in both data collection and analyses. Agreeing to fill in the questionnaire, participants provided their informed consent. Information about study aims, data treatment and anonymity, as well as instructions to complete the questionnaire, were provided in a cover letter.

Samples and Procedures

Participants were contacted through a convenience sampling procedure; a total sample of 344 Italian heterosexual couples filled out a self-report questionnaire. Questionnaires were distributed within organizations that agreed to participate to the survey by trained researchers, leaving to their employees the decision to participate or not. Employees received a sealable envelope (in order to further protect their privacy) containing a copy of the questionnaire and a letter of research presentation (see above). The questionnaire had two sections: the first one was fill out by participants, who all were permanent workers, and the last one by their partners. Participants and their partners were instructed to complete the questionnaire independently of one another.

Among participants, 183 were female (53.2%) and 161 were male (46.8%). Female participants had at least one child in the 77.6% of the cases; among them 29.5% had one child, 51.8% had two children, 18.7% had three or more children. The level of education was bachelor's, master's degrees or higher for the 50.8%, 39.9% had finished high school, the remaining 9.3% had a lower level. The average age was 43.24 years (SD = 9.55; min = 26; max = 64). Among women, most of them declared to have a full-time job (71.6%). They were employed in a range of different occupational sectors: 48.1% health, 16.9% private services, 14.2% industry, 9.3% education and research, 4.4% commerce, 7.1% other. Participants worked, on average, 34.74 h per week (SD = 9.45; min = 6; max = 60). Mean job tenure was 15.97 years (SD = 9.68; min = 1; max = 39). Moreover, organizational seniority was, on average, 13.78 years (SD = 9.28; min = 1; max = 37). Among women's partners, 47.5% had achieved high school, 37.2% a bachelor's, master's degrees or higher educational level, 15.3% had a lower level. As for their professional contract, 61.7% had a permanent full-time job, 9.8% had a permanent part-time job, 8.7% had a fixed-term job, 6.6% had other type of job contracts, 13.2% had not specified other situations.

Male participants had at least one child in most of the cases (82.0%); among them 30.8% had one child, 45.9% had two children, 23.3% had three or more children. The level of education was high school for the 51.6%, bachelor's, master's degrees or higher for 42.8%, the remaining 5.6% had a lower level. The average age was 44.23 years (SD = 9.05; min = 26; max = 67). Among men, most of them declared to have a full-time job (80.7%). They were employed in a range of different occupational sectors: 49.7% health, 32.9% industry, 11.2% private services, 2.5% commerce, 1.9% education and research, 1.8% other. Male participants worked, on average, 37.59 h per week (SD = 10.10; min = 6; max = 60). Mean job tenure was 16.36 years (SD = 9.80; min = 1; max = 38). Moreover, organizational seniority was, on average, 13.69 years (SD = 8.76; min = 1; max = 38). Among men's partners, 57.8% had achieved high school, 30.4% a bachelor's, master's degrees or higher educational level, 11.8% had a lower level. As for their professional contract, 38.5% had a permanent full-time job, 19.3% had a permanent part-time job, 19.3% had a fixed-term job, 8.7% had other type of job contracts, 14.2% had not specified other situations.

Measures

Family life satisfaction of both the respondent and his/her partner was measured by five items (Kobau et al., 2010) with a 7-point Likert scale, from 1 = "Completely disagree" to 7 = "Completely agree" (e.g., "I am satisfied with my family life"). Cronbach's alpha on the whole sample of this study was 0.94.

Job satisfaction was detected by five items of the Copenhagen Psychosocial Questionnaire (Pejtersen et al., 2010) using a 5-point Likert scale, from 1 = "Very unsatisfied" to 5 = "Very satisfied" (e.g., "Indicate your satisfaction about... physical working conditions"). Cronbach's alpha on the whole sample was 0.90.

Job insecurity was measured by four items of the De Witte's (2000) job insecurity scale applying a 5-point Likert scale, from

1 = "Completely disagree" to 5 = "Completely agree" (e.g., "I feel insecure about the future of my job"). Cronbach's alpha on the whole sample was 0.87.

Data Analysis

The statistics software IBM SPSS 24 was used to perform descriptive data analyses, Pearson correlations to detect relationships between variables, and Cronbach's alpha coefficient to verify scales' reliability in the whole sample and separately in female and male samples. Moreover, analysis of variance through *t*-test for independent samples was calculated in order to investigate potential differences between variables' means of the female and male samples.

In order to test study hypotheses simultaneously in the two samples, Mplus 7 (Muthén and Muthén, 1998–2012) was applied to test a multi-group full structural equation model (SEM) using Maximum Likelihood (ML) as estimation method. The following goodness-of-fit criteria were considered in order to assess models (Bollen and Long, 1993): the χ^2 goodness-of-fit statistic; the Comparative Fit Index (CFI); the Tucker Lewis Index (TLI); the Root Mean Square Error of Approximation (RMSEA); and the Standardized Root Mean Square Residual (SRMR). Finally, in order to verify whether mediation effects were significant, we applied bootstrapping procedure (Shrout and Bolger, 2002).

RESULTS

Correlations between study variables and scales' internal consistency are shown in **Table 1** for female and male samples. α values ranged between 0.86 and 0.95, respecting the cut-off of 0.70 (Nunnally and Bernstein, 1994). As for correlations, they showed the expected directions in both groups.

Job insecurity was negatively correlated in both groups with family life satisfaction (F: r = -0.30, p < 0.01; M: r = -0.22, p < 0.01), partner's family life satisfaction (F: r = -0.27, p < 0.01; M: r = -0.17, p < 0.05) and job satisfaction (F: r = -0.47, p < 0.01; M: r = -0.31, p < 0.01).

Job satisfaction was positively correlated in both groups with family life satisfaction (F: r = 0.43, p < 0.01; M: r = 0.53, p < 0.01) and partner's family life satisfaction (F: r = 0.28, p < 0.01; M: r = 0.47, p < 0.01).

Family life satisfaction and partner's family life satisfaction are strongly and positively correlated in both groups, as expected (F: r = 0.67, p < 0.01; M: r = 0.74, p < 0.01).

Analysis of variance between female and male samples did not show significant differences in the variables' means.

The hypothesized multi-group SEM showed a good fit to the data: χ^2 (312, $N_{\text{Female}} = 183$, $N_{\text{Male}} = 161$) = 710.03, p = 0.00, CFI = 0.94, TLI = 0.93, RMSEA = 0.08 (90% CI [0.07, 0.09]), SRMR = 0.07. The model with standardized parameters for the two samples is depicted in **Figure 1**.

Considering the measurement model, item loadings were acceptable for all variables in the two samples. As for the structural model, job insecurity showed a significant negative association with job satisfaction in both samples (F: $\beta = -0.59$, p < 0.001; M: $\beta = -0.40$, p < 0.001). Job insecurity did not present

TABLE 1	Means, standard deviations, Cronbach's a	pha, and correlations among the stu	tudy variables for female ($N = 183$) and male ($N = 161$) group	ps.
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	Female	Female sample		Female sample Male sample					
	М	SD	М	SD	1	2	3	4	
1. Family life satisfaction	4.92	1.40	4.93	1.60	0.93/0.95	0.74**	0.53**	-0.22**	
2. Partner's family life satisfaction	5.07	1.39	5.12	1.42	0.67**	0.93/0.94	0.47**	-0.17*	
3. Job satisfaction	3.43	0.94	3.37	0.99	0.43**	0.28**	0.89/0.91	-0.31**	
4. Job insecurity	2.24	1.81	2.36	1.13	-0.30**	-0.27**	-0.47**	0.89/0.86	

Correlations for the female group below the diagonal; correlations for the male group above the diagonal. Cronbach's α for female/male samples on the diagonal in italics. *p < 0.05; **p < 0.01.



a significant direct relationship with family life satisfaction and partner's family life satisfaction. In female and male groups job satisfaction had a strong positive relationship with family life satisfaction (F: $\beta = 0.39$, p < 0.001; M: $\beta = 0.55$, p < 0.001) and partner's family life satisfaction (F: $\beta = 0.23$, p < 0.01; M: $\beta = 0.57$, p < 0.01). No significant differences between the two samples emerged. The model explained 35% of variance for job satisfaction, 25% for family life satisfaction and 14% for partner's family life satisfaction in the female sample; and 16% for job satisfaction, 32% for family life satisfaction and 32% for partner's family life satisfaction in the male sample.

Subsequently, bootstrapping procedure was used to evaluate mediating effects; 2,000 new samples were extracted from the original one and direct and indirect effects were calculated (Preacher and Hayes, 2008). Whether the confidence interval does not include zero it means that the mediation effect is significant. Statistically significant mediated effects are shown in **Table 2**. Particularly, the bootstrapping procedure confirmed that job satisfaction was a full mediator between job insecurity and family life satisfaction in female and male samples, showing

indirect effects equal to, respectively, -0.23 and -0.22. Moreover, job satisfaction was a full mediator between job insecurity and partner's family life satisfaction in female and male samples, showing indirect effects equal to, respectively, -0.13 and -0.23.

DISCUSSION

The aim of this study was examining the association between job insecurity and family life satisfaction, with three peculiarities: taking into account the intermediate mediating role of job satisfaction, assessing both partners' evaluations of family life satisfaction, and differentiating analysis between genders.

Available evidence clearly showed that job insecurity has detrimental effects on well-being and health (De Witte et al., 2016), performance (Cheng and Chan, 2008), and job attitudes (Vander Elst et al., 2014). More in detail, several studies (Sverke et al., 2002; Callea et al., 2017) reported that job insecurity can negatively affect job satisfaction because, through the anticipation of job loss (thus acting as a powerful stressor), it can decrease the

Indirect effects female sample		Boo	tstrap	
	Est.	SE	p	CI 95%
Job Insecurity \rightarrow Job satisfaction \rightarrow Family life satisfaction	-0.23	0.06	0.000	(-0.349, -0.107)
Job Insecurity \rightarrow Job satisfaction \rightarrow Partner's family life satisfaction	-0.13	0.07	0.050	(-0.268, -0.002)
Indirect effects male sample		Boo	tstrap	
	Est.	SE	p	CI 95%
Job Insecurity \rightarrow Job satisfaction \rightarrow Family life satisfaction	-0.22	0.07	0.002	(-0.362, -0.080)
Job Insecurity \rightarrow Job satisfaction \rightarrow Partner's family life satisfaction	-0.23	0.07	0.002	(-0.370, -0.086)

All parameter estimates are presented as standardized coefficients. Cl, confidence interval.

pleasant feelings associated with his/her own job. Based on such evidence, we anticipated that a negative association would have existed between job insecurity and job satisfaction. Results from multi-group SEM provided strong support allowing to accept Hypothesis 1. In particular, job insecurity decreased levels of job satisfaction both among male ($\beta = -0.40$) and female ($\beta = -0.59$) respondents.

Hypothesis 2 postulated that job insecurity would have been negatively associated with family life satisfaction of focal person (a) and his/her partner (b). In doing so, two prominent workfamily theories were concerned: the spillover (Kanter, 1977) and the crossover (Westman, 2001) theories. The spillover theory was concerned in regards to Hypothesis 2a, that is job insecurity would have been associated with reduced family life satisfaction, given that negative individuals' experiences on the job can carry over into his/her non-work experience, and vice versa. Some studies have already provided partial converging evidence (Hughes and Galinsky, 1994; Mauno and Kinnunen, 1999b). The crossover theory was instead concerned to explain the expected negative association between focal person's job insecurity and his/her partner's family life satisfaction (Hypothesis 2b), given that individual feelings associated with experiences on one domain can be transmitted to individual's significant others and affect them. Also in this case, partial (Larson et al., 1994) and contrasting (Mauno and Kinnunen, 1999b) evidence is available. Results from multi-group SEM do allow to partially accept such hypotheses given that no direct associations were present but mediated ones. In fact, deeper examination (see Hypothesis 3) showed that significant indirect effects were present for both male and female respondents (see below for details).

As anticipated by both sparse evidence (Mauno and Kinnunen, 1999b) and theory (Bakker and Demerouti, 2013), it is possible that the spillover and crossover effects of specific job stressors (i.e., job insecurity) may be mediated by intermediate variables. Therefore, Hypothesis 3 stated that the negative effect of family life satisfaction (both focal person's and his/her partner's) regressed on job insecurity would have been mediated by job satisfaction. Said differently, fear of losing one's own job was not expected to impact directly on decreased family life satisfaction, but lowered job satisfaction (as a result of higher

job insecurity) could reflect in impaired satisfaction about one's own and his/her partner's satisfaction about family life. Results from multi-group SEM provided strong support for Hypothesis 3, which thus can be accepted. In particular, job satisfaction mediated the effect of job insecurity on family life satisfaction (indirect effects: F = -0.23, M = -0.22) and on partner's life satisfaction (indirect effects: F = -0.13, M = -0.23).

As for the exploration of gender role, no differences have been found in this study, which indicated similar patterns for women and men in the spillover and crossover dynamics investigated. Contrary to theories that suggested that women are more likely to experience demands from the family domain spilling over their work role, while for men the opposite situation is more likely (i.e., work domain spilling over the family domain) (Pleck, 1977), our findings contribute to that literature that highlights a greater similarity in the interaction between work and family among genders (Naldini, 2007). Despite some differences still exist, they are decreasing probably because of changes that are involving how men and women perceive their family and work roles, as well as the degree in which these roles are central to their identity. Nowadays, work is considered a central part of their identity also for women, whereas men are more involved in family issues, which are less a women's prerogative.

Limitations and Future Studies

A series of limitations need to be acknowledged. First, since a cross-sectional design was used, causality between variables cannot be established (Podsakoff et al., 2012). Moreover, being that only self-report questionnaires were used, common method bias may have partly inflated our results (Conway, 2002). Future studies should recur to longitudinal or diary approaches in order to examine the causal relationship between variables over time, considering also other-reported ratings (such as colleagues or supervisors for the workplace domain).

A second limitation is the use of the convenience sampling procedure that limits results' generalizability. Despite the sample was a heterogeneous one, the majority of participants had at least one child and a high educational level; this limits the chance to generalize findings to other groups. Moreover, the study involved inter-gender couples; therefore, results are not generalizable to same-gender couples. As regards the procedure, instructions clearly requested each partner to fill out the questionnaire separately; nevertheless, we did not have control whether partners really filled out the questionnaires alone without comparing answers.

Finally, future studies should further examine the dynamics intertwining perceived job insecurity and family life satisfaction of both partners, through the mediation of job satisfaction, considering also buffer effects; particularly, the role of personal resources, such as core self-evaluations, psychological capital, Big Five dimensions, or generic coping strategies, job crafting and employability could be investigated (Silla et al., 2009; Ingusci et al., 2016; Mauno et al., 2017). Moreover, from an opposite point of view, future research should also investigate the crossover of family stressors to the work domain, since family stressors experienced by one individual might be transmitted to the job-related well-being and behavior of his/her partner (Mauno and Kinnunen, 1999b).

CONCLUSION AND PRACTICAL IMPLICATIONS

The present study may contribute to literature mainly for three reasons: (1) it highlighted a spillover effect of job insecurity on the family domain; (2) it found this effect for both the individual and his/her partner confirming a crossover effect; (3) in a working environment where stable jobs are becoming progressively less frequent than temporary ones (Allvin et al., 2013), it confirmed the need to investigate effects of job insecurity also for those workers with permanent contract.

Interventions at the level of Human Resources policies and practices should develop the necessary mechanisms to reduce the perception of job insecurity, considering that helping employees to decrease or tolerate job insecurity may improve their job satisfaction and have certain benefits also for their families. Job insecurity is often increased by the lack of clear information about what workers can expect in their near future (Abildgaard et al., 2017); therefore, organizations may improve their communication system and guarantee clear, objective and timely information, and be available to answer to any requests for clarification about future prospects of both the company and employees (Robinson and Morrison, 2000; Sora and Höge, 2014). Moreover, in case of organizational restructuring or change, which are prevalent today, authors suggested honest, open, and timely communication (Mauno et al., 2017) and a proactive

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approach with high level of employees' involvement and participative decision making (Abildgaard et al., 2017) in order to outbalance perception of job insecurity.

Job insecurity issue may be addressed also at the individual level. Particularly, career practitioners may offer counseling and coaching interventions in order to strength workers' ability to deal with occupational changes, also improving their employability. In addition, life-designing interventions could support individuals in developing adaptive and flexible responses to possible occupational transitions and changing tasks (Savickas, 2012).

Knowledge on crossover between partners may also be useful for both individuals and organizations (Bakker et al., 2005). The former may get a better understanding about their own and their partners' attitudes and feelings, information that could be used to address potential needs of the couples. The former may use the knowledge on crossover in order to foster working conditions able to enhance job satisfaction, positive experiences at work and, as a consequence, at home. Furthermore, interventions to develop employees' coping strategies could be also recommendable in order to provide employees with adequate tools for dealing with the job insecurity experience (Sora and Höge, 2014). Particularly, psychological detachment after work, which has been indicated a good recovery strategy for work-family balance (Derks and Bakker, 2014) and well-being (Meijman and Mulder, 1998; Sonnentag and Fritz, 2007), could be effective against job insecurity (Kinnunen et al., 2010) and may be fostered by engaging in positive activities with family during off-job time.

AUTHOR CONTRIBUTIONS

FE, MM, ALP, PS, and CG made a contribution to the present study. ALP and CG designed the research and collected the data. FE and MM carried out data analysis and interpretation. FE, MM, ALP, and CG wrote the manuscript receiving substantial input from PS. All authors approved the final version of the manuscript for submission and agreed to be accountable for all aspects of the work.

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Gender Inequality in Household Chores and Work-Family Conflict

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The fact that the permeability between family and work scopes produces work-family conflict (WFC) is well established. As such, this research aims to check whether the unequal involvement in household chores between men and women is associated with increased WFC in women and men, interpreting the results also from the knowledge that arise from gender studies. A correlational study was carried out by means a questionnaire applied to 515 subjects (63% men) of two independent samples of Spanish men and women without emotional relationship, who lived with their heterosexual partner. As expected, results firstly show unequal involvement in household chores by women and men as it is higher in women that in men, and the perception of partner involvement is lower in women that in men. Secondly, those unequal involvements relate differently to men and women on different ways of work-family interaction. They do not increase WFC in women comparing to men, although there are tangentially significant differences in work conflict (WC) and statistically significant in family conflict (FC). However, perception of partner involvement on household chores increases WFC both in men and in women but not WC nor FC. Nevertheless, increase on marital conflict (MC) by domestic tasks neither affect in a significant way WFC in women nor in men, but increase WC in both women and men and FC only in women. Results also confirm that subject involvement on household chores is not a significant predictor of WFC in women nor in men, and that MC by domestic tasks is a statistically significant predictor in women of WFC and FC, but not in men. Thus, results show that traditional gender roles still affect the way men and women manage the work and family interaction, although the increased WFC due to involvement in housework is not exclusive to women, but also occurs in men. Personal and institutional recommendations are made on the basis of these results to cope with these conflicts.

Keywords: gender inequality, work-family conflict, households, organizations, Gen Xers

INTRODUCTION

Occupational health psychology promotes labor risk prevention intervening both on the organization and on the person, but also on work-family interface. It seeks the goodness-of-fit among these dimensions in order to reduce psychosocial risks on occupational health and concurrently to improve organizational efficacy. The effect of psychosocial stressors at work does not remain within the working sphere as it extends also to personal life. This permeability between family and work scopes has produced work-family conflict (WFC) to be one of the psychosocial

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risks receiving more attention during the past years (Eby et al., 2005; Ammons and Kelly, 2015; French et al., 2017; Lapierre et al., 2017; Wayne et al., 2017; Carvalho et al., 2018). WFC negatively affects both health and general life such as work performance and work satisfaction within the organizational context, but it also increases conflict rates and decreases family satisfaction. From this perspective, and within a context of a more technological and digitalized society, gender equality at work is a matter of paramount importance, which must start with a gender equality at home. The aim of this study is to check whether the unequal involvement in household chores between men and women is associated with increased WFC in women, and explain it in terms integrating the knowledge of gender studies.

Work-Home Conflict and Gender

Individuals may experience conflict between their work and home roles due to limited time, high levels of stress, and competing behavioral expectations (Greenhaus and Beutell, 1985). Although most of the work-home research has focused on how work variables affect home from the point of view of the conflict between the two spheres (Major and Cleveland, 2005), organizational psychology also begins to study how family variables affect job performance and satisfaction.

In the psychosocial scientific literature, there is a wide tradition on the work and home interface studies (i.e., Kopelmanś et al., 1983; Edwards and Rothbard, 2000; Pitt-Catsouphes et al., 2006; Mills, 2015; Paulin et al., 2017). Two primary perspectives have been offered in this literature based on the incompatibility between individuals' work and home domains (Michel and Hargis, 2008). One perspective focuses on the mechanisms that generate conflict between both domains. The other perspective focuses on the segmentation mechanisms between the work and the family domains. In this study, we adopt the conflict model in examining the influence of home roles (differential involvement of men and women on household chores), on work roles.

Some research has shown that role pressure in work and home domains generates negative consequences on the other one bidirectionally. So the degree of participation in the home role will create difficulties for participation in work, resulting in the home-work conflict (HWC); conversely, the degree of participation in the work domain can hinder performance on the family role, producing an increase of strain-based, time-based or behavior-based work-home conflict (WHC) (Huang et al., 2004).

Gender roles are essential for understanding the work-home interface. They are shared beliefs that apply to individuals on the basis of their socially identified sex which are the basis of the division of labor in most societies (Wood and Eagly, 2010). In Western societies, the home sphere, and the household chores as part of this sphere, it is assumed to be in charge of women, which could in turn affect more highly the home to work conflict of women than of men. However, to our knowledge, this has not been checked empirically. In this study we will focus on the effect of the relationship between gender and dedication to household chores on WFC among women. Different meta-analyses (Byron, 2005; Eby et al., 2005) have demonstrated the key role played by gender, but how it relates to work-family constructs is still both theoretically and empirically debated (Shockley et al., 2017). Research has found differences in work-home conflict repeatedly, ranging from differences in the experience of WFC to the existence of different work and home backgrounds to women and men. However, most studies in the field of work-home interface do not consider gender as a variable, identifying at most correlates and differential associations for men and women (Martínez and Paterna, 2009). Thus, we posit that work-home interface studies should include gender as key variable due to the influence of gender ideology and gender-role orientation might have on the work-home relationship from a cultural point of view.

From a cultural and discursive perspective (Gerstel and Sarkisian, 2006), gender ideology, defined as beliefs and values maintained about what is right for men and women, determines the patterns by which a particular society judges or evaluates the proper conduct of a man or a woman.

This gender ideology is also reflected in the social discourse, as frequently the couple recreates the dominant social discourse in which is referred the essential characteristics in which men and women differ ignoring the sociopolitical context. This discourse states that the differences between men and women in relation to home and work are the result of personal choice, that there are differences in innate abilities of men and women for household chores and work outside the home, and that these differences guide the choice for certain jobs and even that preference for home toward work is a free choice in the case of women (Martínez and Paterna, 2009; Kuo et al., 2018). Linked to this ideology, the traditional gender role model prescribes that work domain and instrumentality are more important for men than for women, whereas the home domain and expressiveness is more important for women. The traditional gender role model has a biosocial and cultural origin, and was described by Parsons and Bales (1955) in their delineation of instrumental (men) and expressive (women) roles. This model arbitrarily assumes that expressiveness and instrumentality are separate dimensions, and that expressiveness is always women gender role whereas instrumentality is that of men. Work and family interactions are embedded in the broader cultural, institutional and economic context in which individuals reside (Ollier-Malaterre and Foucreault, 2017). Of particular relevance to gender differences in WFC are cultural differences in gender egalitarianism, or belief or attitudes about de equality of the sexes within de culture (House et al., 2004; Lucas-Thompson and Goldberg, 2015).

As Martínez and Paterna (2009) indicate, gender ideology seems to determine the percentage of tasks considered traditionally feminine by members of the couple, such as washing, ironing, shopping, cooking, or cleaning. It also generates a differential meaning about household chores for men and women. Also, recent studies have shown that there is still a division of house chores by gender, depending on the gender role nuclei: instrumentality inside and outside home for men; expressiveness and instrumentality inside home for women (Fernández et al., 2016). All this rationale, leads us to formulate hypothesis 1: H1: There will be a division of household chores between men and women based on traditional gender roles. Women will spend more time than men in traditionally female household chores and men in traditionally male ones.

Both men and women similarly perceive a lack of parity in performing household chores, but perceive greater equality in the care of daughters and sons (Yago and Martínez, 2009). This leads us to propose hypothesis 2:

H2: Women will perceive their partners much less involved in household chores and only focus on household chores traditionally considered masculine. Men will perceive their female partners more involved in traditionally female household chores, especially in those traditionally considered feminine.

Implication in Household Chores and Work-Family Conflict (WFC)

Time required for household chores and caring for the family is one of the most important factors in the conflict coming from the family sphere, especially in families with children. So, the dualincome couples with children tend to have a greater number of conflicts between the partners and a higher level of stress than their counterparts without children (Michel and Hargis, 2008). From this point of view, the gender roles model assumes that the nature of the role demands differs in men and women, and these roles act as moderators of WFC (Barnett et al., 1995).

The highest level of family to work interference in women comes from the different implication of women and men in household chores, including the care of children. This different implication has been proven by various studies and research (Bianchi et al., 2000; Korabik, 2015; Borelli et al., 2017) and still persists in society as has been found in different surveys (Organization for Economic Cooperation and Development [OECD], 2014; Eurobarometer, 2015). In concrete, this model keeps very persistent in Spain, where women spend almost double the amount of time on unpaid work as men National Institute of Statistics (INE), 2018). This time is spent on activities such as caring for children (38 h a week women versus 23 men) or family members (20 h women versus 14 men) or household chores (20 h women versus 11 men). So although women have begun to strongly form part of the labor force and to spend more time with their children taking care of them, they neither assume a decrease in their salary as much as women do for work interruptions due to family issues nor stay at home to take care of their children (Gerstel and Sarkisian, 2006). Most men still maintain full involvement in their work because their feminine couple assume the responsibility for caring their children. Thus, we can deduce that women will suffer more by the interference of the family at work, because their greater involvement in the family will can subtract them time, strength and dedication to their work; however, men will suffer more by the interference of work in the family. In fact, a high implication in the family sphere has been shown linked to a higher family-to-work interference only in women (Hammer et al., 1997).

Moreover, men do not feel an obligation when they are involved in the home as women do, as they perceive it more as a hobby or a free choice. Also, those house chores that keep the home every day (shopping, cooking, washing dishes, washing clothes, and cleaning the house) are considered feminine, while those considered male or neutral tasks (paying bills, taking care of the car or home maintenance) do not involve daily devotion. Some cultural interpretation argue that women are more involved in house chores and do not want to fully share because of the belief that this is central to their gender identity and a source of power in the family, whereas husbands, whose gender identity has traditionally been marked by paid work, would not object to do less household chores than their wives (Martínez and Paterna, 2009).

Besides, a crossover effect must be included: to the greater involvement of women in the family and household chores must be added the greatest involvement of men in the workplace (Bakker et al., 2008), which supposes an increased family burden for women. As husbands are not available for household chores, wives suffer overload by household chores and emotional demands related to children caregiving, which will increase still more women stress and family to work interference (Frone, 2003).

In short, the lesser involvement of men in household chores and greater transfer of stress from work to family causes increased domestic workload on women and marital conflict (MC), thus increasing the tension transfer from family environment to worksite in women. All this rationale, leads us to formulate hypothesis 3:

H3: The greater involvement of women in household chores and the perception of the lesser involvement of their men partners is linked to an increased family to work conflict (FWC) in women.

Marital Conflict and Household Chores

This greater involvement of women in household chorus and increased family to work conflict may lead to an increase of MC. In this line, Pittman et al. (1996) provide evidence for this idea by showing that the contribution of women to household chores is higher on the days when their husbands express higher levels of work stress; in these cases, women must subtract energy and time from work due to their husbands' increased work stress. However, men do not adjust their contribution to household chores when their wives bring their work stress home. Research on family processes shows that stressed couples show a high level of negative interactions and conflicts. Thus, increased stress associated with WFC and its correlative frustration, leads individuals to initiate or exacerbate their sequence of negative interaction with the partner (Westman and Etzion, 2005; Huffman et al., 2017). This negative interaction may be understood as product both of social undermining which consist in behaviors that involve rejection, criticism and negative attitude toward the couple (Vinokur and Van Ryn, 1993) and hostile marital interactions (Matthews et al., 1996), which aims to express hostility toward the partner or MCs.

Focusing on the conflict between the partners and their relationship with household chores, it has shown how increasing distress and frustration generated by the WFC tends to impair the interaction with the partner (Westman and Etzion, 2005). This can result in increased tension between the partners due
to the transfer of stress from work to family by men and their lesser involvement in household chores, which would generate an increase in MC and, therefore, an increase of conflict in the family especially in women due to unequal distribution of household chores. This leads us to propose hypothesis 4:

H4: The conflict between the partners due to unequal distribution of household chores generates an increase of more family to work conflict (FWC) in women than in men because of their greater involvement at home.

MATERIALS AND METHODS

Participants and Procedure

A correlational study was carried out by means of a questionnaire applied by professional surveyors during 2014. They selected a segmented sample of men and women working in public and private organizations from different productive sectors (teaching, services, and manufacturing sectors). The final sample consisted of 515 subjects, mostly (63%) were men, with an average age of 40 years old; all of them were married or living with a heterosexual partner, and they had children. Samples of men and women were independent from each other, without emotional/marital relationship between them. Regarding the organizational setting, 21% were working in public organizations and 79% in private ones.

Measures

- Work-Family Conflict (WFC), Family Conflict (FC), and Work Conflict (WC) based on time and strain were measured through the Spanish version (Martínez-Pérez and Osca, 2001) of the Kopelmanś et al. (1983) scale. This scale applies the role conflict concept of Kahn et al. (1964) to study work and family scopes first separately and then together, based on the idea that WC and FC might act as antecedents of WFC. Each of these subscales consists of eight items on a Likert scale ranging from 1 (total disagree) to 5 (total agree). An example of a WFC subscale item is My work timetable is often incompatible with my family life; an example of an item from the FC subscale is My family dislikes doing some activities I would like to do; and an example of an item from the WF subscale is At work I can't be myself, or be the way I really am.
- Subject involvement with household chores scale. This is a 10-item self-constructed scale that measures subjects' self-perception about different tasks related to household chores, family management, and child care and education. Subjects respond to each item using a dichotomous yes/no format. The final scale score is the total number of family tasks they do. Examples of these items are *Do you take the children to school every day*? and *Do you clean your house in your everyday life*? This scale only includes the most common household chores of a standard Spanish couple with children of school age, not including others that may be less frequent in this culture (i.e., cutting the grass).
- *Partner involvement in household chores perception scale.* This self-constructed scale is similar to the one above, but

in this case it measures the subjects' perception of their partners' involvement in all the household chores. Subjects respond to each item using a dichotomous yes/no format about their perception of their partner's involvement in different family tasks. The final scale score is the total number of tasks they perceive that their partners dedicate to family tasks. An example of these items is *Does your partner take the children to school in everyday life*?

• Marital conflict about household chores was measured with the single question How many times do you and your partner argue about who must do the household chores and when? Subjects respond to this item on a Likert scale ranging from 1 (never) to 5 (every day).

We also measured socio-demographic (sex and age) and sociofamiliar (family status, number of children) variables for the sample description.

Data Analyses

First, we performed skewness and kurtosis analyses to check normality among variables. Second, we calculated internal consistencies (Cronbach's α), descriptive analyses and correlations between conflict scales and subject/partner perceived involvement on household chores scales. Third, we computed Analyses of Variance (ANOVAs) in order to test whether there was any statistically significant difference betweengroup regarding gender for subject's involvement in household chores scale, and subject's perception of partner's involvement in household scale, and Kruskal–Wallis non-parametrical tests for item to item analysis due to its dichotomous level of response (Hypothesis 1 and 2). After that, we computed new ANOVAs and Regression Analyses to check gender, household chores, partner's implication and conflict on WFC, WC, and FC (Hypothesis 3 and 4). All data analyses were carried out using SPSS 21.0.

RESULTS

Table 1 shows skewness and kurtosis statistics. As expected, all scales show values equal or below 0.5 and -0.5 in both or at least at one of them. So we assume a normal distribution of the scores of these scales. However, item by item of subject's and partner's involvement in household chores scales do not follow that normal distribution, due to its dichotomical nature.

Table 2 shows the descriptive analyses and Cronbach's alpha of the variables for both samples. The alpha values meet the criterion of 0.70 (Nunnally and Bernstein, 1994), except in the case of the perception of partner's involvement in household chores, which was above 0.60. As expected, the pattern of correlations shows that WFC, work conflict and FC are positively and significantly related in both samples. However, WFC is more related to conflict at work in women and to conflict in the family in men.

Marital conflict is only highly and positively related to WFC, work conflict and FC in women, but not in men. This could indicate that women assimilate the conflict with the partner into conflicts in the family, i.e., women integrate the couple into the family concept, while men consider them to be different.

TABLE 1 | Skewness and Kurtosis analysis of variables distribution.

	Skewn	ess	Kurtos	is
	Statistics	SE	Statistics	SE
Work-family conflict	-0.02	0.11	-0.27	0.22
Work conflict	-0.20	0.11	-0.50	0.22
Family conflict	0.56	0.11	-0.16	0.22
Marital conflict	0.46	0.11	-0.80	0.22
Involvement on household chores (total mean scale score)				
Subject involvement on household chores	0.79	0.15	0.01	0.30
Perception of partner involvement on household chores	0.76	0.15	0.31	0.30
Subject involvement on household chores (item to item)				
Home shopping	0.92	0.11	-1.16	0.21
Cleaning home	0.38	0.11	-1.87	0.21
Domestic repairing	0.84	0.11	-1.30	0.21
Family management	0.69	0.11	-1.53	0.21
Free time family management	1.62	0.11	0.63	0.21
Take children from home to school	1.14	0.11	-0.71	0.21
Take children from school to home	1.19	0.11	-0.60	0.21
Children caregiving	0.73	0.11	-1.47	0.21
Helping children with homework	1.20	0.11	-0.57	0.21
Playing with children	3.60	0.11	10.85	0.21
Perception of partner involvement on household chores (item	to item)			
Home shopping	2.1	0.11	2.37	0.21
Cleaning home	1.4	0.11	0.02	0.21
Domestic repairing	0.33	0.11	-1.90	0.21
Family management	1.22	0.11	-0.51	0.21
Free time family management	2.66	0.11	5.11	0.21
Take children from home to school	1.57	0.11	0.47	0.21
Take children from school to home	1.49	0.11	0.24	0.21
Child caregiving	1.97	0.11	1.92	0.21
Helping children with homework	2.13	0.11	2.58	0.21
Playing with children	4.43	0.11	17.70	0.21

TABLE 2 Cronbach's alpha, means (*M*), standard deviation (*SD*), and intercorrelations by gender (N = 515).

	Women			Men											
	α	М	SD	1	2	3	4	5	м	SD	1	2	3	4	5
(1) Work-family conflict	0.78	2.1	0.70						2.0	0.70					
(2) Work conflict	0.78	2.7	0.75	0.34**					2.9	0.87	0.28**				
(3) Family conflict	0.76	2.4	0.81	0.26**	0.30**				2.3	0.87	0.33**	0.40**			
(4) Marital conflict	_	2.4	1.3	0.31**	0.21**	0.42**			2.2	1.0	-0.05	0.10	0.03		
(5) Subject involvement on household chores	0.72	4.0	0.15	-0.17*	-0.16	0.09	0.12		1.7	0.12	-0.18**	-0.23**	0.18	0.08	
(6) Perception of partner involvement on household chores	0.62	1.8	0.98	0.14	0.14	0.04	-0.18	-0.49**	2.8	1.5	0.31**	0.02	0.08	-0.10	-0.13

**p < 0.01, *p < 0.05.

Subject's involvement in household chores correlates significant and negatively with WFC in both men and women, but only with work conflict in men. Then, for both men and women, the higher their involvement is in household chores, the lower their WFC; moreover, the higher the work conflict is, the lower the men's involvement in household chores. Finally, the correlation between the subject's and the perception of the partner's involvement in household chores is only highly, significantly and negatively related in women. However, the perception of the partner's involvement in household chores is only highly, significantly and positively related to WFC in men. Thus, women decrease their involvement

in household chores when their male partners increase their involvement; on the other hand, in the case of men, the greater the involvement of the partner (women) in the household chores, the higher the WFC is.

ANOVA results confirm these differences and inequality about men's and women's involvement in household chores. Women's involvement in household chores is more than twice that of men (4.0 and 1.7, respectively; F = 82.60; $p \le 001$). Consistently, women perceive lower involvement of their partner (men) in household chores than men do (1.8 and 2.8, respectively; F = 22.70; $p \le 001$).

Kruskal–Wallis tests also confirm that women are significantly more involved than men in seven of eleven household chores (see **Table 3**). These seven tasks are traditionally considered feminine: home shopping, house cleaning, free-time family management, taking children from home to school and from school to home, children's care, helping children with homework, and playing with them. Men only score higher than women on one task traditionally considered masculine: house repairs. There are no differences in family management. These results confirm Hypothesis 1.

Symmetrically, Kruskal–Wallis tests also show that these results are confirmed by the perception that men and women have of their partner's involvement in household chores: men consider that their partners (women) are mainly involved in traditionally feminine household chores: home shopping, house cleaning, free-time family management, taking children from home to school and school to home, taking care of the children, and helping children with homework, whereas women consider that their partners (men) are involved in typically masculine household chores: house repairs and family management. There are no differences in the perception of playing with the children. On the whole, these results confirm Hypothesis 2.

To test the hypothesis 3 (the effect of the greater involvement of women in household chores and perception of lesser involvement of male partners in the increase in the WFC among women compared to men), and hypothesis 4 (the effect of MC in the increased level of WFC in women relative to men), we performed three separate ANOVAs (**Table 4**), complemented by multiple regression analysis (**Table 5**).

ANOVAs results confirm partially hypothesis 3 since greater involvement of women in household chores do not generate a statistically significant increase in WFC comparing to men. There are gender differences in the extent to which this differential involvement in domestic tasks affects FC and (in a tangentially significant way) WC that point to a gender effect. On one hand, in the case of women, when their involvement in household chores is high, their FC and WC levels are similar; however, when their involvement is low, FC decreases and WC increases. On the other hand, in the case of men, the WC is always greater than the FC regardless of their degree of involvement in household chores. That is, in the case of women when there is a lower involvement in household chores the FC is also lower, but increases the WC.

There are no gender differences regarding the WFC according to the perception of their partners: it increases significantly in both men and women when the involvement in household chores of the partner is high or low, being always higher among women than among men regardless of the involvement of the partner with household chores is high or low, which completely rejects hypothesis 3.

It is noteworthy that the effect of the perception of involvement of the partner in household chores by gender does not affect WC or FC in a gender-specific way, but it affects the WFC globally statistically significantly, although these differences were not gender effects manifest. This indicates that the WFC is affected by the involvement of the partner in household chores, but not for the involvement of the subject in them, which segmentally would affect the FC and WC.

Regarding hypothesis 4, the increase of conflict by domestic tasks among the partners does not affect the WFC in a statistically significant way in women nor in men, but it does on WC and FC: when MC is high WC increase both in women and men, but FC increase only in women.

As a confirmation of this results, regarding the relationship between the subject's and partner's involvement in household chores and the different conflicts, regression analyses (see **Table 5**) show, first, that subject involvement on household chores does not predict WFC in women nor men, but only WC in men in a negative way. Moreover, the perception of the partner's involvement in household chores and MC is a predictor of women's WC and men's WFC. Again these results do not confirm hypothesis 3.

Nevertheless, regarding hypothesis 4, as a difference of the ANOVA results, the increase of conflict by domestic tasks among the partners predict the WFC, WC, and FC in a statistically significant way in women but not in men. So results show that MC in women predicts WFC. This result fully support hypothesis 4. In addition to this, the MC is the only variable of those studied that affects the FC in the case of women, whereas involvement in housework does in the case of men, supporting also hypothesis 4.

In the case of men, the perception of the partner's (women) involvement in household chores is a predictor of WFC. Results also show that men's involvement in household chores is a negative statistically significant predictor FC as their beta coefficient is negative. That is, it seems that when the involvement of men in housework increases, the conflict in the family decreases; but when the perception of involvement of their female partners is high, it increases in them the WFC. However, MC does not predict this FC in men, so the FC does not increase by the conflict with the partner for housework but by their low involvement in them.

DISCUSSION

Home-work interaction has been the focus of a wide range of scientific literature during the past decades. It is generally accepted that both the family and the work scope affect each other in a different way. However, it was not studied in which degree the own and the partner's involvement in family issues affect different kind of work-home conflict from a gender point of view. Thus, the aim of this study was to check whether the unequal involvement in household chores between men **TABLE 3** | Kruskal–Wallis test of subject involvement on household chores and perception of partner involvement on household chores by gender (item to item) (N = 515).

	Wo	men			Men	
	М	SD	М	SD	Chi-square	GL
Subject involvement on household cho	ores (item to item)					
Home shopping	0.40	0.49	0.13	0.33	39.078***	1
Cleaning home	0.61	0.49	0.05	0.22	153.846***	1
Domestic repairing	0.10	0.30	0.67	0.47	180.924***	1
Family management	0.31	0.47	0.38	0.49	2.455	1
Free time family management	0.22	0.41	0.13	0.33	6.725**	1
Take children from home to school	0.32	0.47	0.13	0.34	22.959***	1
Take children from school to home	0.34	0.47	0.08	0.28	41.483***	1
Children caregiving	0.50	0.50	0.04	0.20	109.332***	1
Helping children with homework	0.35	0.48	0.07	0.25	49.258***	1
Playing with children	0.10	0.28	0.03	0.16	6.923**	1
Perception of partner involvement on I	nousehold chores (i	item to item)				
Home shopping	0.08	0.28	0.24	0.43	24.355***	1
Cleaning home	0.05	0.22	0.50	0.50	141.873***	1
Domestic repairing	0.64	0.48	0.03	0.16	187.264***	1
Family management	0.30	0.46	0.14	0.35	15.260***	1
Free time family management	0.07	0.26	0.15	0.36	7.49**	1
Take children from home to school	0.12	0.33	0.30	0.46	24.446***	1
Take children from school to home	0.10	0.31	0.37	0.48	51.522***	1
Child caregiving	0.05	0.22	0.32	0.47	66.873***	1
Helping children with homework	0.08	0.28	0.23	0.42	21.669***	1
Playing with children	0.04	0.20	0.04	0.20	0.000	1

The highest values, when significant, appear in bold. *** $p \le 001$, ** $p \le 01$.

and women is associated with increased WFC in women, and explain it in terms integrating the knowledge of gender studies.

First, results confirm inequality because it indicates that the involvement of women in household chores is, on average, more than double the involvement of their male partners. In addition, men are more involved in traditionally masculine household chores (i.e., home repairs and family management), and women are more involved in traditionally feminine chores (i.e., childcare or shopping). Symmetrically, the subject's perception of the partner implication confirms this difference: women perception of their men partner involvement in household chores much less than men perception of their woman partner involvement. Therefore, hypotheses 1 and 2 of our study are confirmed.

Secondly, we checked if those unequal involvements relate differently to men and women on different ways of WF interaction. We found that the greater involvement of women in household chores does not affect the level of WFC differentially in men and women, so hypothesis 3 is not met. This gender inequality in the distribution of household chores and child care does not imply a higher level of WFC in women compared to men. Rather the opposite happens: when more involved are both men and women in household chores, lower is the WFC. Although the hypothesis 3 is not corroborated, it should be noted that when the involvement of women in household chores is high, their level of FC increases; when men's involvement increases, their level of WC increases, which in some way supports hypothesis 3. That is, the high involvement in household chores has negative consequences in the family sphere for women and in the workplace for men, possibly because of the greater respective importance that women give to family and men to work, as it poses the traditional gender role model.

In addition to this, results show that when the involvement of women in household chores is high, their levels of WC and FC are similar, i.e., it equally affects both areas. When this involvement is low, FC is lower than the WC. However, among men, WC is always greater than the WC regardless of their involvement in household chores. Furthermore, when the conflict with the partner for household chores is high, women report a higher FC but not a higher WC, whereas in man this conflict does not affect neither the FC nor the WC.

However, in the case of women, MC affects conflict related WC and FC and WFC, so hypothesis 4 is fully corroborated. This is very interesting because although hypothesis 3 is not met, however, the conflict with the partner due to this inequality in the distribution of housework seems to generate this WFC. That is, it would not be the greatest involvement in household chores itself that might cause and increase WFC in women, but the conflict with their partner which might produce it.

These results may be related to the absence of perception of injustice in the relationships regarding to inequality in the distribution of domestic and family responsibilities between men and women, so that in many cases women neither do perceive **TABLE 4** Analysis of variance of work-family conflict, work conflict and family conflict by subject involvement on household chores and subject perception of partner involvement on household chores and marital conflict by gender (*N* = 515).

	Gender	Work co	onflict	Family co	onflict	Work-family conflict	
		М	SD	М	SD	М	SD
Subject involvement on	household chores						
High	Women	2.7	0.98	2.8	1.0	2.2	0.85
	Men	3.9	0.27	3.1	0.85	2.0	0.87
_OW	Women	2.9	0.69	2.6	0.80	2.4	0.72
	Men	3.2	0.90	2.1	0.92	2.3	0.71
	F	2.516+	3.552*	1.204			
Perception of partner inv	volvement on household che	ores					
High	Women	2.9	0.35	2.9	1.1	2.7	0.53
	Men	3.8	0.53	2.6	0.92	2.4	0.66
_OW	Women	2.6	0.84	2.5	0.90	2.0	0.77
	Men	3.3	0.93	2.6	0.95	1.8	0.68
	F	2.330	0.690	8.458***			
Varital conflict							
High	Women	2.9	0.77	3.0	0.80	2.3	0.74
	Men	3.8	0.85	2.6	0.71	2.1	0.54
_OW	Women	2.7	0.76	2.4	0.70	2.3	0.67
	Men	3.4	0.89	2.6	1.0	2.2	0.78
	F	3.273**	7.442**	0.533			

*** $p \le 0.001$, ** $p \le 0.01$, * $p \le 0.05$, + $p \le 0.10$.

TABLE 5 Regression analyses predicting work conflict, family conflict and work-family conflict (dependent variables) in women and men by involvement on household chores, subject perception of partner involvement on household chores and level of marital conflict (independent variables).

	Work Conflict		Family Conflict		Work-Family Conflict	
	Women	Men	Women	Men	Women	Men
	β	β	β	β	β	β
Subject involvement on household chores	0.09	0.15	-0.09	-0.20**	-0.10	-0.11
Perception of partner involvement on household chores	0.12*	0.09	0.08	0.01	0.08	0.23*
Marital conflict	0.42^{**} $R^2 = 0.18^{**}$	0.02 <i>R</i> ² = 01	0.22^{**} $R^2 = 0.06^{**}$	0.11 <i>R</i> ² = 0.02	0.26^* $R^2 = 0.07^{**}$	-0.03 $R^2 = 0.06^*$

**p < 0.01, *p < 0.05. Standardized beta coefficients (N = 515).

injustice in their relationships nor are dissatisfied. Following the review of Yago and Martínez (2009), it has repeatedly shown that the perception of an unequal distribution of housework between men and women does not necessarily lead to a perception of unfairness. This perception of justice on the division of domestic work and the ideology of traditional gender that supports it explain why gender inequalities remain in the family sphere mediating the relationship between the perception of injustice and perceived quality the relationship. In fact, when women are more socially and emotionally independent from their partners, they are more likely to consider unfair the inequality in the distribution of household chores.

The perception of injustice is a mediating factor between an unequal distribution of domestic work and the perceived quality of the relationship; the relationship may be perceived as satisfactory although the sharing of responsibilities is not equal, if it is not perceived unfair (Yago and Martínez, 2009). However, these results were mediated by gender ideology so this inequal distribution do not generate distress in the more traditional women whereas it does in women with an equal gender ideology.

In this line a study of Ogolsky et al. (2014) shows that the discrepancies at a cognitive level between men and women with regard to equality in household chores affects the quality of the relationship in the sphere of the couple in greater way to women than in men. However, when this inequality is manifested in a behavioral level, it does not seem to affect the quality of the relationship in women. That is, the real inequality does not affect the quality of the relationship in women, but it does at the cognitive level.

The involvement of the couple in household chores is related to an increased WFC, although it does not affect the WC or the FC separately by gender, but affects the WFC globally: it increases similarly in men and women when the couple's involvement is high. This indicates that the WFC is affected by the involvement of the partner in household chores, but not for the involvement of the subject in them, which would affect to a segmented FC and WC. These results do not prove the hypothesis 3, but can indicate that the model of traditional gender roles does not serve to satisfactorily explain the influence of the division of household tasks and the effect of gender inequality in the WFC, as both in the case of men and women more involved in household chores generate that their female and male partners feel an increased WFC.

Men's and women's perceptions of their partners' involvement in household chores contribute significantly to the perception of WFC; their own involvement also contributes significantly to FC, but negatively, which means that the more involved their partner is in the household chores, the greater their WFC.

Although our study seems to show that gender is an important variable in the involvement in household chores, and that gender inequality and the model of traditional gender roles is still valid in our western society, it also seems to suggest that increased WFC due to a high involvement in household chores is not exclusive to men but also occurs in women. This could be an indicator of a change in the model of traditional gender roles that began in the 80s, where new generations equate the importance of work and family spheres in the cases of both men and women.

In fact, results of some recent research (Shockley et al., 2017) indicate that men and women appear to be more similar than different in their WFC experiences; gender differences in WFC appear to generally be small, regardless of which specific subgroups are examined, and when there is meaningful variation in the magnitude of gender differences in WFC the key factors that determine this variation is currently not well understood.

From this point of view, several alternative models other than the conflict perspective might explain these results. This tis the case of models such as the synergy between work and family, positive balance, work-family facilitation, or work-family enrichment (Beutell and Wittig-Berman, 2008; Lapierre et al., 2017), which would better understand the effect of gender on the individual's relationship between work and family.

The use of this new model integrative approach is justified by the social changes that characterize the values of the new generations, Gen Xers (born between 80 and 2000 population). They seem to consider that both work and family are equally important in their life, and try to find the most appropriate way to reconcile both aspects (Beutell and Wittig-Berman, 2008), giving less importance to presentism at work and being supporters of flexibility. This understanding of the work is based, in addition to the facilities provided the digital revolution and technologies for work, making workers less dependent of a particular physical space and a fixed schedule to perform their work, together with the values of personal autonomy and responsibility that are shared by this new generation. This facilitates that people can now have more time to devote to other areas of their life within the scope of non-work such as family or leisure, with a progressively greater importance in their social identity.

From this point of view, research on work and family interaction has evolved from the study of isolated variables within the conflict and segmentation models toward more complex models that try to understand from the boundary theory, and the models of facilitation and synergy, how transitions are made from one scope to the other, and how they integrate with each other. They do not consider them as separate domains but as something unitary and unbreakable within the life of people. In the same way, an approach that takes into account the gender ideology is progressively being imposed, since it is inseparable from the relationship between work and the family from a cultural point of view.

Study Limitations

This study focuses on the effect of different kinds of conflict related to the home and work settings. However, due the lack of clear differences in results regarding WFC in men and women when partners' implication in household chorus is high, it would be necessary to include facilitation and synergy models that would make it easier to understand the work-family relationship in all its facets, including the role played by gender and gender inequality. Research on the positive reciprocal effects of work and family is fundamental to understanding the complexity of the work-family interaction.

In addition, this study has other methodological limitations. First, we studied the effect of gender and involvement in household chores on the work-family relationship using independent samples of men and women, without collecting data from their partners. However, we analyzed the perceptions of these people (men and women) about their own involvement and their partner's involvement, and this perception was shown to be significant. Nevertheless, it would be interesting to include the whole couple as a unit in future studies to increase the reliability of the proposed model.

Second, this study is based only on quantitative analyses. It would be interesting to support these results with qualitative studies (through interviews or focus groups) that would help us to interpret the analyses of the results framed in both the traditional gender roles and cross-effect theories, but also in people's interpretations, increasing the model's validity. They would also allow us to understand the gender role in the direction of the cross-effects of work stress from men to women, or from women to men, as our results only partially support this crosseffect, contrary to previous results (Bakker et al., 2008). In any case, the quantitative methodology used in this study allowed us to detect, in a relatively simple way, the existence of changes in the relationship between gender and the traditional division of roles as a first step.

Also, the household chores used are those that might be generalized to mostly couples with children at school age. However, we have not considered specific situations (i.e., living in their house, living in a large or in a small town, grandparents support in caring children, age of the children) that might have help us to better describe the sample and interpret our results. Future studies could include this kind of sociodemographic variables.

In addition, may be other methodological limitations that may have conditioned the results. One of them is the imbalance in the percentage of men (63%) regarding women (37%). However, this limitation is assumable given the correlational nature of the study and the breadth of the sample. Finally, the reliably of the involvement of the partner in household chores is not too high (Cronbach's alpha 0.62) which could raise doubts about its effect as an independent variable in the WFC in men and WC among women. Nevertheless, it met widely accepted criteria to assume its reliably (over 0.60).

Practical Implications

These results raise a number of practical implications for equality between men and women in terms of gender issues in the effective management of organizations in order to establish social integration and equality policies in both family and work settings (Wharton, 2015). The management of work and working time within organizations must take into account the social changes occurring in gender roles, and start to consider that both men and women gradually tend to give the same importance to their work and family environments (Kuo et al., 2018), with the accompanying increase in WFC and stress in both partners. Thus, although in many cases traditional gender roles are still valid (the family sphere continues to be more important for women than for men), it is necessary to consider the vision and specific attitudes that both workers have about their involvement in work and family, and establish organizational policies that help to reconcile both spheres in both genders (Lucas-Thompson and Goldberg, 2015).

Moreover, public and social institutions specializing in family matters should incorporate these progressive changes in traditional gender roles into their strategies, in order to facilitate the homogenization of women's and men's roles within the family and workplace. For instance, they can design family counseling and couple training campaigns that help them to discover how to best coordinate their dedication to the family in a way that will reduce stress and conflict, and how to minimize WFC, even translating it into work-family synergy.

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But also organizations might participate in this social change. They might contribute for instance through the inclusion of family friendly politics to support the search for home-work balance of their workers, men and women (Sprung et al., 2015; Lin et al., 2017; Matias et al., 2017). It would mean a way to improve the quality of working life of their workers and, at the same time, a return of investment (ROI) both for the organization (Dowd et al., 2017) and for our, hopefully, every time more equitable society.

ETHICS STATEMENT

All participants provided written informed consents before to complete the survey, in accordance with the Declaration of Helsinki, and researchers guaranteed the anonymity of data. This study was approved by the institutional review board of the Faculty of Labour Relations and Social Work of the University of Basque Country.

AUTHOR CONTRIBUTIONS

JC has been the director of review of the scientific literature, theoretical justification, methodology design, data collection, statistical analyses, and results description. EC has coordinated the improvement of the whole design and redaction paper, including conclusions and research limitations.

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Well-Being, More Than a Dream: Women Constructing Metaphors of Strength

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Research on gender inequalities in well-being, attribute lower levels of wellness in women to the burden of multiple role demands, particularly during midlife. Using mostly quantitative measures of subjective well-being (SWB), such studies tend to narrow the concept of well-being and overlook the value of in-depth, context-specific inquiry. Work-life balance is also a consistent causative narrative in studies on women's well-being. Yet, such a narrative frequently emphasizes individual agency in a seemingly unattainable guest, implying an anomaly on how women then actually manage to sustain their well-being. The present study therefore explored the work-life experiences of women in their midlife. The aim was to reach a deeper understanding of the psycho-social dynamics at play in sustaining a psychologically-well self. Meta-theoretically the study built on non-traditional and gendered career models that augment female employees' unique career needs. From a socioanalytic stance, this study investigated secondary data gathered from focus groups, which were based on the socioanalytic method of social dream drawing. The data originated from four sessions of social dream drawings, in which the researcher as participant-observer, investigated work-life experiences of seven women. The gathered information was managed through Atlas.ti and processed through phenomenological hermeneutic analysis. The findings contribute to the discourse on women and well-being and give insight into the application of a unique socioanalytic methodology to research in this field from a gendered perspective. Results were analyzed by developing metaphors from the data. These metaphors reflect women's well-being as they present three unique career needs, namely challenge, balance, and authenticity, during their midlife career stage. Findings show how women's projective identification with outdated gender role norms may perpetuate a gendered notion of work-life balance, which consistently challenges their well-being. Projective identifications are evident in introjected feelings of self-doubt, self-stereotyping, and in the tension between female employees' personal and social identities. The study ultimately points to well-being as a dynamic phenomenon, which women sustain by engaging both positive and negative experiences and through identity tasks such as self-awareness, self-authorisation, self-regard, and authentic self-expression. These findings highlight the importance of creating self-reflective space in organizations to facilitate women's psychological well-being.

Keywords: women, eudaimonic well-being, psychological well-being, work-life balance, women career models, socioanalytic, social dream drawing, phenomenological hermeneutic analysis

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INTRODUCTION

Documented evidence confirms the importance of employee well-being to deliver positive work and organizational outcomes (Harter et al., 2003; Bloom et al., 2013; Colling, 2013; Cooper and Bevan, 2014). This evidence makes the study and management of employee well-being imperative (Sieberhagen et al., 2011; Bloom et al., 2016). Despite equivocal findings on gender variations in well-being (Ferguson and Gunnell, 2016), studies show concern that women seem to be displaying lower levels of well-being than men (Dreger et al., 2016). Women, particularly during midlife, seem to face challenges to their well-being, as is evident from a recent multilevel analysis of suicide trends peaking, and overall life satisfaction decreasing for female employees during their middle age (Case and Deaton, 2015).

Most studies pointing to potential gender differences rely heavily on measures of subjective well-being (SWB) and report on statistical trends rather than provide in-depth context to explain these trends. Well-being in this regard has been assessed predominantly from Diener's (1984) perspective of hedonic or SWB, indicating a self-evaluation of the degree to which an individual experiences high positive affect, low negative affect and a high degree of life satisfaction or happiness (Deci and Ryan, 2008). This perspective, namely acting to maximize pleasure or to avoid displeasure, does not involve the pursuit of meaningful purposes in life (Ferguson and Gunnell, 2016) such as those foundational to perspectives of eudaimonic or psychological well-being (PWB) (Waterman, 2007; Deci and Ryan, 2008).

According to the eudaimonic perspective, well-being should optimize individuals' true potential and purpose in life, helping them experience their existence as meaningful, worthy, and valuable (Ferguson and Gunnell, 2016). Eudaimonic wellbeing presupposes self-realization and authentic self-expression (Waterman, 1993). PWB is related to eudaimonic well-being and incorporates flourishing, personal growth, environmental mastery, autonomy, positive interrelationships, life purpose and meaning as well as self-acceptance (Ryff, 1989). As such, eudaimonic and PWB perspectives acknowledge people's potential for wellness by striving for meaning and purpose, despite encountering difficulties and challenges in life. A recent study shows a decline in well-being as people age, but points out that orientation toward eudaimonic well-being, in which life purpose is maintained, can hold health benefits for older adults (Ryff, 2017).

When positive psychology was established as a new field, its criticism of psychoanalytic perspectives (Seligman, 2003) led to conceptualizing dualistic categories of well-being and ill-being (Linley and Joseph, 2004). In this regard, positive psychology theoretically rejected the negative category of human experience and negated the use of depth-psychology principles as a constructive way to study human behavior (Cilliers and May, 2010). In the present study, principles of depth psychology, as expounded in the psychoanalytic¹ tradition, are regarded as relevant and crucial for a broader understanding of wellbeing. Well-being from a psychoanalytic stance acknowledges the relatedness between positive and negative human experience (Cilliers and May, 2010) and understands well-being as the manifested phenomenon of behavioral dynamics at play above and below the surface of consciousness (Clarke and Hoggett, 2009). Eudaimonic and PWB conceptualisations of well-being are therefore relevant as it provides scope for looking at interrelated positive and negative experience as fundamental to understand optimal behavior such as flourishing and personal growth.

Work-life balance is associated strongly with employee wellbeing (Gröpel and Kuhl, 2009; Lyness and Judiesch, 2014; Nzonzo, 2017) and considered highly important for women's well-being across their career lifespan. Studies showing women reporting lower levels of well-being, attribute this to their weaker socio-economic and power position in life and at work and to the burden of multiple role demands (Dreger et al., 2016). Thus, work-life balance can be considered as a consistent dynamic in women's attempts to maintain well-being throughout their career (Whitehead and Kotze, 2003; Poms et al., 2016). Women's empowerment and hierarchical representation in the work context is a global drive, yet traditional norms for gender roles continue to regard women as primarily responsible for domestic roles. Consequently, female employees are expected to devote less time to work than their male counterparts (Wattis et al., 2013; Sullivan, 2015; Toffoletti and Starr, 2016). As a result, women face unique challenges in work-life balance as their career progresses (Potgieter and Barnard, 2010). Furthermore, their evolving work identity and building career success differ extensively from that of men (Mainiero and Sullivan, 2005; Zimmerman and Clark, 2016).

Contemporary conceptualisations of work-life balance espouse a relativist ontology, emphasizing the attainment of work-life balance as a subjective individual experience that fluctuates over time in response to changing life contexts, career needs, identities, and priorities (Kalliath and Brough, 2008; Potgieter and Barnard, 2010; Barber et al., 2016; Kristensen and Pedersen, 2017). Such a relativist ontology and subjectivist stance developed in response to criticizing conventional perspectives on work-life balance for its objectivist epistemology of work and life as separate and mutually exclusive domains, whether it be conflictual (involving constructs such as work-life conflict or negative work-life spill-over) or enriching (using constructs such as role enhancement, work-life enrichment, positive work-life spill-over, or work-life integration) (Barber et al., 2016; Toffoletti and Starr, 2016).

On the one hand, a subjectivist understanding of work-life balance recognizes the importance of individual differences and in this study is relevant to reflect women's unique experience. On the other hand, such an understanding does not necessarily recognize the dynamics of socio-cultural and organizational contexts where individuals work and live. Instead, it places the responsibility of attaining work-life balance solely on the

¹Long (2013), (p. xxi) prefers the term "socioanalytic," yet recognizes that "others might use the terms system psychodynamics or psychoanalysis." For consistency

the terms socioanalytic and psychoanalytic will be used interchangeably in this study.

individual. Naturally, this creates unrealistic expectations and the additional anxiety to be an ideally balanced individual (Ford and Collinson, 2011), which applies especially to female employees (Sullivan, 2015; Adame et al., 2016; Toffoletti and Starr, 2016). Taking a psychoanalytic perspective to understanding the work-life balance dynamic, Bloom (2016) recognizes above and below surface dynamics at the intersection of the individual and the system. He highlights the elusive idea or fantasy of achieving "balance" as fundamental to the work-life balance discourse, emphasizing a never-ending and continuously disappointing quest for balance. Individuals identify and introject an imbalanced work-life identity, which provides the impetus for continued yet ultimately disappointing efforts of work-life balance in the context of corporate work demands (Bloom, 2016).

Women are therefore expected to manage the "impossible task" of work-life balance (Toffoletti and Starr, 2016, p. 490) in a socio-economic context with sustained stereotypic norms for gender roles (Burnett et al., 2010; Lyness and Judiesch, 2014). Such roles permeate organizational cultures, resulting in a gendered operationalisation of seemingly gender-neutral policies on work-life balance (Burnett et al., 2010; Ford and Collinson, 2011). To this end, female employees make multiple role transitions during a day with consequent physical and psychological costs to their well-being (Amon, 2017), especially since work-life balance remains elusive. Moreover, some women often return to careers that accommodate their role as primary caregivers (Cha, 2013; Wattis et al., 2013). Thus, they frequently opt for discontinuous, interrupted, non-linear career trajectories as opposed to the traditional career-progression patterns men tend to follow (Lewis et al., 2015; Zimmerman and Clark, 2016). Herman (2015) labels such a-typical career movements as a "frayed career" or "careerscape" to express women's range of nontypical career patterns, which include multiple career identities and career change and flexibility over their life course.

In response to the work-life balance dichotomy and due to increasing demands for work efficiency, non-traditional career models such as the boundaryless and protean ones recognize the emergence of multiple careers across organizations and time, where individuals proactively manage and reshape their career roles (Cabrera, 2009). Women applying such non-linear career models to manage work-life demands is not a new phenomenon (Mainiero and Sullivan, 2005). However, for career success, female employees are still regarded as deviating from the norm, which impedes their career advancement and hampers their well-being (Cabrera, 2009). In addition to the boundaryless and protean careers, career-path models were designed unique to women's work-life demands and disparate roles across the career life span. In light of the importance of need fullfilment for well-being, these models highlight that women's predominant career needs from their early, mid to the late career life-stages oscillate between challenge, balance, and authenticity (White, 1995; Mainiero and Sullivan, 2005; O'Neil and Bilimoria, 2005). Women's needs shift from seeking challenging work in the early career stage, to an increasing concern for balance in the midcareer and during the late career striving for authenticity and meaning (Mainiero and Sullivan, 2005; O'Neil and Bilimoria, 2005). Studies show, however, that balance remains a continuous struggle for women across generations and career stages even though it is defined differently in the various career life stages (Darcy et al., 2012; Roebuck et al., 2013).

It is evident how important well-being and women's unique career needs and their experiences of work-life balance features in a gendered socio-organizational context (Amon, 2017). Therefore, the objective of the present research was to explore the work-life experiences of women in their midlife career to gain a deeper understanding of the psychosocial dynamics at play in sustaining a psychologically-well self.

METHODS

Methodological Orientation

Two qualitative methodologies directed the design of this study. Rooted in socioanalytic methodology, the method of social dream drawing (SDD) (Mersky, 2008, 2013) was fundamental to how data were collected. Then, data were analyzed from the methodological tradition of hermeneutic phenomenology, by employing the method of phenomenological hermeneutic analysis (Lindseth and Norberg, 2004).

Socioanalytic inquiry and hermeneutic phenomenology are epistemologically congruent, because both methodologies are fundamentally based on social constructionist assumptions. Social constructionism is a theory of knowledge or epistemology (Andrews, 2012; Galbin, 2014) emphasizing interactive meaning-making in social contexts (Schwandt, 1994) and the co-construction of knowledge between the researcher and the researched (Charmaz, 2006). Such an epistemological understanding is central to socioanalytic inquiry, which believes that knowledge is collectively generated (Mersky, 2015). Socioanalytic methods of inquiry such as SDD is further rooted in systems theory and the psychoanalytic tradition (Long, 2013). It emphasizes the collective unconscious in understanding human behavior (Sievers, 2006) and focus on group rather than individual level of data collection and analysis (Mersky, 2015). As such, the objective of SDD as a socioanalytic method, is to access collective unconscious thinking about a social or organizational phenomenon and to generate data that can be developed into working hypotheses (Mersky, 2013, 2015). The specific procedure underlying SDD is described in detail in the data collection and analysis section below and it is detailed by its developer (Mersky, 2008).

Hermeneutic phenomenology similarly emphasizes collective experience (Schwandt, 1994; Kafle, 2011) and regards the researcher as "creative contributor" central to co-constructing meaning (Dahlberg et al., 2008, p. 96). The researcher's theoretical and experiential preconceptions are central in the data gathering and analysis process, and should be transparently applied through critical and reflective interpretation (Laverty, 2003; Crotty, 2005; Dahlberg et al., 2008; Norlyk and Harder, 2010). The underlying meta-theoretical conceptualisations of well-being and work-life balance was therefore clarified at the onset of the article, it being key to the focus of the present study and interpretations of the data.

Procedure

The researcher was involved in a project aimed at introducing and developing the SDD method for research and consulting purposes in the South African context. The original project recruited women employed at a South African tertiary institution, with qualitative research expertise and interest, to train in the SDD methodology. From the original SDD workshop several SDD sessions followed, focussing on women in the work context. The data for this article were selected from four of these SDD sessions. The inclusion of SDD data was conceptually driven by this study's espoused theoretical framework and its research objective. Four sessions included women in their midlife career stage involved in work characterized by independent and flexible work schedules and multiple career identities typical to the "frayed" career (Herman, 2015). Purposeful sampling as defined by Yin (2011) directed the selection of these four SDD sessions as "data sources" or "sampling units" (Gentles et al., 2015, p. 1781), based on their relevance and richness to the stated research objective. Ethical clearance for using the SDD data as secondary data (because this study was not part of the original project) was obtained from the relevant institutional ethics committee at the University of South Africa (Reference number: 2016_CEMS/IOP_079). Prior to engaging in the project's SDD sessions, consent was generally obtained from participants to digitally record the sessions, as well as process the generated data for research purposes. The four SDD sessions relevant here, consisted of 14 dreams used to elicit collective thinking about work-life themes such as women working in research and the work-life role of women. The SDD data were managed with Atlas.ti and processed through a phenomenological hermeneutic analysis (Lindseth and Norberg, 2004).

Participants

Of the seven women who participated in the four sampled SDD sessions, four women work in academia, of which two simultaneously freelance as consultants. Another participant is a professional nurse working shifts at a hospital, whilst also teaching part-time at a higher education institution. One of the participants runs her own home-based business, and the last one is involved in various non-profit activities such as writing for a local newspaper and doing developmental work in an Afrikaner Youth movement. Of the seven women, six are married; one without children and five having either two or three children. The seventh participant is a single parent with one child. All seven participants fall within the age range of 40-50. Baruch and Barnett (1986) label women in mid-life as represented by the age category 35-55, which places the participants in this inquiry within the mid-life age category. In terms of racial distribution, five white and two black women participated. Four of the women took part in three SDD sessions and three women participated in only one SDD.

Data Collection and Analysis

The SDD method was developed by Mersky (2008). Approximately two to three weeks prior to an SDD session, participants receive an invitation to a themed session (in this case for example Women working in research, or Women's work-life roles). The invitation include instructions to prepare a drawing of any recent (no specific time frame given or required) or well-remembered dream. During a SDD session, participants are seated in a circle and systematically work through individual dreams according to an established procedure consisting of basically three phases (Mersky, 2008, 2013). During the first phase, the "owner" of the dream places the drawing on the ground in the middle of the circle, explains the dream drawing and answers clarifying questions from the other participants. A discussion follows in the second phase during which the other participants associate freely and expand on the dream drawing. As a method to access the unconscious, free association allows for collective reflection, drawing on the memories of participants and the social system to which they belong (Long, 2013). Thereafter and prior to the final phase, participants change seats. During the final phase, participants collectively reflect on issues emerging from the previous two phases, with the established theme in mind. Each step in the SDD process is managed according to a 15-min time boundary. Rest breaks of 15-30-min were included. As a conclusion to the SDD session, the facilitator facilitates a general concluding reflection on learnings and overall thoughts on the session and its theme as a whole. Ultimately each SDD session lasted approximately 4.5 h.

The SDD sessions were recorded digitally and transcribed. Transcriptions were loaded into Atlas.ti and a phenomenological hermeneutic analysis was done according to the typical stages of naïve reading, structural analysis, and comprehensive understanding (Lindseth and Norberg, 2004). The naïve reading and structural analysis are reported on in the results section below and the discussion section details the comprehensive understanding that emerged from the analytic process.

RESULTS

Through an initial naïve reading of the transcriptions, the researcher became familiarized with and gained a holistic sense of the data; in the process developing an acute awareness of the communicative power of metaphor (Shinebourne and Smith, 2010) and it being a tool to help bring to the surface emotional representations of women's well-being experiences (Grisoni and Page, 2010). The free associations and collective reflection on the dream drawings offered various metaphors. The metaphors were used to explore patterns of significance in and construct an in-depth understanding of participants' work-life experiences (Morganan, 1986; Shinebourne and Smith, 2010). During the subsequent structural analysis, several sub-themes emerged, which could be clustered meaningfully into three main themes according to the three, predominant career-development needs unique to women, namely: challenge, balance, and authenticity (Mainiero and Sullivan, 2005; O'Neil and Bilimoria, 2005). Each subtheme respectively was elucidated through the metaphors: "Icarus: Soaring dangerously"; "Centaurs: being both and"; and "Comparing notes with a stranger." These metaphors are discussed below.

Icarus: Soaring Dangerously (Challenge)

In free associating to a particular dream drawing that depicts a colorful plane in the air, participants brought up the metaphor of Icarus:

I hear the fragility, but there is also something about surviving. You know really this is like Icarus. You kept on saying that you were flying near to the edge and that went near to the sun. And you know every time you survive; you didn't fall, I mean in the dream my free association is that you are not falling out of the sky. And that you really get close to danger and this is not like slightly close to danger, this is really close to danger.

The metaphor is derived from the Greek myth of Icarus who escapes imprisonment, yet fails because in his flight he ventures too close to the sun. As a result, the wax of his wings begin to melt so that he ultimately falls and dies. The Icarus metaphor vividly illustrates women's need for challenge but also a duality of emotions they experience in their drive to achieve career success. On the one hand, there is excitement and a sense of empowerment, on the other hand, they experience anxiety and doubt. The metaphoric scenario is the context of escaping imprisonment, which potentially represents breaking free from the shackles of entrenched gendered stereotypes that inhibit women's career success. Whereas the escape provides a sense of empowerment by achieving freedom, there is also anxiety in the prevailing gendered expectation. This is namely, that women who attempt to "fly high" are a dangerous endeavor, beset with potential failure and the imminent danger of getting hurt. The anxiety that is felt seems somehow rooted in women's own sense of "buying into" such a gendered expectation.

Discussions in the SDD groups reflected how women feel trapped despite work-life opportunities to empower them. The reason is that they work and live daily in a society entrenched with success norms that are traditionally male dominant. Thus, the participants drew on the image of a woman winning a competitive race because she "runs like a man." Another image emerged in one of the sessions of feeling trapped like a gladiator fighting in a Roman arena. In this case, entrapment results from society's expectation that female employees will fail when they express their drive for achievement, competition and need for challenge. As one participant explained: "That makes me also think you know, this Gladiator movie and the coloseum and being trapped inside. And not able to get out, because the steep stairs only lead down, but she never reaches the bottom."

The participants also reflected on how their needs for achievement are set up for failure by their own doubts:

Is it safer to stay with the crowd and not stand out by choosing the easy road, even if you know that might be the best thing for you, because you are tiny? And, ja, the word that comes to mind is around self-sabotage. Because... you choose to stay with the crowd, almost intuitively knowing you are never going to get anywhere.

It seems that women's need to belong may perpetuate their projective identification with society's entrenched expectations about gender roles. In this way, "standing out" (achievement/success) is self-sabotaged in favor of metaphorically staying with the gendered norms and low achievement expectations of the crowd. Thus, ultimately in this dynamic inner struggle between wanting to achieve and wanting to belong in a gendered society, women find their well-being challenged.

The same inner dynamic also helps build resilience where women take on the challenge of working and living in a gendered society. Thus, they embrace both their "fragility" and their "surviving", thereby reframing the outcome of the Icarus narrative into non-failure. As a participant explained: "Every time you survive; you didn't fall... you are not falling out of the sky." Resilience evolves when women develop a self-awareness of the need to belong and be accepted, which potentially may be fundamental to self-doubt. As attested by a participant: "It relates to the fear of being acceptable to others... and my own doubt, let me be honest about that, my own doubt in what I do." Such self-awareness seems fundamental to well-being as it creates a willingness to take responsibility for overcoming intrapersonally entrenched gendered stereotypes. The self-awareness leads to self-authorisation to take on challenges and be successful:

... myself as a woman can I dare to break away from the crowd... because the moment that you break away from the crowd, that is when you will be, I mean you can get into serious trouble. I understand that, but that is also the time that you will be celebrated beyond imagination... if you run and you succeed, do you actually, do you actually allow yourself to be successful?

Centaurs: "Being Both... and..." (Balance)

The metaphor of the Centaur depicts the phenomenon of worklife balance as more than consciously managing multiple roles within a limited timeframe. The women are thus associated with Centaurs: "I thought you drew those horse people... horses with human bodies and heads like the ones in the movie Narnia." In this regard, they embody work-life balance by containing the psycho-social consequences and gendered expectations linked to the variable roles in their lives. Stated differently, they embody the gendered rhetoric that underpins conventional conceptualisations of work-life balance. Related associations to the Centaur metaphor are women compared to being "both fish and bird" and "both an airplane and an insect."

Centaurs, the half-human, half-horse. creatures from Greek mythology are regarded as liminal beings. Thus, they embody contrasting natures and occupy anomalous or dual positions at the same time (Clauss, 2007). Women often find themselves in a position that simultaneously presents mutually excluding as well as conflicting expectations. On the one hand, they fullfil the traditional role of mother and wife, which is presented as sub-important to the so-called full-time working role. Thus, by implication the maternal role is also sub-important to that of male employees who continue pursuing hierarchical and financial career success. On the other hand, women fullfil a work role that is loaded with expectations to be productive and to utilize the emancipatory and empowering opportunities available for women in the workplace. As one participant stated: "Linking with that again the whole thing about contradictions, being both an airplane and an insect all at once. Being both strong and vulnerable, both agile and quite sluggish."

Fulfilling differential roles with conflicting expectations, represent above-surface behavioral dilemmas that reflect typical issues of work-life balance and managing of time and resources between different roles. However, in-depth reflection on the embodiment of their contrasting natures by using metaphors and free association, revealed below-surface dynamics. This particularly applies to women's preoccupation with maleness, as the following excerpt illustrates:

I'm just wondering about our pre-occupation with the penis. Because it appears after and in our association with the drawings ... we are pre-occupied with men. It is almost as if the men are drawing themselves into our dreams ... Excuse me, we draw them into the dreams.

The preoccupation was given meaning during the SDD sessions, where participants split male and female qualities stereotypically. The participants projected onto maleness the characteristics of strength, leadership, and control, while femaleness was depicted with comparatively smaller feats: "In the plane you are not the pilot. But with the insect you are steering, you are controlling where you are going" and "one might think of the men being the pilots." Due to this preoccupation with maleness, it seems that women unconsciously avail themselves to embody the gendered rhetoric that underlies the discourse on work-life balance. According to this rhetoric, men are privileged by having more career opportunities and less concerns with work-life balance. A participant elaborated: "The women is in darkness and the men know everything... the only opportunity for seeing what is out there is at the tail end and only the men seem to have access to open that space." Women's well-being is thus challenged by their limiting perspective of balance as a gendered issue.

Nevertheless, ultimately the Centaur metaphor emerged as an image of strength. Female participants also identified within themselves a reservoir of both maleness and femaleness: "I like that about her because I like to be male and female. I really like that. I don't like only the one... because what she then brings to my mind is that she holds the ambivalence inside..." In being "both ... and ..." women see the potential for different rules of being in the world. This insight is described by the following excerpt:

For me it is almost like a fish crossed with a bird and I know you get these movies—"Journey to the center of the earth," where the rule is everything is the opposite than normal. So, the elephants are small where the insects are big; and you get, let's say, ducks with a buck's head or a fish with bird's wings and the bird's beak.

By understanding the possibility of different societal norms there is also the potential to forge new constructions and meaning. A participant remarked: "So, maybe it's about male and female, you know. Maybe it's not just about male... like I mean, for me the courtyard now is a space for something to be birthed." Women's well-being in this case, seems to be their embodiment of difference and their capability to in fact assume a liminal position. This may be on the boundary of work and life where they present both male and female qualities.

Comparing Notes With a Stranger (Authenticity)

An interesting dream shared in one of the SDDs, illustrates two figures sitting back-to-back each with religious notes on their laps. The participant titled her dream drawing, "comparing notes with a stranger." She identified herself, a Christian woman, as one of the figures sitting with her back to that of an unknown Islamic man. In the dream she experiences surprise and relief when realizing that the notes on his lap are similar to her religious notes: "I looked over and said, 'Hey it's the same' ... and it was appropriate."

"Comparing notes with a stranger" metaphorically reflects the tension that women experience when they attempt to retain their personal identity and their authenticity, in relation to their gendered social identity (Kreiner et al., 2006; Brown, 2015). The dream carries a strong spiritual theme. It speaks to the core of one's being and expresses what one believes, relating to the need for authenticity and a distinct personal identity. This dream metaphor expresses how women experience their gendered social identity through negative emotions: feeling judged and not being good enough. The stranger resembles the object of badness (projected onto him) and how the woman identifies (introjection) with the good and preferred characteristic of being non-judgemental. The projection of badness and participants' response to it, represents women's expressed need to be accepted and not be judged:

Central to the dream is something I believe very strongly in. One shouldn't judge. I feel there are people in my house that are terribly judgemental. Just like that, judge, judge, judge, and it's something I've felt my whole life: I can't judge others. I just immediately felt this guy, maybe from ISIS or whatever, I can't judge him.

Attempting to maintain a personal identity of competence, women find it challenging to reconcile a competent self with stereotypic gendered expectations of performing inferior work. Confirming this dynamic is another dream in which one female participant receives flowers from her husband's work, while she is at a workshop: "I didn't know it was for me; it was very weird. I thought the flowers came from my husband's work and it was extremely weird that they knew I was at the workshop." Women's need for recognition as being competent seems evident in the dream, yet it is conflicted by their experience that others do not expect them to be productive: "I couldn't understand that they knew I was there and not at home." The tension between the personal identity and the gendered social identity was first recognized where women feel judged. The tension was affirmed in this dream where the participant had a sense of not being valued.

To resolve and balance the conflicting expectations between their personal and social identities, women frequently assess their self-worth through constant interpersonal comparison. This is typical to conceptual definitions of identity work (Adams and Crafford, 2012). Participants attested that they frequently were negotiating who they are (personal identity) in comparison to others and others' expectations for them (social identity). Reflecting on her interaction with a group of young adult women at a wedding, a participant stated:

I wish I was as sorted out as they are at that age ... they know what they want and how and what; this girl is 24 and she knows exactly what she wants. I mean, when I was 24 everything was confused and then I think: 'Wow! I am actually not even where she is now.' She is spiritually sorted.

Another participant affirmed: "You know our family is unstable, and then I think yours always looks so sorted." From such a discussion comparing oneself with and idealizing others, it seems evident that women's well-being is challenged by the tension created between their sense of self and of an idealized social construct of self. The idealized self is rooted in their gendered identity and their beliefs about the gendered expectations flow from that identity.

The dream, "comparing notes with a stranger," ultimately demonstrates how women sustain their authenticity and wellbeing by working across differences. This movement is reflected where women integrate the projected bad and introjected good in themselves. In the case of the dream, the woman ironically identifies strongly with the stranger: "He was totally strange to me, but I felt an immediate connection with him." By embracing difference, women accept the good and the bad within themselves, expressing the need for an integrated, authentic self. Furthermore, women experienced relief as a strong emotion when they realize the similarity of core beliefs across above-surface differences such as gender and religion. This identification of similarities that transcend differences, reflects the identity task of integration and expresses self-regard.

DISCUSSION

The aim of this inquiry was to reach in-depth understanding of the fundamental psycho-social dynamics explaining how women in their mid-life career sustain well-being. This discussion details the comprehensive understanding that resulted from the analysis and includes a reflection on its implications, potential limitations and directions for future research.

Comprehensive Understanding

Career needs unique to women's careers are: challenge, balance, and authenticity (Mainiero and Sullivan, 2005). All three needs emerged in the data as persistent career issues that impact participants' well-being dynamic. In the discussion above, balance was found to be important across the career life-stages of women (Darcy et al., 2012; Roebuck et al., 2013). In this case, the data provided convincing evidence that in addition to balance, challenge remains a need women have to contend with in midlife, while authenticity is already a relevant issue in this career stage. The results thus demonstrate that, apart from balance, challenge and authenticity needs are also prominent in the midlife career stage and are not exclusive to women's early and late career life-stages. The present study did not aim to compare the extent to which these needs manifest in different career life stages. The focus was rather on the psycho-social dynamics at play when these women deal with their need for challenge, balance, and authenticity to sustain their well-being in work and life.

Regarding the need for *challenge*, well-being is evidenced in women's need for purpose and self-optimisation. However, at the same time, their well-being is challenged by introjections of self-doubt and anxiety, which participants described. These impediments arise from their struggle with internally entrenched gendered stereotypes and identification with masculine norms of success. Women's need for challenge is paralleled by their psycho-social need for belonging, the latter prompting projective identification with gendered expectations about career success and achievement. This detrimental identification is thus exacerbated by a conflicting dynamic that underpins the women's fundamental psycho-social needs. These needs are striving for achievement and to stand out, weighed against wanting to belong (Knez, 2016). In the same vein, Grisoni and Page (2010) report ambivalence about their competence to be rooted in their need to succeed being in competition with their need to collaborate.

Similar to challenge, the gendered notion of work-life *balance* is linked to enduring values and beliefs relevant to the sociocultural context of work life. The findings of the present study have shown that the gendered notion of work-life balance is also perpetuated through women's projective identification with its underlying outdated norms for gender roles. Thus, women are not only sustained by society but sustain themselves by containing the gendered role expectations in work-life balance. Evidence in this regard is participants' preoccupation with male privilege and superiority as well as the stereotypic splitting of male and female qualities. This self-stereotyping prevents women from flourishing and impedes autonomy. Self-stereotyping feeds the prevailing gendered perspective of work-life balance and hampers them in sustaining their psychological well-being.

Finally, regarding the need for *authenticity*, it became evident that conflicting role expectations impact women's well-being by challenging their identity work. Identity work entails attempts to reconcile the tension between preserving the self (personal identity), and external expectations and role demands (social identity) (Kreiner et al., 2006). This reconciliation is key to wellbeing since it highlights the need for authenticity or the ability to express the inner self and engage in activities that reflect the true self (Vleioras, 2005; Vleioras and Bosma, 2006). The process guiding identity work strives to balance the tension that underlies the psycho-social needs of differentiation (negotiating a unique self) and integration (associating the self with others) (Adams and Crafford, 2012; Knez, 2016). Participants' identity work revealed extensive challenges to their well-being since their social identities entrenched negative connotations to traditional female roles set against their personal needs for recognition, value, and competence. In their autoethnographic research, Grisoni and Page (2010), (p. 22) similarly reflect on their having "internalized the rational male gaze from the organization, and when confronted with it we were unable to sustain a sense of the value of our own enquiry." Such entrenched gender role stereotypes inhibit authentic self-expression or "personal expressiveness" (Ferguson and Gunnell, 2016, p. 429; Waterman, 1993, p. 678) and leaves women feeling judged and under-valued despite attempts to realize their career potential and express their personal identities.

When examining the three metaphors, it seems that women's projective identification with stereotypic gender roles may set up the primary intrapersonal barrier to their well-being. This is firstly, evidenced in self-doubt encouraged by the introjected belief that it is dangerous for women to respond to challenges due to the high potential of failure. Introjecting gendered role norms result from women's need to belong, yet conflicts with their need for challenge. Secondly, this barrier became apparent when participants split male and female qualities, where the male represents a projected superior competence in comparison to the female. Splitting of male and female qualities lead women to self-stereotype and embody the gendered rhetoric underlying work-life balance. Lastly, women's struggle to reframe their stereotypic gendered social identities, highlights the difficulty to express an authentic personal identity congruent to the need for challenge, recognition, success, belonging and acceptance. While formulating an identity, the self is continuously negotiated in relation to a socio-cultural and organizational context (Adams and Crafford, 2012). Thus, the self becomes a product of a sociocultural past and its entrenched memories (Knez, 2016). It is therefore not surprising that as women, the participants attested that they find it hard to disengage them from identifying with gendered norms and expectations since these actually represent their social identity.

Insight into the complex nature of well-being does not only require in-depth inner understanding. The relational dynamic between or intersection of the individual, the organization, and society (Ali et al., 2017) is important as it provides understanding of systemic conscious and unconscious behavior (Cilliers, 2017). As a result, the psycho-social dynamics uncovered in the present study, highlight how intrapersonal dynamics collude with the gendered socio-cultural and organizational system to sustain disparaging stereotypes. On the one hand, work-life balance is indeed a subjective phenomenon, which women experience in a unique way. On the other hand, it is informed collectively by socio-cultural norms, which emerge from the unconscious of the individual, the organization and society. Women's introjected beliefs and projective identification with gendered role expectations mirror and perpetuate societal and organizational dynamics in this regard.

The results show evidence of women's well-being that is impacted, however the metaphors are also images of strength and provide evidence of how women sustain their well-being. In this investigation, well-being ultimately emerged as a dynamic phenomenon that requires engagement with both positive and negative emotions and experience. According to Vleioras (2005) negative emotions trigger self-exploration leading to either more negative emotions and/or positive emotions, which further promote exploration and the development of new frames of reference. The dynamic of working with both positive and negative emotion and experience seem inevitable and important in sustaining women's well-being. This is due to a process of constant negotiation to balance the tension between the self and the idealized or social self, referred to as identity work (Adams and Crafford, 2012; Knez, 2016). Whilst the intrapersonal dynamics underlying identity work reflected women's well-being being challenged, it also reflected identity tasks applied to sustain well-being. This finding is congruent with the conclusion reached by Vleioras and Bosma (2006, p. 405) that "not dealing with identity issues is related to less psychological well-being" and "dealing with identity issues is related to more psychological well-being." Through the SDD sessions, women were able to demonstrate how they engage with the full spectrum of inevitable positive and negative experience in identity work. In this regard, the SDD group sessions provided a space for identity tasks, in particular self-reflection and the development of self-awareness, self-authorisation, self-regard and authentic self-expression.

In this study, hope and resilience came to the fore as participants developed self-awareness of their entrenched gendered beliefs and how these influence their personal growth and confidence. Women self-authorized to be successful and thus demonstrate the potential to break free from the narrative of gendered success. By acknowledging their capacity to incorporate both male and female qualities, women also developed the potential for a self-regard that is gender neutral. They furthermore gained sight of the potential to construct a new narrative around their career identity and success. Ultimately, self-regard lead to an integrated and authentic self that "can be celebrated beyond imagination." Seeing that authentic selfexpression is crucial for optimal well-being (Waterman, 1993; Vleioras and Bosma, 2006), female employees should be provided with opportunities such as demonstrated in this study, to selfreflect on their identity work.

Implications

Understanding well-being from a gendered perspective requires a multi-level analysis that incorporates behavioral dynamics above and below the surface of consciousness, and at the intersection of the individual, the organization, and society. Thus, an understanding of well-being is incomplete when it focuses solely on above-surface manifestations such as feeling positive, happy and satisfied. Operationalisation of SWB perspectives in research may therefore impede a fuller understanding of the phenomenon. The present study aimed to demonstrate the importance of mining unconscious experience to develop a more complex and deeper understanding of the enduring well-being dynamic. The study also demonstrated the interrelatedness of individual experience with the norms and expectations of society and the organization.

Furthermore, well-being is a complex phenomenon that cannot be conceptualized adequately as dichotomy, juxtaposing well-being with ill-being, or by negating negative experience. When working with women's well-being (in research or psychology practice) forums are necessary that will allow women to self-reflect, engaging with and integrating positive and negative experience, thoughts and feelings (*cf.* Cilliers and May, 2010). Women's well-being lies in their capability to work with both positive and negative experiences and emotions linked to their potentially conflicting work-life needs. This helps them deal with both the balance and the imbalance that result from fulfilling multiple roles, instead of focusing only on the

positive (denying negative emotions) or constantly attempting to overcome negative emotions as if it is an abnormal state of ill-being (*cf.* Harris, 2009).

Well-being is related closely to identity work (cf. Vleioras and Bosma, 2006). This implies that doing identity work with women may facilitate their experiences of well-being during a particular career-stage. Such identity work should focus on going beyond recognizing gendered stereotypes in society and in the work context. It should create an awareness in women about their inner dynamics that collude with contextual stereotypes to sustain gendered expectations. Women can be coached to recognize how they project and introject gendered qualities and how these impact their self-worth. Ultimately, women should be guided toward self-regard. They should be helped to authorize themselves toward attaining their career needs, taking on their work-life roles and express a personal identity free from constricting gender stereotypes. The present study advances the value of action-research and demonstrates the benefits of group work (cf. Amon, 2017) to help women develop self-awareness, self-regard, self-authorisation, and authentic self-expression.

Employee well-being in organizations is facilitated when the work environment supports the individual's ability to think about, express and manage anxieties related to task accomplishments (Stefano et al., 2017). Therefore, implications of this study for the organization entail providing reflective space for women to do the identity work that has been described above. In providing such a space the organization will enable and facilitate female employees' self-reflection, growth, and psychological well-being. Selfreflective space could be provided explicitly through focus group forums but should also be implicit in the organizational culture.

Limitations and Directions for Future Research

Seeing that this study acknowledges the intersectionality of the individual, organization, and society, data was derived on an individual and group level, yet not on an organizational level. Assumptions about gendered norms and expectations on organizational and societal level, could therefore only be made to the extent that participants' gendered experiences of well-being reflect their interaction with and experience of gender dynamics within the organization and broader society. Studies providing a focus on the system psychodynamics underlying gendered work contexts as an interpretive model for studying women's well-being, continue to be needed.

To operationalise a socioanalytic inquiry is a complex task. Its methods challenged the researcher's skills for group-facilitation and required trustworthy interpretation. Being a participantobserver in SDD sessions may have limited the researcher's scope of interpretation. The researcher attempted to address this deficiency by being methodologically transparent and by clarifying the underlying meta-theoretical influences that impacted the results of this inquiry. To this end, there are boundaries to the methodology followed here. Thus, the results reflect a particular perspective to the data and the phenomenon under research; by implication, other perspectives may be possible.

Acknowledging the possibility of other perspectives highlights the need for continued similar research. Incorporating women in early and late career life-stages in similar studies may produce insightful data that can be added or compared to. For example, future researchers may explore whether gendered role expectations have shifted in the younger generations who enter the work force. The intersection of race and gender and the implications thereof have not been studied here, and will benefit from further exploration. Future research on identity work and work identity linked to well-being from a gendered perspective is also especially encouraged as a result of this study.

CONCLUSION

The present study's contribution to the global body of knowledge regarding well-being from a gendered perspective, is evident in its advancing particular meta-theoretical assumptions about female employees' career needs, work-life balance and women's wellbeing dynamic. Meta-theoretically, the present study posits that it is inappropriate to apply conventional career theory to the study of women's work-life experiences. The more applicable alternative is to apply non-traditional, novel, and gender-specific career models, thus focusing on career needs unique to women. The study moreover refutes an over-emphasis on stereotypic work-life balance as fundamental to women's well-being.

On the one hand, the need for challenge and authentic selfexpression also permeates the career journey of women and are equally important career needs in sustaining well-being. On the other hand, a gendered emphasis on work-life balance may rather have a disparaging effect on women's well-being because worklife balance is a consistent pursuit which is never fully attainable (Bloom, 2016). Over-emphasizing work-life balance in such a manner potentially creates unresolvable anxiety and pressure to be an ideally balanced individual in a social context that is fraught with work-life demands incongruent to gendered expectations. In this way, the prevailing gendered rhetoric underlying the work-life balance phenomenon is maintained. Yet, changing our deep-seated gendered perspective on work-life balance, and by implication on well-being, will prove impossible if it is not accompanied by also shifting our norms about career success. A new and different narrative of career success seems necessary to truly advance a gender neutral work-life balance phenomenon. Conceptualisation of career success should reflect a subjectivist epistemology in which the unique career needs of the individual is acknowledged and celebrated. Whilst we continue to live in a gendered society, this may however be a challenging endeavor. The value of studying well-being from a systems perspective (cf. Ali et al., 2017) and a psychoanalytic stance (cf. Stefano et al., 2017) is therefore evident. This study highlighted how women's projective identification with gendered role norms affect their well-being, yet is a result of unconscious, interrelated dynamics at the intersection of the individual, the group and the organization.

The findings contribute meta-theoretically to the discourse on women and well-being, by highlighting the value of incorporating both positive and negative experience to not only understand the challenges women face in terms of their wellbeing but also how they succeed in sustaining a psychological well self. In this regard, the study provides insight into a unique socioanalytic methodology in well-being research applied from a gendered perspective. Social dream drawing provides a useful mechanism to explore the deeper dynamics underpinning the difficulties that women experience in efforts to sustain their well-being. It however also provides a vehicle to facilitate important identity tasks for sustaining well-being and is proposed as one way to provide female employees with opportunities for collective self-reflection in order to develop self-regard and uncover avenues for authentic self-expression. The study demonstrates how metaphor can be applied to provide an in-depth understanding of the psycho-social dynamics that impact women's well-being as their journey continued through mid-life. The findings denoting identity work and how women sustain their well-being, may be extrapolated to a genderised work environment and applied to different similar contexts globally.

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ETHICS STATEMENT

This study was carried out in accordance with the recommendations of UNISA Policy on Research Ethics and the CEMS/IOP Research Ethics Review Committee. The protocol was approved by the CEMS/IOP Research Ethics Review Committee. All subjects gave written informed consent in accordance with the Declaration of Helsinki.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and approved it for publication.

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Psychosocial Hazards in the Workplace as an Aspect of Horizontal Segregation in the Nursing Profession

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The purpose of this article was to assess the influence of psychosocial hazards as a factor affecting the presence of men in the nursing profession. The article refers to the topic of particularly low representation of men among nursing staff in Poland, in comparison to what similar statistics show for other countries. The aim of the study was to assess whether the psychosocial hazards in the nursing profession constitute a significant factor in the small number of men present in this occupation. In this article psychosocial hazards are considered as all the aspects of management and work organization that may negatively affect the employee's mental and physical health. The research was conducted from September 2017 to April 2018 in the Podlaskie Voivodeship (Poland). A total of 640 respondents working as nurses in inpatient health care facilities, of which 87% were women and 13% were men, were included in the study. A standardized Work Design Questionnaire for an objective assessment of work stressfulness was used as a research tool. The research has been run by a group of experts, who explained the aim and the meaning of the particular questions to the surveyed group. Afterwards, based on the answers and observations of the responders, the experts filled in the questionnaire. The results of the study show that in almost all the evaluated aspects, the nursing profession was assessed more negatively by surveyed men than women. The most negative aspects reported by women included hazards (a score of 60), complexity (58.3), and haste (50.0), while those reported by men included haste (70.0), complexity (66.7), and hazards (65.0). As a conclusion it has been noticed, that results received from the research confirm that psychosocial hazards may have significant impact on the number of men present in the nursing profession in Poland. This study also suggests that the greater psychosocial hazards experienced by male nurses in the workplace may be an effect of the particularly low representation of men among practicing nursing staff.

Keywords: gender, psychosocial aspects of work, male nurse, nurse, feminized profession, psychosocial hazards

INTRODUCTION

In Poland and most countries worldwide, the nursing profession is considered to be a typically female dominated occupation. Such a view is based on the conviction that women, in line with their instincts, should perform care-related tasks (Myungkeun and Keogh, 2016; Kluczynska, 2017b). Statistical data confirm that the nursing profession is dominated by women on a global scale

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(Main Chamber of Nurses Midwives, 2010). This is particularly visible in Poland, where men constitute a mere 2.0% of all registered nurses, while in Canada, 4.6%; in Great Britain, approximately 9.0%; in Ireland, 10.0% and in Iran, 23.0% (Whittock and Leonard, 2003; Evans, 2004; Keogh and O' Lynn, 2007; Nursing and Midwifery Board of Ireland, 2012; Abshire et al., 2017; Kluczynska, 2017a).

These statistics cause that men are more sought after in Poland and other countries as nurses than women. Additionally, working in a female-dominated profession results in men being in a privileged position, which is demonstrated, for example, by being assigned more prestigious, administrative, and better paid tasks. This is known as the glass elevator effect, which allows men to advance only because of their gender. In the case of female nurses, a glass ceiling mechanism is activated, making it difficult for women in feminized occupations to get a promotion (Lipinska-Grobelny and Gozdzik, 2012; Williams, 2013). This is known as vertical segregation, wherein it is more difficult for women to be promoted from less-prestigious and less-paid positions, such as a unit nurse, due to the feminization of the profession. Most men working as nurses are aware that their professional development could be faster and easier due to their gender, and a promotion in the nursing profession typically means doing office work and withdrawing from patient care (Kluczynska, 2012; Lipinska-Grobelny and Gozdzik, 2012; Dudak, 2016).

Most countries around the world, including Poland, have permanent nursing staff shortages. Still, relatively few men work as nurses, despite being preferred for employment (LaRocco, 2007; Eley et al., 2012; Dudak, 2016; Kluczynska, 2017a).

One of the reasons for this is the firmly rooted stereotype that a man working as a nurse is not very manly (LaRocco, 2007; Eley et al., 2012; Dudak, 2016; Kluczynska, 2017a). The decision to perform an unmanly profession affects the perception of a man in the eyes of a large portion of society. Such a man is believed to have characteristics of laziness and submissiveness, or to be self-serving, a failure, a dependent, or of so-called subordinated masculinity. In Poland, a man who chooses the nursing profession may be perceived as a person who has failed to become a doctor and experienced defeat because he was not admitted to study medicine. Another unflattering stereotype prevalent in Poland is the perception that men working as nurses do it as secondary work, which due to the 12-h shift system enables men to do real men's work in the time between shifts (Kluczynska, 2012, 2017a; Dudak, 2016).

Undoubtedly, the prevailing stereotypes are not the only reasons for the low representation of men in the nursing profession. Another important factor influencing this issue can be the psychosocial hazards affecting this professional group, the nature, and the intensity of which may vary depending on the employee's gender (LaRocco, 2007; Eley et al., 2012; Kluczynska, 2017a).

Work under stress and psychosocial hazards corresponds to an increase in employee absenteeism loss of productivity, and high costs of health and social care (European Agency for Safety and Health at Work Topic Centre Risk Observatory, 2007). Psychosocial hazards in the workplace can be described as the aspects of work organization and management that may negatively affect the employee's mental and physical health (Cox and Cox, 1993). In the literature, there are many divisions of psychosocial hazards that consider the negative work environment determinants, also known as stressors. The classifications are usually based on theoretic models of stress or empirical data (Leka et al., 2010; Cox et al., 2016). A dynamic work environment is prone to developing existing or new hazards such as mobbing, aggression, and the introduction of new technologies (Hanna and Mona, 2014; Jamali and Ayatollahi, 2015).

No uniform classification of workplace hazards has been done so far in the scientific literature. The most common hazards classification pertains to the context and content of the work.

Hazards regarding the work context such as ambiguity and role conflict, lack of scope of control and decisions, threats, responsibility, and negative family relations resulting from a work-home conflict cause a decrease in work satisfaction (Jamali and Ayatollahi, 2015), leading to exhaustion, fear, low self-esteem, and professional burnout, finally resulting in leaving the profession (Gurková et al., 2013; Yamaguchi et al., 2016). Poor organizational culture, improper communication at all organizational levels, lowering employees' self-esteem, and mobilizing them to negative rivalry constitute sources of stress and contribute indirectly to inducing many diseases of somatic and mental bases.

In addition, work-related hazards resulting from the work context, such as quantity and quality hazards (Hamaideh et al., 2008), work complexity, work schedule, work environment and equipment lower self-control can lead to making medical errors as well as accidents or injuries leading to decreased productivity (Donnelly, 2014). Night shifts interfere with the human circadian rhythm, leading to frequent poor physical and mental health symptoms such as sleep problems and gastrointestinal disorders. Shift work generally increases morbidity and disease-related absences as well as disrupts employee functioning in family and social life (Harrington, 2001; Pilcher et al., 2003).

The aim of this study was to assess if the psychosocial hazards in the nursing profession, affecting men and women to varying degrees, may constitute a significant cause for the small number of men present in this profession.

MATERIALS AND METHODS

The research was conducted from September 2017 to April 2018 in the Podlaskie Voivodeship (Poland). A total of 640 respondents working as nurses in inpatient health care facilities, constituting 87.0% of women and 13.0% of men, were included in the study. Participation in the study was voluntary and anonymous. The consent of the participants was obtained by virtue of survey completion. All procedures were approved by the Local Bioethics Committee of the Medical University of Bialystok R-I 002/296/2017 and R-I 002/175/2018.

STUDY PROCEDURE

The study was conducted by a group of experts who were representatives of nurses and educators belonging to the nursing profession. These experts had a clear understanding of the purpose of the study and detailed knowledge about the specifics of the unit nurse responsibilities in inpatient health care facilities. The research was conducted using the standardized Work Design Questionnaire for an objective assessment of work stress, which was developed by Dudek et al. (1999). The experts explained the aim and meaning of the particular questions to the surveyed group. Then, based on the answers and observations of the responders, they filled in the questionnaire. Conducting the study using this method ensured objective assessment of work stressfulness. Objectivity, in this case, means that the assessment is independent of the knowledge of the stress experienced by the individual surveyed person, but is a result of the assessment made independently by 2-3 experts, who have knowledge about the specifics and work conditions of the given job position.

STUDY GROUP SELECTION

The selection of the responders for the research group was conducted based on the register of nurses affiliated to the District Chamber of Nurses and Midwives in Białystok. The criterion adopted was employment in a hospital under an employment contract to work in the internal ward, surgical ward, admission room, or emergency department. Out of the group of people who have met the selection criteria, 10.0% of randomly selected women and 100.0% of men were invited to take part in the study. In total, 13.0% of the invited men decided not to participate. Participation in the study was voluntary and could be discontinued at any stage without providing a reason.

QUESTIONNAIRE DESCRIPTION

A standardized Work Design Questionnaire for an objective assessment of work stress was used as a research tool (Dudek et al., 1999).

The questionnaire consisted of 34 statements describing each work characteristic. The statements were graded on a scale of 1–5, depending on the frequency, duration, or intensity of the given occurrence of the characteristic.

Based on the statements included in the questionnaire, one overall measure and ten specific measures of work arduousness were determined, including, unpleasant working conditions, complexity, hazards, conflicts, uncertainty resulting from the organization of work, arduousness, haste, responsibility, physical effort, and competition. The higher the score, the higher the work arduousness in a given aspect. However, the results for different measures are not comparable, because of a different number of component statements corresponding to each detailed measure (and the overall measure). Therefore, raw values of the individual measures were normalized in the range of 0-100 (with 0 indicating absence of work arduousness and 100 indicating maximum work arduousness), to allow for the comparison between work arduousness estimations in the different categories.

Based on the standards set out for the questionnaire, individuals with high stress levels due to work arduousness in the different areas were distinguished.

In the overall scale of work arduousness, three categories were distinguished: low, medium, and high.

STATISTICAL METHODS

Depending on the nature of the variables being compared, appropriate statistical techniques were used, including descriptive statistics of assessments of work characteristics in the men and women groups. Due to the asymmetry in the distribution of some measures, interpretation was based on the median value rather than the average. The Mann–Whitney U test was used to assess the significance of the differences between women and men.

RESULTS

This study included a total of 640 respondents (87.0% of women and 13.0% of men), who were employed as nurses. Most men were employed in emergency units, that is, 41.0% in admission room and 38.6% in emergency department. In the case of women, 37.5% worked in admission rooms, 33.8% in surgical units, and 28.7% were employed in medical treatment units and only 0.2% in emergency units.

Male nurses were better educated than their female counterparts. Higher education was reported by 79.5% of men and 57.7% of women. The structure of job positions did not indicate significant differences between women and men–a unit nurse was the predominant position held in both groups (78.3% of women and 85.5% of men). A total of 59.0% of male nurses and only 26.6% of female nurses were unmarried. Men employed as nurses were significantly younger than women and had shorter work experience (by an average of 8 years). This may have some impact on the comparison of working condition assessments presented in **Table 1**.

Table 2 shows the selected descriptive statistics of assessments of work characteristics in the group of women and men. Due to the asymmetry in the distribution of some measures, interpretation was based on the median value rather than the average. The Mann–Whitney *U* test was used to assess the significance of the differences between women and men. The nursing profession was assessed more negatively by men in almost all the evaluated aspects. The most negative aspects reported by women included hazards (a score of 60.0), complexity (58.3), and haste (50.0), while those reported by men included haste (75.0), complexity (66.7), and hazards (65.0). The median for the overall score was 40.4 among the surveyed female nurses and 48.5 among the male nurses.

Table 3 shows proportions of respondents (based on the point thresholds published by the authors of the questionnaire) whose ratings of the intensity of negative phenomena at the workplace were classified as high. As it can be seen for most of

TABLE 1 | Duration of work experience as nurse, depending on gender.

Age and work experience [years]					Gen	der				
		Woman (N = 555)				Man (N = 83)				
	x	Ме	S	c ₂₅	c ₇₅	x	Ме	S	c ₂₅	c ₇₅
Age	38.7	39	9.7	30	46	31.5	28	8.0	26	35
Work experience	15.1	15	10.3	6	24	7.0	5	7.2	2	10

N, number of assessments; \bar{x} , arithmetic mean-variable average; Me, median-half the measures have lower values and half higher than the median; S, standard deviation (s)-a measure of "average" deviation from the mean value; c_{25} and c_{75} , first and third quartiles.

TABLE 2 | Assessment of work characteristics depending on the respondent's gender.

Assessment of work characteristics			Ger	nder			Р	
(0–100 pkt)		Woman		Man				
	x	Ме	S	x	Ме	S		
Unpleasant working conditions	26.8	25.0	17.6	34.3	30.0	25.4	0.0742	
Work complexity	59.8	58.3	16.1	66.1	66.7	15.8	0.0016**	
Hazards	60.6	60.0	17.7	65.2	65.0	20.0	0.0740	
Conflicts	24.0	25.0	16.8	35.1	31.3	21.5	0.0000***	
Organizational uncertainty	41.1	37.5	25.5	52.4	50.0	25.8	0.0002***	
Arduousness	44.7	41.7	19.1	53.9	50.0	19.4	0.0000***	
Haste	52.6	50.0	23.9	67.2	75.0	22.0	0.0000***	
Responsibility	30.8	25.0	29.0	34.6	37.5	32.5	0.3671	
Physical effort	42.4	37.5	17.4	47.1	50.0	19.5	0.0171*	
Competition	16.8	0	27.9	31.1	25	36.3	0.0002***	
Overall score	42.9	40.4	12.5	51.0	48.5	15.9	0.0000***	

p-value of statistical significance calculated using the Mann-Whitney U test; $\frac{x}{2}$, arithmetic mean-variable average; Me, median-half the measures have lower values and half higher than the median; S, standard deviation (s)-a measure of "average" deviation from the mean value. *statistical relevance (p < 0,05); **strong statistical relevance (p < 0,01); **very strong statistical relevance (p < 0,001).

the considered aspects of work, a high level of negative opinions is more common among male nurses. This is particularly clear while assessing conflict, organizational uncertainty, arduousness, and haste. The characteristics that occur with the highest intensity include complexity, unpleasant working conditions, and haste for women, as well as complexity, haste, and unpleasant working conditions for men.

Figure 1 shows the percentage of respondents declaring a high level of negative phenomena in their professional work (along with the accuracy of estimation in the form of 95.0% confidence intervals) in the group of women and men. It further shows the result of the Chi-squared test of independence; therefore, it may be a more illustrative presentation of the results (instead of a table).

Table 4 shows a comparison between the classifications of the level of negative phenomena at work according to a summarized scale. The chi-squared test indicates statistically significant differences between female and male opinions in the intensity of negative workplace phenomena. The scale of negative workplace phenomena was described as high by the vast majority of men (85.5%) and only about two-thirds of women (67.7%).

DISCUSSION

All countries around the world, including Poland, are affected by the phenomenon of professional horizontal segregation. The percentage of men working in nursing is very low on a global scale. This is particularly visible in Poland, where men constitute a mere 2.0% of all registered nurses, while in Canada, 4.6%; Great Britain, approximately 9.0%; Ireland, 10.0%; Spain, 16.0%, and Iran, 23.0%. (Whittock and Leonard, 2003; Evans, 2004; Keogh and O' Lynn, 2007; Nursing and Midwifery Board of Ireland, 2012; Abshire et al., 2017; Kluczynska, 2017b). In most countries, stereotypes prevailing in societies are indicated as the main barrier in undertaking the nursing profession by men. What is characteristic is that the prevailing stereotypes are similar in different countries, even those that are culturally distant. Everywhere, nursing is identified with providing care, and this with being a typically women's activity. The masculinity of men who work as nurses is questioned; they are viewed as those who did not succeed in becoming doctors or those who became nurses as a result of lack of other career prospects (Neighbours, 2008; Kouta and Kaite, 2011).

High level of stress		Gen	der		Р
	Wo	man	Ν	lan	
	N	%	N	%	
Unpleasant working conditions	384	68.9	62	74.7	0.2870
Work complexity	427	76.7	74	89.2	0.0100**
Hazards	297	53.3	50	60.2	0.2378
Conflicts	287	51.5	61	73.5	0.0002***
Organizational uncertainty	280	50.3	59	71.1	0.0004***
Arduousness	235	42.2	52	62.7	0.0005***
Haste	359	64.5	66	79.5	0.0067**
Responsibility	191	34.3	36	43.4	0.1066
Physical effort	273	49.0	50	60.2	0.0563

p-value of statistical significance calculated using the chi-square test for independence. *statistical relevance (p < 0,05); **strong statistical relevance (p < 0,01); ***very strong statistical relevance (p < 0,001).



TABLE 4 | Assessment of negative workplace phenomena depending on gender.

Overall score	Gender (p =	= 0.0034**)	Total
	Woman	Man	
Low	28 (5, 0%)	3 (3, 6%)	31
Middle	152 (27, 3%)	9 (10, 8%)	161
High	377 (67, 7%)	71 (85, 5%)	448
Total	557	83	640

Men are not only reluctant to become nurses; they also, according to research conducted by Kluczynska (2017b), much more frequently leave the profession than women in the first years of work similar inferences were obtained in the United States (Sochalski, 2002) and in South Korea (Kim and Shim, 2018). An important reason for resigning from the nursing profession is due to the workplace psychosocial hazards, which is confirmed by studies carried out by Eley et al. (2010); Cortese (2012); Rangel de Oliveira et al. (2017), and Hasselhorn et al. (2008).

In the present study, we examined to what extent the intensity of the psychosocial hazards in the workplace varies in nursing depending on the nurse's gender. On the basis of the obtained results, we found that far more men assessed their working conditions as highly unfavorable. Other studies published in the scientific literature so far have shown different results. According to a study conducted in Iran, women assessing their working conditions worse than men were in the majority; however, men constitute 23.0% of people working in nursing on the Iranian job market (Jamali and Ayatollahi, 2015). A better physical and psychophysical condition of male nurses than female nurses was found in the study conducted in Spain. The percentage of men working in the nursing profession in Spain is also significantly higher than in Poland and is over 16.0% (Rosa et al., 2013). In turn, in a study conducted in hospitals in southwestern Ethiopia, nurses' gender did not affect the degree of negative work characteristics in any way (Dagget et al., 2016).

Work complexity, as a characteristic constituting psychosocial hazards in the workplace, was assessed in our study as having the highest intensity among the tested hazards. Again, a higher incidence of this characteristic was found among men than women. Moreover, our results are also inconsistent with the results of studies carried out in other countries. Research in Andalusia (Spain) showed that men cope with work complexity a little better than women, but it should be noted that in the sample studied in Andalusia, the share of men was slightly higher than that of women, while in our study, women definitely dominated (87.0%) (Rivera-Torres et al., 2013). Similar results to the study of Rivera-Torres et al., 2013) were obtained in the research conducted in Italy (Romano et al., 2015).

The next psychosocial hazards that were indicated the most by the studied group were hazards in the workplace. In this case also, this characteristic was more intensely felt by men than women. Research carried out in Great Britain, the United States, and Iran showed that the nurse's gender did not affect the extent of perceived hazards in the workplace. In each of these countries, the number of men in the nursing professional group and the studied groups was significantly higher than in Poland (Domagała et al., 2017; Zaree et al., 2018).

Differences in the perception of conflict, a workplace hazard, to a large extent depend on individual employee's characteristics and factors such as professional experience, education, relationships with colleagues, position, and organizational climate. In our study, the potential for conflict was a characteristic with the highest discrepancy in the evaluation of intensity by men (73.5% assessed as high) and women (51.5% assessed as high). This is consistent with the results of a study in Sweden (Leineweber et al., 2014). Whereas, research from Iran showed that conflict did not depend on the respondents' gender (Najimi et al., 2012). Differences in the age and education of men and women could have affected our study results. In the studied

sample, men were better educated (79.5% of men had higher education and only 57.7% of women) and younger (by 8 years), both in terms of age and work experience, than women.

Physical effort, as a psychosocial hazard in the nursing profession, was the only characteristic assessed in our study that was consistent with the results of studies from other countries such as those from Japan and Brazil (Rotenberg et al., 2008; Yada et al., 2014). This is probably due to the "He-man" stereotype, according to which a male nurse is naturally inclined to all kinds of hard physical work, because who, if not he, can lift, overturn, or bring something (Neighbours, 2008).

CONCLUSIONS

The conducted analysis showed that in Poland, male nurses experience psychosocial hazards more severely than female

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nurses, and this is unlike the results of studies conducted in other countries in terms of most of the studied characteristics. Is the low representation of men in the nursing profession in Poland the reason for this? Certainly this is one of the most important reasons. It is also possible to draw another conclusion, which is a form of specific feedback, that the reason for the greater psychosocial hazards perceived by male nurses in Poland is a result of their particularly low representation in the nursing profession compared with other countries.

AUTHOR CONTRIBUTIONS

KK: concept of the research, design of article structure, conducting of the research, review of the literature, results analysis, writing the article; EK-K: review of the literature, review of article drafts; MS: statistical analysis.

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Gender Diversity on Boards of Directors and Remuneration Committees: The Influence on Listed Companies in Spain

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Women have traditionally been underrepresented on boards of companies, but after some social and legal pressure their presence has been increased during recent years. This paper examines the relation of the presence of female directors both at board meetings and at audit and remuneration committees, with CEO pay and the shareholders' consultative vote on managerial remuneration plans ("say on pay"). Using a large sample of Spanish firms listed between 2011 and 2015, our study reveals that firms with female representation on their remuneration committee, display lower levels of CEO pay and CEO pay growth. We also obtain evidence that this effect is attributable to the proprietary female directors. Additionally, from the "say on pay" perspective, female membership of the remuneration committee is associated with a lower number of votes in terms of director remuneration reports and related policies. Overall, our results indicate that female directors on the remuneration committee contribute to a moderation of executive remuneration growth and are consequently perceived by shareholders as valuable resources in the design of executive remuneration plans. This confirms the influence of the minority group, females, in the sustainable progress of these companies. Our results support the presence of female directors not only as a social measure or tokenism, but also as a contribution to good governance practice.

Keywords: remuneration, gender-discrimination, minority influence, board of directors, remuneration committee, management, listed companies

INTRODUCTION

Cultural, gender and racial composition of boards of directors are counted amongst the most relevant concerns for managers, shareholders, and directors of major corporations (Carter et al., 2003). In the Strategic Engagement for Gender Equality 2016–2019, the European Commission maintain their commitment to improve the gender balance in economic leadership positions, in particular obtaining at least a 40% representation of the sex that is currently less represented within the group of non-executive directors in listed companies (European Commission, 2016-2019). The mandate of the European Commission urging EU member States to increase the presence of female directors has resulted in legislative reforms favoring their progressive incorporation to the boards of listed companies. The incorporation of female directors to the firms' boards is aimed at ensuring equality in decision-making, but it could also be justified on the grounds of their specific ability to improve company decision-making.

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The increase of female presence on corporate boards has been promoted either by imposing legal quotas or by issuing softer recommendations with respect to the codes of good governance. Scandinavian countries have been pioneers in the use of a quota system. In 2003 the Norwegian parliament passed a law requiring 40 per cent of corporate directors in listed companies to be women (Rose, 2007). Other countries such as Belgium, France, Germany, Iceland, India, Israel, Italy, and Spain use some forms of quota system to improve female representation on the boards of listed firms. Nonetheless, the quota system has been a matter of discussion due to their convenience and acceptability when dealing with meritocracy (e.g., Moscoso et al., 2012), as it could be seen as a tokenism and/or as granting less value. However, based on historical disadvantages and to offer an opportunity to "rebalance" the society, the Spanish Organic Law 3/2007 on effective equality between men and women has granted large companies 8 years to include a minimum proportion of 40% female directors on their boards. Nevertheless, this level of presence on the part of female directors has not been achieved so far.

In the case of Spain, the legal system of quotas co-exists with the softer recommendations proposed by the code of good governance which establishes that in 2020, female directors should account for 30% of the board seats of listed companies. The last report issued by the Spanish Association of Women Entrepreneurs (Women CEO, 2017), reveals during the last year an increase in the percentage of female directors at the IBEX 35 companies from 19.1 to 21.8% and that for the first time, all firms in this index have female representation in their boards.

The under representation of female directors on the boards is not only a Spanish issue, but is common to most OECD countries, also. Although there has been a steady increase in the number of female directors over recent years, the OECD (2017) report on the implementation of the OECD gender recommendations shows that female directors constitute still a minoritarian group in the boards of listed companies. In 2016 female directors accounted for only 20% of the directorships in listed OECD companies, and as few as 4.8% of chief executive officer (CEO) positions were occupied by women. These figures were slightly higher than the averages of 16.4 and 2.4% for female directors and CEOs respectively in 2013.

Although female directors represent a minority within the boards of listed companies in developed countries, the presence of minorities in boards of directors can influence decisionmaking. In this sense, even in male dominated boards, appointing female directors may improve the working environment of the group (Bilimoria and Huse, 1997), and as a result, gender diverse boards meet more frequently and suffer less from absenteeism (Adams and Ferreira, 2009). There is a growing body of studies that analyse the effect of gender diverse boards on firms' affairs. The results obtained are not conclusive so far. There is some evidence suggesting that female directors improve firms' performance (Adams et al., 2011; Hutchinson et al., 2015; Terjesen et al., 2016) and also that it has a negative impact on the firm's stock prices (Ahern and Dittmar, 2012). The effect of female directors on firm's risk is also unclear with some studies suggesting a reduction of firms' risk taking (Lenard et al., 2014; Liu et al., 2014; Hutchinson et al., 2015) and others find no effect at all (Sila et al., 2016). However, the identification of a clear relationship between boards' gender diversity and firms' metrics of risk might be impeded by the fact that risk measures such as stock volatility or its systematic or idiosyncratic components are subject to many external factors uncontrolled by the board.

Our study follows a more direct approach to analyse the female's influence on the boards' functioning. Instead of focusing our attention on metrics of firms' risk, we analyse the association between female directors and a board decision with a high impact on firm risk taking: managerial pay. A question of special interest in the company is the way in which the board of directors uses compensation systems to align interests between shareholders and managers. From this perspective, we study the role played by female directors on managerial remuneration design as a determinant of the company's risk level.

The board of directors and its remuneration committee are both responsible for hiring, firing, and designing the compensation of top managers. Setting top managerial remuneration is one of the most problematic decisions at firm level, since top managers can exert a major influence on the bodies responsible for this decision (i.e., the board and its remuneration committee). Powerful managers can tilt the balance in favor of their own interests when deciding managerial pay levels and structure. Managerial power can often be behind the growth in executive remuneration and is more often than not unjustified by firm growth or profitability. In order to avoid managerial risk aversion, the remuneration packages of top managers have incorporated variable elements based on firms' performance as well as equity and option based pay. The positive relation between the value or stock options and the firms' stock volatility constitutes a source of risk-taking incentives for top managers. An inadequate pay mix can greatly alter managerial attitudes toward risk taking, resulting in an incentive for misalignment. An excessive use of options-based compensation has been attributed as being one of the main causes of the global financial crisis in 2007 (Fahlenbrach and Stulz, 2011; Chesney et al., 2012; Gregg et al., 2012; Cheng et al., 2015). Similarly, there is evidence of a positive association between the use of options-based CEO remuneration and socially irresponsible activities (McGuire et al., 2003; Bouslah et al., 2018).

Our contribution to the literature on board diversity is twofold. First, by focusing on the analysis of female directors and how the latter can influence the direct outcome of boards' decisions (i.e., CEO pay). Rather than analyzing a firm level outcome such as firm risk, we try to isolate our results from the confounding effects of outside factors that may affect firms' risk or performance. Second, we contribute to the scant group of works analyzing the effect of board gender diversity on CEO pay setting. To our knowledge, the only evidence provided by Adams and Ferreira (2009) uses a sample of large US firms. Our analysis has been conducted for the Spanish market. Therefore, the risk reducing influence of female directors observed in the US market might differ in the case of Spain where the use of option-based managerial compensation is much less common than in the US context. Our results could be extrapolated to other European countries with similar CEO pay structures. This is indeed a matter of interest given that Union member countries are expected to implement UE directives seeking board gender diversity.

The remainder sections of the paper are structured as follows. In section Objective we do a review of previous literature. In the next two sections we describe our data and empirical approach. We follow by presenting and discussing our results in section Results and finally in section Discussion we extract conclusions.

GENDER DIVERSITY, DISCRIMINATION, AND MANAGEMENT

Female Under Representation at the Upper Echelons

Women have traditionally been excluded from the active work force and remain under-represented in managerial positions (Tatli et al., 2013), experiencing the "glass ceiling" effect (Pichler et al., 2008; Cech and Blair-Loy, 2010), and consequently remain in an unfavorable situation. According to the 2010-2016 national labor force survey conducted by the Pew Research Center, women corporate power is limited although women represent 40% or more of the work force in more than 80 countries globally. Additionally, the total number of female directors and the rate of increase in their numbers over time remain somewhat scarce. Nevertheless, women have been gaining ground on corporate boards in recent years. In 2015, women held 17.9% of the board seats in Fortune 1,000 companies. The proportion of female directors on the boards of large public firms listed in EU 28 countries has increased from 18.6% in 2014 to 23.3% in 2016. Female board members in IBEX35 firms increased by 13.75% in 2016 and the total percentage of female directors in the IBEX-35-19.83%—is slowly getting closer to the European average. These meager figures of female representation show that there is still a long way to achieving equal career opportunities for men and women.

Legislation has encouraged diversity in management teams, but both intentional and unintentional institutional barriers exist in the workplace (Joshi et al., 2015). Even when they are in high status occupations, women often face challenges at work, including discrimination (Hahm et al., 2010). As a result, they experience issues of visibility, that is, increased experiences of heightened visibility and invisibility (Broadbridge and Simpson, 2011).

We can trace the roots of female discrimination at work from two main but different perspectives: individual and organizational. The organizational perspective would seem to be more relevant in this case, with some approaches dealing with similar problems, mainly gender stereotyping of managerial positions (Schein, 2007), so we are going to outline the organizational perspective. Stone-Romero and Stone (2005) "presented an interesting model that analyses discrimination" from the perspective of decision-makers. It highlights discrimination as being the result of categorizing individuals according to group membership in a way that decision-making is influenced by stereotypes. In general, women stereotypes are "viewed as less suitable for managerial jobs when compared to the stereotypes of male, white, middle-aged workers (Goldman et al., 2006)," who seem to represent hard or technical competences (i.e., knowledge, abilities, self-confidence, assertiveness, and dominance). The fact that these demands are key to accessing high-status managerial and professional jobs contributes to the problem; even more so, when women are associated with female soft competences (i.e., teamworking, communication, and emotional support). Therefore, criteria for job access are presumably fostered and biased because of this kind of stereotyping (Schein, 2007).

The social identity perspective (Tajfel and Turner, 1979), "is mainly based on stating" that group members (ingroup) tend to protect their self-esteem in order to achieve a positive and particular social identity. This can result in discrimination, either directly or indirectly, competing, separating or punishing the outgroup by giving preferential treatment to the ingroup, and ultimately, leading to the so-called ingroup bias phenomenon. In this sense, the statistical discrimination model deals with the stereotypical orientation of the employer on average data about the possible performance of a particular group, and protecting the ingroup as well. According to this theory, inequality may exist and persist between demographic groups even when economic agents are non-prejudiced. Following Rodgers (2009), this type of discrimination can result in a self-reinforcing vicious circle over time, as on exit, average individuals from the discriminated group are discouraged from participating in the market or improving their skills as their (average) return on investment is less than for the non-discriminated group. But there are other approaches for the explanation of gender discrimination.

The occupational segregation model refers to the case where the representatives of different groups of workers have unequal access to employment positions. This means that occupations are separated: some are for men and others for women. The origin of segregation can occur on different grounds. To begin with, self-selection phenomenon, the selection by women to depart from higher level positions choosing instead to dedicate themselves to more traditional family roles. The latter leads us to the glass escalator effect, through which women must watch as men surpass them on the way to the top of the organizations (Snyder and Green, 2008).

Sheridan and Milgate (2003) "attribute the lack of female directors to the scarce number of women as senior managers." The case of management is particularly interesting since it has traditionally been viewed as a male domain requiring specific sets of skills. But simultaneously, women who are on the way to getting power are at risk for the backlash effect (Rudman, 1998), seen as a social and economic punishment for defying stereotypic expectations, and consequently at risk of prejudice and hiring discrimination. Working women who demonstrate stereotypical male behaviors are likely to face setbacks because they do not fit the female stereotype, especially in top positions. One explanation of this phenomenon is that women who demonstrate hard skills that are consistent with successful managers, can be perceived negatively by some co-workers for not behaving in a traditional feminine way. These women are perceived as more competent, but at the same time less socially skilled, less likable and less likely to be promoted.

Moreover, women need to comply with masculine norms of behavior if they are to break through the glass ceiling, acting as masculine manager stereotypes, and exceeding male cultural norms. Liff and Ward (2001, p. 20) pointed out that "organizations are also the site within which women come to understand the requirements of senior jobs and their own career options. Organizational cultures, structures, and practices provide the context within which this occurs and can lead women to decide that such jobs, or the process they would have to go through to get them, are not for them." This can lead to a generalized managerial assumption that women are satisfied to continue in their present position, whilst male peers indicate much more strongly to the person responsible for promotions their readiness for the next step up. Traditional female family responsibilities could hinder commitment to the organization and their lack of involvement in corporate networks limits the access of women to senior jobs. The gender bias seems to rest on employers' stereotypes of women, as more trustworthy, honest, meticulous and patient (Aganon, 1999).

Other explanations present women as more skilful than men in terms of team-building and communication but worse in terms of business skills. Based on these attitudes, women and men are therefore matched to different jobs, "which require different traits, consistent with the views of the dominant group holding that job." Outstanding research by Schein and colleagues over a period of more than 40 years showed that the role of "managers has been associated with male characteristics, not only in the United States" but in several other countries as well (e.g., Schein, 2007), posing the think manager-think male effect. This situation might explain by itself that white men hold a disproportionate number of the highest paying jobs and account for the best opportunities for advancement. Therefore, white men will be less disadvantaged at this stage than white women. Managers and employees of professional firms tend toward the homosocial reproduction in organizations where they were drawn, hiring co-workers similar to themselves.

Following Goldman et al. (2006), the consequences of gender discrimination can exist both at an organizational level and at an individual level also. For example, discrimination affects negatively the psychological health of women, and even stigmatizes them if they publicly denounce having been discriminated.

Summing up this section, women have been suffering the personal and social consequences of a disadvantageous situation both outside and inside organizations due to several cultural and biased decision-making practices revolving around discrimination issues, mainly based on stereotyping their competences in order to avoid them holding managerial positions. But, as we can see in the next sections the contribution of women to organizational performance should be highlighted as their role could be beneficial for organizations in many ways. Now we focus on the influence that female directors can have on firm value in the form of financial performance and risk-taking with specific attention being paid to their role in executive pay setting.

Female Directors and Boards Performance

The Board of Directors is a control governance mechanism, aimed to monitor managerial activities so as to mitigate agency costs (Jensen, 1993), and to set the strategic objectives which should orientate the course of the company (Hillman and Dalziel, 2003). The Board's supervisory tasks include: monitoring the CEO, and the implementation of the firms long term strategy, firing and hiring the CEO and assessing and rewarding the CEO/top managers of the firm (Hillman and Dalziel, 2003).

There are opposing views on the forces driving executive remuneration design. According to the optimal contracting perspective on executive remuneration, managerial remuneration packages should align the divergent interests of managers and shareholders. In this regard, remuneration constitutes a mechanism which provides incentives and discipline to executives, ensuring that the marginal benefits that can be obtained from opportunistic behavior are lower than the opportunity costs associated with this behavior in terms of lower payments from the company (Shleifer and Vishny, 1997).

In contrast, the managerial power approach (Jensen, 1993; Hermalin and Weisbach, 1998; Bebchuk et al., 2002a,b; Bebchuk and Fried, 2003) argues that the design and implementation of executive remuneration policies is a potential source of conflict as powerful executives can influence managerial compensation design, which can result in sub-optimal compensation contracts. An executive remuneration structure should be aligned with the interests of shareholders and other employees, company's performance, long-term strategy and corporate and social responsibility commitments. Therefore, regulators and corporate good governance codes propose, among other recommendations, that the board of directors is dominated by independent directors and hence, set up a nomination and remuneration committee (hereafter, NRC) to independently evaluate the remuneration policy of company executives and oversee that it is performancerelated, and complies with the principles of moderation and transparency.

The effective implementation of the board of directors' functions involves designing an adequate system of incentives for executives and, at the same time, ensuring that the board structure is diverse in terms of gender, races and experience of their members (Westphal and Milton, 2000). The Higgs Report (2003) suggested that gender diversity increases board effectiveness and therefore recommended that more women be incorporated to boards, which has long been considered an organizational good practice. The arguments for gender diversity on corporate boards are manifold. Gender diverse boards provide access to a broader knowledge base (Sheridan et al., 2011; Laguir and Den Besten, 2016), which in turn expands the set of experiences and points of view available in an all-male board (Daily and Dalton, 2003). As a work group, adding female directors to the boards' composition improves the working environment (Bilimoria and Huse, 1997), reduces directors' absenteeism (Adams and Ferreira, 2009) and produces better board deliberations (Eagly and Johnson, 1990; Kravitz, 2003). Having female representation on the board also has the advantage of adding legitimacy to the firm, as inequality

between men and women's rights is seen as unacceptable in developed countries. From the agency theory perspective gender diverse boards are also optimal, since they produce superior monitoring outcomes as compared to all male boards (Adams and Ferreira, 2009). There are also numerous studies that have linked gender-diverse boards with better financial performance (Carter et al., 2003; Erhardt et al., 2003; Smith et al., 2006; Campbell and Mínguez-Vera, 2008; Lückerath-Rovers, 2013; Liu et al., 2014; Terjesen et al., 2016), better governance (Adams and Ferreira, 2009; Gul et al., 2013), increased innovation (Miller and Triana, 2009; Torchia et al., 2011), and firms' corporate social responsibility (Bear et al., 2010). Nonetheless, as female are a minority group, it is not clear how their influence could take place. Following Minority Conversion Model (Moscovici, 1985), minorities activate social validation process focusing on the object of disagreement. That is, minorities influence take place indirectly through conversion, a latent change, intimate; whilst majorities influence take place through a direct way, fast and in public (Mugny et al., 1991). Social comparison operates more on different opinions (Nemeth, 1986). When we compare majority groups with minorities some social differences emerge (Maass, 1991): minorities are seen as more salient, different, with less credibility, and being under high social pressure. Following excellent Mannix and Neale (2005) revision on this topic we are going to address deeply this issue. Majority groups has been traditionally consider as more powerful and influencers through the pressure for conformity (e.g., Janis, 1982), because it is assumed integration and social validation. However, Westphal and Milton (2000) demonstrated that the influence of minorities can avoid outgroup biases that would otherwise minimize their influence when they have prior experience on other boards or social network links to other directors that foster them to create the image of similarity with the majority. As Nemeth (1986) stated, "minority opinions provoke majority members to respond with an augmented cognitive flexibility, probably because of the social pressure of the team to converge to a single decision or consensus" (Moscovici, 1985), and in the case of boards presenting a documented remuneration proposal. Mugny and Papastamou (1980) found that "the consistent disagreement of two is stronger than one disagreement." More on this Larson et al. (2004) found coalitions to be particularly effective at persuading the group. Finally, Moscovici (1985), proposed that double minorities (different in demographic characteristics and opinions) might exert greater latent influence than ingroup minorities (similar to the majority in their demographic characteristics but have divergent opinions). Outgroup members with divergent perspectives may be more willing to express opinions and exert influence on the group, avoiding cognitive dissonance and enhancing the out-group member to validate her contribution to the group.

There is also a large body of literature that investigates the effect of board gender diversity on firm risk. The study of Lenard et al. (2014) shows that more gender diversity in a board of directors impacts firm risk by contributing to lower variability of stock market return. Results in Australia by Hutchinson et al. (2015) also show that gender diversity moderates excessive firm risk which in turn improves firms' financial performance.

Faccio et al. (2016), found that transitions from male to female CEOs (or from female to male) are associated with economically and statistically significant reductions (increases) in corporate risk-taking. On the contrary, Sila et al. (2016), have not found evidence that female board representation affects firm risk in a sample of US firms. Croson and Gneezy (2009) found that women could be more risk averse in the general population but not in managerial positions where differences are smaller and often inexistent. Here, a self-selection phenomenon could be at the origin of this exception. Another explanation can be grounded on the situational theory by Mischel (1968, 2004), who established that when the situation is strong enough (e.g., limited with social norms, rules, etc.), personality differences between subjects are less explicit. In consequence, behavior is more specific and unstable depending on the situation, in a way that when the latter is unambiguous behavior is more similar.

Female Directors and Executive Pay

In order to avoid possible conflicts of interest interfering in the optimal design of remuneration policies, the board and NRC need a high degree of independence, experience, knowledge, expertise, and values (Hillman and Dalziel, 2003). In this sense, gender diversity can help provide these skills, necessary for the optimal design of remuneration policies. Several prior studies have examined the effect of gender diversity on NRC when designing executive pay arrangements. This scarce but emerging literature investigates mainly whether top management pay and corporate performance are more aligned in companies with gender-diverse compensation committees, leading to mixed results. The study by Borrenbergs et al. (2017), investigates the relationship between female presence in the remuneration committee and the relative weight of performance contingent pay for top executives. The findings, based on a detailed analysis of a sample of public US and Canadian firms, show strong evidence supporting the fact that gender-diverse compensation committees are associated with lower levels of annual bonuses in top executives' remuneration contracts (variable short-term compensation). However, the models do not provide evidence with respect to the relative weight of total variable compensation, that is, when other long-term variable compensations are considered (option awards, stock grants and long-term incentive plans). Other studies have found evidence of a negative relationship between gender diversity compensation committees and CEO pay. A study by Bugeja et al. (2016), based on annual company data collected between 2002 and 2009 show that CEO compensation levels are negatively associated with the gender-diversity of the compensation committee, but not with the gender-diversity of the board.

OBJECTIVE

In this study we have focused on the role played by female directors on boards and remuneration committees when designing and implementing CEOs incentive schemes. Our work expands upon previous research on the association between gender-diverse boards (and compensation committees) and CEO remuneration packages by analyzing whether the percentage of dissent say on pay vote is different for firms with and without gender-diverse compensation committees.

Taking into account all of the above considerations regarding the positive association of female directors with board monitoring performance, we can hypothesize that the presence of female board members is positively associated with CEO wage moderation. Consequently, we can hypothesize the influence of females as minority group on male majority group on boards.

Also, when considering the negative association of female directors with firm risk and risk-taking incentives provided by option-based remuneration, we expect to see a negative association between female director representation and the use of this form of incentive pay.

METHODOLOGY

Sample and Data

Our sample includes unbalanced panel data from companies listed on the Madrid Stock Exchange between 2011 and 2015. Companies going public between 2011 and 2015 have been added to the sample in the year of their initial public offer and companies de-listed have been eliminated in the year of that event. We have obtained all corporate governance information related to board structure, committees, CEO remuneration and ownership structure of the firms from the registers of the National commission of the stock Exchange (Comisión Nacional del Mercado de Valores or CNMV). The accounting data to determine the size of the company, its profitability and leverage comes from the records of the CNMV and SABI (Sistema de Análisis de Balances Ibéricos) databases. Finally, the share prices to estimate market returns are obtained from Capital IQ.

Variables

The main variables of our study are CEO pay and the results from the annual vote issued by the firms' shareholders about the firm's executive compensation plan, these being used as dependent variables. As we are mainly interested in the moderation and risk incentives provided by executive pay, we analyse the relative annual increase of CEO pay and the proportion of equity and option-based CEO pay. The first is proxied by the annual increase of total CEO pay scaled by the previous CEO total pay. The second is proxied by the ratio of equity and option-based CEO pay components scaled by total CEO pay.

Our main independent variables are the presence of female directors on the board and the nomination and remuneration committee. We proxy the female influence on the firm's corporate governance system with three variables, that is, by the proportion of female directors scaled respectively by the number of members on the board, the audit committee, and the nomination and remuneration committee. Alternatively, we use a set of dummy variables that take the value of one when there is at least one female directors on the board, the audit committee, or the nomination and remuneration committee. The influence of female directors on executive compensation may differ depending on the independent status of the directors considered. Therefore, to investigate the possible differences between executive, independent and proprietary female board members on executive pay, we have included the proportion of executive independent and proprietary female directors in relation to the total board size. We also include in our regression models the corresponding dummy variables representing the presence of such directors on the board.

We control for both board and committee composition and size that are considered to affect their supervisory activity. We use the proportion of independent board directors as a proxy of the board's independency. The size of the board and its committees are controlled by the logarithm of the total number of board directors.

We control possible firm size effects on all models through the inclusion of the logarithm of the book value of total assets measured in thousands of constant Euros. We also include controls for financial leverage and performance and investment opportunities that may affect CEO pay. We proxy the firm's performance with two different variables: company Return on assets, measured by the ratio of EBIT to total assets and the market annual performance. Finally, we control for the firm's investment opportunities by including the market to book ratio defined as the market value of the firm's equity scaled by its book value.

The models account for the possible effects of the changes in general economic conditions by including year dummies. As executive pay may vary across industries, we have also included Standard Industrial classification (SIC) dummy variables to control for this effect.

Data Analysis

The following regression equation is used to test our hypotheses related to two alternative outcomes: the annual growth rate of CEO pay and the proportion equity and option-based CEO remuneration;

$$y_{i,t} = \alpha + \beta' M_{i,t} + \delta' X_{i,t} + \mu_i + \lambda_t + \varepsilon_{i,t}$$
(1)

where our dependent variable, *y* indexes either a CEO pay growth rate or the proportion of equity and option-based CEO pay by firm *i* in year *t*, M is a vector of variables of interest that are potential determinants of CEO remuneration—female representation on the board, the remuneration committee and the audit committee. X is a control vector that includes board independence and size, firm size, profitability, leverage, and investment opportunities variables. Our model also includes industry (μ_i) and year (λ_t) fixed-effects and allows for heteroscedastic error terms that are clustered at firm level ($\varepsilon_{i,t}$).

RESULTS

Table 1 shows the distribution of the sample. Gender-diverse board of director companies (i.e., boards that have at least one female director) have increased from 59.24% in 2012 to 75.54% in 2015. We can attribute the rise of female participation on the board of directors to the progressive implementation of the Spanish Organic Law 3/2007, regarding effective equality between men and women. This Law prescribes large listed

TABLE 1 | Sample description.

(A) Frequency of firms by year (2012–2015).

	Total	Female presen	ce on boards	All-male board of directors		
Fiscal year	Number firms	Number firms	Percentage	Number of firms	Percentage	
2012	157	93	24.16%	64	30.34%	
2013	153	87	22.60%	66	31.28%	
2014	147	100	25.97%	47	22.27%	
2015	139	105	27.27%	34	16.11%	
Total	596	385	100%	211	100%	

(B) Frequency of firms by year: all-male vs. female presence on boards.

	2012		2013		201	4	2015	
Type of board	Number firms	Percentage						
All-male	64	40.76%	66	43.14%	47	31.97%	34	24.46%
Gender-diverse	93	59.24%	87	56.86%	100	68.03%	105	75.54%
Total	157	100%	153	100%	147	100%	139	100%

TABLE 2 | Descriptive statistics.

Variable	Number of Observations	Mean	Standard Deviation	Minimum	Maximum
Annual CEO pay (thousand euros)	243	1,487.769	29,336.24	31	241,919
Relative annual increase of CEO pay	243	0.067	0.9376	-0.966	6.2711
Proportion of dissent say on may vote	329	0.028	0.0758	0	0.0933
Proportion of board female directors	243	0.115	0.1036	0	0.5
Proportion of audit committee female directors	236	0.132	0.1730	0	0.6666
Proportion of remuneration committee female directors	213	0.112	0.1720	0	0.8
Proportion of proprietary board female directors	243	0.05	0.0775	0	0.3846
Proportion of executive board female directors	243	0.007	0.0310	0	0.2222
Proportion of independent board female directors	243	0.058	0.0797	0	0.5
Female directors presence (board)	243	0.712	0.4537	0	1
Proprietary female directors presence (board)	243	0.387	0.4880	0	1
Executive female directors presence (board)	243	0.058	0.2334	0	1
Independent female directors presence (board)	243	0.399	0.4907	0	1
Proportion of equity and option based CEO pay	243	0.103	0.3648	0	2.7663
Proportion of board independent directors	243	0.335	0.1747	0	0.8888
Board size	243	11.49	4.717	1	36
Remuneration committee size	213	4.333	1.7174	1	12
Audit committee size	243	4.097	1.5419	1	12
Total assets (thousand euros)	243	3,596,727	7,753,106	12,039.73	5.01E + 07
Return on assets	243	0.035	0.1213	-0.428	0.3614
Annual market return	243	0.1	0.4898	-0.823	2.0217
Book to market ratio	243	1.884	2.7633	-1.138	22.129

companies to reach a 40% female representation on the board of directors in 8 years.

The descriptive statistics of the variables used are presented in **Table 2**. The mean annual total CEO remuneration is 1,487,769 Euros with an average annual increase of 6.72% over the period

2012–2015. We have reported an average 2.83% of dissent says on pay vote, resulting in a much lower opposition to executive remuneration plan than in the US market. For instance, in the same period of our study, the consultancy firm Semler Brossy reports for the Rusell 3,000 firms that the opposition say on TABLE 3 | Comparisons of firms with and without female directors between 2012 and 2015.

Variable	Firms with female directors	Firms with no female directors	Mean difference	t
	Mean	Mean		
Annual CEO pay thousand euros	1342.64	880.80	461.83***	26.472
Relative annual increase of CEO pay	0.0278	0.08113	0.0532	0.4549
Proportion of equity and option based CEO pay	0.3364	0.0616	0.0537	1.2738
Proportion of dissent say on may vote	0.0285	0.0189	0.0096	14.639
Proportion of board independent directors	0.3364	0.2855	0.0508***	53.644
Board size	11.0727	9.3044	1.7683***	84.843
Logarithm of total assets	12.5226	12.4360	0.0866	0.6282
Return on assets	0.0246	0.0211	0.0035	0.3129
Annual market return	0.0687	0.0875	-0.0187	-0.6226
Book to market ratio	2.6056	3.1693	-0.5636	-0.9521
Debt to assets ratio	0.5927	0.6839	-0.0911	-11.117

***p < 0.01. In bold statistically significant coefficients of variables of interest.

pay vote ranged from a minimum level of 8% in 2016 to a maximum level of 10% in 2012. The proportion of female directors is 11% for the board and the remuneration committee and 13% for the audit committee. This 11% proportion of female directors is comprised of independent directors (5.3%), proprietary directors (4.9%) and executive directors (0.7%). To conserve space, we omit discussion of the descriptive statistics of our control variables.

Table 3 shows the univariate analysis of the mean differences between companies with and without female directors (genderdiverse and all-male board of directors) for the period 2012– 2015. Companies with female directors offer a higher CEO total remuneration, a higher percentage of short-term and longterm variable remuneration than those companies with all male boards. The mean value of CEO total pay is 461.83 thousand euros higher for firms with gender-diverse boards of directors. We also note that companies with gender diverse board directors are bigger and show both a higher percentage of independent directors and larger Boards.

Tables 4–7 show our estimations of the effect of female directors both on the growth rate of CEOs' pay and the proportion equity and option-based CEO remuneration. **Table 8** displays the effect of female directors on the percentage of shareholders opposition to the managerial remuneration plan presented at the Annual General Meeting (negative or dissent say on pay vote). Results in **Tables 4**, **5** show respectively that the proportion of female directors on the remuneration and nomination committee and the indicator of the presence of female members on this committee both relate negatively to the growth rate of CEO pay. The presence of female directors on the design of executive pay design is associated to a moderation in the growth of CEO pay.

The economic effect of female directors on the nomination and remuneration committee is not negligible. The coefficient in column 3 of **Table 4** indicates that an increase of one standard deviation in the proportion of female directors on the nomination and remuneration committee is associated with a 13% reduction in the growth rate of CEO compensation. The coefficient in column 3 of **Table 5** indicates that having at least one female director on the remuneration and nomination committee is associated with a 23% reduction in the growth rate of CEO pay.

The models predicting the proportion of equity and optionbased CEO pay displayed in columns 4–6 of **Tables 4**, **5** show positive coefficients for all the proxies of female board and committee membership. However, none of these coefficients are statistically significant at conventional levels. Altogether, our results suggest that female directors on the remuneration committee are associated to lower growth rates of CEO pay, no specific effect appears to exist in terms of the use of long term incentives in the executive pay mix.

In terms of types of directors, **Tables 6**, **7** suggest that the proportion of proprietary directors is associated to lower levels of CEO pay growth. The coefficient in the second column of **Table 6** indicates that an increase of one standard deviation of the proportion of proprietary female directors is associated with a 10% decrease in executive pay growth. The second model in **Table 7** indicates that having female proprietary directors is associated with a 26% lower growth rate in CEO pay.

We also display in the sixth column of **Table 6** a significant and negative relationship between the proportion of board executive female directors and the proportion of equity and option-based CEO remuneration. Nevertheless, the economic importance of this effect is relatively small. An increase in one standard deviation in the proportion of executive female directors is associated with a 0.19% reduction in the proportion of equity and option-based remuneration. The corresponding model in **Table 7** indicates that having one or more female executive directors is associated with a 6% lower proportion of equity and option- based CEO remuneration.

Table 8 shows the results for the analysis of the relationship between female directorships and the proportion of shareholders' opposition to the managerial compensation plan voted at the

			Relative annual increase of CEO pay	increase of CI	EO pay			Proporti	Proportion of equity and option based CEO pay	option based	CEO pay	
	Model 1	11	Model 2	9 2	Model 3	el 3	Model 4	14	Model 5	15	Model 6	9 1
	m	+	B	t	m	t	B	t	8	t	в	t
Proportion of board female directors	-0.271	-0.51					0.108	0.58				
Proportion of audit committee female directors			0.477	1.39					0.0622	0.50		
Proportion of remuneration committee female directors					-0.761**	-2.43					-0.0350	-0.30
Proportion of board independent directors	0.264	1.13	0.231	1.04	0.278	1.24	-0.176	-1.64	-0.176	-1.58	-0.240**	-2.11
Logarithm of board size	0.119	1.08	0.187	1.28	0.184	1.11	0.0262	1.01	0.0229	0.76	0.0396	1.36
Logarithm of total assets	-0.0135	-0.48	-0.0163	-0.53	-0.0225	-0.69	0.000935	0.16	0.000735	0.13	0.00157	0.25
Return on assets	-0.350	-0.96	-0.332	-0.91	-0.0130	-0.04	-0.00798	-0.09	-0.0126	-0.15	-0.00624	-0.07
Debt to assets ratio	-0.0932	-0.62	-0.0610	-0.41	-0.190	-0.97	0.0124	0.48	0.0144	0.50	0.0101	0.28
Annual market return	0.0634	0.69	0.0225	0.25	0.106	1.00	-0.0542*	-1.91	-0.0525*	-1.85	-0.0530*	-1.73
Book to market ratio	0.0151	1.55	0.0160*	1.74	0.00505	0.74	-0.000805	-0.36	-0.000562	-0.25	0.000343	0.15
Constant	0.137	0.31	-0.113	-0.26	0.217	0.43	-0.0518	-0.40	-0.0374	-0.30	-0.0528	-0.42
No. of Obs.	243		236	6	213	e	297	h	290		264	
Adjusted R ²	0.0587	37	0.0712	12	0.0597	197	0.180	0	0.178	.00	0.157	7
F	4.927	7	4.446	16	3.864	54	1.788	80	1.767	17	1.426	6
d	0.0000	Q	0.0000	00	0.0000	00	0.0409	90	0.0441	41	0.145	5
No. of firms clusters	92		92	~	84	4	95		95		87	

Variable			Relative annual increase of CEO pay	increase of CE(O pay			Propo	Proportion of equity and option based CEO pay	option based (CEO pay	
	Model 1	11	Mod	Model 2	Model 3	el 3	Mo	Model 4	Model 5	el 5	Model 6	9 6
	ß	t	B	t	B	t	B	t	B	t	ß	t
Female directors presence at the board	-0.0501	-0.43					0.0561	1.15				
Female directors presence at the board			0.176	1.48					0.0165	0.38		
Female directors presence at the board					-0.232**	-2.01					0.00693	0.13
Proportion of board independent directors	0.258	1.19	0.213	0.97	0.313	1.29	-0.182*	-1.66	-0.177	-1.59	-0.247**	-2.02
Logarithm of board size	0.128	1.08	0.180	1.25	0.166	1.01	0.0138	0.63	0.0216	0.73	0.0412	1.33
Logarithm of total assets	-0.0139	-0.49	-0.0145	-0.48	-0.0248	-0.75	0.00227	0.35	0.00101	0.17	0.00128	0.21
Return on assets	-0.344	-0.91	-0.346	-0.95	0.0173	0.05	-0.00718	-0.08	-0.0136	-0.16	-0.0173	-0.17
Debt to assets ratio	0.0597	0.64	0.0197	0.22	0.102	0.99	-0.0544*	-1.93	-0.0523*	-1.82	-0.0534*	-1.74
Annual market return	0.0152	1.54	0.0156*	1.69	0.00582	0.90	-0.00114	-0.51	-0.000642	-0.28	0.000292	0.13
Book to market ratio	-0.0934	-0.61	-0.0678	-0.47	-0.191	-0.96	0.0140	0.52	0.0127	0.46	0.0112	0.31
Constant	0.126	0.28	-0.111	-0.25	0.270	0.53	-0.0703	-0.52	-0.0341	-0.27	-0.0581	-0.43
No. of Obs.	243		53	236	213		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	297	290	0	264	
Adjusted R ²	0.0584	34	0.07	0.0720	0.0545	45	0.	0.184	0.178	78	0.157	2
F	4.862	2	4.4	4.492	3.818	18	÷.	1.698	1.747	17	1.393	0
d	0.0000	0	0.00	0.0000	0.0000	00	0.0	0.0565	0.0475	75	0.1600	8
No. of firms clusters	92		6	92	84	_		95	96		87	
			Relative annual increase of CEO pay	increase of CE	O pay			Propo	Proportion of equity and option based CEO pay	l option based	CEO pay	
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	Model 1	11	Moc	Model 2	Moc	Model 3	Moo	Model 4	Mod	Model 5	Model 6	əl 6
	B	t	ß	t	B	t	m	t	B	t	B	t
Proportion of independent board female directors	0.483	0.72					0.393	1.58				
Proportion of proprietary board female directors			-1.401*	-1.78					-0.117	-0.53		
Proportion of executive board female directors					2.673	1.01					-0.459**	-2.38
Proportion of board independent directors	0.148	0.64	0.0814	0.42	0.281	1.34	-0.244*	-1.96	-0.181	-1.63	-0.173	-1.63
Logarithm of board size	0.116	1.05	0.134	1.23	0.120	1.06	0.0266	1.07	0.0285	1.10	0.0263	1.01
Firm logarithm of total assets	-0.0128	-0.45	-0.0146	-0.52	-0.0142	-0.50	0.000735	0.13	0.000346	0.06	0.000837	0.14
Return on assets	-0.323	-0.86	-0.350	-0.93	-0.259	-0.86	-0.00681	-0.08	-0.0123	-0.15	-0.0231	-0.27
Debt to assets ratio	-0.0868	-0.59	-0.100	-0.66	-0.0815	-0.61	0.0144	0.50	0.0114	0.45	0.0111	0.44
Annual market return	0.0453	0.45	0.0549	0.58	0.0695	0.72	-0.0616**	-2.21	-0.0511*	-1.87	-0.0531*	-1.94
Book to market ratio	0.0146	1.49	0.0160*	1.67	0.0143	1.43	-0.000780	-0.35	-0.000525	-0.25	-0.000599	-0.26
Constant	0.0993	0.22	0.227	0.50	0.0664	0.15	-0.0378	-0.34	-0.0251	-0.21	-0.0318	-0.28
No. of Obs.	243		57	236	21	213	5	297	50	290	264	5
Adjusted R ²	0.0584	34	0.0	0.0720	0.0	0.0545	.0	0.184	0.178	78	0.157	57
11	4.862	N	4.4	4.492	3.8	3.818	1.6	1.698	1.747	47	1.393	33
0	0.0000	00	0.0	0.0000	0.0	0.0000	0.0	0.0565	0.0475	175	0.1600	00
No. of firms clusters	92		0	92	00	84	0,	95	96	10	87	

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Variable			Relative annual increase of CEO pay	increase of C	EO pay			Propor	Proportion of equity and option based CEO pay	option based	CEO pay	
	Model 1	1	Mod	Model 2	Model 3	el 3	Mo	Model 4	Model 5	el 5	Model 6	9 19
	œ	t	ß	t	ß	t	ß	t	Δ	t	œ	ţ
Independent female directors presence at the board	0.130	0.86					0.0313	0.62				
Proprietary female directors presence at the board			-0.267**	-2.32					0.0512	0.99		
Executive female directors presence at the board					0.339	1.04					-0.0634**	-2.35
Proportion of board independent directors	0.122	0.58	0.0319	0.15	0.274	1.30	-0.197	-1.60	-0.127	-1.25	-0.172	-1.62
Logarithm of board size	0.0994	0.84	0.166	1.49	0.116	1.05	0.0232	0.92	0.0174	0.75	0.0269	1.03
Logarithm of total assets	-0.0112	-0.39	-0.0165	-0.60	-0.0151	-0.53	0.00109	0.18	0.00121	0.20	0.00102	0.18
Return on assets	-0.315	-0.82	-0.362	-0.97	-0.261	-0.86	-0.0104	-0.12	-0.00781	-0.09	-0.0240	-0.28
Debt to assets ratio	-0.0767	-0.50	-0.110	-0.73	-0.0828	-0.61	0.0147	0.53	0.0150	0.60	0.0112	0.44
Annual market return	0.0417	0.42	0.0496	0.54	0.0686	0.71	-0.0554*	-1.93	-0.0502*	-1.93	-0.0532*	-1.94
Book to market ratio	0.0145	1.51	0.0159*	1.69	0.0143	1.43	-0.000691	-0.31	-0.000976	-0.43	-0.000604	-0.26
Constant	0.0948	0.21	0.245	0.54	0.0955	0.22	-0.0394	-0.34	-0.0613	-0.46	-0.0360	-0.31
No. of Obs.	243	~	24	243	243	e	2	297	297	7	297	
Adjusted R ²	0.0618	18	0.0	0.0741	0.0647	347	.0	0.181	0.184	34	0.181	-
11	5.005	55	4.6	4.602	4.549	49	-	1.847	1.914	14	1.77	5
0	0.0000	00	0.0	0.0000	0.0000	000	0.0	0.0330	0.0258	58	0.0430	80
No. of firms clusters	92		ð	92	92	0	0,	95	95	10	92	

TABLE 6 | Regression results of CEO pay on executive, proprietary and independent female directors' weighting.

TABLE 8 | Regression results of Dissent say on pay vote on female directors' weight.

Variable		F	Proportion of dissen	t say on may v	ote	
	Mod	el 1	Mode	12	Model	3
	В	t	В	t	В	t
Proportion of board female directors	-0.0346	-1.00				
Proportion of audit committee female directors			-0.000724	-0.03		
Proportion of remuneration committee female directors					-0.0478***	-2.73
Proportion of board independent directors	-0.0106	-0.42	-0.0108	-0.42	-0.00388	-0.16
Logarithm of board size	0.0124*	1.79	0.0123	1.52	0.0127*	1.80
Logarithm of total assets	0.00267	1.61	0.00254	1.43	0.00233	1.35
Return on assets	0.0371	1.42	0.0386	1.52	0.0429	1.61
Debt to assets ratio	0.00709	0.75	0.00685	0.71	0.0102	0.83
Annual market return	0.00547	0.87	0.00441	0.71	0.00769	1.02
Book to market ratio	-0.000684	-0.84	-0.000659	-0.80	-0.000364	-0.49
Constant	-0.0214	-0.94	-0.0247	-1.06	-0.0288	-1.27
No. of Obs.	37	1	361		329	
Adjusted R ²	0.05	37	0.050)4	0.0617	,
F	4.1	49	4.212	2	4.102	
P	0.00	000	0.000	0	0.0000)
No. Clusters	10	8	108		106	

Regressions are estimated using OLS with standard errors clustered by company. All models include 2-digit SIC and year dummies. *p < 0.1; ***p < 0.01. In bold statistically significant coefficients of variables of interest.

annual general meeting (dissent say on pay vote). Coefficients for all the proxies of female directorships are negative, but only statistically significant in the case of female directorships on the remuneration and nomination committee. The coefficient in the third column of **Table 8** indicates that a one standard deviation in the proportion of female directors on the remuneration and nomination committee is associated with a lower 0.8% dissent say on pay vote. This reduction in say on pay opposition might appear to be negligible but represents 30% of the average negative say on pay vote. This result is consistent with the moderating role of female directors on this committee reported in **Tables 4**, **5**.

Moreover, with the set of control variables used across all the estimated models we have obtained evidence of a negative relationship between the firm's market return and the proportion of equity and option-based CEO pay. This result could be explained as an attempt of low performing firms to improve their market returns by providing variable incentives to their CEOs. Option and equity-based CEO pay formulas provide the CEOs with incentives to create value for shareholders, that is, to align their interests with those of the firm.

Overall, our results suggest that female directors on the nomination and remuneration committee are both associated with lower levels of CEO pay growth and lower levels of shareholder opposition to the executive remuneration plan. This result suggests that the moderating role of female remuneration committee members is valued positively by firm owners. All in all, these results provide support to our hypothesis that female directors contribute toward CEO pay moderation. We also have partial support for the hypothesis that female directors reduce the use of option-based executive compensation given that our results only hold for executive female directors. This can be explained by the natural risk aversion of executives and at the same time by the low proportion of option-based executive pay in the Spanish market which renders this matter less relevant when designing executive pay plans.

DISCUSSION

The current debate about women on corporate boards of directors focuses on closing the pay gap and opening company boardrooms up to more women. The search for a political and social solution has led to additional and new legislation that involves an increased use of measures for the advancement of women to reduce gender gaps.

In addressing gender equality, we need to recognize that in all developed countries there are concerns about how to improve the situation of women in different settings of the professional arena. Women have reached higher education levels than men, so at the European level women represent 60% of all workers with higher education but only a 45% of total employment. However, when we look at the management positions, there seems to be a "glass ceiling" that prevents women from accessing positions of power and greater responsibility. Our sample shows that the percentage of female executive directors is low with only 5% of listed firms having female executive directors.

In Spain, following the implementation of the Organic Law 3/2007 on effective equality between men and women, it was recommended, not imposed, to increase and to include a minimum 40% of women on the boards of directors. The progressive implementation of effective gender equality legislation has favored the increase of women on the boards of directors in Spain. Their presence has gone from 6% in 2007 up to 17% nowadays. A very limited advance, more so when we consider that only 5% of executive directors are women. This means that most women are proprietary or independent directors with less decision-making power than executive directors on the board of directors. Nonetheless, there is a gap between the moment when new legislation is passed and the moment on which the implementation of such measures takes place (for instance, García-Izquierdo et al., 2010, 2015), so a progressive incorporation of women to boards during coming years is expected despite the objective of such 40% should be obtained by 2015 (eight years after legislation has passed). Nonetheless, reasons for this scarce implementation are not clear. We can say that 3/2007 Law explicitly state a recommendation (i.e., try to reach) but not a compulsory objective, nor any punishment nor any reward. Probably, in this matter of gender in traditional organizational contexts "hard law" would be more effective than "soft law." Simultaneously, as Boards are mainly composed by men probably they are aware or not committed enough for such social objective. Moreover, the economic crisis could easily have an effect on shaping organizational decisions to more tangible measures.

All in all, this paper corroborates that although the legislation in Spain presents a margin for improvement, as soft law, the incorporation of women appears to exert a positive effect in terms of higher wage moderation, and restraint in the use of long-term variable remuneration systems.

We have shown also how the presence of female directors on the board of directors and on the remuneration committee can provide a valuable tool for moderating CEO pay. Moreover, our results show that the presence of female directors on the remuneration committee is associated with lower growth rates of CEO pay, which can be considered a better organizational outcome in terms of good governance. This represent a clear

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proxy evidence of minority influence on boards, despite it is quite difficult to reveal the underlying mechanisms that are taking place in boards decision-making processes as is well known the meetings are more like a blackbox.

This research has been focused on the analysis of the relationship between the presence of women and CEO remuneration policy on boards of directors, but it would be interesting to include in the analysis other personal characteristics of the directors such as previous professional experience on other boards and academic and professional background. Nevertheless, we have seen that this limitation should not be particularly crucial as we can expect that personal, educational and professional profiles of male and female directors of companies operating in Spain do not differ significantly, even in family businesses due the implementation of the protocol.

Moreover, it should be quite interesting and appealing to unveil group processes and decision making mechanisms in order to be more informative and transparent for the stakeholders.

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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Accelerated Researchers: Psychosocial Risks in Gendered Institutions in Academia

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In recent decades, scientific institutions have undergone significant changes due to new managerialism and the application of excellence in research. This research model has given rise to tensions related to increasing pressures and working demands in a competitive international environment that accelerate the pace of academic life. In addition, precarious working conditions and job insecurity have affected academics' lives and careers. Academic literature has already addressed these organizational changes and their impact on academics, however, few studies have focused on psychosocial risks related to time constraints, meritocratic pressures and career insecurity from a gender perspective. This analysis is relevant given the gendered distribution of responsibilities and the evidence of gender biases in academia that hinder the advancement of gender equality in scientific institutions, as the persistent lack of women at the top of research careers show. In this paper, we explore the psychosocial effects of the new organizational model of science characterized by accelerated time regimes and precarious working conditions from a gender perspective. We draw attention to gender-based discriminatory practices that may yield an accumulative effect on the well-being of women academics. We analyze 36 interviews from women and men researchers from five areas of knowledge in Spanish universities and research centers, following a 'gendered institutions' approach. The results highlight psychosocial risks for both men and women academics as a result of accelerated work organizations, intensified by uncertainty and hyper-competition due to lack of positions. The hegemonic male work model characterized by total availability confirms academia as a gendered institution, especially damaging women's well-being and careers, as well as those of men committed to care responsibilities - challenging motherhood explanations which may discourage them from the pursuit of gender equality. Our findings highlight discriminatory practices toward women academics which create psychological harm and feelings of being unwelcome, putting their career progression at risk. Lastly, we suggest a different model of work organization following the implementation of a culture based on an 'ethics of care' feminist approach.

Keywords: gender, academia, time, well-being, precariousness, scientific careers

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INTRODUCTION

New managerialist practices and the application of excellence and competitiveness in research institutions (Deem, 1998, 2001; Shore and Wright, 2000; Van den Brink and Benschop, 2012a) have increased working rhythms, accelerating the pace of the academic life (Ylijoki and Mäntylä, 2003; Gill, 2009, 2017; Walker, 2009; Vostal, 2015). This has impacted in researchers' experiences, raising constraints in the academic practice and psychosocial risks, as some studies focused on academia have mentioned (Morley, 2005; Lynch, 2006; Sparkes, 2007; Menzies and Newson, 2008; Gill, 2009; Burrows, 2012; Leathwood and Read, 2013; Knights and Clarke, 2014; Mountz et al., 2015; Vostal, 2015). According to the European Agency for Safety and Health (Eurofound and EU-OSHA, 2014, p. 10) "psychosocial risks at work' refers to the likelihood that certain aspects of work design and the organization and management of work, and their social contexts, may lead to negative physical, psychological and social outcomes."

The audit culture that measure research performance through quantitative indicators, is identified as the origin of increasing stress and anxiety (Morley, 2005; Lynch, 2006; Burrows, 2012; Leathwood and Read, 2013; Knights and Clarke, 2014; Felt, 2017). Uncertainty over research careers and precariousness in the academic labor market also affect the working conditions shaping researchers' career development and personal lives (Gill, 2009; Müller, 2014; Fochler et al., 2016; Bozzon et al., 2017; Heijstra et al., 2017). However, few studies are focused on psychosocial risks of time constraints and precariousness from a gender perspective (Acker and Armenti, 2004; Menzies and Newson, 2008; Gill, 2009; Mountz et al., 2015). Many studies report gender biases in academia - centered, among others, on the lack of recognition, old boys' networks, gendered construction of scientific excellence and harassment (Fitzgerald et al., 1988; Rossiter, 1993; Wennerås and Wold, 1997; Steinpreis et al., 1999; Bagilhole and Goode, 2001; Gupta et al., 2004; Van den Brink and Benschop, 2012a; Jagsi et al., 2016) - which impede the advancement of women researchers and add an accumulative risk on their psychological well-being.

Our research explores psychosocial risks experienced by women and men academics emerging from accelerated time regimes and precariousness from a gender perspective. We also pay attention to specific gender-biased attitudes that may exacerbate psychosocial risks on women. The study focuses in Spanish academia, drawing on 36 interviews from five different research and academic institutions. We firstly present the literature review addressing: (a) the influence of acceleration and audit culture on the well-being and practices of researchers; (b) the impact of uncertainty and precarious working conditions on researchers; and (c) gender inequality in academia with a specific focus on time regimes. In the methodology section, we describe the design of the fieldwork and analysis. We adopt a content analysis methodology drawing on a gendered institutions approach (Acker, 1992). In the results, we show psychosocial risks from a gender perspective related to (a) time constraints due to increased work expectations, (b) lack of positions, labor precariousness and career uncertainty, and (c) invisible

and specific discriminatory practices on gender basis. In the discussion, we underscore the main results and limitations of the study, and lastly, we explore policy implications and conclusions.

LITERATURE REVIEW

The Impact of Acceleration and Audit Culture

Scientific excellence has been "discussed primarily in terms of productivity" and measured by indicators as part of new managerialist audit practices in recent decades (Deem, 1998, 2001; Shore and Wright, 2000; Van den Brink and Benschop, 2012a, p. 508). These practices are based on "critiques of professional power" and used to boost outputs and to seek differentiation between individuals, institutions, and countries in a competitive international environment (Deem, 1998, p. 51, Deem, 2009). Indicators, that were originally conceived as sources of information, nowadays enact *academic value* – especially regarding journals impact factor – that guides crucial decision-making processes, such as funding achieved or career progression (Burrows, 2012).

Within these organizational changes, researchers' demands and expectations have increased leading to an acceleration of academic working pace (Ylijoki and Mäntylä, 2003; Walker, 2009; Müller, 2014; Vostal, 2015). Vostal (2015, p. 298) points out tensions between increasing workload and unchanging temporal resources which "might have particularly misfortunate implications – for social environments, human relations, mental health and well-being." In their study of time in academia, Ylijoki and Mäntylä (2003) find four temporal structures in conflict: schedule time (externally imposed timetables), timeless time (indepth time needed for reading and writing), contracted time (referring to uncertainty and limited time of contracts) and personal time.

Some works mention audit culture as a source of stress and anxieties under constant self-monitoring and self-discipline (Morley, 2005; Lynch, 2006; Walker, 2009; Burrows, 2012; Knights and Clarke, 2014; Walker, 2014; Mountz et al., 2015). Morley (2005, p. 86) describes "stories of occupational stress, illness, alienation, fear, and resentment" among academics that highlight governance by numbers and rankings. On the one hand, the scarce time to perform research properly triggers feelings of vulnerability, failure, self-doubt, *imposter syndrome*, and occupational insecurity (Knights and Clarke, 2014). On the other, personal time for self-care, family or other interests, is "something that is lacking and constantly at risk of being excluded" which leads to academics' burnout (Ylijoki and Mäntylä, 2003, p. 68).

Audit culture also affects the working environment as time constraints and output pressures give rise to individualistic strategies (Sparkes, 2007; Müller, 2014; O'Neill, 2014; Clarke and Knights, 2015). In this respect, some authors report that social relations are damaged and individual identities are *contaminated* by competitiveness, eroding friendly relationships and companionship in the workplace (Morley, 2005; Sparkes, 2007; Baker, 2010). Ostensibly, poor quality of work is also a side-effect related to the achievement of excellence as defined by quantitative indicators, which contrasts with a focus on a wider-ranging impact of the academic work – research, teaching and service – on society and the students (Lynch, 2006; Walker, 2009; Hartman and Darab, 2012; O'Neill, 2014). This also creates psychological tensions in academics such as feelings of frustration and a loss of meaning related to ethical and professional values (Knights and Clarke, 2014).

Grant culture or *projectification*, meaning the "organization of research through third-party funded projects" (Felt, 2017, p. 55), is becoming another major source of pressure to pursue research careers and to be promoted. Not only continuity depends on the funding achieved in many cases, but also professional identity and self-image become connected to the grants obtained (Knights and Clarke, 2014; Morley, 2016). Projectification also defines researchers' strategies in predefined units of time: "[K]nowledge production must now be packaged in (generally) 3-year units, and publications are required during this time-span to demonstrate the worth of the investment" (Felt, 2017, p. 55). Research is structured in a standard and compressed way and different processes or unexpected events might not necessarily fit with the diversity of researchers' experiences, which might cause stressful situations.

The promise of peer recognition sustains the work model of researchers in academia (Knights and Clarke, 2014), keeping them in a constant rat race for merits while dealing with the necessary time for self-care or the care for others. This creates conflicting feelings: "We [researchers] experience over-work, stress, guilt and anxiety as well as, if we are lucky, pride, relief and joy. We want to escape, but we are continually seduced by the potential pleasures on offer – either that and/or we simply need the job" (Leathwood and Read, 2013, p. 1172). However, expected rewards have a negative side as a result of rejection fear and unsuccessful aspirations, what is a highly frequent experience in academia – for instance, highly-ranked journals usually "reject 95% or more of submitted articles" (Gabriel, 2010, p. 763, cited in Knights and Clarke, 2014, p. 344).

The Impact of Uncertainty and Precariousness

New managerial practices also attempt to "reduce public expenditure and impose tighter monitoring and auditing" (Deem, 1998, p. 51; Shore and Wright, 2000) that jointly with austerity measures have diminished working conditions. Permanent positions have decreased while new labor categories characterized by low salaries and instability have fragmented the labor force (Hey, 2001; Slaughter and Cantwell, 2012; Conesa and González, 2018). An increasing ratio of uncertainty and precariousness has extended in the form of short-term and/or part-time contracts (Steinthorsdóttir et al., 2016) which may aggravate anxiety. Following Gill (2017, p. 5), "[m]any are on zero hours contracts – or do not even have contracts – and often find themselves burdened with tutoring or grading responsibilities."

Lack of permanent positions intensifies *hyper-competition* (Fochler et al., 2016) with a large number of academics forming a bottleneck (Conesa and González, 2018). This situation

reinforces acceleration of working pace as researchers in early career stages and in non-tenure track positions struggle to increase their productivity in shorter periods of time with lower resources (Müller, 2014). In this competitive environment, working and living to anticipate and secure the future (Ylijoki, 2010; Müller, 2014) is fundamental since "[t]here is always someone who will work longer hours and produce even more 'products' to justify their position in the pecking order of the academy" (Walker, 2014, p. 62). Hyper-competition, therefore, hampers the rational utilization of work time and the adequate conditions to safeguard researchers' well-being. Job precariousness and temporal constraints hinder researchers' personal plans, such as having a family (Bozzon et al., 2017) because career stability arrives at later stages (Felt et al., 2017).

Budget cutbacks derived from the economic crisis have urged governments to push universities to apply for external funding, even though success rates are low due to wide competition (European University Association [EUA], 2015). For instance, the Horizon 2020 EU programs report a success rate of "approximately 14% in first 100 calls" (European University Association [EUA], 2015 p. 12). This pressure interferes in researchers' work, particularly when they hold temporary contracts or they depend on grants to maintain their contracts, separating academics between winners and losers (Morley, 2016; Felt, 2017). Therefore, career progression relies on researchers who become responsible for their professional future (Gill, 2009; Leathwood and Read, 2013).

Some scholars have described this situation as an affective economy, indicating that hyper-competition and lack of career stability create emotional dependence on success (Müller, 2014; Fochler et al., 2016), which may lead to flawed scientific practices such as salami-slicing, text recycling or fraud (Lutz, 2012; Felt et al., 2017; Horbach and Halffman, 2017). Similarly, and according to Heijstra et al. (2017), fear of losing continuity makes academics in non-stable or precarious positions accept more time-consuming tasks, coined ironically academic housework. They usually accept the intensive work expecting a midterm improvement in their position (Heijstra et al., 2017), perceiving that "a foot-in-the-door [is] a way of gaining a 'proper job"' (Gill, 2017, p. 5). Women are usually reported to sustain high rates of part-time work and fixed term contracts in academia (Van den Brink and Benschop, 2012a; European Commission, 2016, p. 102), as well as undertaking a high proportion of academic housework (Heijstra et al., 2017).

Gender Inequality in Academia and the Impact of Academic Time Regimes

Although we would agree with the idea that not all academics experience accelerated academia as a constraining experience (Vostal, 2015), social factors such as gender may have a differential impact on women's well-being. Many studies report inequality practices, revealing academia as a *gendered institution* (Acker, 1992; Van den Brink and Benschop, 2012a,b). The focus of these studies ranges from misrecognition and biased assessment procedures based on gender (i.e., deemed less competent, judged harder or judged on their physical appearance), to old boys' networks and gendered scientific excellence (Rossiter, 1993; Wennerås and Wold, 1997; Steinpreis et al., 1999; Bagilhole and Goode, 2001; Gupta et al., 2004; Van den Brink and Benschop, 2012a,b) as well as sexual harassment (Fitzgerald et al., 1988; Jagsi et al., 2016), among others. Gendered practices governing academia indicate major pressures and difficulties for women overcoming psychological health risks.

Scientific excellence as assessed by quantitative rates and number of publications means that "time, and not quality, accounts for a large part of the appreciation," which emerges as an unspoken rule that goes uncorrected for part-time researchers and those bearing more care responsibilities (Benschop and Brouns, 2003, p. 199; Van den Brink and Benschop, 2012a). As a gendered institution, academia reproduces the hegemonic male model of total time availability and devotion to work (Acker, 1992, 2006; Bailyn, 2003; Bleijenbergh et al., 2012; Bozzon et al., 2017). Care responsibilities are still understood as a women's issue and rarely raised by men, leaving the model unquestioned (Van den Brink and Benschop, 2012b; Herschberg et al., 2014). Regarding the remaining gendered division of labor, some women are expressly unwilling to apply for promotion due to lacking the time and energy necessary for work-life balance (Baker, 2010). Although women currently working in the sciences are in no doubt about the importance of their professional careers and having more collaborative partners, there is still a gendered asymmetry of power in daily domestic and familiar responsibilities (González, 2014). This situation becomes especially onerous in international mobility periods, where women have to juggle complex decisions regarding their multiple roles (González and Vergés, 2013; González, 2014).

Although the topic of time and gender is often mentioned few studies have focused on women's psychosocial risks, or the embodied effects related to time constraints and precariousness. Those that highlight these phenomena state that more research on this "too rarely discussed" topic is needed (Acker and Armenti, 2004; Gill, 2009; Mountz et al., 2015, p. 1236). High levels of health risks are reported, caused by sleep deprivation and fatigue - especially dealing with motherhood - and anxiety about future work, as the most common (Acker and Armenti, 2004). Gill (2009, p. 9) highlights that those women who want to have children might feel unable due to the intensification of demands that "make[s] it extremely difficult to manage" to do so, or job insecurity "that makes it too late." Besides lack of sleep, Menzies and Newson (2008) report that women show higher rates of different indicators of stress compared to men. Due to their positions as 'outsiders' in academia, they have a greater pressure to present themselves as worthier, which may compel them to internalize to a large extent the precepts of high productivity expectations (Aisenberg and Harrington, 1988; Acker and Armenti, 2004). Embodied effects and affective states, such as overload, hurt, distress, shame, fear, isolation and guilt, are connected to fast regimes of time and quantitative metricoriented careers in academia (Gill, 2009; Mountz et al., 2015).

METHODOLOGY

The Study

This study is developed within the framework of the GENERA project, which aims to compare scientific performance and academic cultures in different disciplines and research institutions in Spain from a gender perspective. We conducted 10 case studies based on a qualitative methodology including biographical interviews and document analysis of the recruitment policies, institutional web page content, and focus groups.

For this paper, we address psychosocial risks of women and men academics analyzing data gathered from interviews from five case studies located in different Spanish regions: three university departments and two research centres (see **Table 1**). They cover five fields of knowledge: humanities, architecture, telecommunications, environmental sciences, and biomedicine.

We analyze 36 semi-structured biographical interviews (lasting from 60 to 180 min, audio-recorded and transcribed) conducted in 2015 and 2016. They are comprised of a balanced number of women and men at each stage of the research careers within these institutions (adjunct professors, junior and senior post-doc positions, associates, full professors, fellow researchers, senior researchers and leaders of research groups). All academics interviewed were full-time employees except four women adjunct professors. Their ages ranged from 28 to 67 years.

The biographical method based on personal interviews allows the researcher "to apprehend the prominent experiences from the life of a person and the definitions that person applies to that experiences," therefore supposing an appropriate method to approach interviewees' experience of psychosocial risks (Taylor and Bogdan, 1984/1992, p. 102). The subject matter of the interviews addresses professional and personal history, relevant moments in their careers, presence or absence of mentoring and institutional support, their experience on selection and promotion processes, scientific practices, time organization, future expectations and aspirations, and main obstacles experienced in their lives/careers.

A key informant from each institution put us in touch with the department director or a superior manager of the research centers who provided approval to undertake fieldwork – having been previously informed of the goals and characteristics of the study – and gave access to members of the institution, and to internal documents concerning hiring processes. The key informant also made initial contact with researchers, methodologically selected from a pool of candidates in correspondence with a theoretical sample and provided us their email addresses. We agreed to send

TABLE 1 | Type of institution, field, and number of interviews.

Institution	Field	Number of interviews
Public University	Humanities	8 (4 men, 4 women)
Public University	Architecture	8 (4 men, 4 women)
Public University	Telecommunications Engineering	8 (4 men, 4 women)
Research Centre	Environmental Sciences	4 (2 men, 2 women)
Research Centre	Biomedicine	8 (4 men, 4 women)

a report outlining the main results and recommendations related to gender advancement and to receive their (voluntary) feedback, subsequently incorporated in the final report.

The participants were invited to take part via an email announcing the aims of the study, the methodology, the duration and procedure of the interviews (audio-recorded), and providing information regarding the privacy, confidentiality, and anonymity of the gathered data. A more detailed document was attached containing the name and funding program of the study, team members involved, abstract and main objective, methodology, our ethical commitment to the research, and communication of the final report prior to the publication of results. In this document we also provided information about the expected impact: the presentation and publication of results in scientific conferences and journals, and the dissemination of main results and good practices to policy bodies and to the general public and media. Following their positive response, we arranged a date for carrying out the interview and, immediately before starting the interview, we established verbal informed consent, stating the following: the objective of the study; that the interview would be audio recorded; that all personal data and information used would be anonymized and only accessible to the members of the study team; that they were free to ask any questions about the project at any moment, to stop the interview at any moment or to avoid replying to any of the questions for any reason. Verbal informed consent was obtained from all research participants regarding research participation.

Our commitment to safeguarding interviewee anonymity has resulted in the use of fictitious names and the erasure of any personal information that may identify them. Ethics approval was not required by the funding organization, national regulations, nor the university where the research was undertaken.

The Analysis

We conducted a qualitative content analysis of the interviews. The analytical strategy is inspired by the method of constant comparisons in a spiraling process developed by Corbin and Strauss (1990/2015). Firstly, from an inductive process we highlighted the topics found in the interviews (codes) and, through several comprehensive readings, we detected commonalities (categorizations). Key questions around time, work intensification, precariousness, uncertainty, and discrimination emerged in connection with psychosocial risks and health issues and their possible relations to gender. Secondly, the quotations concerning previously mentioned key issues were constantly compared both within the interview discourse and between the interviews as a whole, examining pieces of data against each other to search for similarities and differences (Corbin and Strauss, 1990/2015). On one hand, this refines key questions into main categories (time regimes, working conditions, and discrimination practices) and, on the other, identifies variations and commonalities, leading the analysis to a more abstract level, following theoretical comparisons (Corbin and Strauss, 1990/2015). During a third phase, we applied consecutive comparisons contrasting interview discourses and main categories with the existing literature following the gendered institutions approach (Acker, 1990). Throughout this

phase, we aimed to uncover novelties with respect to other studies, attaining in-depth and new knowledge. In a final phase, we reexamined our findings in order to assess the interpretation of data and select the most relevant quotations that connect the theoretical analysis with the fieldwork. In all of these phases we used analytical strategies, such as a special attention to language, expressed emotions, metaphors, different meanings of words, contrast examples and negative cases (Corbin and Strauss, 1990/2015).

Our gender analysis draws on the concept of gendered institutions developed by sociologist Acker (1992, p. 567): "The term "gendered institutions" [sic] means that gender is present in the processes, practices, images and ideologies, and distributions of power in the various sectors of social life," referring to institutions such as the state, the economy, politics, or academia (Acker, 1992). Gender is embedded in organizational functioning, being that organizations are not gender neutral (Acker, 1990). Gendered processes are referred to by Acker (1992) more specifically as procedures that shape hierarchies, construct images and symbols, personal interactions based on doing gender and construction of the gendered self through ongoing accomplishment (see West and Zimmerman, 1987). According to Acker (1990, p. 568), "understanding how the appearance of gender neutrality is maintained in the face of overwhelming evidence of gendered structures is an important part of analyzing gendered institutions."

RESULTS

A great variety of institutions make up the Spanish research and innovation ecosystem (universities, research centers, R&D enterprises, and other organizations) and they display different cultures regarding internationalization and competitiveness. In this study, time constraints are connected to high pressures surrounding research performance (i.e., publications and projects) and high teaching workloads in universities, although productivity expectations depend on departmental cultures and types of research center.

Psychosocial Risks in Accelerated Male Time Regimes

Work organization and expectations in academia follow a time pattern that entails total availability related to high demands and research productivity. This feature of academic work is linked with hegemonic masculinity: "someone who gives total priority to work and has no outside interests and responsibilities" (Bailyn, 2003, p. 139; Acker, 2006; Bleijenbergh et al., 2012), that is, a white, middle-class and male breadwinner. In that context, personal time is neglected because of the centrality of work and the idea that a good and efficient academic should work long hours. This affects many women and men researchers following the same organizational and hegemonic masculine patterns. Therefore, those researchers with more responsibilities outside professional spheres – mainly women due to gendered division of work (Acker, 1992) – are highly exposed to psychosocial risks; although as we have found in the fieldwork, some men, committed with care responsibilities also endure similar difficulties.

Time Schedules and Obsession With Scientific Productivity

The academics interviewed devote more hours to work than the established in their labor contracts. Their schedule is determined as 'extremely exhausting' in the pursuit of merits and maximum productivity. Both women and men have interiorized this professional commitment which provokes psychosocial risks:

When I started the thesis, I worked from Monday to Sunday, 10 h a day, for 3 years and I burned out. It drained my energy, my strength and, finally, I decided not to work on weekends for my psychological well-being (...). You cannot work from Monday to Sunday for years without consequences. You realize that you don't go out, you don't have social life, I didn't see my family (Miguel).

Despite his concerns about health risks, Miguel continues to overwork, as research performance is a requisite in the scientific career while time for family and social life can be relegated (Ylijoki and Mäntylä, 2003; Bleijenbergh et al., 2012). A culture of long hours is normalized to such an extent that not following this unwritten rule could mean, as Miguel states, that researchers do not cherish science sufficiently: "in science there is this culture that you have to suffer, otherwise [it seems] you don't want it enough."

Pressures related to the attainment of high citation impact and publication rates become an obsession for researchers given that these measurements *enact* academic recognition and value (Burrows, 2012). The *publish or perish* culture could easily entail abuse of working conditions, since academics may become caught up in institutional demands, misreading labor relations, which constitutes a threat to researchers' well-being. In the quotation below, Mar explains how the high demands from her female boss exceed current legislation on working conditions:

My boss is a person who lives working 7 days a week, seven! And 12 months – or maybe 11 and a half – only working! I mean that she... her obsession is to publish articles, the greater the impact the better... and, if you have to do other things outside work it is simply not possible. You should leave whatever you want to do because you have to do this [research] right now! (...). One day I received maybe 10 or 15 emails from her saying 'this is urgent'... whatever it was. Besides that, I received a text message, and if she had been able to come to my home, she would have come to. I knew what she was like this before and I accepted it! But also, I said to her that I didn't want to live only for this [work]. And she accepted it too. I mean... (Mar).

Regarding international mobility, high pressure work situations intensify psychosocial risks because researchers lack support and networks (González and Vergés, 2013). Brenda felt under pressure in the United States, where her male boss did not allow her to have free time and holidays, compelling the entire research team to work all day long at the office. Brenda reports that she was living in a bubble in which only work existed (days meant an endless loop). Post-traumatic symptoms are evident even now whenever she receives her current boss' calls. She highlights her difficulties in caring for her husband when he broke his leg in the US:

And then, he broke his leg, I was stressed because I didn't have friends, everybody was at home, winters there [in the United States] last 7 months... I only ate junk food. It was the only thing that made me happy: to eat and smoke. My husband put on 17 kilos and I put on 11 kilos in a year. I ate a lot. It didn't matter what you wore, you didn't care about anything. You lose perspective... You have to go [to the office] the next day and deliver the results. If that night you can't have dinner or you keep working until 3 am, so be it. Because it's the only thing that matters in your life. And you are in this loop and it's hard to get out. It's difficult to stop. (...) And I'm still... my boss calls me and I jump and show up at the lab quickly. (...) It is still in my head. I feel frightened. I'm afraid of people saying 'she is lazy'... (Brenda).

This high-pressure environment, abuse in power relations and lack of tools and support (she raises her concerns about her visa status considering the possibility of quitting the contract) eventually led to feelings of isolation and anxiety that produced a lack of self-care and an emotional dependence on giving results to her boss (Müller, 2014; Fochler et al., 2016).

Care and Professional Values in Accelerated Time Regimes

When interviewees talk about family responsibilities, women refer to tight schedules, scant sleeping hours, and high levels of exhaustion (Acker and Armenti, 2004; Mountz et al., 2015). Care work distribution with partners and the support of colleagues, especially in scheduling and in peer recognition, are crucial to maintain the necessary energy and motivation. Support from other relatives when it is not externalized - only mothers or female relatives are mentioned - is necessary to deal with high amounts of work or short-term mobility. Psychosocial risks appear more intense for women where partners are absent (single or divorced mothers), relatives are not close (or nonexistent) or home responsibility is recognized as unequally distributed. Flora, who leads two relevant international grants, displays high selfcontrol regarding scheduling at work-life balance. She reports feelings of isolation owing to a lack of understanding from her colleagues who, she explains, want her to spend more time in the workplace; time with her daughters is paramount and care duties are unequally distributed between her and her partner. To solve this conflict, she has developed an exhausting time regime that she calls being chronometered, a timekeeping self-discipline that she implements to deal with work and family, avoiding any possible time wasting:

[If] You are the only one in a group of 12 people who is a mother or a father, it's complicated... Let's say that you feel different. You feel [like you are] in a different world, that... of course, you have chosen... but... you would also like to spend more time with them [her colleagues] instead of *being*

chronometered all the time... Now, you see, I'm looking at the clock all the time, 'I have 15 min left.' It's always like this, and it is very exhausting. But... could I do it differently? I don't know... I could control my time less frequently but then I'm not with my daughters and that's not a way to live. I feel responsible for them... it's like a constant double responsibility (Flora).

Stress and depletion impact on researchers as a result of a work organization that outweighs spare time, family time and care time, since both family and care time are traditionally undervalued and unpaid work-time (Tronto, 1993; Torns, 2005). Even if women researchers strictly control time for work and family, they embody feelings of guilt due to a lack of time for caring, failing to accomplish other researchers' expectations in a masculine work model, and failing to spend more quality time in each activity:

I always feel guilty about everything: the students, the colleagues... You know? I always leave [work] a bit early [to be with her daughters]. Then, I work every night but it's like... Ok, you are putting your daughters to bed or giving them a bath, and you are thinking 'Oh, I have to reply this email!,' 'Oh, I have to finish this!'

Flora places the responsibility for the situation as a whole on her choices and her own time management, assuming gendered clashing patterns: she deals with caring responsibilities while assuming the breadwinner role of a more-than-full-time work commitment. Tensions are intensified where there are high professional and family ethics and values that cannot be honored (Knights and Clarke, 2014). She does not question general work organization, nor does she call for a more reasonable and balanced time distribution, because she already experiences the lack of understanding of her colleagues without family responsibilities and the loneliness of being an outsider in a masculinized environment (Aisenberg and Harrington, 1988).

Few men raised similar concerns on family issues. Those who did expressed worry and distress about their productivity and career prospects because of difficulties in dealing with commitments in both spheres. Pablo explains that he is dealing with anxiety and describes himself as being a burden because he is no longer driven by high productivity: "Well, now, to break my back is more difficult. I mean, I have three children. Before I was in the lab every weekend and now I am only [there] exceptionally."

A culture of excellence in science based on productivity (Van den Brink and Benschop, 2012a) creates harmful conditions that lead researchers to think they are not fast enough in terms of productivity, and as such that they are worthless. This condition displays an affective economy based on success dependency (Müller, 2014). Expressions such as 'break my back' show an extreme devotion to work and being burned out means *failure* in research performance norms. Mario explains that he is held back in his career when compared to those colleagues who have advanced faster than him. He cites that he is a picky person, working alone and methodically, and that family responsibilities compel him to spend more time with his wife and children than other colleagues do: "my family needs a lot from me." Like many other academics in university, he values knowledge transmission and prefers devoting time to teaching ("[I] prioritize my students") instead of research, and placing family before scientific productivity (Lynch, 2006; O'Neill, 2014). He represents a reversal of the traditional male model in academia and develops an alternative competitiveness based on an individual scheme that slows his publishing output.

Care responsibilities mentioned by men researchers is a novelty in the Spanish context, since it is a topic barely raised, as Herschberg et al. (2014) also note in the context of the Netherlands. Despite discourses of worry over career advancement, male frustration and anxiety seem to be more related to a desire to have time for family and to take on care responsibilities, while women's appraisement of family is deeply interiorized and taken for granted. Male researchers are not outsiders within academia, whereas women attempt to engage in both spheres at the same level owing to an awareness that they need to demonstrate their value as workers (Aisenberg and Harrington, 1988).

Psychosocial Risks and Precariousness: A Gendered Race for Scarce Resources

Austerity has weakened working conditions in academia. Among European countries, Spanish academia has been strongly affected by cutbacks (European University Association [EUA], 2015; Conesa and González, 2018). This creates a psychosocial impact on researchers connected to long-term precariousness, career prospects, family strategies and unwilling mobility. Lack of positions, especially tenured or tenure-track, is a common situation that increases hyper-competition, reinforcing an accelerated academy (Müller, 2014; Walker, 2014; Fochler et al., 2016). However, there are differences between universities and research centers.

Public Universities

Competitiveness and precariousness within universities are especially connected to a lack of positions rising from the freezing of replacement positions (Amoedo-Souto and Nogueira, 2013; Conesa and González, 2018). The result is a bottleneck situation in almost all public universities. This raises anxiety about the future as well as provoking the erosion of colleagues' relationships, creating unfriendly working environments and emotional problems (Morley, 2005; Sparkes, 2007). Personal tensions lead to embodied effects such as somatization, internal fears, and loneliness. Marta's words reflect this stressful environment where collegiality and well-being are at risk: "Because of these null replacement rates there are huge queues of people ready for promotion. And. . . it will be. . . a war! Come on!" (Marta). Tomás and his colleague, also a friend, had to deal with the situation of being offered the same position as lecturer. After receiving this offer, Tomás suffered abdominal pain as a result, on the one hand, to the need to compete against a friend, and on the other, to the fact that it represented an important step in a career offering very few opportunities for promotion or advancement: "When I came home, I had stomach ache... I mean... I had a

knot in my stomach... I was sick... Well, I suppose that's nerves..." (Tomás).

Long-term precariousness affects the careers and lives of researchers who become burned out and exhausted (Ylijoki and Mäntylä, 2003). Multiple demands combined with a lack of stability is a common formula for researchers expected to do more with less, absorbing their energy and motivation (Deem, 1998; Hey, 2001; Walker, 2009). In some universities there are long-term non-stable positions held by academics waiting on job vacancies for more than 10 years, contracted as temporary tenure-track associate professors or part-time, fixed-term adjunct professors with low salaries (Castillo and Moré, 2016).

Jorge explains that a long-term non-permanent position led him to burn out due to maintaining a precarious post for many years – a position that did not allow him to undertake research projects – all the while struggling with multiple demands and waiting for a position that never arrived. He had committed himself to maintaining a more managerial-based role as a foot-inthe-door (Gill, 2009) which led to personal and career setbacks. Dealing with the many quantified demands together with a precarious situation also affects the quality of teaching, clashing with professional values and bringing frustration (Lynch, 2006; Knights and Clarke, 2014):

All professors need to take on responsibility for the management of the university in order to understand how the university works, but it cannot be a priority because it makes you postpone research, it hinders your curriculum, and teaching also suffers. Students notice the lack of quality. You need to stop at some point because in the midst of so many demands, quality surveys, publications, stays abroad, excellence, teaching material... it is just impossible. (...)

For the last 2 or 3 years I have not had time to improve my teaching subjects: I have neither the head space nor the strength. I do not meet deadlines. (...) You end up burned out, profoundly burned out (Jorge).

Women in early careers hold adjunct professor positions (with one-semester or annual contracts and very low income), conducting *academic housework* and hoping their situation will provide the first step in their academic career, and are thus afraid of losing a very precarious position (Gill, 2009; Heijstra et al., 2017). This type of contract hinders career progression as it is designed for teaching support and stability is not guaranteed, a common situation in Spanish universities (Castillo and Moré, 2016). Sandra, in her forties, cannot advance in her research career despite a brilliant CV. Consequently, she conducts research in grueling working conditions:

This situation has been going on for the past 14 years and I'm tired because this position doesn't allow you to apply for research projects, doesn't allow you to... I mean, I renew the contract annually... I cannot create a research group, I cannot access funding, I cannot apply for European funding because my contract is very precarious and it is continuously renewed (Sandra).

Statistical reports from Spanish public universities (MECD, 2017) confirm Felt et al.'s (2017, p. 33) observations about the extension of the period during which scholars still count as junior, non-established academics. This situation generates feelings of helplessness and cynical responses: 'Being stable when you are 45 years... It's too much (...) I mean, mmmm, the future... (...) So... in my department, [laughs] this is the problem... The problem is that the Spanish university is a pile of shit and that's all I can tell you' (Cristina). This has consequences for both men and women's life plans in terms of housing, family, and the economic security necessary for different life circumstances (Bozzon et al., 2017), creating feelings of insecurity, worry, anxiety, or rage.

Research Centers

In research centers job positions rely on grants and projects, and thus the culture of internationalization and hypercompetitiveness is pivotal. Early career researchers deal with anxieties surrounding job insecurity as they realize there are few available intermediate or permanent positions and large numbers of predoctoral or postdoctoral researchers, which leads Miguel to state: "a research career does not exist." Brenda characterizes the workplace as hostile and unfriendly due to poor future prospects and high competitiveness:

(...) [T]he people that end up here are *very* competitive. There's one position for 450 PIs [principal investigators]. We all know these statistics...Very, very, very, very competitive. And your best friends are never in your field because you're fighting for the same grant, for the same money (Brenda).

Therefore, she refuses to become a principal investigator (PI), given that this position implies a total immersion in competitive and pressuring practices related to *projectification* and audit culture. Constant stress and limited resources become entangled in an affective economy (Müller, 2014) that leads researchers to feign being the best:

Would you like to be a PI?

No. No. I wouldn't. The pressure they suffer... especially the young ones. Not those who have already built their fortress and live comfortably... The pressure they [junior PIs] are under to find money, the pressure to publish, the pressure they suffer to talk publicly, to pretend that you're the best, otherwise they eat you. And this is related to your personality ehh... of.... of being the best of the best: 'I don't care about anything, and I never make mistakes.'

Brenda depicts the ideal researcher as a tough person, never making mistakes lest "they eat you." Even if academic work is presented as neutral, hegemonic masculinity values characterize work and leadership styles where aggressiveness and hypercompetitiveness contrasts with a supportive, friendly and kinder style (Acker, 1992, 2006; Van den Brink and Benschop, 2012b; Morley, 2016). Brenda is also concerned about future uncertainty and lack of economic resources due to budget cutbacks. Austerity measures, limited time regimes, hegemonic masculine environments and a desire to have a family may push her to abandon academia and look for a job in a different sector. A selfprotection response from psychosocial risks emerges from her words when comparing herself with another colleague working at the same institution:

'(...) in my lab, there's a guy who developed his career during the golden years of the leader [the boss] (...) Now he is 47 years-old. Now, the boss has no money. What is this guy going to do? I don't want it to happen to me at 47 years old and with two children. I am still able to pack my bags and move, so I prefer to do it now.'

Gender, few grants available and accelerated time regimes intertwine in Flora's decision, as she strives to overcome all these common obstacles. She defines academia as a rat-race, a pursuit of scarce resources (Müller, 2014), suffering from masculine hegemonic norms understood as neutral (Van den Brink and Benschop, 2012b). She is developing a brilliant career in a work environment where care work is worthless, which places her at a disadvantage (having to work faster in order to not fall behind):

A lot of women are in part-time work. In my case, I have done this Ph.D., I have went through everything for a goal [to be a scientist]... and I have a family! If I do not publish, if I do not have research projects, of course, I will lag behind the men, and if I am behind the men, I cannot win relevant grants and I won't have other things [resources]. It was very clear to me: it is like this [to struggle bitterly for her career] or I have to start selling ice creams (Flora).

Academic aspirations taken in tandem with breadwinner and caring roles present genuine difficulties for women's career progression. Pain and sacrifice represent a persistent state of affairs in academia in a gendered race for limited resources (Vázquez-Cupeiro and Elston, 2006; Ylijoki, 2010).

Psychosocial Risks Due to Sexism and Gender Discriminatory Practices

We have already identified practices and patterns embedded in male organizations which support evidence of academia as a gendered institution (Acker, 1992; Van den Brink and Benschop, 2012a,b). In this section we outline specific but invisible gender discriminatory practices based on gendered personal interactions and power distribution (West and Zimmerman, 1987; Acker, 1992) that emerge as a source of psychosocial risks exacerbated by work organization in academia. These practices are often hidden by a lack of awareness on the part of men and women in academia and are related to lack of recognition, lack of authority and sexual harassment suffered by women, which lead to exclusionary effects such as feeling unwelcome. Only exceptionally, women express discomfort with discriminatory attitudes toward them, conveyed as anger, sadness, and frustration. We explore these psychosocial effects through the examination of evaluation processes, daily work, and particular events within the working environment.

The climate created in recruitment and selection processes strongly influences future actions and performance of researchers, encouraging (or discouraging) them to pursue their aspirations in academia. The evaluation process is stressful for candidates, such that disrespectful comments concerning personal life and doubts about professional competencies may cause harmful states. Sexism, deeply rooted in our society, appears in evaluation meetings, provoking discomfort and anxiety in early-career women. During a fellowship interview, Brenda was asked gender-biased questions from an evaluator who inquired about her husband's plans – he also being a researcher – assuming it may affect her career:

I did the interview, one of them [evaluators] was lovely – there were two – but the other destroyed me. And, obviously, he was going to ask [uncomfortable] questions... but of course, these questions were already what I went through every day. 'Oh, really? Why have you decided to come here? Do you think you are able to be a PI here? We don't offer internal promotion here.' And I replied: 'Neither here nor any other place where I've been.' 'Is that so? And is your husband going to come along with you?' (Brenda).

She related that her interview was difficult, and that the woman interviewed previously had left the room crying. Pressing women in the interviews appears as a legitimate strategy as it establishes the strength of character required to pursue a *challenging* career. Men, however, are not subjected to these kinds of questions imbued with gender stereotypes; firstly, the male model presupposes strong and secure candidates (Van den Brink and Benschop, 2012b), and secondly the breadwinner model takes for granted that men are in charge of family life while women are subordinated to male plans (Acker, 1992; Van den Brink and Benschop, 2012a,b; González, 2014).

Informal practices, such as their exclusion from decisionmaking and influential networks, prevent women's progression in research careers (Bagilhole and Goode, 2001; Van den Brink and Benschop, 2012a). A senior female researcher in a male dominated institution explains that she had never been invited in decision-making meetings to pre-select future senior researchers which other senior, male colleagues attended. She states that this is not only a discriminatory practice but that it also has implications for diversity in the recruitment of researchers to the institution (i.e., not necessarily white male researchers). She feels angry and ignored since she is isolated from influential panels: "I mean, we [women] are not a flower jar for decoration. None of us!" (Tina).

Discrimination on a gendered basis is also manifested in the dismissal of women's authority, misrecognition, verbal insults and even sexual harassment, which cause women discomfort and fear of losing their job. Inappropriate comments or insults are a hidden injury only mentioned in the corridors (Gill, 2009) creating toxic environments for women. Sonia explains that during a discussion about professional issues, her department director argued with her alluding her recent divorce: "He shouted that I was a nervous wreck because I was getting divorced. I felt very bad... (...) I thought that 'a man does not receive this kind of comment!" (Sonia). Sonia expresses indignation and rage that he would use her personal situation as a means of dealing with a professional confrontation.

Offensive comments from other colleagues undervalue and misrecognize women's research competence. She also relates another male colleague's comment about her saying: "'You have a rating of 19 on ResearchGate while I have 14. And I think this is because you are pretty. You have received a higher rating because of your photograph." She explains her feeling regarding his comment: "I was stunned... Come on! Could it not be that they are interested in my publications?" She expresses indignation over the threat to her self-confidence and competence, considering his comments about her physical appearance as both inappropriate and sexist. This example illustrates that casual comments or even jokes between colleagues are still keeping women in a subordinated position.

Sonia spoke about sexual misconduct when she was a young student undertaking an internship in an automobile factory:

I had problems... just because I am a woman, I swear, because they treated me like a fool. I had two bosses in this company, one of them... he was good but the head of purchasing treated me as if I was silly! And, once... he... he touched me on my thigh (...) And I took his hand away and since that moment, there were bad vibes! Nothing else... between us, nothing else... Thereafter, I was unhappy in this job, the people... afterward, everything was bad (Sonia).

Such a situation came to generate negative feelings, disaffection in the workplace and finally the abandonment of her job. The "negative consequences for sexual non-cooperation" in rejecting *deliberate touching* was identified by Fitzgerald et al. (1988, p. 167) in academic settings. This signifies a double abuse: the unwanted touching behavior that leads women to feel uncomfortable (and carries with it the objectification of the female body at work, in addition to being treated as foolish), on top of the hostile environment following the incident ("bad vibes") that threatens women's well-being and constrains their career decisions (Connell, 2006).

DISCUSSION

By adopting a gender perspective, in this study we attempt to explore psychosocial risks that arise from an accelerated academy model (Vostal, 2015, 2016) embedded in precarious working conditions. We thus contribute evidence focused on time and gender regimes in academia and provide more in-depth knowledge about their psychosocial effects (Acker and Armenti, 2004; Menzies and Newson, 2008; Gill, 2009, 2017; Mountz et al., 2015).

We show academia as a gendered institution in which practices, images and values are defined by a male hegemonic norm understood as universal, neutral and disembodied (Acker, 1990, 1992, 2006; Connell, 2006; Mählck, 2012). Organizations are gendered, incorporating assumptions about gender in their performance and reproducing gender power relations (Acker, 1990).

Acceleration of academic working pace due to high and monitored expectations of scientific productivity, and reinforced by understaffing, increases workloads and corresponds to a work model that demands total time devotion and in which "family, community, and personal life are secondary" (Bleijenbergh et al., 2012, p. 23; Bozzon et al., 2017). Accelerated time regimes draw on excellence and new managerial practices that generate long working hours, relegating private lives and self-care linked to personal well-being. Obsession with accountability and publication rates affects both women and men, damaging their health, and potentially resulting in negative power relations that intensify psychosocial risks.

This analysis goes beyond the motherhood explanations that are often mentioned as a means of addressing the 'issues faced by women' in research (Bozzon et al., 2017). Although time for caring responsibilities affects women careers, this issue does not take into account the diversity of women researchers and their different responses as per their own values and goals. Instead, we propose an examination of gendered institutions and the ways in which scientific organization shape researchers' careers and lives and especially hinder women's careers. This analysis entails an understanding of a gendered distribution of roles as regards professional and care responsibilities. Support from actors close to women researchers (partners, family, colleagues, and superiors) are paramount, although they still do not prevent them from experiencing exhaustion and stress as a result of the accelerated academic pace. Moreover, this support is usually hard to come by, as it depends on many non-controllable factors, and is particularly problematic during international mobility (González and Vergés, 2013; González, 2014).

Those men who want to contribute equally in career and caring responsibilities – and who begin to dare to talk about it Herschberg et al. (2014) – also experience additional tensions in this accelerated and precarious labor framework, erected upon a universal and disembodied male identity as researchers. Academic work organization also penalizes nontraditional masculine identities, which may discourage more men from pursuing gender equality in the future. This finding reinforces our recommendations regarding the necessary changes in academic work organization with respect to researchers' experiences, in order to prevent psychosocial risks and career disadvantages.

Psychosocial risks increase in parallel with job insecurity and precariousness. This yields hyper-competition (Fochler et al., 2016), erosion of collegiality, unfriendly environments, poor academic quality and burn out. Scarcity of positions intertwined with gender discrimination results in serious conditions for women who put up with an intense masculine work model jointly with caring responsibilities. Women make a great effort in the race for limited resources while trying to "manag[ing]e the unmanageable" (Gill, 2009, p. 11), taking on high levels of stress, discomfort and isolation.

Psychological harm is on the rise in gendered institutions, given sexism and discriminatory practices against women comprised of undermining, exclusion, isolation, objectification, mistreatment, and sexual misconduct. As Connell states, sexual harassment in gendered institutions impacts on women's self-confidence in organizational settings (Acker, 1990, 1992; Connell, 2006, p. 838). Masculine power relations lead to feelings of being unwelcome that hinder their advancement within academic organizations (Fitzgerald et al., 1988; Jagsi et al., 2016).

Limitations

As academic researchers, the authors of this study are aware of the risks of bias and preconception in the methodological process, especially in the analysis of interviewees' discourses (Ylijoki and Mäntylä, 2003; Van den Brink and Benschop, 2012a). Taking into account that research is a situated human activity, we have tried to engage with partial objectivity (Haraway, 1988). We have been conscious of our positions while we have applied analytical distance through the constant comparison method and making connections with other research findings. This implies the revision of our own interpretations of academics' discourses, and discussion between the co-authors of this paper as a means of examining different meanings and seeking out counterexamples to validate findings. Although our research is influenced by our own trajectory, we have consciously avoided dismissing those examples questioning our own prejudices, placing the participants' words over our own experiences and understandings. Witnessing stress and worries about lack of time and self-care was the starting point for this research; some hypotheses were confirmed by the data from the fieldwork, whereas others were difficult to validate, such as, physical illnesses suffered by researchers that may remain hidden or neglected by interviewers' responses. Only one women explicitly talked about sexual misconduct.

Despite difficulties in uncovering hidden symptoms, we found means of generating interviewees' openness and trust that cast light on significant evidence. Moreover, some researchers explicitly showed willingness to articulate their experiences of stress, exhaustion, indignation and feelings of uselessness and exclusion.

Policy Implications and Future Contributions

According to the evidence, the model of excellence based on quantitative indicators and high competitiveness needs to be addressed in academic organizations so as to promote well-being, quality in both research and teaching duties, and the inclusion of women in research institutions, particularly at senior stages and at decision-making levels.

Advancing in gender equality may require the application of an *ethics of care* feminist perspective that places care at the center of the political arena (Tronto, 1993; Carrasco, 2001; Mountz et al., 2015), and that counteracts a culture only based on (scientific) productivity and undervalues care work (such as 'academic housework'). This perspective understands caring as a crucial activity "to maintain, continue and repair our 'world' so that we can live in it as well as possible" (Fisher and Tronto, 1991, p. 40; Tronto, 1993, p. 103), supporting ideas of interdependency and vulnerability linked to all beings. In this sense, it questions the disembodied hegemonic masculine model promoting an alternative gender-balanced organization of work and responsibilities.

This overhauls the underlying argument that takes for granted that women should adapt themselves to gendered organizations, as the development of work-life balance policies seem to support. These policies are ambiguous and fundamentally focused on women, avoiding tackling inequalities in multiple work, family, and societal spheres (Torns, 2005; Mescher et al., 2010). In the same vein, certain gender equality measures in academia such as mentoring, coaching, and quotas are only focused on "helping women to adjust to the male world," instead of changing academic institutions (Van den Brink and Benschop, 2012b, p. 81).

Institutional changes should include an understanding of selfcare and care for others as important aspects in the sustainability of personal and social life (Tronto, 1993; Carrasco, 2001), taking into account time availability as a powerful resource that needs to be equally distributed (Conesa, 2017). From an ethics of care feminist perspective, governments and policymakers should *care about* the effects and consequences of new managerial practices and its accelerated time regimes, requiring *attentiveness, responsibility,* and *constant evaluation* – including *willingness to listen* to academics' experiences for "managing the unmanageable" (Tronto, 1993; Gill, 2009, p. 11; Conesa, 2017). Changing academic institutions means, under an ethics of care feminist lens, to disrupt the exclusionary effects of gendered organizations.

In order to prevent psychosocial risks, we propose an extension of care culture, paying attention to work expectations and working time regimes, job security, healthy environments and respectful interactions which erode implicit and subtle biases. A culture based on the feminist ethics of care entails cooperation instead of competition, equal treatment and good working conditions, while promoting social justice and the encouragement of women's and men's advancement toward gender equality.

More concrete measures may include the assessment of quality through more qualitative than quantitative procedures (DORA, 2012; Hicks et al., 2015). As regards time regimes, an adaptation of schedule demands to more real and rational time resources (Ylijoki and Mäntylä, 2003; Vostal, 2015) is needed to take into account the sustainability of life, as well as a reversion of the long hours culture, that should be underpinned by labor rights. Other recommendations may entail a valorization of the different roles related to science and academic practice, and an understanding of the time needed to develop quality in teaching and research. Furthermore, less standardized and more flexible rules for projects and research outputs, in addition to an appreciation of diverse academic profiles and different types of epistemic cultures. Good working conditions should be guaranteed in order to prevent abuses of power driven by an obsession with productivity.

More research focused on the ethics of care feminist perspective to be applied in the academic context needs to be done. Psychosocial effects in the accelerated academy needs as well further contributions including an intersectional perspective that tackles other axes of inequality (Gill, 2009; Walker, 2009; Mountz et al., 2015).

CONCLUSION

This paper addresses gender equality in academia by examining the psychosocial costs of accelerated working time regimes, job insecurity, and gender discriminatory practices brought about by excellence, audit culture and competition, adding a gender perspective. Going beyond explanations centered on motherhood, it tackles scientific organization via the *gendered institutions* approach (Acker, 1992), and suggests the application of an *ethics of care* feminist perspective (Tronto, 1993; Carrasco, 2001). Time constraints in academia penalize and exclude a diverse body of valuable researchers and approaches. This model, based on a hegemonic male norm, hinders women's professional and personal lives, as well as men's advancement toward gender equality.

AUTHOR CONTRIBUTIONS

EC designed the study for her doctoral thesis, conducted field work and analysis, and wrote the first drafts of

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Better Together: A Model for Women and LGBTQ Equality in the Workplace

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Much has been achieved in terms of human rights for women and people of the lesbian, gay, bisexual, transsexual, and queer (LGBTQ) community. However, human resources management (HRM) initiatives for gender equality in the workplace focus almost exclusively on white, heterosexual, cisgender women, leaving the problems of other gender, and social minorities out of the analysis. This article develops an integrative model of gender equality in the workplace for HRM academics and practitioners. First, it analyzes relevant antecedents and consequences of gender-based discrimination and harassment (GBDH) in the workplace. Second, it incorporates the feminist, queer, and intersectional perspectives in the analysis. Third, it integrates literature findings about women and the LGBTQ at work, making the case for an inclusive HRM. The authors underscore the importance of industry-university collaboration and offer a starters' toolkit that includes suggestions for diagnosis, intervention, and applied research on GBDH. Finally, avenues for future research are identified to explore gendered practices that hinder the career development of women and the LGBTQ in the workplace.

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INTRODUCTION

Gender has diversified itself. More than four decades have passed since Bem (1974) published her groundbreaking article on psychological androgyny. With her work, she challenged the binary conception of gender in the western academia, calling for the disposal of gender as a stable trait consistent of discrete categories (Mehta and Keener, 2017). Nowadays, people from the LGBTQ community find safe spaces to express their gender in most developed countries (see ILGA-Europe, 2017). Also, women-rights movements have impulsed changes for the emancipation and integration of women at every social level, enabling them to achieve things barely imaginable before (see Hooks, 2000).

However, there is still a lot to do to improve the situation of women and people from the LGBTQ community (International Labour Office, 2016; ILGA-Europe, 2017). Some actions to increase gender inclusion in organizations actually *conceal inequality* against women, and many problems faced by the LGBTQ originate within frameworks that anti-discrimination policy *reinforce* (see Benschop and Doorewaard, 1998, 2012; Verloo, 2006). For example, the gender equality, gender management, and gender mainstreaming approaches overlook most problems faced by people from the LGBTQ community and from women of color, framing their target stakeholders as white, cisgender, and heterosexual (see Tomic, 2011; Hanappi-Egger, 2013; Klein, 2016). These problems seem to originate in the neoliberalization of former radical movements when adopted by the mainstream (see Cho et al., 2013). This translates into actions addressing sexism and heterosexism that overlook other forms of discrimination (e.g., racism, ableism),

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resisting an intersectional approach that would question white, able-bodied, and other forms of privilege (see Crenshaw, 1991; Cho et al., 2013; Liasidou, 2013; van Amsterdam, 2013).

The purpose of this paper is to support the claim that gender equality shall be done within a queer, feminist, and intersectional framework. This argument is developed by integrating available evidence on the antecedents and consequences of GBDH against women and people from the LGBTQ community in the workplace. The authors believe that GBDH against these groups has its origin in the different manifestations of sexism in organizations. A model with the antecedents and consequences of GBDH in the workplace is proposed. It considers an inclusive definition of gender and integrates the queer-feminist approach to HRM (Gedro and Mizzi, 2014) with the intersectional perspective (Crenshaw, 1991; McCall, 2005; Verloo, 2006). In this way, it provides a framework for HRM scholars and practitioners working to counteract sexism, heterosexism, and other forms of discrimination in organizations.

GBDH IN THE WORKPLACE

GBDH is the umbrella term we propose to refer to the different manifestations of sexism and heterosexism in the workplace. The roots of GBDH are beyond the forms that discriminatory acts and behaviors take, being rather "about the power relations that are brought into play in the act of harassing" (Connell, 2006, p. 838). This requires acknowledging that gender harassment is a technology of sexism, that "perpetuates, enforces, and polices a set of gender roles that seek to feminize women and masculinize men" (Franke, 1997, p. 696). Harassment against the LGBTQ is rooted in a heterosexist ideology that establishes heterosexuality as the superior, valid, and natural form of expressing sexuality (see Wright and Wegner, 2012; Rabelo and Cortina, 2014). Furthermore, women and the LGBTQ are oppressed by the institutionalized sexism that underscores the supremacy of hegemonic masculinity (male, white, heterosexual, strong, objective, rational) over femininity (female, non-white, non-heterosexual, weak, emotional, irrational; Wright, 2013; Denissen and Saguy, 2014; Dougherty and Goldstein Hode, 2016). In addition, GBDH overlaps with other frameworks (e.g., racism, ableism, anti-fat discrimination) that concurrently work to maintain white, able-bodied, and thin privilege, impeding changes in the broader social structure (see Yoder, 1991; Yoder and Aniakudo, 1997; Buchanan and Ormerod, 2002; Acker, 2006; Liasidou, 2013; van Amsterdam, 2013). The next paragraphs offer a definition of some of the most studied forms of GBDH in the workplace.

Sexual Harassment

Sexual harassment was first defined in its different dimensions as gender harassment, unwanted sexual attention, and sexual coercion (Gelfand et al., 1995). Later, Leskinen and Cortina (2013) focused on the gender-harassment subcomponent of sexual harassment and developed a broadened taxonomy of the term. This was motivated by the fact that legal practices gave little importance to gender-harassment forms of sexual harassment, despite of the negative impact they have on the targets' well-being (Leskinen et al., 2011). Gender harassment consists of rejection or "put down" forms of sexual harassment such as sexist remarks, sexually crude/offensive behavior, infantilization, work/family policing, and gender policing (Leskinen and Cortina, 2013). The concepts of sexual harassment and gender harassment were initially developed to refer to the experiences of women in the workplace, but there is also evidence of sexual and gender harassment against LGBTQ individuals (Lombardi et al., 2002; Silverschanz et al., 2008; Denissen and Saguy, 2014). In addition, studies have shown how gender harassment and heterosexist harassment are complementary and frequently simultaneous phenomena accounting for mistreatment against members of the LGBTQ community (Rabelo and Cortina, 2014).

Gender Microaggressions

Gender microaggressions account for GBDH against women and people from the LGBTQ community that presents itself in ways that are subtle and troublesome to notice (Basford et al., 2014; Galupo and Resnick, 2016). Following the taxonomy on racial microaggressions developed by Sue et al. (2007), the construct was adapted to account for gender-based forms of discrimination (Basford et al., 2014). Gender microaggressions consist of microassaults, microinsults, and microinvalidations, and although they may appear to be innocent, they exert considerably negative effects in the targets' well-being (Sue et al., 2007; Basford et al., 2014; Galupo and Resnick, 2016). As an example of microassault imagine an individual commenting their colleague that their way of dressing looks unprofessional (because it is not "masculine enough," "too" feminine, or not according to traditional gender-binary standards). A microinsult is for example when the supervisor asks the subordinate about who helped them with their work (which was "too good" to be developed by the subordinate alone). An example of microinvalidation would be if in a corporate meeting the CEO dismisses information related to women or the LGBTQ in the company regarding it as unimportant, reinforcing the message that women and LGBTQ issues are inexistent or irrelevant (for more examples see Basford et al., 2014; Galupo and Resnick, 2016). Because gender is not explicitly addressed in microaggressions, it can be especially difficult for the victims to address the offense as such and act upon them (see Galupo and Resnick, 2016). Hence, they are not only emotionally distressing, but also tend to be highly ubiquitous, belonging to the daily expressions of a determined context (Nadal et al., 2011, 2014; Gartner and Sterzing, 2016).

Disguised Forms of GBDH

It is also the case that some forms of workplace mistreatment constitute disguised forms of GBDH. Rospenda et al. (2008) found in their US study that women presented higher rates of generalized workplace abuse (i.e., workplace bullying or mobbing). In the UK, a representative study detected that a high proportion of lesbian, gay, and bisexual respondents have faced workplace bullying (Hoel et al., 2017). Specifically, the results indicated that while the bullying rate for heterosexuals over a six-months period was of 6.4%, this number was

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tripled for bisexuals (19.2%), and more than doubled for lesbians (16.9%) and gay (13.7%) individuals (Hoel et al., 2017). Moreover, 90% of the transgender sample in a US study reported experiencing "harassment, mistreatment or discrimination on the job" (Grant et al., 2011, p. 3). These findings suggest that many of the individuals facing workplace harassment that appears to be gender neutral are actually targets of GBDH. Hence, they experience "*disguised* gender-based harassment and discrimination" (Rospenda et al., 2009, p. 837) that should not be addressed as a gender-neutral issue.

Intersectional, Queer, and Feminist Approaches in Organizations

In this section, a short introduction to the feminist, queer, and intersectional approaches is given, as they are applied to the analyses throughout this article.

FEMINIST APPROACHES

In the Beginning There Was Feminism

In the words of bell hooks, "[f]eminism is a movement to end sexism, sexist exploitation, and oppression" (Hooks, 2000, viii). However, feminism can be a movement, a methodology, or a theoretical approach, and it is probably better to talk about *feminisms* than considering it a unitary concept. In this paper, different feminist approaches (see Bendl, 2000) are applied to the analysis. *Gender as a variable* takes gender as a politically neutral, uncontested variable; the *feminist standpoint* focuses on women as a group; and the *feminist poststructuralist* approach searches to deconstruct hegemonic discourses that perpetuate inequality (for the complete definitions see Bendl, 2000).

Gender Subtext

The gender subtext refers to an approach to the managerial discourse that brings attention to how official speeches of inclusion work to conceal inequalities (Benschop and Doorewaard, 1998). Its methodology -subtext analysis-brings discourse analysis and feminist deconstruction together to scrutiny the managerial discourse and practices in organizations (Benschop and Doorewaard, 1998; Bendl, 2000; Bendl, 2008; Benschop and Doorewaard, 2012).

Integration and Applications of Feminist Approaches and the Gender Subtext

The gender subtext serves to understand the role that organizational factors play in the occurrence of GBDH. Gender as a variable serves to underscore how the hegemonic definition of gender excludes and otherizes the LGBTQ from HRM approaches to gender equality. The feminist standpoint is applied in this paper as a framework in which two groups—women and the LGBTQ—are recognized in their heterogeneity, and still brought together to search for synergies to counteract sexism as a common source of institutionalized oppression (see Oliver, 1992; Franke, 1997). Finally, the feminist-poststructuralist approach enables conceiving gender as deconstructed and reconstructed, and to apply the subtext analysis to the organizational discourse (see Benschop and Doorewaard, 1998; Monro, 2005).

QUEER APPROACH

Queer Theory and Politics

The origins of the queer movement can be traced to the late eighties, when lesbians, gays, bisexuals, and the transgender took distance from the LGBT community as a sign of disconformity with the depoliticization of its agenda (Woltersdorff, 2003). However, the "Queer" label was later incorporated in the broader movement (Woltersdorff, 2003). In terms of queer theory, the most recognized scholar is Judith Butler, whose work *Gender Trouble* (1990) was revolutionary because it made visible the oppressive character of the categories used to signify gender, and insisted in its performative nature (see Butler, 1990; Woltersdorff, 2003).

Queer Standpoint, the LGBTQ, and HRM

In the presented model, queer theory brings attention to the exclusion of the LGBTQ community from the organizational and HRM speech. This exclusion is observed in the policies and politics supported by the HRM literature and practitioners, as well as in the way the LGBTQ are otherized by their discursive practices (e.g., validating only a binary vision of gender, Carrotte et al., 2016). Although the categories that the queer theory criticizes are applied in this model, its constructed nature is acknowledged (see Monro, 2005). In this way, McCall's (2005) argument in favor of the strategic use of categories for the intersectional analysis of oppression is supported. This analysis is conducted adopting a queer-feminist perspective (Marinucci, 2016) and the intersectional approach.

INTEGRATION OF INTERSECTIONALITY WITH THE QUEER AND FEMINIST APPROACHES

Origin and Approaches

The concept of intersectionality was initially introduced to frame the problem of double exclusion and discrimination that black women face in the United States (Crenshaw, 1989, 1991). Crenshaw (1991) analyzed how making visible the specific violence faced by black women conflicted with the political agendas of the feminist and anti-racist movements. This situation left those women devoid of a framework to direct political attention and resources toward ending with the violence they were (and still are) subjected to (Crenshaw, 1991). Intersectionality theory has evolved since then, and different approaches exist within it (McCall, 2005). These approaches range from fully deconstructivist (total rejection of categories), to intracategorical (focused on the differences within groups), to *intercategorical* (exploring the experiences of groups in the intersections), and are compatible with queer-feminist approaches (see Parker, 2002; McCall, 2005; Chapman and Gedro, 2009; Hill, 2009).

The intracategorical approach acknowledges the heterogeneity that exist within repressed groups (see Bendl, 2000; McCall, 2005). Within this framework (also called intracategorical complexity, see McCall, 2005), the intersectional analysis emerges, calling for attention to historically marginalized groups, [as in Crenshaw (1989, 1991)]. The deconstructivist view helps to de-essentialize categories as gender, race, and ableness, making visible the power dynamics they contribute to maintain (see Acker, 2006). The intercategorical approach takes constructed social categories and analyzes the power dynamics occurring between groups (McCall, 2005).

Integration: Queer-Feminist Intersectional Synergy

Applying these complementary approaches helps to analyze how women and people from the LGBTQ community are defined (e.g., deconstructivist approach), essentialized (e.g., deconstructivist and intracategorical approaches), and oppressed by social actors (e.g., intercategorical approach) and institutionalized sexism (e.g., Oliver, 1992; Franke, 1997). It also allows the analysis of the oppression reinforced by members of the dominant group (intercategorical approach), as well as by minority members that enjoy other forms of privilege (e.g., white privilege), and endorse hegemonic values (deconstructivist and intracategorical approaches). In addition, the analyses within the inter- and intra-categorical framework allow approaching the problems faced by individuals in the intersections between sexism, heterosexism, cissexism, and monosexism (e.g., transgender women, lesbians, bisexuals), as well as considering the way classism, racism, ableism, and ethnocentrism shape their experiences (e.g., disabled women, transgender men of color).

Support for an Integrative HRM Model of GBDH in the Workplace

This section describes an integrative model of GBDH in the workplace (Figure 1). First, the effects of GBDH on the health and occupational well-being of targeted individuals are illustrated (P1 and P2). Afterwards, the model deals with the direct and moderation effects of organizational climate, culture, policy, and politics (OCCPP) on GBDH in the workplace. OCCPP acts as a "switch" that enables or disables the other paths to GBDH. OCCPP's effects on GBDH are described as: a direct effect on GBDH (P3), the moderation of the relationship between gender diversity and GBDH (P3a), the moderation of the relationship between individual characteristics and GBDH (P3b), and the moderation (P3c) of the moderation effect of gender diversity on the relationship between individual's characteristics and GBDH (P4). In other words, when OCCPP produce environments that are adverse for gender minorities, gender diversity and gender characteristics become relevant to explain GBDH. When OCCPP generate respectful and integrative environments, gender diversity, and gender characteristics are no longer relevant predictors of harassment.

CONSEQUENCES OF GBDH IN THE WORKPLACE

GBDH and Individuals' Health

Evidence suggests that exposure to sexist discrimination and harassment in the workplace negatively affects women's wellbeing (Yoder and McDonald, 2016; Manuel et al., 2017), and that different forms of sexual harassment can constitute trauma and lead to posttraumatic stress disorder (Avina and O'Donohue, 2002). In their meta-analysis (N = 89.382), Chan et al. (2008) found a negative relationship between workplace sexual harassment, psychological health, and physical health conditions. Regarding the LGBTQ at work, Flanders (2015) found a positive relationship between negative identity events, microaggressions, and feelings of stress and anxiety among a sample of bisexual individuals in the US. This is consistent with Galupo and Resnick's (2016) results about the negative effects of microaggressions for the well-being of lesbian, bisexual, and gay workers. In another study, Seelman et al. (2017) found that microaggressions and other forms of gender discrimination relate to lowered self-esteem and increased stress and anxiety in LGBTQ individuals, with the most negative effects reported by the transgender. In a study among gay, lesbian, and bisexual emerging adults in the US, exposure to the phrase "that's so gay" related to feelings of isolation and physical health symptoms as headaches, poor appetite, and eating problems (Woodford et al., 2012). In the literature on gender discrimination, Khan et al. (2017) found that harassment relates to depression risk factors among the LGBTQ. Finally, according to Chan et al. (2008) meta-analysis, targets of workplace sexual harassment suffer its detrimental jobrelated, psychological, and physical consequences regardless of their gender.

Proposition P1: GBDH negatively affects women and LGBTQ individuals' health in the workplace.

GBDH and Occupational Well-Being

Occupational well-being refers to the relationship between job characteristics and individuals' well-being (Warr, 1990). It is defined "as a positive evaluation of various aspects of one's job, including affective, motivational, behavioral, cognitive, and psychosomatic dimensions" (Horn et al., 2004, p. 366). It has a positive relationship with general well-being (Warr, 1990) and work-related outcomes like task performance (Devonish, 2013; Taris and Schaufeli, 2015).

There is robust evidence on the negative effects of GBDH on indicators of occupational well-being, such as overall job satisfaction, engagement, commitment, performance, job withdrawal, and job-related stress (Stedham and Mitchell, 1998; Lapierre et al., 2005; Chan et al., 2008; Cogin and Fish, 2009; Sojo et al., 2016). Its negative effects have been reported among women (Fitzgerald et al., 1997), gay and heterosexual men (Stockdale et al., 1999), lesbians (Denissen and Saguy, 2014), and transgender individuals (Lombardi et al., 2002), to name some.



Proposition P2: GBDH negatively affects the occupational wellbeing of women and people from the LGBTQ community in the workplace.

ANTECEDENTS OF GBDH IN THE WORKPLACE

Direct Effect of OCCPP on GBDH

In the next lines, the direct effects of OCCPP on GBDH against women and people from the LGBTQ community are explored, supporting the next proposition of this model.

Proposition P3: OCCPP affect the incidence of GBDH against women and the LGBTQ.

Organizational Culture and GBDH

Organizational culture refers to the shared norms, values, and assumptions that are relatively stable and greatly affect the functioning of organizations (Schein, 1996). The most plausible link between organizational culture and GBDH seems to be the endorsement of sexist beliefs and attitudes. This is supported by evidence that sexism endorsement encourages GBDH attitudes and behavior (see Pryor et al., 1993; Fitzgerald et al., 1997; Stockdale et al., 1999; Stoll et al., 2016). The literature on sexism has mainly adopted a binary conception of gender (see Carrotte et al., 2016). However, the last decade more research has focused on heterosexism and anti-LGBTQ attitudes, uncovering their negative effects in the lives of LGBTQ individuals.

Sexism Against Women

Scholars focusing on sexism against women have categorized it in different ways. *Old-fashioned sexism* refers to the explicit endorsement of traditional beliefs about women's inferiority (Morrison et al., 1999). *Modern* and *neo sexism* define the denial of gender inequality in society and resentment against measures that support women as a group (Campbell et al., 1997; Morrison et al., 1999). *Gender-blind sexism* refers to the denial of the existence of sexism against women (Stoll et al., 2016). *Benevolent sexism* defines the endorsement of an idealized vision of women that is used to reinforce their submission (Glick et al., 2000). Finally, *ambivalent sexism* is the term for the endorsement of both hostile and "benevolent" sexist attitudes (Glick and Fiske, 1997, 2001, 2011).

Sexism Against the LGBTQ

Sexism directed against the LGBTQ takes different forms, that can be also held by members of the LGBTQ community, as the evidence about biphobia and transphobia points out (see Vernallis, 1999; Weiss, 2011). Heterosexism is the endorsement of beliefs stating that heterosexuality is the normal and desirable manifestation of sexuality, while framing other sexual orientations as deviant, inferior, or flawed (see Habarth, 2013; Rabelo and Cortina, 2014). Monosexism and biphobia refer to negative beliefs toward people that are not monosexual, namely, whose sexual orientation is not defined by the attraction to people from only one gender (see Vernallis, 1999). Cissexism (also transphobia) refers to "an ideology that denigrates and subordinates trans* people because their sex and gender identities exist outside the gender binary. Transgender people are thus positioned as less authentic and inferior to cisgender people" (Yavorsky, 2016, p. 950). Hence, transgender individuals experience concurrently sexism, heterosexism, and cissexism/transphobia in their workplaces (see Yavorsky, 2016).

Organizational Climate and GBDH

Organizational climate reflects the "social perceptions of the appropriateness of particular behaviors and attitudes [in an organization]" (Sliter et al., 2014). There is evidence linking organizational climate with workplace harassment (Bowling and Beehr, 2006), sexual harassment (Fitzgerald et al., 1997, p. 578), and gender microaggressions (Galupo and Resnick, 2016).

Diversity climate is "the extent to which employees perceive their organization to be supportive of underrepresented groups, both in terms of policy implementation and social integration" (Sliter et al., 2014). Hence, a gender-diversity climate reflects the employees' perceptions of their workplace as welcoming and positively appreciating gender differences (Jansen et al., 2015). It has been associated with an increased perception of inclusion by members of an organization, buffering the negative effects of gender dissimilarity (i.e., gender diversity) between individuals in a group (Jansen et al., 2015). Sliter et al. (2014) found a negative relationship between diversity climate perceptions and conflict at work. Also, it has been suggested that it plays a crucial role for workers' active support of diversity initiatives, which is determinant for their successful implementation (Avery, 2011). A similar construct, *climate for inclusion* has also shown to be a positive factor in gender-diverse groups, protecting against the negative effects of group conflict over unit-level satisfaction (Nishii, 2013).

Heterosexist climate refers to an organizational climate in which heterosexist attitudes and behaviors are accepted and reinforced, propitiating GBDH against the LGBTQ (see Rabelo and Cortina, 2014; Galupo and Resnick, 2016). For example, Burn et al. (2005) conducted a study using hypothethical scenarios to test the effects of indirect heterosexism on lesbians, gays, and bisexuals. The participants of their study reported that hearing heterosexist comments would be experienced as an offense, affecting their decision to share information about their sexual orientation (Burn et al., 2005). In addition, it has been found that LGBTQ-friendly climates (hence, low in heterosexism), can have a positive impact on the individual and organizational level (Eliason et al., 2011). Examples of positive outcomes are reduced discrimination, better health, increased job satisfaction, job commitment (Badgett et al., 2013), perceived organizational support (Pichler et al., 2017), and feelings of validation for lesbians that become mothers (Hennekam and Ladge, 2017).

Workplace Policy and GBDH

Workplace policy plays an important role in the incidence of GBDH. Finally, evidence shows that policy affects the extent to which the work environment presents itself as LGBTQ-friendly, influencing the experience of LGBTQ individuals at work (Riger, 1991; Eliason et al., 2011; Döring, 2013; Dougherty and Goldstein Hode, 2016; Galupo and Resnick, 2016; Gruber, 2016). Eliason et al. (2011) found that inclusive language, domestic partner benefits, child-care solutions, and hiring policies are relevant for the constitution of a gender-inclusive work environment for the LGBTQ. Calafell (2014) wrote about how the absence of policy addressing discrimination against people with simultaneous minority identities (e.g., queer Latina) contributes to cover harassment against them. Galupo and Resnick (2016) found that weak policy contributes to the incidence of microaggressions against people from the LGBTQ community. Some of the situations they found include refusal of policy reinforcement, leak of confidential information, and refusal to acknowledge the gender identity of a worker (Galupo and Resnick, 2016). Moreover, existent policy may serve to reinforce inequalities if its discourse is based on power binaries (e.g., rational/masculine vs. emotional/feminine) that discredit, oppress, and marginalize minority groups (Riger, 1991; Dougherty and Goldstein Hode, 2016). For example, Peterson and Albrecht (1999) analyzed maternity-policy and found how discourse is shaped to protect organizational interest at the cost of the precarization of women's conditions in organizations. Finally, it is very important to address the mishandling of processes and backlash after GBDH complaints are filed, since they keep targets of harassment from seeking help within their organizations (see Vijayasiri, 2008).

Organizational Politics and GBDH

Organizations are political entities (Mayes and Allen, 1977). In the workplace, power, conceived as access to information and resources, is negotiated through political networks embedded in communication practices (Mayes and Allen, 1977; Mumby, 2001; Dougherty and Goldstein Hode, 2016). These communication practices operate within power dynamics in which the majority group sets the terms of the discussion and frames what is thematized (Mumby, 1987, 2001). Since gender affects the nature of these power relations, the effects of politics in gender issues and of gender issues in politics must be considered.

Full Moderation of OCCPP of the Relationship Between Gender Diversity and GBDH

Gender diversity refers to heterogeneity regarding gender characteristics of individuals in an organization. Broadly, an organization in which most workers are cisgender, male, and heterosexual would be low in gender diversity, and one in which individuals are evenly distributed in terms of their gender identity, sexual orientation, and gender expression, would be high on gender diversity. In this section, the moderation effect of OCCPP on the relationship between gender diversity and GBDH is discussed to support the next proposition of the model.

Proposition P3a: The relationship between gender diversity and GBDH is fully moderated by OCCPP. When OCCPP propitiate a hostile environment for gender minorities, low gender diversity will lead to high GBDH. When OCCPP propitiate a context of respect and integration of gender minorities, low gender diversity will not lead to higher GBDH.

Male-Dominated Workplace

In male-dominated organizations, a hypermasculine culture is predominant, male workers represent a numerical majority, and most positions of power are occupied by men (e.g., Carrington et al., 2010). These organizations present an increased frequency and intensity of GBDH against women, men who do not do gender in a hypermasculine form, and individuals from the LGBTQ community (Stockdale et al., 1999; Street et al., 2007; Chan, 2013; Wright, 2013). Women in a male-dominated workplace may be confronted with misogyny at work (Denissen and Saguy, 2014), becoming targets of more intense and frequent GBDH as they depart from the policed gender-rule that demands them to behave feminine, submissive, and heterosexual (Berdahl, 2007). Women refusing sexual objectification in these contexts may become targets of serious forms of mistreatment, with the case that certain women "-including lesbians and those who present as butch, large, or black-may be less able to access emphasized femininity as a resource and thus [become] more subject to open hostility" (Denissen and Saguy, 2014, p. 383). In other words, the more they depart from the sexist and heteronormative standard, the worse is the mistreatment they will face. At the same time, the strategies some women apply to avoid hostility have a high cost for their identity and validation at work, as pointed by Denissen and Saguy (2014, p. 383),

the presence of lesbians threatens heteronormativity and men's sexual subordination of women [...] [b]y sexually objectifying tradeswomen, tradesmen, in effect, attempt to neutralize this threat. While tradeswomen, in turn, are sometimes able to deploy femininity to manage men's conduct and gain some measure of acceptance as women, it often comes at the cost of their perceived professional competence and sexual autonomy and—in the case of lesbians—sexual identity.

However, GBDH is not only directed to women in hypermasculine contexts, as suggested by Denissen and Saguy (2014), who observed that "tradesmen unapologetically use homophobic slurs to repudiate both homosexuality and femininity (in men)" (Denissen and Saguy, 2014, p. 388). Hence, men working in a male-dominated context are also expected to perform hegemonic masculinity, being punished when they do not comply. This leaves men who do not present dominant traits, that are feminine, or that are not heterosexual, at risk of becoming targets of GBDH (Franke, 1997; Stockdale et al., 1999; Carrington et al., 2010).

Female-Dominated Workplace

Female-dominated workplaces are those where women represent a numeric majority. It has been suggested that in these contexts (e.g., nursing) women with care responsibilities can find more tools to balance work-family schedules (Caroly, 2011), and face less harassment (Konrad et al., 2010). However, evidence about heterosexism and harassment against people from the LGBTQ community uncovers heteronormativity in femaledominated workplaces (e.g., among nurses, see Eliason et al., 2011). For example, an experiment about discrimination of gays and lesbians in recruitment processes showed that while gay males were discriminated in male-dominated occupations, lesbians were discriminated in female-dominated ones (Ahmed et al., 2013).

Representation of the LGBTQ in the Workplace

At the moment this paper is being written, the authors have not found research that specifically targets LGBTQdominated organizations. There is evidence suggesting that having more lesbian, gay, and non-binary coworkers contributes to the development of LGBTQ-friendly workplaces (Eliason et al., 2011). In addition, evidence supports the positive effects of having LGBTQ leaders that advocate for the respect and integration of LGBTQ individuals in organizations (Moore, 2017).

Gender Diversity, Tokenism, Glass Escalator, and GBDH

When gender-minority individuals are pioneers entering a gender-homogeneous workplace, they face a heightened probability of experiencing tokenism (Maranto and Griffin, 2011). Tokenism refers to the performance pressures, social

isolation, and role encapsulation that individuals from social minorities face in organizations in which they are underrepresented numerically (Yoder, 1991). Gardiner and Tiggemann (1999) conducted a study comparing the effects of male- and female-dominated work environments on individuals' well-being and tokenism experiences. They found that women, in comparison to men, experience the highest levels of tokenism and discrimination in male-dominated sectors, and that they endure more pressure than men, even in female-dominated contexts (Gardiner and Tiggemann, 1999). There is also an increasing number of reports on the experiences of tokenism by the LGBTQ (LaSala et al., 2008; Colvin, 2015) and research on how to hinder the negative consequences of tokenism against them in organizations (Davis, 2017; Nourafshan, 2018). The fact that men in female- dominated work settings report less levels of pressure than women in male dominated workplaces is compatible with Yoder's (1991) conception of tokenism as the oppression of social-minority members who are simultaneously a numerical minority. Because white men are a social majority, they do not experience the negative effects of tokenism when they are underrepresented numerically. Actually, evidence on the glass escalator effect shows that white men experience advantages when they enter female-dominated fields (Williams, 1992, 2013, 2015; Woodhams et al., 2015). However, tokenism might be also present in female-dominated settings, as can be inferred from studies on LGBTQ experiences in women-dominated professions (Eliason et al., 2011; Ahmed et al., 2013). Moreover, research in the US suggests that female CEOs tend to advance policies related to domestic-partner benefits and discrimination against women, but not necessarily advocate for a wider range of LGBTQ-inclusion policies (Cook and Glass, 2016).

Gender Diversity, Contradictions, and the Role of OCCPP

The evidence on the effects of gender diversity in organizations is not free of contradictions. It has been found that the integration of male coworkers in female-dominated workplaces increases conflict between women (Haile, 2012), and that as the proportion of male doctors in workgroups increases, the same happens with sexual harassment against female doctors (Konrad et al., 2010). If taken together, it makes sense to consider an interaction of OCCPP and gender diversity to explain GBDH. In other words, it seems that gender diversity alone is not enough to end GBDH in the workplace, but can interact in a positive way with organizational factors to diminish conflict and GBDH (see Nishii, 2013). White, middle class, cisgender, heterosexual men would most likely not be targeted for GBDH in femaledominated contexts, since they are not a social minority, rather benefiting from their underrepresentation (see Williams, 1992). Finally, it is expected that gender diversity and OCCPP present a circular causation (see double-ended arrow in Figure 1), so that a higher representation of a particular minority group will traduce into OCCPP that promote inclusion for that group. At the same time, an organization whose OCCPP invites to respect and integrate gender minorities will attract more women and LGBTQ individuals (see Bajdo and Dickson, 2001; Moore, 2017).

OCCPP Full Moderation of the Relationship Between Individuals' Characteristics and GBDH

Individuals' gender characteristics intersect with race, class, ethnicity, and disability configuring complex identities and dynamics that affect individuals' experience of inequality in organizations (see Oliver, 1992; Acker, 2006; Verloo, 2006; Cunningham, 2008; Ericksen and Schultheiss, 2009; Cho et al., 2013; Donovan et al., 2013; Liasidou, 2013; Wright, 2013; Calafell, 2014; Moodley and Graham, 2015; Senyonga, 2017). In other words, it is difficult to isolate causes for exclusion, since they derive from complex power dynamics that shape individuals' experience. It was mentioned above that women and the LGBTQ tend to be more targeted for GBDH than white heterosexual men. However, it is in sexist organizational contexts that gender characteristics are made salient to propitiate GBDH.

Proposition P3b: The link between individuals' gender characteristics and GBDH in the workplace is fully moderated by OCCPP. This means that in a context of sexist OCCPP, individuals with gender-minority status will experience more GBDH. In contexts in which OCCPP propitiate respect and integration of gender minorities, GBDH will be low.

In other words, if the organizational context is tolerant of GBDH, harassment will occur based on individuals' sex, gender identity, sexual orientation, gender expression, or an intersection of those (Crenshaw, 1991; Pryor et al., 1993; Franke, 1997; Stockdale et al., 1999; Galupo and Resnick, 2016). Some examples of how gender characteristics are used as grounds for GBDH are described in the following lines.

Sex assigned at birth refers to the gender category assigned to individuals according to their physical characteristics at birth (ILGA-Europe, 2016). At the moment, the intersex category for those whose physical characteristics do not match the binary conception of gender at birth is not officially recognized in many countries (ILGA-Europe, 2016).

Gender identity is the "deeply felt internal and individual experience of gender, which may or may not correspond with the sex assigned at birth" (International Commission of Jurists, 2009, p. 6). Despite the claims to adopt inclusive conceptions of gender, organizations continue to direct their gender-equality programs to white cisgender women, excluding the transgender and genderqueer (see Carrotte et al., 2016; Galupo and Resnick, 2016).

Gender expression is the way people handle their physical or external appearance so that it reflects their gender identity (European Union Agency for Fundamental Rights, 2014). In highly sexist organizations, gender policing and harassment is directed against less gender-conforming individuals (e.g., Stockdale et al., 1999; Wright, 2013).

Sexual orientation refers to the "person's capacity for profound affection, emotional and sexual attraction to, and intimate and sexual relations with, individuals of a different gender or the same gender or more than one gender" (ILGA-Europe, 2016, p. 180). It is often the case that family policy in organizations consider only workers whose families are conformed by heterosexual couples and their children (e.g., Galupo and Resnick, 2016).

This excludes those who are in same-sex or non-monosexual partnerships and families, sending the message that they are "different," abnormal, or unnatural (see Galupo and Resnick, 2016). There is evidence that gender-exclusive language (using *he* and *his* instead of gender-inclusive forms) negatively affects the sense of belongingness, identification, and motivation of women in work settings (Stout and Dasgupta, 2011). In the same way, the exclusion of people with non-binary or non-heterosexual gender characteristics in the organizational discourse makes them experience feelings of exclusion and otherization (Carrotte et al., 2016).

Double Moderation of OCCPP: Its Effects on the Moderation of Gender Diversity of the Relationship Between Individuals' Characteristics and GBDH

Considering the literature on tokenism, gender characteristics (e.g., transgender) are expected to be a relevant predictor of GBDH if there is a reduced number of people with *those* characteristics in the organization (i.e., low gender diversity). Also, it is expected that this relationship will only take place in those situations in which the OCCPP propitiate a discriminatory and harassing environment for gender minorities.

Proposition P3c and P4: When OCCPP propitiate a discriminatory and harassing environment for gender minorities, women and the LGBTQ will experience more GBDH in a context low in gender diversity. If the OCCPP configure an environment that is inclusive and respectful of gender minorities, a low gender diversity will not lead to GBDH against women and the LGBTQ in that organization.

RECOMMENDATIONS FOR ACADEMICS AND PRACTITIONERS

Need for Industry-University Collaborations: From the Lab to the Field

Research that emerges from industry-university collaboration (IUC) is needed to better understand and counteract GBDH. Porter and Birdi (2018) identified twenty-two factors for a successful IUC. Some of these factors are: capacity of the stakeholders to enact change, a clear and shared vision, trust between the actors, and effective communication (Porter and Birdi, 2018). Rajalo and Vadi (2017) developed a model of IUC, according to which success is more likely when preconditions from the involved partners (i.e., academics and practitioners) match. These preconditions are explained in terms of absorptive capacity (ability to process and incorporate new information), and motivation to collaborate (Rajalo and Vadi, 2017). In other words, those involved in IUC need top management support, economic resources, a shared vision of gender equality, trust in each other, effective communication channels, and high motivation to collaborate. It is not a simple endeavor, but it is a necessary and possible one (see Porter and Birdi, 2018).

In collaborations, scholars and practitioners have the opportunity to work together in the design, development, implementation, and follow-up of HRM strategies. This must be done ensuring that projects are appropriate for each

organization, and that the raised information is suitable for research purposes. Evidence on IUC spillover points out that firms and academics benefit from these collaborations (see Jensen et al., 2010). In the case of HRM, scholars can gain access to samples that are difficult to reach and economic resources to finance their research, while practitioners benefit from the academic expertise (see Jensen et al., 2010). In the context of gender equality, this can be useful to develop and implement evidence-based procedures to counteract GBDH (see Briner and Rousseau, 2011). To build the networks necessary for such collaborative alliances, public and private initiative must be taken (see Lee, 2018). Congresses and events that approach gender issues in organizations and aim to build bridges between the industry and the academia can offer opportunities for collaboration to occur. Finally, practitioners must gain awareness of gender issues in the workplace, and organizationalfeminist scholars should write and reach for the practitioner audience as well.

A Small Help to Begin With: The Gender-Equality Starters' Toolkit

We know that for practitioners and researchers that are not familiarized with the poststructuralist, intersectional, queerfeminist theories, our recommendations may sound quite cryptic. For this reason, we developed a very simplified starters' toolkit (Table 1). In its "HRM diagnose" section, we suggest ways to develop a first diagnose of the organization in relation to gender issues. The "HRM interventions" section refers to actions that can be taken in case further intervention is needed. In the "applied-research" section, we provide applied-research ideas to better understand GBDH and develop evidence-based tools for HRM. Finally, in the "references and resources" section we include references that support and complement the suggestions provided. Each row of the toolkit refers to one of the components of our model (health and occupational well-being were grouped together). As mentioned, the aim of this toolkit is to provide material for a first approach to GBDH in organizations, and inspire those interested in conducting applied research on GBDH in the workplace.

A CHANGE OF PERSPECTIVE: LOOKING AT THE ORGANIZATION WITH QUEER-FEMINIST LENS

Change Organizational Politics, Change the Organization

Organizational politics result from the interplay of discursive practices and power negotiations, and refer to who and how is determining the terms of these negotiations (Mumby, 1987, 2001). To understand organizational politics, the hegemonic discourse has to be analyzed utilizing deconstructive lens that uncover the operating power dynamics (e.g., Benschop and Doorewaard, 1998; Dougherty and Goldstein Hode, 2016). In other words, when deconstructing the organizational discourse, the researcher or practitioner analyzes both the content and structural elements of the particular text (see Peterson and Albrecht, 1999; Buzzanell and Liu, 2005). Organizational-text examples are: the sexual harassment policy of the organization, brochures from the last organizational-change campaign, the transcript of interviews on gender issues, the chart of values of the firm. The analysis of this material allows to observe the way gender issues are approached and defined (or not approached nor defined), to develop a first diagnose and lines of action (for an example see Dougherty and Goldstein Hode, 2016). Some questions that may help in the analysis are:

How is gender defined? (Whose gender is [not] validated?),

What actions or behaviors are constitutive of GBDH in this organization? (What forms of aggression and discrimination are hence allowed?),

What are the procedures if action is to be taken? (What is left out of procedure leaving space for leaks or inadequacies?), and What is the organizational history in relation to GBDH claims? (Who has enjoyed impunity? Whose claims are [not] listened to?).

For example, the researcher or practitioner may realize that the sexual-harassment policy of a particular organization refers to cisgender individuals only. Moreover, it may be that this policy defines GBDH as harassment of men against women, excluding same-sex sexual harassment (see Stockdale et al., 1999). Furthermore, it may become evident that this policy is framed in a discourse of binary logics that serve to blame the victims and victimize harassers (see Dougherty and Goldstein Hode, 2016). Finally, after a follow-up of archived organization's processes, it may come out that harassers have historically enjoyed impunity (see Calafell, 2014). This initial analysis might be useful to develop a plan for change. Continuing with the example, this policy may be redefined so that it adopts an integrative conception of gender. In addition, it can be adapted to include cases of same-sex sexual harassment. It can be also reframed using a discourse that allows fairness for all parties involved. Finally, cases from the past may be analyzed to avoid committing old mistakes in the future, and if some of these cases are recent, rectification may be considered.

Reading Between the Lines: Disguised Forms of GBDH

Bullying and Mobbing as Disguised GBDH

We argue that at least some workplace mistreatment that appears as "gender neutral" is actually gendered. Available evidence points to a higher frequency of bullying/mobbing against women and the LGBTQ in the workplace (Rospenda et al., 2008, 2009; Grant et al., 2011; Hoel et al., 2017). Hence, once data on workplace mistreatment is raised, it is advisable to evaluate gender disparities (e.g., statistically comparing means) that may point to cases of disguised GBDH. The importance of addressing disguised GBDH (i.e., "sexist" mobbing and bullying) lies on solving the problem (i.e., mistreatment) at its roots. According to our model, if sexist OCCPP are intervened and changed, their consequences (i.e., overt and disguised forms of GBDH) should disappear.

Disguised GBDH at the Task Level

We also believe that disguised GBDH might take place through task allocation processes. In other words, it may be that

	HRM diagnose	HRM interventions	Applied-research: development of resources for practitioners and academics	References and resources
GBDH	 Measure the incidence of GBDH considering its different forms Conduct interviews and/or focus groups to better interpret the obtained results when in doubt If available, check the record from the sexual harassment helpline from the organization (or equivalent) 	 Train the whole organization on GBDH, focusing on the forms of GBDH that are most prevalent (e.g., microaggressions) Approach those areas where the incidence of GBDH was reported Make sure that GBDH complaints have been addressed and that they are being handled fairly Pay special attention to "stuck" processes and hollow-up for adequate closure Address disguised forms of GBDH according to the OCCPP they relate to. For example, develop a plan for cultural change to countera sexism (culture), implement training and coaching programs for leaders (climate), analyze policy for career development (policy), generate incentives for leaders to mentor and impulse the development of women and the LGBTQ in the workplace (politics) 	 Psychometric validation of scales to measure GBDH Critterion validation of diagnose measures of GBDH Development and validation of measures that address different forms of GBDH Development and validation of standardized training techniques to address GBDH in the workplace Pre-post evaluation of the effects of training interventions to reduce GBDH Q., applying the ADDIE model, see Molenda, 2003) 	 Sexual harassment in the workplace (Fitzgerald et al., 1997, 1999) Gender harassment (Leskinen and Cortina, 2013) Gender heterosexist harassment (Pabelo and Cortina, 2014) Homonegative microaggressions (Wegner and Wright, 2016) Microaggressions against women (Owen et al., 2010; Basiord et al., 2014) Bullying at work/mobbing (Einarsen et al., 2009) Handling and preventing sexual harassment in the work/place (Kleiner and Takeyama, 1998; McDonald et al., 2015; Newman, 2018) Task allocation processes (de Pater et al., 2009) Illegitimate tasks' effect on ERI, moderated by gender (Omansky et al., 2004)
Organizational climate	 Apply GBDH-relevant measures of organizational climate Evaluate if leaders promote a climate of respect, diversity, and inclusion Conduct qualitative techniques (e.g., interviews, focus groups) to clarify the meaning of the obtained data whenever necessary 	 Develop action plans for those areas with higher levels of organizational heterosexist climate to promote a climate of respect and inclusion Implement coaching and learning programs for leaders to promote a climate of respect and inclusion Follow-up on the implementation and success of these actions and repeat climate measurements periodically (e.g., once a year) 	 Psychometric and criterion validation of GBDH-relevant measures of organizational climate Longitudinal analysis of the effects of leadership and organizational-climate interventions to test their effectiveness 	 Bernol Psychological climate for sexual harassment (Estrada et al., 2011) Diversity climate (Mor Barak et al., 1998) Climate for inclusion (Nishii, 2013) LGBT organizational-climate inventory (Liddle et al., 2004)

	HRM diagnose	HRM interventions	Applied-research: development of resources for practitioners and academics	References and resources
Organizational culture	 Apply qualitative and quantitative techniques to measure the endorsement of hetero-sexist values in the organization Determine cultural elements (Schein, 1990, 1996) that contribute to reinforce a hetero-sexist culture Engage key members in the organization (visible and/or powerful) to serve as champions to impulse cultural change Identify excluding and otherizing communication practices 	 Develop an action plan for cultural change Start changing the HRM elements that contribute to reinforce heterosexism (e.g., heterosexist communication material, events, official communicates, exclusive language etc.), then reach for the rest of the organization. Cunningham (2008) underscores the incorpance of political, social, and functional pressures that can be utilized to question the legitimacy of sexism in organizations to impulse cultural change Implement a "Champions" program for gender diversity and inclusion, making vible top-leaders' advocacy for these issues Implement gender-validating communication practices in all organizational-communication instances 	 Validate methods for cultural change to apply in the organizational setting Determine what forms of heterosexism are most prevalent in determined organizational settings Develop studies to uncover forms in which organizational culture manifests heterosexism Develop and share experiences on implementing inclusive and gender-validating communication practices 	 Heterosexism (Rabelo and Cortina, 2014) Modern sexism and old-fashioned sexism (Morrison et al., 1999) Hostile and benevolent sexism (Glick and Fiske, 2001) Antecedents of deinstitutionalization that cause cultural change in organizations (Oliver, 1992) Application of the antecedents of deinstitutionalization (Cunningham, 2008) Comeron and Green, 2009) Gendered communication practices (Stout and Dasgupta, 2011; Carrotte et al.,
Organizational policy	 Check for availability and applicability of policy addressing GBDH, partner benefits, and parenthood, among others Analyze available procedures in case GBDH occurs Analyze the organizational history regarding policy compliance, policy reinforcement, recurrence of harassment, etc. 	 Develop policy whenever it is missing Revise the way policy has been interpreted to solve cases of GBDH Deconstruct policy subtext to understand the operating gender-power dynamics Develop communication campaigns to inform all organization members about the available policy and procedures 	 Document and share experiences on policy deconstruction and policy development Make visible the ways by which gender-subtext operates within organizational policy 	 2016) On the effects of policy and considerations for its development (Hirsh and Cha, 2016) On analyzing and interpreting gender subtext and applying a feminist-queer- intersectional approach (Bendl, 2000, 2008) On applying queer theory to unveil heteronormative essentialist definitions of gender in organizations (Bendl et al., 2008) Daconstruction of sexual harassment policy (Dougherty and Goldstein Hode, 2016) Deconstruction of maternity-leave policy (Peterson and Albrecht, 1999; Buzzanell and Liu, 2005) Deconstruction of the predominant discourse in the Swedish nursing profession (Dahlborg-Lyckhage and Pilhammar-Anderson, 2009)

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	HKW diagnose	HRM interventions	Applied-research: development of resources for practitioners and academics	References and resources
Organizational politics	Answer these questions to analyze how power is distributed in the organization: 1. How many women and LGBTO hold positions of power? How strong are the glass and lavender cellings? 2. What career-development opportunities are available for women and the LGBTO? 3. In case certain minority groups are underrepresented in the organization in general, what is the discourse that accounts for the underrepresentation of certain minority groups in power positions (if that is the case)? 5. Which groups of people are excluded (or feel excluded) from formal and informal decision-making processes? 6. What are the procedures for recruitment, training, and promotion? To what extent are they designed to ensure fairness and accountability? 7. Which groups of people are excluded (or feel excluded) from formal and informal meetings and events?	 Develop mentoring programs for women and the LGBTQ Remove barriers for minority-group participation in formal and informal events (e.g., early instead of late meetings, invite partners rather than wifes/husbands, use inclusive language) Revise and develop procedures for recruitment, training, and promotion to ensure fairness and accountability Hold line managers and executives accountable for their recruitment, development, and promotion decisions (see Hirsh and Cha, 2016) Remove or redesign events that paramount heterosexist comedian; women portrayed in sexualized ways (e.g., christmas party with an heterosexist comedian; women portrayed in sexualized ways (e.g., as models in stretch clothes handling the prizes to the awarded men]) 	 Test, document, and share effectiveness of mentoring programs Share case studies on political-change management Develop indicators of distribution of power inside organizations Share HRM best-practices to ensure equal opportunity for people of all gender characteristics and other minorities as well 	 Mentoring and politics for women in the academia (Gibson, 2006; Dashper, 2018) Testimony of the researchers' positive mentorship experience, and their reflections on the importance of mentors' awareness of gender issues when mentoring women (Ali and Coate, 2012) Mentoring for LGBTQ youth (McAllister et al., 2009) On the positive effects of policy designed to increase accountability in recruitment, hiring, and promotion processes for the representation of minorities at the managerial level (Hirsh and Cha, 2016) On power, politics, and gender (Mumby, 1996, 2001; Bendl, 2000; Bendl et al., 2008)
Individuals' health and occupational well-being	 Raise data on individuals' occupational well-being (e.g., job satisfaction, job commitment, organizational engagement, burnout) Raise data on individuals' health, sick absence, and sick presenteeism Check for intergroup differences (e.g., t-tests/ANOVA) controlling for gender oharacteristics that may signal the presence of sexist OCCPP and/or GBDH Check for intergroup differences involving people in the intersections of minority identities 	 Identify areas that present significantly higher rates of sick absence, sick presenteeism, health problems, and lower occupational well-being for women and/or the LGBTQ. Implement actions to improve the OCCPP and counteract possible GBDH (see above). Check for additional problems that affect people in the intersections of minority identities and develop actions to address them accordingly 2. Repeat measurements periodically (e.g., once a year) for follow-up and to evaluate the effectiveness of the interventions 	 Test criterion-validity (utilizing health and occupational well-being indicators) of diagnose instruments and methods to reduce GBDH in organizations Raise evidence on women's and LGBTQ's health and occupational well-being in the workplace Raise evidence to make visible the problems faced by individuals in the intersection of multiple minority identities 	 Meta-analysis on the antecedents and consequences of sexual harassment in the workplace (Chan et al., 2008) Workplace (Chan et al., 2008) Workplace harassment and morbidity among US adults (Khubchandani and Price, 2015) Work conditions and mental heath of dual-earner gay/lesbian parents (Goldberg and Smith, 2013) Outhe influence of workplace policy on LGBT well-being in the workplace (Lloren and Parini, 2017) Quantitative methodology in intersectional research (Else-Quest and Hyde, 2016a,b).

TABLE 1 | Continued

the processes of task allocation are such that they keep gender minorities away from career-development opportunities. Evidence signaling that women receive less challenging tasks that are relevant for career development suggests that the process of task allocation is not gender neutral (de Pater et al., 2009). There is also research on the effects of illegitimate tasks that suggests that their assignation to individuals in organizations may be gendered (Omansky et al., 2016). Illegitimate tasks are perceived as unreasonable and/or unnecessary by the person that undertakes them, and constitute a task-level stressor (Semmer et al., 2010, 2015). It was found that illegitimate tasks exert a stronger negative effect on perceptions of effortreward imbalance (ERI) among male than female professionals (Omansky et al., 2016). One explanation is that women are socialized to undertake these tasks, which is why they feel less disrupted by them (Omansky et al., 2016). However, if this causes women to undertake more illegitimate tasks than men, that might bring negative consequences for their occupational development and well-being. Available evidence shows no gender differences in the reports of illegitimate tasks between women and men (see Semmer et al., 2010, 2015; Omansky et al., 2016). However, it is unclear if this is because women do not perceive the tasks they undertake to be illegitimate, or if there is no difference de facto. To our knowledge, there is no evidence on illegitimate tasks assigned to LGBTQ individuals. We think that the findings on task-allocation and illegitimate-tasks call for more research in this subject, especially regarding the role of illegitimate tasks and task-allocation processes for the career development of women and the LGBTQ.

Lavender Over the Glass Ceiling

It is important to evaluate if, when, and what kind of leadership positions are available for gender minorities in organizations. This includes spotting cases when a single person or a small group is tokenized and expected to compensate for a lack of diversity of the whole organization (see Benschop and Doorewaard, 1998). The glass ceiling in the case of women and lavender ceiling in the case of LGBTQ individuals refer to the burdens faced by these groups to reach leadership positions as a consequence of sexism in organizations (Hill, 2009; Ezzedeen et al., 2015). There is also evidence that female executives are appointed to leadership positions when odds of failing are high (Ryan and Haslam, 2005). Regarding the LGBTQ, it is necessary to raise more evidence on the factors that make it possible for them to break through the lavender ceiling (Gedro, 2010).

Limitations of This Study and Future Research

Our model was developed based on the review of available literature. The fact that it is based on secondary sources leaves space for bias and calls for its empirical testing. The mediation path that links the antecedents and consequences of GBDH should be tested in longitudinal studies, and the moderations proposed can be better assessed utilizing experimental designs. In this paper we argued for an integrative conception of gender in the HRM approach to GBDH. Nevertheless, data on the experiences of the LGBTQ in the workplace are mostly based on small samples, especially for the transgender. In addition, although we discussed the constructed nature of categories and pointed to their limitations, we considered women and the LGBTQ as relatively stable concepts. The experience of women and the LGBTQ greatly differs when looking to the heterogeneity between and within these groups. We thematized intersectionality mostly referring to sex assigned at birth, gender identity, and sexual orientation, and thus acknowledge our difficulty to account for exclusion dynamics involving identities in the intersection of race, gender, ableness, body form, and class. More research that focuses on these groups (e.g., transgender people of color) is needed. Finally, we made conjectures on the role that task-allocation processes may play as disguised GBDH that needs to be tested empirically as well. We think that since overt expressions of GBDH are in the decline in western workplaces, it is necessary to reach for gendered practices that disadvantage women and the LGBTQ in organizations.

CONCLUSIONS

There is a potential for synergy when HRM considers the needs of women and people from the LGBTQ community together, especially to propitiate gender equality and counteract genderbased discrimination and harassment. To start, organizational resources can be employed to neutralize the mechanisms through which gender oppression acts against women and members from the LGBTQ community. In this way, actions for gender equality help create safe spaces for both groups. In addition, framing gender and sexuality in inclusive ways helps dismantle heterosexist, cissexist, and monosexist paradigms that contribute to create discriminatory and harassing workplaces. Finally, queer and feminist perspectives should be integrated with the intersectional approach to counteract discrimination against those in the intersection of multiple marginalized identities. Hence, the needs of people of all genders, people of color, disabled people, people with different body shapes, and people with different cultural backgrounds are made visible and addressed. This assists in developing truly inclusive and respectful workplace environments in which workers can feel safe to be themselves and unleash their full potential.

AUTHOR CONTRIBUTIONS

All authors contributed to the definition of the subject and the development of the hypotheses and model presented. CG drafted the manuscript and KO provided close support and supervision during the writing process and conducted revisions at all stages of the manuscript development. All authors contributed to the manuscript revision and approved the submitted version.

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