



OPEN ACCESS

EDITED BY

Darren Moore,
University of Exeter, United Kingdom

REVIEWED BY

Mary Koutselini,
University of Cyprus, Cyprus
Benjamin Dreer-Goethe,
University of Erfurt, Germany

*CORRESPONDENCE

Angela Urick
✉ angela_urick@baylor.edu

RECEIVED 02 March 2025

ACCEPTED 02 July 2025

PUBLISHED 06 August 2025

CITATION

Urlick A, Magnusen M, Eckert J and
Carpenter B (2025) Promoting educator
wellbeing: the relationship between political
skill, community empowerment, and
collective leadership.
Front. Educ. 10:1586480.
doi: 10.3389/feduc.2025.1586480

COPYRIGHT

© 2025 Urick, Magnusen, Eckert and
Carpenter. This is an open-access article
distributed under the terms of the [Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/). The
use, distribution or reproduction in other
forums is permitted, provided the original
author(s) and the copyright owner(s) are
credited and that the original publication in
this journal is cited, in accordance with
accepted academic practice. No use,
distribution or reproduction is permitted
which does not comply with these terms.

Promoting educator wellbeing: the relationship between political skill, community empowerment, and collective leadership

Angela Urick^{1*}, Marshall Magnusen¹, Jonathan Eckert¹ and
Bradley Carpenter^{2,3}

¹Department of Educational Leadership, Baylor University, Waco, TX, United States, ²Sul Ross State University, Alpine, TX, United States, ³Alpine Independent School District, Alpine, TX, United States

Purpose: Recent demands placed on educators to navigate crises in schools have further solidified the urgency to promote wellbeing. The purpose of this study is to understand how to promote wellbeing for teachers and administrators with collective leadership through political skill and community empowerment.

Research methods: We surveyed $N = 314$ teachers and administrators in a central region of Texas during Fall 2021 to understand their influence and wellbeing during the COVID-19 pandemic. Educators were invited to participate in this survey, which included four instruments, and was collected using an email list through an educational service center when schools opened after quarantine. This survey data was applied to a multigroup structural equation model to demonstrate how factors lead to wellbeing. Teachers and administrators were compared to show varying relationships between responses about wellbeing, political skill, community empowerment, and collective leadership.

Findings: This study provides evidence to validate relationships between an interdisciplinary set of measures across these roles of educators. For teachers, as hypothesized, collective leadership and political skill influenced wellbeing. Community empowerment was a direct outcome for collective leadership but not wellbeing. For administrators, the hypothesized relationships had similar results. Collective leadership and political skill influenced wellbeing. Uniquely, in the structural phase of model testing, a path modification was added, which could be justified by theory, and specific to the role of administrators. Physical health was specified as a predictor of community empowerment. Overall, for both groups, collective leadership was situated as the main driver of this wellbeing model. Our findings reflect the importance of mixing positive psychology and leadership frameworks to understand how to support educators through a crisis.

Implications: We explain how collective leadership can provide educators with the agency necessary to promote their own wellbeing.

KEYWORDS

wellbeing, collective leadership, multigroup SEM, political skill, community empowerment, COVID-19

Introduction

Numerous challenges to teachers' wellbeing, such as low salaries as well as increased workloads and pressure to succeed without commensurate support, have contributed to the profession of teaching experiencing a health crisis (Doan et al., 2024; Sandilos et al., 2024). And teachers are not alone. Similar pressures and increased demands on school leaders (e.g., principals) and how these factors impact their wellbeing are also present but have been studied less extensively than teachers (Bartanen et al., 2019; Snodgrass Rangel, 2018). This gap in knowledge is particularly problematic as today's principals are among the most stressed cohorts of educational professionals, increasingly leaving the field at alarming rates (Yan, 2020; Sandilos et al., 2024). Indeed, the percentage of principals leaving the profession surged to 16% in 2021, and while this percentage declined to 8% by 2023, it remains higher than pre-pandemic turnover (Diliberti and Schwartz, 2025).

Principals, like teachers, benefit from organizational structures and support mechanisms to help lessen the workload and reduce work-related pressure and stress (Wang et al., 2018). Further, while teacher and principal burnout was a significant concern prior to the COVID-19 pandemic, the overall increasing demands placed on educators to navigate crises in schools have further solidified the urgent need to better understand how to promote wellbeing given the importance of educators to shaping the youth of current and future generations (Urlick et al., 2021; Zhang et al., 2024). Ultimately, the current crisis of wellbeing within the teaching profession highlights the need for educators, policymakers, and educational researchers to search for creative answers beyond typical education frameworks and practices to understand how to best support teachers and administrators. Therefore, the purpose of this study is to understand how a set of interdisciplinary factors may help to promote teacher and administrator wellbeing.

Wellbeing is a concept with multiple dimensions and definitions across fields and participants. Wellbeing has been described as an overall flourishing (see Butler and Kern, 2016; Seligman, 2011), which, in turn, promotes physical wellbeing, as a measure of overall health (Friedman and Kern, 2014; Kesavayuth et al., 2022). For instance, wellbeing has been approached through positive psychology as a satisfaction with life (Cantril, 1965), optimal funding and experience (Ryan and Deci, 2001), a combination of love of what we do, relationships, security and physical health (Rath and Harter, 2010). These approaches generally fall into the areas of evaluative wellbeing (life satisfaction), hedonic wellbeing (feelings), and eudemonic wellbeing (purpose of life). Additionally, interventions to reduce adverse work-related outcomes, such as burnout, are often based on risk and negatively framed with a focus on mental health (Page and Vella-Brodrick, 2013; LaMontagne et al., 2007).

A decade ago, few programs or interventions sought to promote positive properties of wellbeing (LaMontagne et al., 2014). Much has changed, as programs that focus on mindfulness and the more positive aspects of wellbeing have greatly increased over the past several years, especially since the COVID-19 pandemic (McNeven et al., 2024; Sandilos et al., 2024). Even so, the current literature still "presents very limited guidance as to how wellbeing should be promoted across the complexity of a whole-school context in order to improve outcomes" (McNeven et al., 2024, p. 601–602). Thus, to improve understanding and offer

guidance about wellbeing in schools, we consider how organizational structures might promote positive wellbeing, operationalized as both emotional and physical, for teachers and administrators through leadership and social exchange relationships in schools.

Conceptual model

The conceptual model for this study is informed by the Job-Demands-Resources model (Bakker et al., 2023), and consists of collective leadership, political skill, community empowerment, and wellbeing. Bakker et al.'s model describes an *energy depletion process* as well as a *motivation process*. The energy depletion process occurs when issues such as high job demands lead to burnout. Goal achievement and sense of personal growth induce the motivation process. This model has been found to enhance wellbeing (Claes et al., 2023) and educator wellbeing enhances outcomes for students (Dreer, 2023, 2024). Collective leadership mediated by political skill and community empowerment should lead to enhanced educator wellbeing because these variables not only contribute to the motivation process and enhance social effectiveness, but they reduce the effects of energy depletion (Eckert, 2018; Cyril et al., 2016; Ferris et al., 2007).

The first component of the conceptual model is collective leadership. Because leadership style, and the corresponding behaviors, can impact informal and formal leader wellbeing (Kaluza et al., 2020; Skakon et al., 2010; van Dierendonck et al., 2004), collective leadership within a school is positioned to directly promote both teacher and administrator wellbeing. This style of leadership emphasizes collaborative goal setting and strategic implementation of goals in the service of the mission at the core of schools—teaching and learning (Eckert, 2018, 2019). Collective leadership may also influence wellbeing through teacher and administrator perceptions of political skill and community empowerment. In other words, political skill and community empowerment are potential mediators of the collective leadership—wellbeing relationship. Figure 1 visually illustrates the framework used to examine collective leadership and wellbeing.

Next, political skill is positioned as one of two possible mediators of the proposed relationship. This social effectiveness concept is defined as "the ability to effectively understand others at work and to use such knowledge to influence others to act in ways that enhance one's personal and/or organizational objectives" (Ferris et al., 2005, p. 127). The construct of political skill consists of four dimensions: (1) social astuteness, (2) interpersonal influence, (3) networking ability, and (4) apparent sincerity. Social astuteness is being able to "read the room"; this dimension pertains to individual self-awareness and whether an individual has a keen understanding of what is required to be accepted in various social situations.

Interpersonal influence describes a compelling personal style typified by a heightened level of interpersonal flexibility and appeal that enables someone to exert sway more effectively on individuals and groups. Networking ability defines individuals who can initiate, develop, and maintain constructive connections with a diverse array of contacts. Skilled networkers are individuals who are effective at building coalitions within their organizations. Apparent sincerity is the fourth dimension of political skill. This dimension details the extent to which individuals can display high levels of authenticity and sincerity (Ferris et al., 2005; Ferris et al., 2007). In summation, political

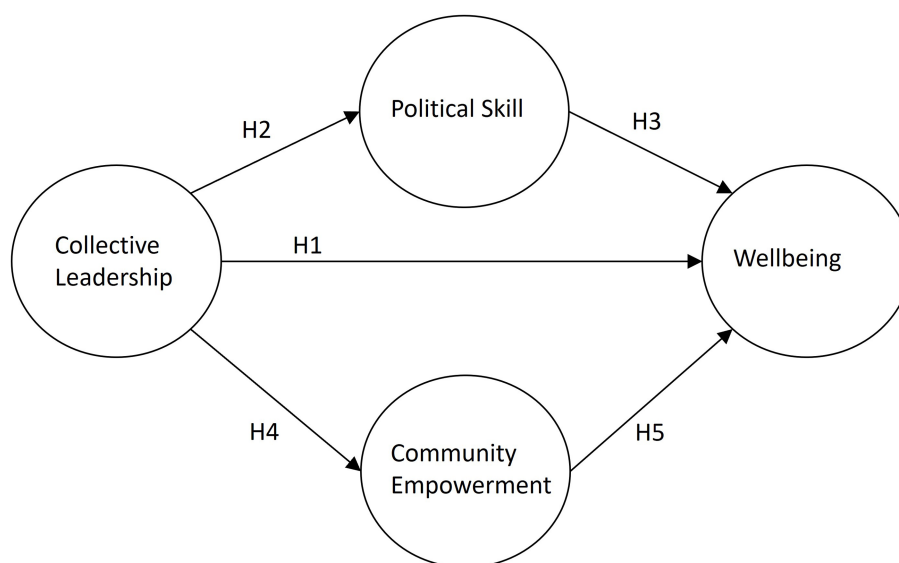


FIGURE 1

Conceptual framework of hypothesized relationships between collective leadership, political skill, community empowerment and wellbeing.

skills allow individuals to navigate social structures and relationships to influence progress and engage with others within a context.

The second mediator, community empowerment, can promote wellbeing in local areas, especially following stages of a crisis (Urlick et al., 2021), through institutions, agencies, and partnerships by distributing resources and leadership to community members (Cyril et al., 2016). Community empowerment has been conceptualized as having intra-organizational, inter-organizational and extra-organizational components in which social links are structured to collectively lead community actions (Peterson and Zimmerman, 2004). At the core of community empowerment, these collective and social mechanisms manifest as the degree to which individuals perceive that they can control their influence at multiple levels (i.e., personal, organizational, and community). Community empowerment, like political skill, is expected to be a mediator of collective leadership because it exemplifies an overall perceived personal influence to take community action for wellbeing.

people around shared goals (Smylie and Eckert, 2018). Recent evidence points to problems (e.g., burnout, role overload) that can arise from a single person attempting to “go it alone” as a leader developing follower wellbeing. Instead, facilitating employee wellbeing should be a collaborative process between leaders and followers (Boekhorst et al., 2021). Second, teachers and leaders who lead collectively act as catalysts, accelerating good work, which does not revolve around an individual leader but accelerates the work of others without leading to burnout. In fact, this type of leadership could build resilience that leads to school improvement. Third, instead of designing artificial team building or leadership exercises, teachers and administrators begin to identify expertise and talents that might help address future challenges (Eckert, 2018, 2019; Eckert and Morgan, 2023). Collective leadership provides structures to avoid burnout and support wellbeing. Thus, the following hypothesis is proposed:

H1: Collective leadership will have a significant, positive association with teacher and administrator wellbeing.

Collective leadership to wellbeing

Collective leadership encompasses the practices through which teachers and administrators influence students, colleagues, policymakers, and others to improve student outcomes (Eckert and Morgan, 2023). This type of work toward shared goals and supports leader wellbeing through a few requisite conditions: supportive administration, resources, work design, and supportive social norms and working relationships, shared influence, and an orientation toward goals, which promotes synergy between teachers and administrators in both the setting and pursuit of strategic, educational goals (Eckert, 2018).

There are several reasons why this type of leadership should have a positive relationship with teacher and administrator wellbeing. First, by moving away from the notion of solitary superhero leaders performing extraordinary work, collective leadership builds teams of

Collective leadership to political skill

Political skill is about effectively navigating social exchanges, and collective leadership is built upon a foundation of social dynamics and shared leadership efforts amongst a group of individuals seeking to accomplish common goals (Eckert, 2018; Ferris et al., 2005). Development experiences, such as mentoring and administrative support, present in a collective leadership environment (Eckert and Morgan, 2023), are linked to the formation of all four political skill dimensions (Ferris et al., 2007). Further, when a collection of teachers and administrators possess strong beliefs in their conjoint skills, they are likely to experience confidence in the collective’s ability to leverage such skills to accomplish shared goals as well as their own, individual skills to do likewise (Bandura, 1997; Hattie, 2018). Thus, when collective leadership is strong, individuals involved in the collective

leadership process are likely to perceive themselves as socially effective (e.g., socially astute, apt networkers) because of the apparent conjoint capabilities of the group of which they are a part. Accordingly, the following hypothesis is proposed:

H2: Collective leadership will have a significant, positive association with teacher and administrator political skill.

Political skill to wellbeing

Political has been linked to career accomplishment (Magnusen and Kim, 2016; Todd et al., 2009), satisfying work relationships (Epitropaki et al., 2016), and is a known buffer against social stressors present in the workplace (Harvey et al., 2007; Perrewé et al., 2004). All these areas can positively impact wellbeing. Social stressors, for example, include job-related stress stemming from coworker conflict and unjust treatment from peers and supervisors (Bruk-Lee and Spector, 2006). Such stressors can diminish employee wellbeing because these individuals experience degraded workplace self-perceptions and diminished job satisfaction (Bruk-Lee and Spector, 2006; Collie et al., 2012). Political skill should help individuals feel more directly in control and equipped to navigate workplace social exchanges and social stressors to maintain constructive workplace relationships and achieve job-related success (Harvey et al.; Hobfoll, 2001; Epitropaki et al., 2016; Ferris et al., 2005; Todd et al., 2009).

Perceptions of control in one's work environment often correlate with wellbeing (Siu et al., 2007). However, for control to exist, individuals need to have confidence in their abilities to effectively navigate their environments (Meier et al., 2008). With political skill comes a more detailed understanding of one's work environment. When individuals better understand their work environments, they are less likely to be stressed and dissatisfied with their jobs (Bruk-Lee and Spector, 2006; Harvey et al., 2007). Even when stressors are perceived, politically skilled individuals should view them as nonthreatening and manageable (Perrewé et al., 2004). Thus, political skill is expected to have a significant, positive relationship with teacher and administrator wellbeing.

H3: Political skill will have a significant, positive association teacher and administrator wellbeing.

Collective leadership to community empowerment

Community empowerment is about personal and community agency, much like political skill, so a collective nature of leadership can also facilitate a sense of individual influence in one's community. Community empowerment represents different levels of agency from organizational to individual empowerment within community. For example, Laverack (2001) examined its similarity with community development and explained its organizational aspects as "the existence of functional leadership, supported by established organizational structures with the participation of its members who have demonstrated the ability to mobilize resources indicate a community which already has strong social support elements," (p. 135). The essence of community empowerment is participation, social support

mechanisms, access to resources, and problem-solving (Urick et al., 2021; Cyril et al., 2016; Laverack, 2001). Collective leadership drives and encourages these organizational structures for community members. If collective leadership is successful, teachers and administration should feel a stronger sense of community empowerment. Therefore, the third hypothesis is proposed:

H4: Collective leadership will have a significant, positive association with teacher and administrator community empowerment.

Community empowerment to wellbeing

Community empowerment has been used as an approach to navigate crises, particularly to engage community members in restoring health issues (Urick et al., 2021; Cyril et al., 2016). When empowered, teachers and administrators take responsibility for distributing information and resources through their networks to promote action. Community empowerment represents their personal influence over situations across networks within and outside of the work environment (Peterson and Zimmerman, 2004). This individual agency allows teachers and administrators to engage in decisions that meet the needs of their own wellbeing whether physical or emotional. We theorize that community empowerment is a mechanism for wellbeing.

H5: Community empowerment will mediate the relationship between collective leadership and teacher and administrator wellbeing.

The current study situates teachers and administrators within their job demands immediately following a return to school after quarantine from COVID-19 in 2021. We seek to understand how organizational and social structures influence their wellbeing. Wellbeing has been developed as both an emotional and physical concept. Past literature has shown a direct link from an emotional flourishing (i.e., positive emotions, engagement, relationships, meaning, etc.) to physical health (e.g., Kesavayuth et al., 2022). We hypothesized that a perceived confidence to navigate social situations (political skill) and a feeling of personal agency in their organization and community (community empowerment) will promote overall wellbeing. Further, if leadership is purposefully structured to share influence and resources as well as provide support and control over work (collective leadership) then these organizational structures will help educators in their political skill and community empowerment which leads to wellbeing. This study utilizes organizational, educational, and health measures to understand how to support teachers and administrators in their return to work after experiencing COVID-19.

Methods

The purpose of this study is to understand how educators engage with others to build wellbeing in a time of crisis, namely during the COVID-19 pandemic. We theoretically situated three primary constructs, collective leadership, community empowerment, and political skill as social mechanisms which may drive wellbeing. We argued that these concepts represent structures to help educators

filter social exchanges, resources, and job demands toward improved wellbeing. To test these theoretical assumptions and hypotheses, multigroup structural equation modeling was applied to survey responses collected from teachers and administrators in Fall 2021.

Sample

The sample includes teachers and administrators in a central region of Texas. This region spans 76 school districts, about 353 school principals, and approximately 12,100 teachers within a local geographic area of 12 counties. The student population served by these districts is racially and ethnically diverse, with about 35% Hispanic, 20% African American, 37% White, 5% with two or more races, 2% Asian, and less than 1% Native American and Pacific Islander. From this region, $N = 312$, educators voluntarily responded to the full survey early in the 2021 fall semester when students returned to school with COVID-19 protocols still in place. Educators, teachers and administrators, were emailed using a contact list through a regional education service center. Educational service centers in Texas provide training and administrative support to school districts in their designated area. The sample includes educators from across this region in different counties, districts, and schools varying in size; however, we do not claim that it is representative of this region. The nature of the research questions emphasized how educators, as individuals, perceived their engagement in leadership as potentially influencing their wellbeing. Participants were encouraged to respond to the survey to provide protected feedback about their wellbeing to the regional service center to attract educators who had varying views to share.

Instrumentation

To meet the purpose of this study, four instruments were combined to administer to the sample. While the collective leadership instrument is native to education (Eckert et al., 2022), the other instruments, community empowerment, wellbeing, and political skill, were interdisciplinary or outside of education. When used in combination, these instruments provide a set of measures to assess the extent to which educators perceived that their involvement in leadership was structured to move them beyond crisis and into wellbeing.

The first instrument, community empowerment (see Israel et al., 1994), was designed to measure the extent to which participants perceive their control in the organization and how much influence they think they have in their own life and community. This survey was designed to assess how individuals felt about their agency in organizations and their community during public health interventions. Community empowerment is conceptualized by two constructs: organizational empowerment and individual and community empowerment. Organizational empowerment measures the extent to which a respondent feels included in the development of organizational decisions that affect their life, others, and the progress toward overall goals. This subscale included five items such as: *I can influence the decisions that this school [organization] makes, this school [organization] has influence over decisions that affect my life, this school [organization] can influence decisions that affect the community,*

I am satisfied with the amount of influence I have over decisions that this school [organization] makes. Individual and community empowerment focuses on items related to the amount of influence toward decisions affecting one's own life and decisions affecting their immediate community. This subscale had seven items including: *I have control over the decisions that affect my life, my community has influence over decisions that affect my life, I can influence decisions that affect my community, and people in my community work together to influence decisions on the state or national level.* Preliminary analyses were conducted to check the acceptability of factor loadings and reliability scores for items attached to each of these theoretical constructs. Both subscales were included as mean composite indicators for the community empowerment factor and maintained measurement model fit.

The second instrument, collective leadership (see Eckert et al., 2022), measures how educators view six dimensions at their school: supportive administration, resources and initial leadership capacity, work design, supportive relationships, shared influence, and orientation toward improvement. Supportive administration had four subscale items which measured: *administrators develop shared understanding of vision and purposes of collective leadership, administrators develop leadership capacity in others, and the principal collaborates with teachers to determine leadership tasks.* Resources and Initial Leadership Capacity includes three items to represent a range of resources: *there are adequate financial resources to support our school's goals, our facilities are adequate to support our school's goals, and there are adequate human resources to support our school's goals.* Work design, five items total, describes how and when work is shared, for example: *there is adequate time available for leadership work, there are adequate professional learning experiences for teachers and administrators together, and there are regular opportunities for teachers to observe each others' teaching.* Next, supportive norms and working relationships is a subscale which includes five items that identify good working relationships across school stakeholders: *I have good working relationships with teachers, ...administrators, ...students, ...parents, and there are teachers who have the ability to work well with and help other teachers to improve their practice.* Shared influence subscale also asks respondents about influence with three kinds of stakeholders in the school, for example, *I have a great deal of influence on teachers, ... administrators, ...students in my school.* Finally, orientation toward improvement construct measures the way in which progress is approached with four items, such as: *at my school, risk taking informed by reflection is encouraged, if I try really hard, I can make progress with even the most unmotivated students, and if I put my mind to it, I can work well with any teacher at this school.* The factor loadings of items for each of the six subscales were explored as well as checked for scale reliability. A mean composite was created for each, and six indicators represented collective leadership as a factor in the measurement model.

The third instrument, political skill (see Ferris et al., 2005), measures four constructs based on an individual's perception of their social astuteness, interpersonal influence, networking ability, and apparent sincerity. This instrument connects to broader organizational behavior and theory which is applied across a variety of organizations or work settings. Each of the four constructs as mean composites were included as indicators for political skill in the measurement model. Social astuteness as a subscale is defined by five items which describe how well the respondent can understand and interact with others, such as, *I understand people very well, I have good intuition or savvy*

about how to present myself to others, and I pay close attention to people's facial expressions. Interpersonal influence measures the way in which someone can effectively communicate with others, in a total of four items, for example: *I am able to make most people comfortable and at ease around me, it is easy for me to develop good rapport with most people, and I am good at getting people to like me.* Networking ability gauges the amount of time and attention a person dedicates to building connections with others, in six items, such as: *I spend a lot of time and effort networking with others, At work, I know a lot of important people and am well connected, and I am good at using my connections and networks to make things happen at work.* Lastly, apparent sincerity consists of three items: *When communicating with others, I try to be genuine in what I say and do, it is important that people believe I am sincere in what I say and do, and I try to show a genuine interest in other people.* All items were loaded onto their subscales, then checked for reliability to replicate original theoretical construction. The four subscales included as indicators for political skill as a factor maintained good fit in measurement model.

The fourth instrument, wellbeing (see Lai et al., 2018), was designed based on descriptions of flourishing (see Seligman, 2011), known as the PERMA profile since items measure P-positive emotion, E-engagement, R-relationships, M-meaning, and A-accomplishment as the main theory behind positive mental frames for wellness. This main theory, and approach to emotional wellbeing, or positive psychology, has been expanded to include additional measures, supplemental to this main construct. One of the extra measures is physical health, which is included in this study given the context of COVID-19. Factor loadings and reliability were checked for each of these scales to assess the adequacy and maintain the original theoretical constructs. Each construct in PERMA and health have three items to measure it. Positive emotion subscale asks *how often do you feel joyful, how often do you feel positive, and to what extent do you feel content?* Engagement is defined by an interest in tasks, such as: *how often do you become absorbed in what you are doing, to what extent do you feel excited and interested in things, and how often do you lose track of time while doing something you enjoy?* Relationships subscale measures perceived support from others, for example, *to what extent do you receive help and support from others when you need it, how satisfied are you with your personal relationships, and to what extent do you feel loved?* Meaning construct items assess the extent of a life purpose: *to what extent do you lead a purposeful and meaningful life, to what extent do you feel that what you do in your life is valuable and worthwhile, and to what extent do you feel you have a sense of direction in your life?* Finally, in PERMA, the last subscale, accomplishment has three items to understand overall personal progress: *how much of the time do you feel you are making progress toward accomplishing your goals, how often do you achieve the important goals you have set for yourself, and how often are you able to handle your responsibilities?* Each of these five constructs were included as indicators of the main wellbeing factor as a primary dependent variable of interest in this study. Due to the pandemic context, and need for physical health to return to work settings, a measure of health was included as an ultimate outcome stemming from PERMA wellbeing. The health measure, an additional construct on the PERMA survey, consisted of three items: *how would you say your health is, how satisfied are you with your current physical health, and compared to others of your same age and sex how is your health?* Each of the five PERMA wellbeing subscales, and the health items, are

represented by a mean composite in the measurement model of this study which has good fit.

Data analysis

The four instruments above are aligned to measure the constructs represented in the conceptual model of this study. Using these measures of factors, the conceptual model also depicted five main hypotheses or proposed directions between concepts. Collective leadership was hypothesized to influence political skill, community empowerment, and wellbeing. Both political skill and community empowerment were hypothesized to have separate paths to wellbeing. Given that the sample includes two distinct roles of educators, teachers and administrators, who have different responsibilities and job demands, a multigroup structural equation model was applied to these data to test the hypotheses.

Multigroup structural equation modeling allows for specifications by group in one omnibus model. This approach appropriately handles measurement invariance and tests for equality of factors and relationships across groups. The findings demonstrate how indicators of factors, paths between factors, and coefficients differ for each group. Since groups are analyzed as one model, the sample maintains its power to estimate parameters. The multigroup analysis allows a comparison of this measurement and structure between teachers ($n = 243$) and administrators ($n = 69$). To prepare the data for analysis, items for each subscale were averaged into a composite score. These subscales were transformed into a standardized score based on the full sample. The means across roles or groups show a difference in their response from the overall average of 0. Administrators, which included principals, assistant principals, counselors, etc., generally had higher responses across these measures compared to teachers (Table 1).

Multigroup structural equation modeling has two main phases, a measurement phase, and a structural phase, which were applied using Mplus, version 8.11. This study follows similar steps outlined for this approach in Xu (2020a,b). Model-fit indices and parameter estimates are assessed through both phases (measurement and structural) to determine the appropriateness of the hypothesized relationships between concepts. Several model-fit indices describe the degree of fit when the hypothesized model is applied to sample data and estimated model covariance matrix. These fit indices are root mean squared error of approximation (RMSEA) for model parsimony and comparative fit index (CFI) (Schreiber et al., 2006). As a general rule, "good fit" thresholds for RMSEA are approximately less than 0.05, and for CFI are greater than 0.900–0.950 (Hu and Bentler, 1999; Kline, 2015). Chi-square estimates were compared across models to understand differences, such as comparing constrained to unconstrained models for groups to test for invariance.

In the measurement phase, the equality of factors is tested across groups, following procedures similar to confirmatory factor analysis. A reference indicator is selected for each factor. In this model, the indicator with the highest loading was set as the reference indicator. The reference indicators were supportive administration, interpersonal influence, organizational empowerment, and meaning. An unconstrained model was run with parameters freed in each group. The modification indices were used to understand changes to each group that were needed

TABLE 1 Descriptive statistics for measures by group, teachers and administrators.

Measures	Teachers				Administrators			
	Min	Max	Mean	SD	Min	Max	Mean	SD
CL- supportive administration	−2.653	1.151	−0.115	1.026	−1.702	1.151	0.400	0.788
CL- resources and initial leadership capacity	−2.056	1.635	−0.005	1.017	−2.056	1.635	0.018	0.944
CL- work design	−2.217	2.179	−0.087	1.017	−1.558	2.179	0.305	0.880
CL- supportive social norms and working relationships	−6.018	1.085	−0.045	1.023	−2.467	1.085	0.156	0.903
CL- shared influence	−3.350	2.035	−0.153	0.956	−2.004	2.035	0.535	0.972
CL- orientation toward improvement	−3.871	1.598	−0.067	1.016	−2.609	1.598	0.234	0.910
PS- interpersonal influence	−4.662	1.225	−0.091	1.034	−1.987	1.225	0.319	0.800
PS- social astuteness	−3.905	1.493	−0.082	1.019	−1.906	1.493	0.285	0.879
PS- networking ability	−2.520	1.666	−0.172	0.996	−1.589	1.666	0.598	0.758
PS- apparent sincerity	−4.078	0.626	−0.083	1.053	−4.078	0.626	0.290	0.723
CE- organizational empowerment	−2.962	1.755	−0.133	1.002	−2.176	1.755	0.463	0.849
CE- individual and community empowerment	−3.524	2.147	−0.095	1.005	−2.106	1.864	0.333	0.915
WB- positive emotion	−3.827	2.333	−0.074	0.997	−2.390	1.717	0.259	0.972
WB- engage	−2.936	1.761	−0.046	0.999	−2.688	1.761	0.161	0.994
WB- relationships	−4.114	1.928	−0.064	1.025	−2.906	1.324	0.222	0.877
WB- meaning	−4.051	1.845	−0.057	1.030	−2.872	1.256	0.200	0.866
WB- accomplishment	−3.529	2.526	−0.068	1.014	−2.318	1.921	0.238	0.919
Physical health	−2.881	2.341	−0.060	1.033	−2.185	1.645	0.207	0.852

to specify correlations between errors of indicators within the same factor. One-by-one modifications to specify correlations between errors for indicators were added to each group, and model results and fit were checked. A total of 10 modifications of “with statements” were added to the teacher group. A total of six modifications of “with statements” were added to the administrator group. These modifications are marked in the results models with dotted lines which connect indicators in the same factor. The repeated model structure to free parameters in each group for the unconstrained model was removed, and a constrained model was tested. There was a significant difference of chi-square values between the constraint and unconstrained models ($\Delta X^2 = 32.274$, $\Delta df = 15$, $CV = 24.996$). Proceeding with the constrained model, the output was examined for group modifications for the “by statements,” which show differences in indicators by factor to be released from the equality constraints. With changes added step-by-step for groups, a total of four loadings were released from equality constraints for teachers, and a total of three loadings for administrators. These differences in group model modifications of “by statements” are marked in the results with a dotted line arrow leading from factor to indicator. The model fit indices for the last step of the measurement phase were good ($X^2 = 363.619$, $df = 234$ (teachers = 204.0, admin = 159.6), CFI = 949, SRMR = 0.065, RMSEA = 0.60 with CI: 0.047, 0.071). No other modifications were appropriate to add to improve measurement fit.

In the structural phase, the equality of relationships between factors is tested across groups, which is similar to path analysis. Using the measurement modifications from the first phase, the hypothesized relationships were added into the model. An unconstrained model was specified first; however, structural

relationships are not set to be equal as a default in *Mplus*. When running the unconstrained model, good fit remained, but one modification to the structural model was suggested. A path between physical health and community empowerment was suggested for the administrator group. Given past literature which situates community empowerment as an outcome for improved public health (see [Urlick et al., 2021](#)), and fewer possible organizational supports for administrators who are facilitating these structures, this path of an “on statement” for physical health as an independent variable on community empowerment as a dependent variable was added. This structural modification to the administrator group is marked by a dotted line arrow in the results. Next, equality constraints were applied to each group to test for invariance. Each path coefficient was specified as equal in the model for each group. The fit indices remained good, and there was not a significant chi-square change between the unconstrained and constraint models ($\Delta X^2 = 8.061$, $\Delta df = 6$, $CV = 12.592$). The constraint model was used; however, the coefficient for wellbeing on political skill seemed to differ between groups because of its size for teachers compared to administrators in the unconstrained model. The equality constraint for only this path was released in each group and a model test for a difference was added. The model fit for the final analysis of this structural phase as well as the model test for this path are reported in the next section as a part of the findings.

Results

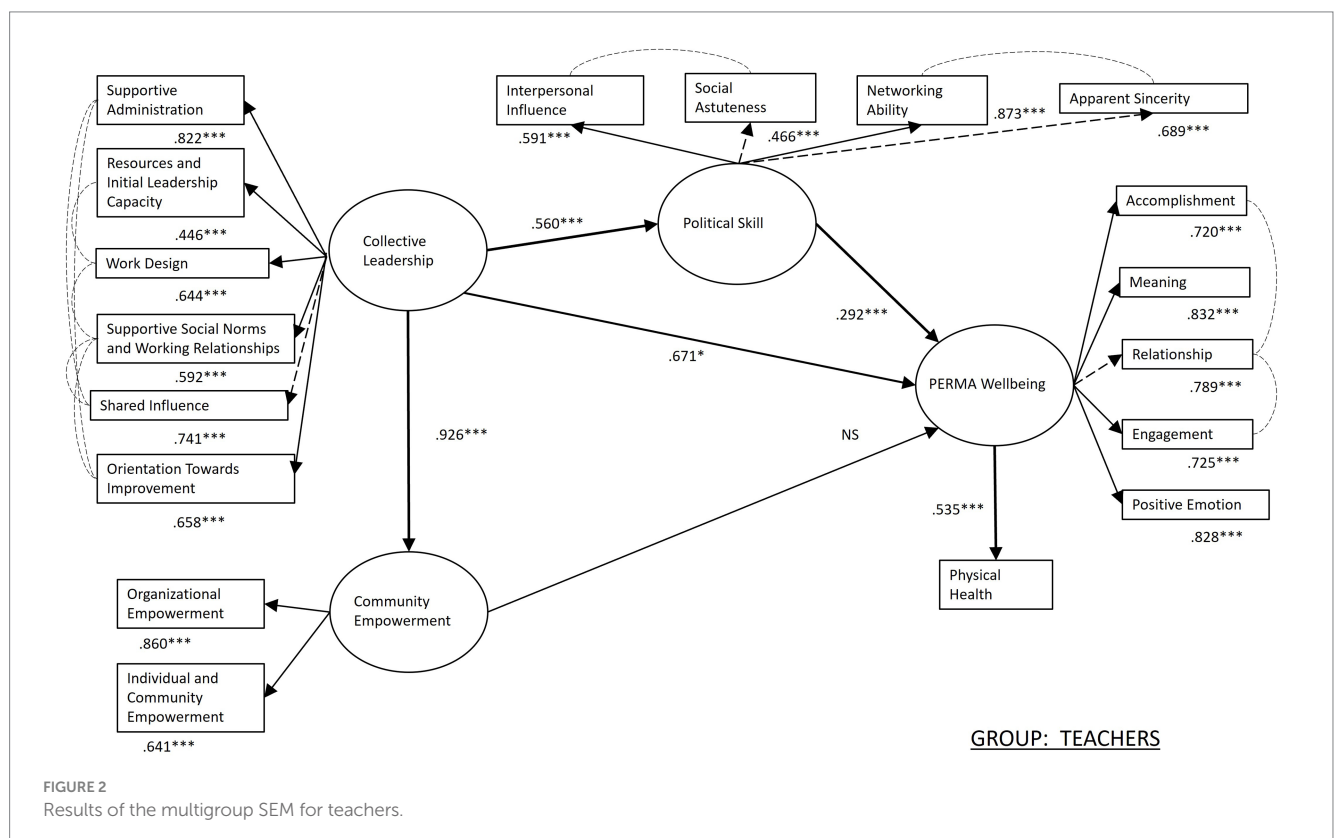
Work experiences and job demands of teachers and administrators can influence how they perceive their wellbeing,

especially within the context of returning to schools following quarantine during COVID-19. Data was collected from teachers and administrators during Fall 2021, when schools reopened in central Texas, about their perceptions of collective leadership, political skill, community empowerment and wellbeing. The hypotheses of this study generally posit that if teachers and administrators believe they have influence and control at school, and in their lives, they should maintain better emotional and physical health. This study aimed to examine and better understand the extent to which perceived collective leadership might influence individuals' perceptions of wellbeing through political skill and community empowerment. Since teachers and administrators have different role responsibilities and formal control over school supports, a multi-group structural equation model was applied to test the relationships across variables. While results are visualized separately for each group, teachers and administrators, they were tested simultaneously in an omnibus model, which had good fit for all measurement and structural modifications ($X^2 = 430.077$, $df = 272$ (teachers = 234.836, admin = 195.241), CFI = 940, SRMR = 0.068, RMSEA = 0.61 with CI: 0.050, 0.072). There was only one structural parameter that was tested for a difference between groups, a path between political skill and wellbeing, which was not significant (Wald Test = 2.446, $df = 1$, $p > 0.05$). The results for each group are presented below.

For teachers, as hypothesized, collective leadership influenced wellbeing (H1) and political skill (H2), and in turn, political skill also influenced wellbeing (H3). Community empowerment was a direct outcome for collective leadership (H4); however, it did not connect to wellbeing (H5). The largest relationship ($\beta = 0.926$, $p < 0.001$) was the connection between collective leadership and community

empowerment. With moderate effects between collective leadership with PERMA wellbeing ($\beta = 0.671$, $p < 0.05$) and political skill ($\beta = 0.560$, $p < 0.001$). Collective leadership was situated as the main driver of this model. This model had two factors positioned as mediators between collective leadership and wellbeing, political skill and community empowerment. Only political skill had a small effect on PERMA wellbeing ($\beta = 0.292$, $p < 0.001$). Finally, as expected, the PERMA factor of wellbeing did predict physical health ($\beta = 0.535$, $p < 0.001$), which represents the important link between mental and physical wellbeing (Figure 2).

For administrators, the hypothesized relationships had similar results. Collective leadership influenced wellbeing (H1) and political skill (H2), and in turn, political skill also influenced wellbeing (H3). Community empowerment was a direct outcome for collective leadership (H4); however, it did not connect to wellbeing (H5). Uniquely, in the structural phase of model testing, a path modification was added, which could be justified by theory, and specific to the role of administrators. Physical health was specified as a predictor of community empowerment. This new path had a small but significant effect ($\beta = 0.240$, $p < 0.001$). Administrators' perceptions of their physical health positively influenced the degree to which they were empowered in the organization, community, and in their own life. Like teachers, collective leadership had the largest relationship with community empowerment ($\beta = 0.832$, $p < 0.001$), and moderate relationships with political skill ($\beta = 0.688$, $p < 0.001$) and PERMA wellbeing ($\beta = 0.636$, $p < 0.05$). While the model test between groups was not significant for this path, administrators had an increased relationship between political skill and PERMA wellbeing ($\beta = 0.436$, $p < 0.001$) compared to teachers ($\beta = 0.292$,



$p < 0.001$). The magnitude of relationship between PERMA wellbeing and physical health for administrators ($\beta = 0.512$, $p < 0.001$) was very similar to teachers ($\beta = 0.525$, $p < 0.001$). In sum, for administrators like teachers, collective leadership was the main driver in the model for wellbeing with a unique path from physical health back to community empowerment (Figure 3).

With these models, we wanted to demonstrate how teachers and administrators engaged in leadership to influence their wellbeing during the COVID-19 pandemic. We viewed political skill, community empowerment, and collective leadership as ways in which educators could engage in social exchanges and access resources to navigate job demands and protect their health during a crisis. While political skill, community empowerment, and wellbeing were interdisciplinary measures, collective leadership was primarily situated in education. In conclusion, collective leadership in schools influenced these outcomes derived from organizational and public health measures. Leadership support and navigation of social exchanges helped both teachers and administrators positively perceive their wellbeing. In addition, for administrators, the perception of their physical health also influenced their view of empowerment within their organization, life, and community. These findings have important implications for educators as they continue to understand necessary changes in school practice since COVID-19.

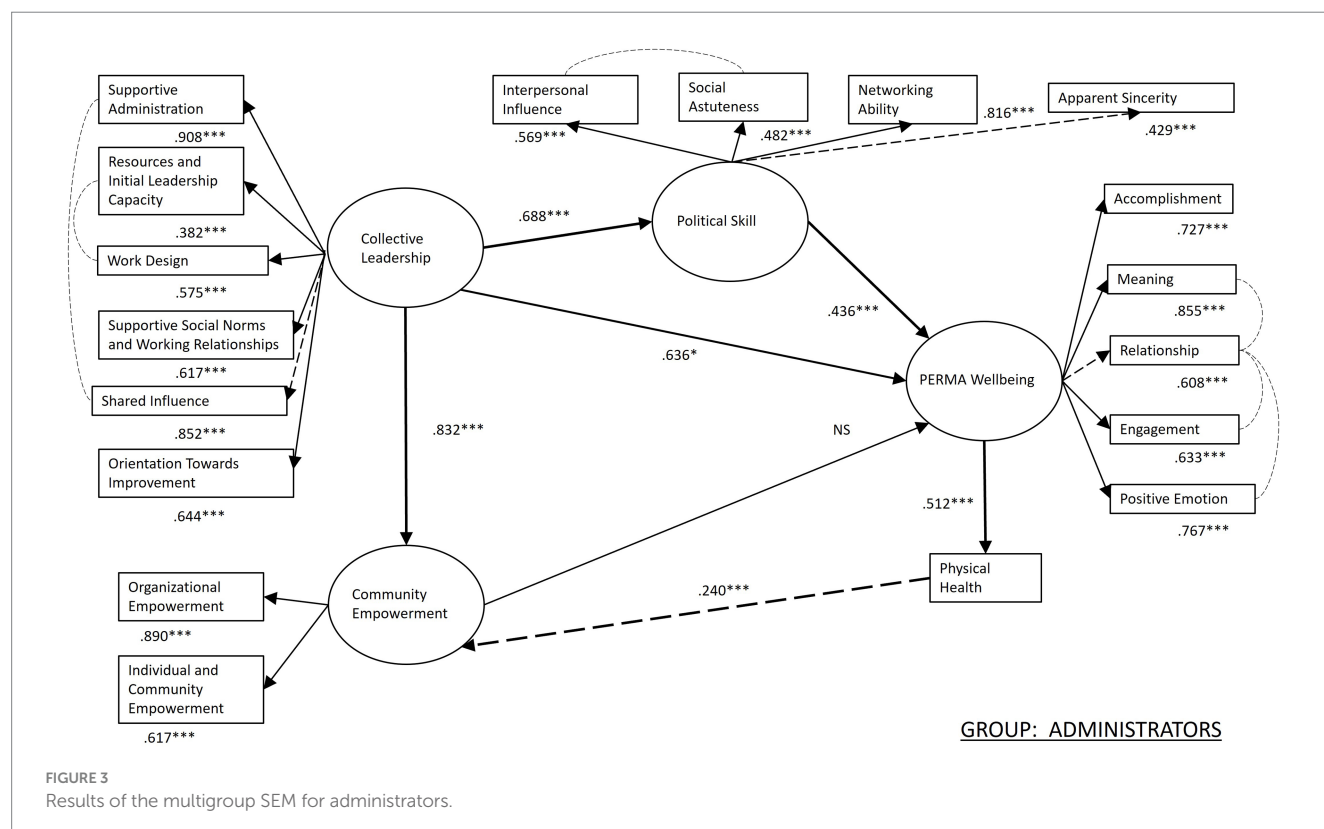
Discussion

In summary of findings, teachers and administrators had similar relationships across survey constructs which led to

wellbeing. Collective leadership and political skill both directly influenced emotional wellbeing. While community empowerment was hypothesized to promote wellbeing, this construct positively related to collective leadership and did not connect directly to wellbeing. As expected, the main outcome, emotional wellbeing was an immediate predictor of physical wellbeing. Uniquely, in the administrator model, physical wellbeing was found as a precursor to community empowerment. Future research should explore the theoretical overlap between collective leadership and community empowerment. In addition, in future work, physical wellbeing might be explored as an antecedent rather than an outcome only.

Wellbeing was situated as an outcome in this study since the COVID-19 crisis intensified the stress being shouldered by educators across the globe. Even prior to the pandemic, an increasing number of school leaders and teachers were choosing to leave the profession (Maxwell and Superville, 2020; Carver-Thomas and Darling-Hammond, 2019). Stress-related issues such as work intensification, dwindling amounts of resources, and an increasing number of assumed roles, contribute to the emotional exhaustion, fatigue, and burnout experienced by many of today's educators (e.g., Hayes et al., 2022; Wang et al., 2018; Wells et al., 2013). The emotional and physical wellbeing of educators is important to keep teachers and principals in the profession.

In this study, we posited that collective leadership (Eckert, 2018, 2019; Leithwood and Mascal, 2008; Louis et al., 2010), mediated by community empowerment (Cyril et al., 2016) and political skill (Ferris et al., 2005), could provide a set of measures allowing us to determine how educators navigate crises while maintaining an overall sense of wellbeing (Pressley and Ha, 2022; Trinidad, 2021; Urick et al., 2021).



Given the nuanced and consistently changing nature of the educational workplace, this set of interdisciplinary measures provides an original perspective on how collective leadership could be related to emotional wellbeing and health. Primarily, we found that perceptions of collective leadership, directly, and mediated through political skill are related to educators' wellbeing.

Consistent with previous research across fields, for our main outcomes, our findings link emotional or mental wellbeing with physical wellbeing. A consistent, moderate relationship surfaced for teachers and administrators between emotional wellbeing (or PERMA) and health (Seligman, 2011). This relationship contributes to ongoing conversations in psychology about the importance of emotions when it comes to physical health (e.g., Kok et al., 2013). Both teachers and administrators who have increased positive mental wellbeing also have increased perceptions of physical health. While school environments may not directly address physical health within work interactions, the role of teachers and administrators can focus on job responsibilities that align with positive emotions, engagement, relationships, meaning, and a sense of accomplishment. And in turn, through these mental supports, work environments in schools would indirectly support increases health.

As predictors of wellbeing outcomes, political skill and community empowerment were hypothesized as having direct effects on emotional wellbeing, or PERMA. The findings partially confirmed our hypotheses by connecting political skill to wellbeing and conflicted with past literature with a non-significant result between community empowerment and wellbeing (e.g., Cyril et al., 2016; Harvey et al., 2007; Perrewé et al., 2004; Urlick et al., 2021). The field of education has had fewer discussions about how these constructs, which demonstrate personal agency, influence emotional wellbeing. Like the interdisciplinary literature (e.g., Bruk-Lee and Spector, 2006; Harvey et al., 2007), educational researchers have more often focused on stressors, burnout, dissatisfaction, or turnover (Saloviita and Pakarinen, 2021), rather than measuring concepts related to positive psychology to predict wellbeing (e.g., Linley et al., 2006).

Collective leadership was situated in the model as the main driver of support, whether through political skill, community empowerment, or directly, which all lead to wellbeing. As noted above, the path from community empowerment to wellbeing was not confirmed, but community empowerment served as the largest outcome of collective leadership for both teachers and administrators. Future research should continue to investigate the ways in which community empowerment, defined by organizational, individual and community, functions as a critical outcome for collective leadership. This connection is important since it can become a bridge between education and public health conceptualizations and measures of agency. Community empowerment is discussed in the public health literature as a main outcome of successfully navigating a health crisis (see Urlick et al., 2021). Likewise, organizational theory and behavior literature can also add to the understanding of collective leadership since political skill was a mediator between collective leadership and wellbeing. While collective leadership represents structures to share work and decisions, this theory does not yet connect with how these school practices might help educators learn to build these more universal, personal social skills. Finally, collective

leadership had a direct effect on PERMA wellbeing. Past literature has demonstrated that collective leadership is a driver of school improvement (e.g., Eckert and Morgan, 2023), but has not yet been connected to soft skills or positive psychology for educators. The integration of teachers and administrators into collective work has benefits beyond academic outcomes or aspects directly related to traditional improvement.

The nuanced finding of this study was an additional path added to the administrator group only. For administrators, physical health was a significant predictor of community empowerment. This finding did confirm interdisciplinary findings which discuss community empowerment as an outcome from successfully navigating a health crisis (see Urlick et al., 2021). However, this finding in past literature comes from a broader public policy context of health interventions during crisis. In this study, this finding is specific to administrators. Administrators who positively viewed their physical health had increased perceptions of their empowerment across the organization, local community, and personal life. Future research should focus not only on health as an outcome, but health as a predictor for leaders who are responsible for facilitating support structures for others. Health as a precursor might be most important for these leaders compared to teachers.

Though the current study offers several interesting contributions to the study of teacher and administrator wellbeing, it is not without limitations. First, the survey was not a representative sample of the population. Given the timing of the survey during a pandemic and the size of the region, the response rate was less than 3 % of the population. Second, the survey represented educator perceptions at a single point in time. Future research would deepen understanding if researchers could track each respondent with a unique identifier over time. Third, we could not confirm the directionality of the relationships. Due to the limitations of the single survey, we can only assert that there are relationships between concepts.

These findings provide new directions for school practice and policy beyond perspectives which are overly driven by achievement only outcomes. The COVID-19 pandemic was a turning point which highlighted a need to focus instead on the holistic progress and wellbeing of all school stakeholders. This shift in mindset allows for expanded frameworks and measures to help assess how to better personally support teachers and administrators through work environments so that the job demands do not continue to push them out of the profession.

Data availability statement

The datasets presented in this article are not readily available because data are deidentified and confidential to approved researchers. Requests to access the datasets should be directed to angela_urick@baylor.edu.

Ethics statement

The studies involving humans were approved by Baylor University Internal Review Board. The studies were conducted in accordance with the local legislation and institutional requirements. The

participants provided their written informed consent to participate in this study.

Author contributions

AU: Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing. MM: Conceptualization, Project administration, Supervision, Writing – original draft, Writing – review & editing. JE: Conceptualization, Investigation, Writing – original draft, Writing – review & editing. BC: Conceptualization, Data curation, Investigation, Methodology, Writing – original draft, Writing – review & editing.

Funding

The author(s) declare that no financial support was received for the research and/or publication of this article.

References

- Bakker, A. B., Demerouti, E., and Sanz-Vergel, A. (2023). Job demands-resources theory: ten years later. *Annu. Rev. Organ. Psychol. Organ. Behav.* 10, 25–53. doi: 10.1146/annurev-orgpsych-120920-053933
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: Henry Holt & Co.
- Bartanen, B., Grissom, J. A., and Rogers, L. K. (2019). The impacts of principal turnover. *Educ. Eval. Policy Anal.* 41, 350–374. doi: 10.3102/0162373719855044
- Boekhorst, J. A., Hewett, R., Shantz, A., and Good, J. R. L. (2021). The double-edged sword of manager caring behavior: implications for employee wellbeing. *J. Occup. Health Psychol.* 26, 507–521. doi: 10.1037/ocp0000313
- Bruck-Lee, V., and Spector, P. E. (2006). The social stressors-counterproductive work behaviors link: are conflicts with supervisors and coworkers the same? *J. Occup. Health Psychol.* 11, 145–156. doi: 10.1037/1076-8998.11.2.145
- Butler, J., and Kern, M. L. (2016). The PERMA-Profil: A brief multidimensional measure of flourishing. *International journal of wellbeing*, 6.
- Cantril, H. (1965). *The pattern of human concerns*. New Brunswick, NJ: Rutgers University Press.
- Carver-Thomas, D., and Darling-Hammond, L. (2019). The trouble with teacher turnover: how teacher attrition affects students and schools. *Educ. Policy Anal. Arch.* 27, 1–32. doi: 10.14507/epaa.27.3699
- Claes, S., Vandepitte, S., Claes, E., and Annemans, L. (2023). How job demands and job resources contribute to our overall subjective well-being. *Front. Psychol.* 14, 1–11. doi: 10.3389/fpsyg.2023.1220263
- Collie, R. J., Shapka, J. D., and Perry, N. E. (2012). School climate and social-emotional learning: predicting teacher stress, job satisfaction, and teaching efficacy. *J. Educ. Psychol.* 104, 1189–1204. doi: 10.1037/a0029356
- Cyril, S., Smith, B. J., and Renzaho, A. M. (2016). Systematic review of empowerment measures in health promotion. *Health Promot. Int.* 31, 809–826. doi: 10.1093/heapro/dav059
- Diliberti, M. K., and Schwartz, H. (2025). Educator turnover continues decline toward prepandemic levels: findings from the American school district panel. Santa Monica: RAND Corporation.
- Doan, S., Steiner, E. D., and Pandey, R. (2024). Teacher well-being and intentions to leave in 2024: findings from the 2024 state of the American teacher survey RAND Corporation Available online at: https://www.rand.org/pubs/research_reports/RR1108-12.html
- Dreer, B. (2023). On the outcomes of teacher wellbeing: a systematic review of research. *Front. Psychol.* 14:1205179. doi: 10.3389/fpsyg.2023.1205179
- Dreer, B. (2024). Teachers' well-being and job satisfaction: the important role of positive emotions in the workplace. *Educ. Stud.* 50, 61–77. doi: 10.1080/03055698.2021.1940872
- Eckert, J. (2018). *Leading together: teachers and administrators improving student outcomes*. Thousand Oaks, CA: Corwin Press.
- Eckert, J. (2019). Collective leadership development: emerging themes from urban, suburban, and rural high schools. *Educ. Adm. Q.* 55, 477–509. doi: 10.1177/0013161X18799435
- Eckert, J., and Morgan, G. (2023). Collective leadership: a catalyst for school improvement. *Educ. Policy Anal. Arch.* 31:n80. doi: 10.14507/epaa.31.7603
- Eckert, J., Morgan, G. B., and Padgett, R. N. (2022). Collective leadership: developing a tool to assess educator readiness and efficacy. *J. Psychoeduc. Assess.* 40, 533–548. doi: 10.1177/07342829211072284
- Epitropaki, O., Kapoutsis, I., Ellen, B. P. III, Ferris, G. R., Drivas, K., and Ntotski, A. (2016). Navigating uneven terrain: The roles of political skill and LMX differentiation in prediction of work relationship quality and work outcomes. *Journal of Organizational Behavior*, 37, 1078–1103. doi: 10.1002/job.2100
- Ferris, G. R., Treadway, D. C., Kolodinsky, R. W., Hochwarter, W. A., Kacmar, C. J., Douglas, C., et al. (2005). Development and validation of the political skill inventory. *J. Manag.* 31, 126–152. doi: 10.1177/0149206304271386
- Ferris, G., Treadway, D., Perrewe, P. L., Brouer, R., Douglas, C., and Lux, S. (2007). Political skill in organizations. *J. Manage.* 33, 290–320. doi: 10.1177/0149206307300813
- Friedman, H. S., and Kern, M. L. (2014). Personality, well-being, and health. *Annual review of psychology*, 65, 719–742.
- Harvey, P., Harris, R. B., Harris, K. J., and Wheeler, A. R. (2007). Attenuating the effects of social stress: the impact of political skill. *J. Occup. Health Psychol.* 12, 105–115. doi: 10.1037/1076-8998.12.2.105
- Hattie, J. (2018). Collective teacher efficacy according to John Hattie. [Vimeo]. VisibleLearning. Available online at: <https://visible-learning.org/2018/03/collective-teacher-eficacy-hattie/>
- Hayes, S. D., Anderson, E., and Carpenter, B. W. (2022). Responsibility, stress and the well-being of school principals: how principals engaged in self-care during the COVID-19 crisis. *J. Educ. Adm.* 60, 403–418. doi: 10.1108/JEA-08-2021-0153
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory. *Appl. Psychol.* 50, 337–421. doi: 10.1111/1464-0597.00062
- Hu, L.-T., and Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: conventional criteria versus new alternatives. *Struct. Equ. Model.* 6, 1–55.
- Israel, B., Checkoway, B., Schulz, A., and Zimmerman, M. (1994). Health education and community empowerment: conceptualizing and measuring perceptions of individual, organizational and community control. *Health Educ. Q.* 21, 149–170. doi: 10.1177/109019819402100203
- Kaluza, A. J., Boer, D., Buengeler, C., and van Dick, R. (2020). Leadership behaviour and leader self-reported well-being: a review, integration and meta-analytic examination. *Work Stress.* 34, 34–56. doi: 10.1080/02678373.2019.1617369
- Kesavayuth, D., Shangkhum, P., and Zikos, V. (2022). Well-being and physical health: a mediation analysis. *J. Happiness Stud.* 23, 2849–2879. doi: 10.1007/s10902-022-00529-y
- Kline, R. (2015). *Principles and practice of structural equation modeling*. 4th Edn. New York, NY: Guilford Press.
- Kok, B. E., Coffey, K. A., Cohn, M. A., Catalino, L. I., Vacharkulksemsuk, T., Algee, S. B., et al. (2013). How positive emotions build physical health: perceived

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The authors declare that no Gen AI was used in the creation of this manuscript.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

positive social connections account for the upward spiral between positive emotions and vagal tone. *Psychol. Sci.* 24, 1123–1132. doi: 10.1177/0956797612470827

Lai, M. K., Leung, C., Kwok, S. Y., Hui, A. N., Lo, H. H., Leung, J. T., et al. (2018). A multidimensional PERMA-H positive education model, general satisfaction of school life, and character strengths use in Hong Kong senior primary school students: confirmatory factor analysis and path analysis using the APASO-II. *Front. Psychol.* 9:1090. doi: 10.3389/fpsyg.2018.01090

Lamontagne, A. D., Keegel, T., Louie, A. M., Ostry, A., and Landsbergis, P. A. (2007). A systematic review of the job-stress intervention evaluation literature, 1990–2005. *Int. J. Occup. Environ. Health* 13, 268–280. doi: 10.1179/oeh.2007.13.3.268

LaMontagne, A. D., Martin, A., Page, K. M., Reavley, N. J., Noblet, A. J., Milner, A. J., et al. (2014). Workplace mental health: developing an integrated intervention approach. *BMC psychiatry*, 14, 131.

Laverack, G. (2001). An identification and interpretation of the organizational aspects of community empowerment. *Community Dev. J.* 36, 134–145. doi: 10.1093/cdj/36.2.134

Leithwood, K., and Mascal, B. (2008). Collective leadership effects on student achievement. *Educ. Adm. Q.* 44, 529–561. doi: 10.1177/0013161X08321221

Linley, P. A., Joseph, S., Harrington, S., and Wood, A. M. (2006). Positive psychology: past, present, and (possible) future. *J. Posit. Psychol.* 1, 3–16. doi: 10.1080/17439760500372796

Louis, K. S., Leithwood, K., Wahlstrom, K. L., and Anderson, S. E. (2010). Student learning: Final report of research findings. The Wallace Foundation. Available online at: <http://www.wallacefoundation.org/knowledge-center/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf>

Magnusen, M. J., and Kim, J. W. (2016). Thriving in the political sport arena: LMX as a mediator of the political skill-career success relationship. *J. Appl. Sport Manag.* 8, 15–42. doi: 10.18666/JASM-2016-V8-13-6456

Maxwell, L. A., and Superville, D. (2020). The pandemic may drive principals to quit. *Educ. Week*.

McNeven, S., Main, K., and McKay, L. (2024). Wellbeing and school improvement: a scoping review. *Leadersh. Policy Sch.* 23, 588–606. doi: 10.1080/15700763.2023.2183512

Meier, L. L., Semmer, N. K., Elfering, A., and Jacobshagen, N. (2008). The double meaning of control: three-way interactions between internal resources, job control, and stressors at work. *J. Occup. Health Psychol.* 13, 244–258. doi: 10.1037/1076-8998.13.3.244

Page, K. M., and Vella-Brodick, D. A. (2013). The working for wellness program: RCT of an employee well-being intervention. *J. Happiness Stud.* 14, 1007–1031. doi: 10.1007/s10902-012-9366-y

Perrewé, P. L., Zellars, K. L., Ferris, G. R., Rossi, A. M., Kacmar, C. J., and Ralston, D. A. (2004). Neutralizing job stressors: political skill as an antidote to the dysfunctional consequences of role conflict. *Acad. Manag. J.* 47, 141–152. doi: 10.2307/20159566

Peterson, N. A., and Zimmerman, M. (2004). Beyond the individual: toward a nomological network of organizational empowerment. *Am. J. Community Psychol.* 34, 129–145. doi: 10.1023/b:ajcp.0000040151.77047.58

Pressley, T., and Ha, C. (2022). Teacher exhaustion during COVID-19: exploring the role of administrators, self-efficacy, and anxiety. *Teach. Educ.* 57, 61–78. doi: 10.1080/08878730.2021.1995094

Rath, T., and Harter, J. (2010). Giving and your community well-being. *Gallup Manag. J. Online*.

Ryan, R. M., and Deci, E. L. (2001). On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annu. Rev. Psychol.* 52, 141–166. doi: 10.1146/annurev.psych.52.1.141

Saloviita, T., and Pakarinen, E. (2021). Teacher burnout explained: teacher-, student-, and organisation-level variables. *Teach. Teach. Educ.* 97:103221. doi: 10.1016/j.tate.2020.103221

Sandilos, L. E., Hindman, A. H., Lathrop, J., and Wu, Q. (2024). Toward a coherent and comprehensive approach to teacher well-being: a synthesis of theory and review of intervention research. *Review of Research in Education* 47:274–310. doi: 10.3102/0091732X231210246

Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., and King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: a review. *J. Educ. Res.* 99, 323–338. doi: 10.3200/JOER.99.6.323-338

Seligman, M. E. (2011). Flourish: a visionary new understanding of happiness and well-being. New York, NY: Simon and Schuster.

Siu, O. L., Lu, C. Q., and Spector, P. E. (2007). Employees' well-being in greater China: the direct and moderating effects of general self-efficacy. *Appl. Psychol.* 56, 288–301. doi: 10.1111/j.1464-0597.2006.00255.x

Skakon, J., Nielsen, K., Borg, V., and Guzman, J. (2010). Are leaders' well-being, behaviours and style associated with the affective well-being of their employees? A systematic review of three decades of research. *Work Stress* 24, 107–139. doi: 10.1080/02678373.2010.495262

Smylie, M. A., and Eckert, J. (2018). Beyond superheroes and advocacy: the pathway of teacher leadership development. *Educ. Manage. Adm. Leadersh.* 46, 556–577. doi: 10.1177/1741143217694893

Snodgrass Rangel, V. (2018). A review of the literature on principal turnover. *Rev. Educ. Res.* 88, 87–124. doi: 10.3102/0034654317743197

Todd, S. Y., Harris, K. J., Harris, R. B., and Wheeler, A. R. (2009). Career success implications of political skill. *J. Soc. Psychol.* 149, 279–304. doi: 10.3200/SOCP.149.3.279-304

Trinidad, J. E. (2021). Teacher satisfaction and burnout during COVID-19: what organizational factors help? *Int. J. Leadersh. Educ.* 28, 19. doi: 10.1080/13603124.2021.2006795

Urlick, A., Carpenter, B. W., and Eckert, J. (2021). Confronting COVID: crisis leadership, turbulence, and self-care. *Front. Educ.* 6:642861. doi: 10.3389/feduc.2021.642861

van Dierendonck, D., Haynes, C., Borrill, C., and Stride, C. (2004). Leadership behavior and subordinate well-being. *J. Occup. Health Psychol.* 9, 165–175. doi: 10.1037/1076-8998.9.2.165

Wang, F., Pollock, K. E., and Hauseman, C. (2018). School principals' job satisfaction: the effects of work intensification. *Can. J. Educ. Adm. Policy*, 185:185–173.

Wells, K. B., Jones, L., Chung, B., Dixon, E. L., Tang, L., Gilmore, J., et al. (2013). Community-partnered cluster-randomized comparative effectiveness trial of community engagement and planning or resources for services to address depression disparities. *J. Gen. Intern. Med.* 28, 1268–1278. doi: 10.1007/s11606-013-2484-3

Xu, Y. (2020a). Multi-group SEM, measurement phase [video].. YouTube. Available online at: <https://www.youtube.com/watch?v=6xDiZx6OnWc>.

Xu, Y. (2020b). Multi-group SEM, structural phase [video].. YouTube. Available online at: <https://www.youtube.com/watch?v=1p-Pkgwz6Rc>.

Yan, R. (2020). The influence of working conditions on principal turnover in K-12 public schools. *Educ. Adm. Q.* 56, 89–122. doi: 10.1177/0013161X19840391

Zhang, L., Chen, J., Li, X., and Zhan, Y. (2024). A scope review of the teacher well-being research between 1968 and 2021. *Asia Pac. Educ. Res.* 33, 171–186. doi: 10.1007/s40299-023-00717-1