American Psychological Association

Journal of Occupational Health Psychology

1076-8998/19/$12.00

2019, Vol. 24, No. 3, 387–409
http://dx.doi.org/10.1037/ocp0000135

Meta-Analytic and Multiwave Comparison of Emotional Support and Instrumental Support in the Workplace

Michael Mathieu and Kevin J. Eschleman
San Francisco State University

Danqiao Cheng
University of California, Berkeley

Two complementary studies were conducted to compare emotional support and instrumental support in the workplace. Study 1 included meta-analyses with 142 independent samples containing 68,354 participants and tested the moderation effects of source of support (supervisor vs. coworker) and support scale type (received vs. availability). Study 2 incorporated a two-wave survey design and objective ratings of participant job demands. Overall, emotional support and instrumental support were strongly correlated and demonstrated a similar pattern of effects with work criteria. However, the emotional support–instrumental support relationship is stronger within occupations higher in emotional labor demands. Moderation effects of support on stressor–criteria relationships were also reviewed among the primary studies in the meta-analysis. For both emotional support and instrumental support, buffering effects and reverse buffering effects were commonly found, which indicates that contextual factors need to be considered to determine when support mitigates or exacerbates the effect of stressors on work criteria. Moderation effects of source of support (supervisor vs. coworker) and support scale type (received vs. availability) were also tested. In general, support was more strongly correlated with criteria when the source of support was the supervisor and the scale included items about the availability of support. The findings from the two studies provide researchers and practitioners a guide for when emotional support and instrumental support converge or diverge.

Keywords: emotional support, instrumental support, emotional labor, source of support, availability of support

Allowing a colleague to vent his or her emotions (emotional support) and helping a colleague on an unexpected work problem (instrumental support) are two types of support behaviors common in workplaces. These helping behaviors provide workers with valuable socioemotional and task-relevant resources that can have both direct effects on worker well-being and indirectly help the worker manage job demands (Viswesvaran, Sanchez, & Fisher, 1999). Previous researchers have argued that emotional support and instrumental support are conceptually independent and provide distinct resources (Barling, MacEwen, & Pratt, 1988; Cohen & Wills, 1985), whereas other research indicates the two variables are often strongly correlated (Fenlason & Beehr, 1994) and can be interpreted by a worker as providing the same resources (Semmer et al., 2008). A better understanding of when emotional support and instrumental support converge or diverge has important implications for both occupational health practitioners and researchers. We used meta-analysis and a two-wave study to compare and contrast emotional support and instrumental support. We compare and contrast the main effects and interaction effects of both emotional support and instrumental support on common criteria. In addition, we test for moderators of occupation type, source of support (supervisor or coworker), and support scale type (received or available).

Relationship Between Emotional Support and Instrumental Support

Several theories have been used to help define support in the workplace and describe the effects of support on workers. We have selected conservation of resources theory (COR; Hobfoll, 1989, 2002) because the theory differentiates different types of resources. The fundamental premise of COR is that humans strive to protect, retain, foster, and obtain resources. Job resources can be social, physical, psychological, or organizational. A resource is functional in achieving work goals, reducing job demands and associated strain, or stimulating personal growth, learning, and development. Support behaviors in the workplace are one of many types of resources.

In some cases, social support researchers have attempted to differentiate social support based on the presumed resources asso-

This article was published Online First October 18, 2018.

Michael Mathieu and Kevin J. Eschleman, Department of Psychology, San Francisco State University; Danqiao Cheng, Department of Psychology, University of California, Berkeley.

Danqiao Cheng is now at the UCLA Anderson School of Management, University of California, Los Angeles.

This article is based on the thesis of Michael Mathieu. Portions of it were presented at the 2016 Society for Industrial and Organizational Psychology Conference. We thank Felicia Poh for her theoretical and practical contributions to the manuscript.

Correspondence concerning this article should be addressed to Michael Mathieu, Department of Psychology, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132. E-mail: MichaelTMathieu@gmail.com

ciated with the interaction. These differentiations include emotional support and instrumental support. Emotional support behaviors can be in the form of listening to one's work concerns, allowing one to vent their emotions, and providing words of encouragement during difficult times. It is presumed that these behaviors provide socioemotional resources, such as affection, sympathy, understanding, acceptance, and esteem from others (Thoits, 1982). Instrumental support behaviors can be in the form of task instruction, task assistance (Deelstra et al., 2003), and flexibility in one's work schedule (Hammer, Kossek, Yragui, Bodner, & Hanson, 2009). It is presumed that these behaviors provide task-related resources, such as knowledge and competency.

Perceptions of emotional support and instrumental support are likely strongly related for several reasons. Within COR theory, resource gain spirals describe the process in which a person high in resources becomes more capable of acquiring additional resources. Conversely, those low in resources will have more difficulty acquiring resources. These resource spirals occur because resources are additive; workers will leverage their current resources to increase their pool of resources. For example, a worker who receives ample task guidance from a supervisor is more likely to perform the job well and, in turn, receive emotional praise. Similarly, a worker who receives instrumental support from a colleague may identify this colleague as a viable outlet for additional resources, thus returning to the colleague for emotional support at a later date.

A strong correlation between emotional support and instrumental support may also be because the behaviors often occur concurrently (Fenlason & Beehr, 1994). The notion that organizations and managers are engaging in one type of supportive behavior is unlikely. More likely is that organizations and managers are seeking to provide their workforce with a wide range of resources to help them be successful. For example, a manager facing a work–family conflict issue among their workforce may survey the workforce to understand their needs and gripes (emotional support), implement a new policy to limit workload (instrumental support), and promote buy-in to the new program with a family friendly socializing event (emotional support). This scenario demonstrates that workplace issues are likely solved through a combination of emotional support and instrumental support. In this scenario, the co-occurrence of emotional support and instrumental support to solve the same work issue makes differentiating the support content less clear.

Although emotional support and instrumental support are argued by some to be distinct resource-laden behaviors (Cohen & Wills, 1985), the expected strong correlation may also be because both behaviors provide the same resources. For example, a worker who receives time management feedback from a supervisor may experience an increase in ability to do one's job, but also feel appreciated due to the individual attention provided by the supervisor. This scenario demonstrates how workers may perceive an instrumental support behavior as providing both task-relevant and socioemotional resources. In reflective interviews with hospital patients, Semmer et al. (2008) found that patients interpreted instrumental support behaviors from health care providers as having emotional meaning. In sum, we expect emotional support and instrumental support to be strongly correlated.

> *Hypothesis 1:* Emotional support and instrumental support will be strongly correlated.

Although the findings of Semmer and colleagues (2008) indicate emotional support and instrumental support can be interpreted similarly by a recipient, it is important to consider the emotional context in which it was examined. The health care provider–patient experience is similar to workers who are in occupations high in emotional labor demands. Emotional labor demands require regulated interactions with clients outside the organization, consideration of others, and control over one's emotional displays to match the situation appropriately (Glomb, Kammeyer-Mueller, & Rotundo, 2004; Morris & Feldman, 1996). In these emotionally oriented work environments, emotional support and instrumental support are likely indistinguishable because the job duties require an exchange of emotional resources. We predict emotional labor will moderate the relationship between emotional support and instrumental support, such that stronger relationships will be found among workers in occupations higher in emotional labor demands and weaker among workers in occupations lower in emotional labor demands.

> *Hypothesis 2:* Emotional labor demands will moderate the relationship between emotional support and instrumental support. Specifically, emotional support and instrumental support will be more strongly related in occupations higher in emotional labor demands than lower in emotional labor demands.

Correlates of Emotional Support and Instrumental Support in the Workplace

According to COR theory, the direct effects of support on work criteria occur through two simultaneous resource mechanisms: accumulation and protection of resources. Positive health occurs when a worker experiences a surplus of resources, whereas strain occurs when a worker experiences either actual depletion of resources (e.g., less support) or potential threat to resources (e.g., greater job demands). The protection mechanism is the process whereby workers activate their current resources to prevent from losing other valuable resources. For example, a worker may accept a supervisor's help on unusual work problems in an effort to reduce the ambiguity of one's role responsibilities. Similarly, a worker may embrace a friendly approach from a colleague to emotionally vent about a problem and experience less emotional exhaustion. The accumulation mechanism is the process whereby individuals regulate their behaviors and exert control over their environment to gain and store new resources. For example, a worker may accept a supervisor's help on unusual work problems in an effort gain more job knowledge and grow one's skills. Similarly, a worker may embrace a friendly approach from a colleague to build a long-term relationship and establish a source of support for the future. All of these examples demonstrate how support can be related to work criteria through either the protection mechanism or accumulation mechanism.

Also commonly used to describe the effects of support on criteria is the norm of reciprocity (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). It is important to note that the mechanisms within COR theory and norm of reciprocity are not competing models of behavior, but potentially complementary mechanisms that all occur when a worker perceives support in the

workplace. According to the norm of reciprocity, workers use support to form beliefs of how much the organization values their contributions. These beliefs of value to the organization determine a worker's felt obligation—a belief regarding whether one should care about the organization's well-being. Workers who perceive support will experience positive job attitudes and feel motivated to engage in behaviors that benefit the organization to ensure future resources are provided. Overall, we predict direct effects of support on several criteria through the protection mechanism, accumulation mechanism, and norm of reciprocity. Criteria are broadly categorized into stressors, strain, job attitudes, and job behaviors.

Stressors

Common job stressors examined in relation to emotional support and instrumental support include role conflict, role overload, role ambiguity, and work–family conflict (Greenhaus & Beutell, 1985; Rizzo, House, & Lirtzman, 1970). Role conflict occurs when a worker has a set of demands or expectations that conflict with each other, such that fulfilling one set of expectations makes it more difficult to fulfill the other set. Role ambiguity occurs when a worker lacks clarity in job duties. Role overload occurs when a worker has too many job duties for the amount of resources provided. Work–family conflict occurs when a worker's job duties interfere with their family duties and often is associated with other role stressors (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). Work–family conflict differs from family work conflict, which occurs when family duties interfere with job duties. We expect emotional support and instrumental support to be negatively associated with role conflict, role ambiguity, role overload, and work–family conflict.

Hypothesis 3a: Emotional support will be negatively associated with role conflict.

Hypothesis 3b: Emotional support will be negatively associated with role ambiguity.

Hypothesis 3c: Emotional support will be negatively associated with role overload.

Hypothesis 3d: Emotional support will be negatively associated with work–family conflict.

Hypothesis 4a: Instrumental support will be negatively associated with role conflict.

Hypothesis 4b: Instrumental support will be negatively associated with role ambiguity.

Hypothesis 4c: Instrumental support will be negatively associated with role overload.

Hypothesis 4d: Instrumental support will be negatively associated with work–family conflict.

Strain

Strain includes both psychological and physical experiences. Examples of psychological strain are emotional exhaustion, depersonalization, and reduced sense of accomplishment, which are facets of job burnout (Maslach & Jackson, 1981). Emotional exhaustion is a state of feeling depleted by one's work over an extended period of time. Depersonalization represents the worker's tendency to view patients/customers/clients as objects rather than people with needs. Reduced sense of accomplishment is the lack of efficacy at work and feeling that little progress is made toward work goals. Physical symptoms are physical maladies and illnesses that can include backache, headache, eyestrain, sleep disturbance, and gastrointestinal problems, which are often measured via self-report (Nixon, Mazzola, Bauer, Krueger, & Spector, 2011). We expect emotional support and instrumental support to be negatively associated with emotional exhaustion, depersonalization, reduced sense of accomplishment, and physical symptoms.

Hypothesis 5a: Emotional support will be negatively associated with emotional exhaustion.

Hypothesis 5b: Emotional support will be negatively associated with depersonalization.

Hypothesis 5c: Emotional support will be negatively associated with reduced personal accomplishment.

Hypothesis 5d: Emotional support will be negatively associated with physical symptoms.

Hypothesis 6a: Instrumental support will be negatively associated with emotional exhaustion.

Hypothesis 6b: Instrumental support will be negatively associated with depersonalization.

Hypothesis 6c: Instrumental support will be negatively associated with reduced personal accomplishment.

Hypothesis 6d: Instrumental support will be negatively associated with physical symptoms.

Job Attitudes

Whereas strains are more closely related to health, job attitudes include a more mild combination of thoughts and feelings about the job environment. Job attitudes include job satisfaction and organizational commitment. Job satisfaction is a worker's appraisal of one's job experience and how much the worker enjoys the job (Locke, 1976, p. 1300). Organizational commitment is characterized by one's identification with and involvement in an organization. Commitment often involves strong acceptance of the organization's goals and values, willingness to exert considerable effort on behalf of the organization, and a desire to maintain organizational membership (Mowday, Steers, & Porter, 1979). We expect emotional support and instrumental support to be positively associated with job satisfaction and organizational commitment.

Hypothesis 7a: Emotional support will be positively associated with job satisfaction.

Hypothesis 7b: Emotional support will be positively associated with organizational commitment.

Hypothesis 8a: Instrumental support will be positively associated with job satisfaction.

Hypothesis 8b: Instrumental support will be positively associated with organizational commitment.

Job Behaviors

Job behaviors include turnover intention, task performance, and extra-role performance. Turnover intention is a worker's plan to leave his or her organization within a specified period of time (Griffeth, Hom, & Gaertner, 2000). Task performance involves a worker's completion of job description duties, whereas extra-role performance represents a worker's efforts to help colleagues or the organization beyond the required job description duties (Campbell, 1990). We expect emotional support and instrumental support to be negatively associated with turnover intention and positively associated with task performance and extra-role performance.

Hypothesis 9a: Emotional support will be negatively associated with turnover intention.

Hypothesis 9b: Emotional support will be positively associated with task performance.

Hypothesis 9c: Emotional support will be positively associated with extra-role performance.

Hypothesis 10a: Instrumental support will be negatively associated with turnover intention.

Hypothesis 10b: Instrumental support will be positively associated with task performance.

Hypothesis 10c: Instrumental support will be positively associated with extra-role performance.

Comparisons of Correlation Strength

We conducted analyses to determine if support type (emotional vs. instrumental) moderated the relationships with strain and job behaviors. Although emotional support and instrumental support are expected to be related to aforementioned criteria, it is unclear if the relationships will be stronger for either emotional support or instrumental support. COR theory does not differentiate between different types of social resources. However, researchers who have distinguished between emotional support and instrumental support base their rationale on the specificity hypothesis (Cohen & Wills, 1985). Based on the specificity hypothesis, stronger effects are found between variables when they overlap in contextual factors, such as the type of resources acquired from support (e.g., instrumental) and criteria (e.g., task performance). In a meta-analysis of coworker support, Chiaburu and Harrison (2008) found empirical evidence for this claim; instrumental support from coworkers was more strongly related with task performance than emotional support from coworkers. If the specificity hypothesis applies to the presumed differences between emotional support and instrumental support, different effects will be found with criteria. Specifically, emotional support will be more strongly associated with strain variables than instrumental support because of the common emotional context. Instrumental support will be more strongly associated with stressors and job behaviors than emotional support because of the common task context. Exploratory analyses are conducted for different effects with job satisfaction and organizational commitment because there is no clear matching of support resources to the context of these variables.

Hypothesis 11a: Emotional support will have a stronger relationship with emotional exhaustion compared with instrumental support.

Hypothesis 11b: Emotional support will have a stronger relationship with depersonalization compared with instrumental support

Hypothesis 11c: Emotional support will have a stronger relationship with reduced personal accomplishment compared with instrumental support.

Hypothesis 11d: Emotional support will have a stronger relationship with physical symptoms compared with instrumental support.

Hypothesis 12a: Instrumental support will have a stronger relationship with role conflict compared with emotional support.

Hypothesis 12b: Instrumental support will have a stronger relationship with role ambiguity compared with emotional support.

Hypothesis 12c: Instrumental support will have a stronger relationship with role overload compared with emotional support.

Hypothesis 12d: Instrumental support will have a stronger relationship with work–family conflict compared with emotional support.

Hypothesis 12e: Instrumental support will have a stronger relationship with turnover intention compared with emotional support.

Hypothesis 12f: Instrumental support will have a stronger relationship with task performance compared with emotional support.

Hypothesis 12g: Instrumental support will have a stronger relationship with extra-role performance compared with emotional support.

Buffering and Reverse Buffering Effects of Support

The benefits of emotional support and instrumental support extend beyond the main effects with stressors, strain, job attitudes, and job behaviors to include moderation effects of support on stressor–criteria relationships. Hobfoll (2002) argued within a COR theory framework that resource gain is most impactful when it occurs simultaneous with a resource loss. This implies that workers who are confronted with high job demands will benefit the most from support, also known as a buffering effect. The buffering effect describes how workers are able to transform the effect of job demands into either fewer negative consequences or greater positive outcomes.

Although buffering effects describe a beneficial/mitigating moderation effect of support, support can also have a harmful/exacerbating moderation effect known as a reverse buffering ef-

fect. Reverse buffering effects can occur, for example, when help is unwanted, makes the recipient of the help feel inadequate, or draws more attention to the stressors (Beehr, Bowling, & Bennett, 2010). The pattern of support moderation effects is a growing topic of emphasis within the social support literature, but no studies have tested if the frequency or pattern of support–stressor moderation effects differ for emotional support and instrumental support.

Hypothesis 13: Emotional support will moderate the stressor–criteria (e.g., strain, job attitudes, job behaviors) relationships such that the moderation effect will represent a buffering effect more often than a reverse buffering effect.

Hypothesis 14: Instrumental support will moderate the stressor–criteria (e.g., strain, job attitudes, job behaviors) relationships such that the moderation effect will represent a buffering effect more often than a reverse buffering effect.

Source of Support as a Moderator

The effects of emotional support and instrumental support may also vary depending upon the source of support, such as support from supervisors or coworkers. The expected moderation effects of different sources of support is likely because some organizational members have greater power than others and their behaviors are interpreted differently. For example, supervisors enforce company policies and evaluate job performance, which results in their behaviors being interpreted differently than those with less organizational power. Coworkers on the other hand often have more frequent interaction together than with a supervisor and have similar status within the organization, which makes their interaction less restricted (Ferris & Mitchell, 1987). Being high in power or low in power within a relationship has wide-ranging psychological effects (Keltner, Gruenfeld, & Anderson, 2003) including the degree to which an individual adheres to social norms (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). People lower in power within a relationship tend to observe and adhere to social norms more acutely than do higher power individuals. In the context of workplace social support, a salient social norm is the norm of reciprocity. Because of the power differential, receiving support from supervisors (a high power actor) should elicit more adherence to the norm of reciprocity than receiving support from coworkers (an equal power actor). As mentioned above, workers who perceive support and adhere to the norm of reciprocity will experience positive job attitudes and feel motivated to engage in behaviors that benefit the organization.

Several studies have examined the effects of source on the support–criteria relationships, with mixed findings being reported. Fenlason and Beehr (1994) compared emotional support and instrumental support from either a supervisor or coworker. The authors recommended that to combat worker strain, support should come from those in the workplace, especially supervisors. This finding was consistent for both emotional support and instrumental support. No differences between sources were found when comparing support–stressor relationships, but additional empirical evidence supports the claim that supervisors are generally more influential than coworkers on many variables including job attitudes (Ng & Sorensen, 2008), strains (Mayo, Sanchez, Pastor, & Rodriguez, 2012), engagement (Othman & Nasurdin, 2013), and performance (Liaw, Chi, & Chuang, 2010).

Hypothesis 15: Source of support will moderate the emotional support–criteria relationships. Specifically, emotional support will be more strongly related to other variables when the support is from supervisors compared with coworkers.

Hypothesis 16: Source of support will moderate the instrumental support–criteria relationships. Specifically, instrumental support will be more strongly related to other variables when the support is from supervisors compared with coworkers.

Support Received or Support Availability as a Moderator

A potential moderator of the effects of support is whether a worker is evaluating support that has been received or support that is available to the employee. The notion of availability of resources is highlighted in COR theory when Hobfoll, Freedy, Lane, and Geller (1990) suggested that although support resources need to be consistent to promote health, the supportive relationships "must not be so firm as to inhibit change" (p. 474). In other words, support is most effective when the receipt of support resources is stable, but can be increased if needed.

Seminal support researchers expressed similar sentiments in their definitions of support as the provision and availability of helping behaviors (Caplan, Cobb, & French, 1975). Recently, however, researchers have argued that the availability of support is more, or at least differentially, valuable to a worker compared with received support (Beehr et al., 2010). This idea is reflected in the development of an Availability of Social Support scale that counts number of people who one could rely upon during a time of need in the future (Sarason, Levine, Basham, & Sarason, 1983) rather than evaluating perceptions of past support behaviors by others (this scale does not differentiate between emotional support and instrumental support). The current meta-analysis tests the notion that measuring support availability is more predictive of criteria than measuring only support received.

Hypothesis 17: Emotional support will be more strongly correlated with criteria when the scales include support availability items compared with when the scales are exclusively support received.

Hypothesis 18: Instrumental support will be more strongly correlated with criteria when the scales include support availability items compared with when the scales are exclusively support received.

Method—Study 1

Identification of Studies

Study 1 used meta-analysis to test the hypotheses. Four methods were used to conduct the literature search. First, 24 peer-reviewed journals with high impact factors within applied psychology, general psychology, and management fields (listed in the Appendix) were searched using the PsycINFO database. Due to the vast literature on social support, not all journals could be searched. These journals often publish applied research within the workplace, which maximized our ability to identify relevant studies.

Keywords used in the searches were *social support*, *coworker support*, *supervisor support*, *emotional support*, *psychosocial support*, and *instrumental support*. Search phrases were not combined with other terms such as *work* or *job* for fear that relevant studies not mentioning these words would be missed. To complement our search of high-impact journals, unpublished dissertations were obtained using ProQuest. We searched for dissertations classified as in the field of industrial/organizational psychology and used one of the terms *social support*, *coworker support*, *instrumental support*, or *emotional support* along with *work* or *job* in the abstract, and randomly selected 25% (~2,000) of the results to examine. This search effort reduces concerns of a publication bias because theses and dissertations are often unpublished in peer-reviewed journals.

Our search also included a review of articles cited within 10 previously published meta-analyses on social support in the workplace (see References for meta-analyses). Lastly, we conducted a targeted search for studies citing common support scales (Caplan et al., 1975; Clark, 2001; Ducharme & Martin, 2000; Hammer et al., 2009; Scandura, 1992; Zellars & Perrewé, 2001). This targeted search led to additional research articles in fields other than organizational psychology and management (e.g., nursing, career development). Articles included in the meta-analysis were published between 1976 and 2018. The current meta-analysis included 142 independent samples containing 68,354 participants that measured either emotional support or instrumental support in the workplace.

Criteria for Inclusion and Exclusion

Studies were included in the meta-analysis if they were written in English and the support scale only measured support in the workplace that was clearly either emotional support or instrumental support. It is important to note that researches often combine scales of similar constructs that correlate strongly (e.g., $r > .70$) despite the original intention to measure distinct constructs; this was often the case for studies using Caplan and colleague's (1975) seminal scales of emotional support and instrumental support. Sources of support from coworkers, supervisors, career mentors, or "others in the workplace" were included, whereas sources of support from family and nonwork friends were excluded. A minimum of four primary studies was used as a cutoff to determine if a correlate of support was included in the meta-analysis.

Scales of support were independently coded by study authors and trained graduate students. Coders were given descriptions based on the Thoits's (1982) definitions. Emotional support was described as emotional resources such as affection, sympathy, understanding, acceptance, and esteem from others. Instrumental support was described as task/job-related resources such as help to accomplish a task, helping with a heavy workload, or giving advice on how to better accomplish a task. Coders indicated if the scale was (a) exclusively emotional support, (b) exclusively instrumental support, (c) both emotional support and instrumental support, or (d) I do not know.

Scales that combined the two types of support or included other types of support were excluded. Discrepancies were discussed until there was complete agreement. Example coded content from the items are listed in Table 1. Researchers often ($k = 30$) created their own scales based on definitions from seminal researchers (Caplan et al., 1975; Clark, 2001; Hammer et al., 2009; Scandura, 1992).

Coding Emotional Labor Demands

Primary studies were coded for emotional labor demands to test Hypothesis 2. Primary studies were coded for emotional labor demands if the sample was exclusively one job title and included a correlation between emotional support and instrumental support. To objectively code for emotional labor demands, we followed the method of Glomb and colleagues (2004). Each job title was matched with an Occupational Network (O*NET: United State Department of Labor/Employment & Training Administration, 2010) job title by two of the authors and reviewed until agreement was met or the data were omitted. We averaged five O*NET job characteristics: "Communicating with people outside the organization," "Performing for or working directly with the public," "Cooperation," "Concern for others," "Self-control." We omitted the "stress tolerance" job characteristic used by Glomb and colleagues (2004) because it can refer to many types of stress that are not emotional labor (e.g., heavy workload, strict legal or ethical restrictions, competitive markets, requirements to monitor displays closely, working difficult shifts). Each job characteristic was on a scale of 0–100, with higher scores indicating emotional labor is more common. We dichotomized emotional labor demands into high ($M = 81$; range = 73 to 85) and low ($M = 61$; range = 52 to 72) to test for moderation.

Coding Support Received and Support Availability

Emotional support and instrumental support scales were coded as either received, available, or neither. Example items of support received and support availability are provided in Table 1. Items and instructions were reviewed for each study as many researchers adapted seminal scales to fit with the common work behaviors within their samples. Received support was demonstrated with past tense phrases, such as "provided," "gave," "talked, or "received." Support availability was demonstrated with hypothetical or future tense phrases, such as "if needed," "I can rely," "I would," or "I could." Items that were unclear in either past or future tenses were coded as neutral (e.g., "My coworkers support me"). We coded scales as support received if the scale contained at least one item as received and zero items as available. We coded scales as support availability if the scale contained at least one item as availability. This was done because too few of the primary studies measured support with exclusively availability items.

Analyses

Study 1 tested all Hypotheses except Hypotheses 9c and 10c. Significance of mean corrected correlations was determined using 95% confidence intervals. Categorical moderators were tested with the Hunter and Schmidt's method outlined by Aguinis, Sturman, and Pierce (2008) because the method was less affected by the potential of range restriction compared with other common significance tests.

The average correlation was calculated for studies that reported support from multiple work sources (e.g., coworkers, supervisors, mentor). Single composite correlations were formed using a linear composite calculator from Hunter and Schmidt (2004) for studies that reported multiple factors of a single criteria (e.g., job satisfaction facets). Procedures and software from Hunter and Schmidt (2004) were used to calculate the meta-analytic results. We pro-

Table 1
Scale Content Coded as Emotional Support or Instrumental Support Within Meta-Analyses

Emotional support received	Instrumental support received
• provided you with encouragement (Bacharach, Bamberger, & Biron, 2010)	• provides knowledge related to work (Bhanthumnavin, 2002)
• provides emotional support and encouragement (Hamilton, 2007)	• provides you with opportunities that stretch you professionally (Yip, 2015)
• I have shared personal problems with my mentor (Ensher, Grant-Vallone, & Marelich, 2002)	• my coworker provided practical assistance (Hoang, 2014)
• my coworkers provide me with the strength that I need to get through a difficult day of work (Hoang, 2014)	• provide me with important work-related information and advice that make performing my job easier (Liaw, Chi, & Chuang, 2010)
• to what extent do you receive appreciation and approval from your coworkers (Tews, Michel, & Ellingson, 2013)	• gives me helpful feedback about my job performance (Aryee & Luk, 1996)
• we talk about the good things about our work (Zellars & Perrewé, 2001)	• provides opportunities to develop specialized functional skills (Kraimer, Seibert, Wayne, Liden, & Bravo, 2011)
• conveyed empathy for the concerns and feelings you have (Taylor & Neimeyer, 2009)	• gave advice or tangible assistance (Bamberger, Geller, & Doveh, 2017)
• he/she has lent an ear or counseled (Bamberger et al., 2017)	• gave me a lot of information about position advancement opportunities (Weng et al., 2010)
• we talk about the good things about our work (Kahn, Schneider, Jenkins-Henkelman, & Moyle, 2006)	• suggests training that might be helpful (Kidd & Smewing, 2001)
• my mentor has invited me to join him for lunch (Waters, 2004)	• talked you through work-related problems helping you come up with solutions (Bacharach et al., 2010)
	• my mentor has placed me in important assignments (Ensher, Thomas, & Murphy, 2001)
Emotional support available	**Instrumental support available**
• my supervisor is willing to listen to my problems in juggling work and nonwork life (Hammer, Kossek, Yragui, Bodner, & Hanson, 2009)	• if needed, can you get support and help with your work from your immediate superior (Hopkins, 2011)
• to what extent are your coworkers willing to listen to your problem at work (Baeriswyl, Krause, Elfering, & Berset, 2017)	• I can rely on my supervisor to help me with scheduling conflicts if I need it (Hammer et al., 2009)
• when I really need to talk with someone, my fellow faculty members are willing to listen (Ray & Miller, 1991)	• how much can your supervisor be relied on when things get tough at work (Beehr, Bowling, & Bennett, 2010)
• I feel I can count on my coworkers as friends (Fisher, 1985)	• others are willing to finish work assigned to me (Poortvliet, Anseel, & Theuwis, 2015)
• how much is your supervisor willing to listen to your personal problems (Beehr et al., 2010)	• I can rely on my supervisor to help me out with a work problem (Tucker, Jimmieson, & Bordia, 2018)
• I would discuss my private concerns and problems with my mentor (Weng et al., 2010)	• your coworkers would fill in while you're absent (Ducharme & Martin, 2000)
• there is a trustworthy person I can turn to for advice if I were having problems (Baker, O'Brien, & Salahuddin, 2007)	• my supervisor is always willing to give me directions when I am not sure of myself on the job (Fisher, 1985)
• I can talk over problems with colleagues (Redman & Snape, 2006)	• can you rely on your immediate supervisor when things get tough at work (Van Yperen & Hagedoorn, 2003)
• my coworkers always seem to make time for me if I need to discuss work (Spooner-Lane, 2004)	• I expect to have support in attaining the highest possible levels of performance (Irving & Montes, 2009)

vide the sample weighted relationships that are uncorrected and corrected for reliability in both predictor and dependent measures. Artifact distributions were used to correct for unreliability when scale Cronbach's α was missing.

Results—Study 1

Relationship Between Emotional Support and Instrumental Support

The meta-analytic results for the interrelationships between emotional support and instrumental support are presented in Table 2. Hypothesis 1 is supported by the strong, positive mean corrected correlation between emotional support and instrumental support ($\rho = .73$; $N = 18{,}528$; $k = 54$). Similar correlations were found between emotional support and instrumental support when different sources of support and types of support scales were considered: support from supervisors ($\rho = .79$; $N = 6{,}440$; $k = 18$), support from coworkers ($\rho = .79$; $N = 10{,}221$; $k = 19$), support received ($\rho = .69$; $N = 8{,}318$; $k = 34$), and support availability ($\rho = .74$; $N = 3{,}588$; $k = 12$).

Support was found for Hypothesis 2, which predicted a stronger relationship, $t = 3.40$, $p < .01$, between emotional support and instrumental support for occupations higher in emotional labor demands ($r = .69$, $\rho = .79$; $N = 4{,}182$; $k = 14$) compared with lower in emotional labor demands ($r = .52$, $\rho = .62$; $N = 1{,}931$; $k = 7$).

Correlates of Emotional Support and Instrumental Support

The overall meta-analytic results for the correlates of emotional support and instrumental support are presented in Table 3. Criteria are grouped into the categories of stressors, strain, job attitudes, and job behaviors.

Stressors. Support was found for Hypotheses 3a, 3b, 3c, and 3d. Greater emotional support was associated with less role con-

Table 2
Meta-Analyses for the Interrelationships Between Emotional Support and Instrumental Support

Relationship	*k*	*N*	*r*	ρ	SD_r	SD_ρ	80% CrI	95% CI
Emotional support & instrumental support	54	18,528	.62	.73	.14	.15	[.53, .92]	[.68, .77]
Emotional support supervisor & instrumental support supervisor	18	6,440	.67	.79	.13	.14	[.61, .97]	[.72, .86]
Emotional support coworker & instrumental support coworker	19	10,221	.61	.79	.14	.16	[.58, 1.00]	[.71, .89]
Instrumental support supervisor & instrumental support coworker	14	6,738	.42	.52	.10	.10	[.49, .65]	[.46, .59]
Emotional support supervisor & emotional support coworker	23	7,205	.36	.45	.12	.12	[.29, .61]	[.39, .51]
Emotional support coworker & instrumental support supervisor	13	4,962	.29	.38	.09	.10	[.26, .50]	[.32, .45]
Emotional support supervisor & instrumental support coworker	13	5,198	.32	.25	.08	.08	[.22, .42]	[.27, .38]
Emotional support received & instrumental support received	34	8,318	.57	.69	.16	.18	[.46, .92]	[.62, .75]
Emotional support availability & instrumental support availability	12	3,588	.64	.74	.18	.19	[.49, .99]	[.62, .86]

Note. *k* = number of samples; *N* = total sample size; mean *r* = average weighted correlation coefficient; mean ρ = average weighted correlation coefficient corrected for unreliability in the dependent and independent variables; SD_r = standard deviation of mean *r*; SD_ρ = standard deviation of mean ρ; CrI = 80% credibility interval; CI = 95% confidence interval based around mean ρ.

flict (ρ = −.23; *N* = 4,174; *k* = 15), less role ambiguity (ρ = −.36; *N* = 4,704; *k* = 15), less role overload (ρ = −.11; *N* = 7,228; *k* = 15), and less work–family conflict (ρ = −.20; *N* = 6,974; *k* = 17). Support was found for Hypotheses 4a, 4b, 4c, and 4d. Greater instrumental support was associated with less role conflict (ρ = −.37; *N* = 17,905; *k* = 11), less role ambiguity (ρ = −.39; *N* = 18,576; *k* = 14), less role overload (ρ = −.20; *N* = 7,090; *k* = 17), and less work–family conflict (ρ = −.12; *N* = 13,669; *k* = 18).

Strain. Support was found for Hypotheses 5a, 5b, 5c, and 5d. Greater emotional support was associated with less emotional

Table 3
Meta-Analyses for the Correlates of Emotional Support and Instrumental Support

Relationship	*k*	*N*	*r*	ρ	SD_r	SD_ρ	80% CrI	95% CI	*t* value
Role conflict									
Emotional support	15	4,174	−.19	−.23	.14	.15	[−.42, −.04]	[−.32, −.15]	$t = 2.96^{**}$
Instrumental support	11	17,905	−.31	−.37	.08	.09	[−.48, −.25]	[−.42, −.31]	
Role ambiguity									
Emotional support	15	4,704	−.29	−.36	.12	.13	[−.53, −.20]	[−.44, −.29]	$t = 0.73$
Instrumental support	14	18,576	−.32	−.39	.08	.09	[−.50, −.28]	[−.44, −.34]	
Role overload									
Emotional support	15	7,228	−.09	−.11	.12	.14	[−.29, .08]	[−.19, −.03]	$t = 1.81^{*}$
Instrumental support	17	7,090	−.18	−.20	.13	.14	[−.38, −.03]	[−.28, −.13]	
Work–family conflict									
Emotional support	17	6,974	−.17	−.20	.14	.14	[−.43, .03]	[−.29, −.11]	$t = 2.00^{*}$
Instrumental support	18	13,669	−.10	−.12	.09	.09	[−.24, .00]	[−.17, −.07]	
Emotional exhaustion									
Emotional support	21	6,507	−.21	−.24	.11	.11	[−.37, −.10]	[−.29, −.18]	$t = 0.27$
Instrumental support	15	4,314	−.22	−.25	.11	.11	[−.38, −.11]	[−.31, −.18]	
Depersonalization									
Emotional support	12	4,233	−.21	−.25	.10	.11	[−.41, −.10]	[−.33, −.18]	$t = 1.76^{*}$
Instrumental support	6	2,190	−.15	−.17	.07	.08	[−.28, −.06]	[−.25, −.09]	
Reduced personal accomplishment									
Emotional support	12	4,186	−.20	−.24	.08	.07	[−.33, −.15]	[−.29, −.19]	$t = 0.99$
Instrumental support	7	2,363	−.17	−.21	.07	.06	[−.28, −.13]	[−.27, −.14]	
Negative physical symptoms									
Emotional support	10	3,660	−.20	−.24	.06	.03	[−.29, −.20]	[−.29, −.20]	$t = 2.34^{**}$
Instrumental support	8	2,593	−.11	−.13	.12	.13	[−.30, .03]	[−.23, −.03]	
Job satisfaction									
Emotional support	53	15,119	.34	.40	.14	.15	[.22, .61]	[.37, .46]	$t = 2.67^{**}$
Instrumental support	51	21,050	.41	.49	.17	.19	[.25, .74]	[.44, .54]	
Organizational commitment									
Emotional support	15	3,777	.35	.41	.11	.11	[.28, .53]	[.35, .46]	$t = 1.23$
Instrumental support	23	5,841	.39	.46	.13	.14	[.29, .63]	[.40, .53]	
Turnover intention									
Emotional support	21	4,641	−.20	−.24	.15	.16	[−.45, −.03]	[−.32, −.16]	$t = 0.97$
Instrumental support	25	14,415	−.23	−.28	.09	.11	[−.42, −.15]	[−.33, −.23]	
Task performance									
Emotional support	18	4,042	.17	.20	.09	.08	[.09, .32]	[.15, .26]	$t = 2.35^{*}$
Instrumental support	26	5,857	.24	.29	.16	.17	[.07, .51]	[.21, .36]	

Note. *k* = number of samples; *N* = total sample size; mean *r* = average weighted correlation coefficient; mean ρ = average weighted correlation coefficient corrected for unreliability in the dependent and independent variables; SD_r = standard deviation of mean *r*; SD_ρ = standard deviation of mean ρ; CrI = 80% credibility interval; CI = 95% confidence interval based around mean ρ; *t* value uses the mean corrected correlation.
$^{*}p < .05$. $^{**}p < .01$.

exhaustion ($\rho = -.24$; $N = 6{,}507$; $k = 21$), less depersonalization ($\rho = -.25$; $N = 4{,}233$; $k = 12$), less reduced personal accomplishment ($\rho = -.24$; $N = 4{,}186$; $k = 12$), and fewer physical symptoms ($\rho = -.24$; $N = 4{,}186$; $k = 12$). Support was found for Hypotheses 6a, 6b, 6c, and 6d. Greater instrumental support was associated with less emotional exhaustion ($\rho = -.25$; $N = 4{,}314$; $k = 15$), less depersonalization ($\rho = -.17$; $N = 2{,}190$; $k = 6$), less reduced personal accomplishment ($\rho = -.21$; $N = 2{,}363$; $k = 7$), and fewer physical symptoms ($\rho = -.13$; $N = 2{,}593$; $k = 8$).

Job attitudes. Support was found for Hypotheses 7a and 7b. Greater emotional support was associated with greater job satisfaction ($\rho = .40$; $N = 15{,}119$; $k = 53$) and greater organizational commitment ($\rho = .41$; $N = 3{,}777$; $k = 15$). Support was found for Hypotheses 8a and 8b. Greater instrumental support was associated with greater job satisfaction ($\rho = .49$; $N = 21{,}050$; $k = 51$) and greater organizational commitment ($\rho = .46$; $N = 5{,}841$; $k = 23$).

Job behaviors. Support was found for Hypotheses 9a and 9b. Greater emotional support was associated with less turnover intention ($\rho = -.24$; $N = 4{,}641$; $k = 21$) and greater task performance ($\rho = .20$; $N = 4{,}042$; $k = 18$). Support was found for Hypotheses 10a and 10b. Greater instrumental support was associated with less turnover intention ($\rho = -.28$; $N = 14{,}415$; $k = 25$) and greater task performance ($\rho = .29$; $N = 5{,}857$; $k = 26$).

Comparisons of correlation strength. Support was found for Hypotheses 11b and 11d, but no support was found for Hypotheses 11a and 11c. Emotional support was more strongly related to strain variables than instrumental support in two of four comparisons. Emotional support was more strongly associated with depersonalization, $t = 1.76$, $p < .05$, and physical symptoms, $t = 2.34$, $p < .01$, but no significant differences were found for emotional exhaustion and reduced personal accomplishment. Across the four relationships, the average corrected correlation strength for emotional support with strain variables was |.24|, whereas the average corrected correlation strength for instrumental support with strain variables was |.19|.

Support was found for Hypotheses 12a, 12c, 12d, and 12f, but no support was found for Hypotheses 12b and 12e. Instrumental support was more strongly related to stressors and job behaviors than emotional support in three of six comparisons. Instrumental support was more strongly associated with role conflict, $t = 2.96$, $p < .01$, role overload, $t = 1.81$, $p < .05$, and task performance, $t = 2.35$, $p < .05$, but no differences were found for role ambiguity and turnover intention. In addition, emotional support was more strongly associated with work–family conflict compared with instrumental support, $t = 2.00$, $p < .05$. Across the six relationships, the average corrected correlation strength for emotional support with stressors and job behaviors was |.22|, whereas the average corrected correlation strength for instrumental support with stressors and job behaviors was |.28|.

Exploratory analyses were conducted to compare the effects of emotional support and instrumental support with the remaining relationships. Instrumental support was more strongly associated with job satisfaction compared with emotional support, $t = 2.67$, $p < .01$, but no difference was found for organizational commitment. Across the two relationships, the average corrected correlation strength for emotional support with job attitudes was |.41|, whereas the average corrected correlation strength for instrumental support with job attitudes was |.48|.

Buffering and Reverse Buffering Effects of Support

A moderation effect of support on the stressor–criteria relationship is tested by calculating the unique variance explained by a Support × Stressor interaction term within a regression equation. Graphing the regression equation for high/low scores of support is required to determine if the significant interaction term represents a buffering effect or a reverse buffering effect. A weighted average of the interaction effect sizes was not possible due to the wide range of how moderation effects were tested within the primary studies. The primary studies were inconsistent in the type of criteria or stressor used to test for moderation effects, number of moderation effects tested in an analysis, control variables, and whether or not the R^2 change statistic was reported. These inconsistencies limit our ability to estimate an accurate moderation effect size. However, we calculated a frequency count of studies with at least one significant moderation effect to determine how common the buffering effect or reverse buffering effect is for either instrumental or emotional support. Studies were coded for if a support moderation effect was tested, if the moderation effect was significant, and the patterns of the significant moderation effects.

No support was found for Hypothesis 13. Emotional support moderation effects were tested and reported in 25 studies. At least one significant moderation effect was reported in 18 of the 25 (72%) studies. Graphical follow-up analyses indicated that a significant moderation effect represented a buffering effect in 12 of the 25 (48%) studies, whereas 10 of the 25 (40%) studies report a significant reverse buffering effect. These results indicate that buffering effects were only slightly more common than reverse buffering effects among studies testing emotional support moderation effects.

No support was found for Hypothesis 14. Instrumental support moderation effects were tested and reported in 23 studies. At least one significant moderation effect was reported in 14 of the 23 (61%) studies. Graphical follow-up analyses indicated that there was a significant buffering effect in seven of the 23 (30%) studies, whereas 10 of the 23 (43%) studies report a significant reverse buffering effect. These results indicate that buffering effects were slightly less common than reverse buffering effects among the studies testing instrumental support moderation effects.

Source of Support as a Moderator

Before comparing the main effects of emotional support and instrumental support, the interrelationships between types of support from different sources were reviewed (see Table 2). Support from supervisors were positively correlated with support from coworkers across all four relationships tested ($\rho = .25$ to $.52$). These results indicate that sources of support are not entirely independent.

Moderation effects of the source of support on the relationship between emotional support and criteria are presented in Table 4. Partial support was found for Hypothesis 15. Emotional support from supervisors was more strongly related to criteria variables than emotional support from coworkers in four of 12 comparisons. Specifically, emotional support from supervisors was more strongly associated with role conflict, $t = 1.91$, $p < .05$, work–family conflict, $t = 3.64$, $p < .01$, job satisfaction, $t = 2.03$, $p < .05$, and turnover intention, $t = 2.23$, $p < .05$, compared with

Table 4
Meta-Analyses for the Correlates of Emotional Support From Either Supervisors or Coworkers

Relationship	*k*	*N*	*r*	ρ	SD_r	SD_ρ	80% CrI	95% CI	*t* value
Role conflict									
Emotional support from supervisors	8	2,330	−.29	−.36	.11	.11	[−.51, −.22]	[−.45, −.27]	$t = 1.91^*$
Emotional support from coworkers	8	2,803	−.19	−.25	.11	.12	[−.39, −.10]	[−.33, −.16]	
Role ambiguity									
Emotional support from supervisors	8	3,107	−.33	−.41	.08	.10	[−.53, −.29]	[−.49, −.34]	$t = 0.40$
Emotional support from coworkers	8	2,892	−.30	−.39	.10	.10	[−.52, −.25]	[−.47, −.30]	
Role overload									
Emotional support from supervisors	9	4,584	−.15	−.18	.15	.17	[−.40, .04]	[−.29, −.07]	$t = 1.14$
Emotional support from coworkers	10	5,910	−.08	−.10	.11	.13	[−.26, .07]	[−.18, −.01]	
Work–family conflict									
Emotional support from supervisors	11	2,921	−.20	−.24	.14	.15	[−.42, −.05]	[−.33, −.15]	$t = 3.64^{**}$
Emotional support from coworkers	4	2,899	−.05	−.06	.06	.04	[−.12, −.01]	[−.12, −.01]	
Emotional exhaustion									
Emotional support from supervisors	12	4,091	−.25	−.29	.09	.09	[−.40, −.18]	[−.34, −.23]	$t = 1.03$
Emotional support from coworkers	12	4,426	−.22	−.25	.10	.10	[−.38, −.13]	[−.32, −.19]	
Depersonalization									
Emotional support from supervisors	6	2,804	−.21	−.26	.07	.06	[−.33, −.18]	[−.32, −.19]	$t = 1.87^*$
Emotional support from coworkers	8	3,149	−.28	−.34	.09	.10	[−.47, −.22]	[−.42, −.26]	
Reduced personal accomplishment									
Emotional support from supervisors	7	2,866	−.20	−.24	.07	.06	[−.32, −.17]	[−.30, −.18]	$t = 1.50$
Emotional support from coworkers	8	2,991	−.24	−.29	.08	.07	[−.38, −.20]	[−.35, −.23]	
Negative physical symptoms									
Emotional support from supervisors	8	3,732	−.21	−.24	.08	.07	[−.34, −.15]	[−.31, −.18]	$t = 0.27$
Emotional support from coworkers	14	4,664	−.22	−.25	.10	.10	[−.38, −.13]	[−.32, −.19]	
Job satisfaction									
Emotional support from supervisors	25	8,492	.38	.48	.15	.16	[.28, .68]	[.42, .54]	$t = 2.03^*$
Emotional support from coworkers	18	5,754	.32	.39	.12	.13	[.21, .57]	[.32, .46]	
Organizational commitment									
Emotional support from supervisors	10	2,641	.33	.39	.11	.10	[.26, .52]	[.31, .47]	$t = 0.21$
Emotional support from coworkers	5	1,315	.30	.38	.09	.08	[.28, .48]	[.28, .48]	
Turnover intention									
Emotional support from supervisors	11	2,853	−.28	−.34	.08	.06	[−.42, −.26]	[−.40, −.28]	$t = 2.23^*$
Emotional support from coworkers	9	2,236	−.16	−.20	.16	.18	[−.42, .03]	[−.32, −.07]	
Task performance									
Emotional support from supervisors	10	2,258	.14	.16	.09	.07	[.06, .27]	[.10, .20]	$t = 0.96$
Emotional support from coworkers	8	1,898	.16	.20	.10	.10	[.08, .33]	[.11, .29]	

Note. *k* = number of samples; *N* = total sample size; mean *r* = average weighted correlation coefficient; mean ρ = average weighted correlation coefficient corrected for unreliability in the dependent and independent variables; SD_r = standard deviation of mean *r*; SD_ρ = standard deviation of mean ρ; CrI = 80% credibility interval; CI = 95% confidence interval based around mean ρ; *t* value uses the mean corrected correlation.
* *t* value significant at $p < .05$. ** *t* value significant at $p < .01$.

emotional support from coworkers. Contrary to the hypothesis, emotional support from coworkers was more strongly associated with depersonalization, $t = 1.87$, $p < .05$, compared with emotional support from supervisors. No significant differences were found for role ambiguity, role overload, emotional exhaustion, reduced personal accomplishment, physical symptoms, organizational commitment, and task performance. Across the 12 relationships, the average corrected correlation strength for emotional support from supervisors was |.30|, whereas the average corrected correlation strength for emotional support from coworkers was |.26|.

Moderation effects of the source of support on the relationship between instrumental support and criteria are presented in Table 5. Partial support was found for Hypothesis 16. Instrumental support from supervisors was more strongly correlated with variables than instrumental support from coworkers in five of eight comparisons. Specifically, instrumental support from supervisors was more strongly associated with role conflict, $t = 2.90$, $p < .01$, work–family conflict, $t = 2.70$, $p < .01$, job satisfaction, $t = 3.53$, $p < .01$, turnover intention, $t = 9.60$, $p < .01$, and task performance, $t = 4.38$, $p < .01$, compared with instrumental support from coworkers. No significant differences were found for role ambiguity, role overload, and emotional exhaustion. Across the eight relationships, the average corrected correlation strength for instrumental support from supervisors was |.32|, whereas the average corrected correlation strength for instrumental support from coworkers was |.18|.

Support Received or Support Availability as a Moderator

Moderation effects of received versus availability scale wording on the relationship between emotional support and criteria are presented in Table 6. Support was found for Hypothesis 17. Emotional support availability was more strongly related to criteria variables than emotional support received in four of six comparisons. Specifically, emotional support availability was more strongly associated with role ambiguity, $t = 3.46$, $p < .01$, emotional exhaustion, $t = 2.03$, $p < .05$, job satisfaction, $t = 1.71$, $p <$

Table 5
Meta-Analyses for the Correlates of Instrumental Support From Either Supervisors or Coworkers

Relationship	*k*	*N*	*r*	ρ	SD_r	SD_ρ	80% CrI	95% CI	*t* value
Role conflict									
Instrumental support from supervisors	5	16,571	−.32	−.39	.04	.04	[−.44, −.33]	[−.43, −.34]	$t = 2.90^{**}$
Instrumental support from coworkers	4	1,066	−.08	−.11	.16	.19	[−.36, .14]	[−.31, .10]	
Role ambiguity									
Instrumental support from supervisors	7	17,111	−.33	−.40	.06	.07	[−.49, −.31]	[−.46, −.35]	$t = 0.90$
Instrumental support from coworkers	4	1,155	−.26	−.32	.15	.17	[−.53, −.11]	[−.50, −.14]	
Role overload									
Instrumental support from supervisors	8	5,042	−.23	−.27	.11	.12	[−.42, −.12]	[−.36, −.18]	$t = 1.52$
Instrumental support from coworkers	9	5,267	−.14	−.17	.13	.15	[−.37, .02]	[−.28, −.07]	
Work–family conflict									
Instrumental support from supervisors	11	11,734	−.10	−.12	.08	.09	[−.24, .00]	[−.18, −.06]	$t = 2.70^{**}$
Instrumental support from coworkers	4	1,261	−.02	−.03	.06	.04	[−.07, .02]	[−.11, .05]	
Emotional exhaustion									
Instrumental support from supervisors	13	4,153	−.25	−.29	.09	.09	[−.40, −.18]	[−.34, −.23]	$t = 1.62$
Instrumental support from coworkers	8	3,085	−.19	−.22	.10	.10	[−.35, −.09]	[−.30, −.14]	
Job satisfaction									
Instrumental support from supervisors	25	15,054	.46	.57	.15	.18	[.34, .79]	[.49, .64]	$t = 3.53^{**}$
Instrumental support from coworkers	11	3,646	.31	.39	.11	.12	[.23, .54]	[.30, .47]	
Turnover intention									
Instrumental support from supervisors	15	12,194	−.23	−.28	.07	.07	[−.37, −.20]	[−.33, −.24]	$t = 9.60^{**}$
Instrumental support from coworkers	4	917	−.08	−.10	.05	.01	[−.10, −.10]	[−.16, −.03]	
Task performance									
Instrumental support from supervisors	13	3,052	.20	.24	.09	.09	[.11, .36]	[.18, .30]	$t = 4.38^{**}$
Instrumental support from coworkers	9	1,680	.09	.10	.09	.06	[.02, .18]	[.03, .17]	

Note. *k* = number of samples; *N* = total sample size; mean *r* = average weighted correlation coefficient; mean ρ = average weighted correlation coefficient corrected for unreliability in the dependent and independent variables; SD_r = standard deviation of mean *r*; SD_ρ = standard deviation of mean ρ; CrI = 80% credibility interval; CI = 95% confidence interval based around mean ρ; *t* value uses the mean corrected correlation.
** $p < .01$.

.05, and turnover intention, $t = 3.43$, $p < .01$, compared with emotional support received. No significant differences were found for work–family conflict and organizational commitment, but the patterns were in the expected direction. Across the six relationships, the average corrected correlation strength for emotional support availability with criteria was |.36|, whereas the average corrected correlation strength for emotional support received with criteria was |.26|.

Moderation effects of received versus availability scale wording on the relationship between instrumental support and criteria are

Table 6
Meta-Analyses for the Correlates of Emotional Support Comparing Received and Availability

Relationship	*k*	*N*	*r*	ρ	SD_r	SD_ρ	80% CrI	95% CI	*t* value
Role ambiguity									
Emotional support received	11	3,575	−.26	−.33	.12	.13	[−.49, −.16]	[−.41, −.24]	$t = 3.46^{**}$
Emotional support availability	4	1,129	−.39	−.47	.06	.02	[−.45, −.47]	[−.53, −.40]	
Work–family conflict									
Emotional support received	10	4,010	−.12	−.14	.13	.14	[−.33, .04]	[−.24, −.05]	$t = 0.37$
Emotional support availability	5	1,872	−.15	−.17	.15	.15	[−.36, .03]	[−.31, −.03]	
Emotional exhaustion									
Emotional support received	12	3,420	−.17	−.20	.12	.12	[−.35, −.04]	[−.27, −.12]	$t = 2.03^{*}$
Emotional support availability	7	2,462	−.24	−.28	.07	.05	[−.35, −.21]	[−.34, −.22]	
Job satisfaction									
Emotional support received	39	9,394	.32	.39	.14	.14	[.19, .59]	[.33, .45]	$t = 1.71^{*}$
Emotional support availability	10	3,659	.41	.47	.13	.13	[.30, .65]	[.38, .56]	
Organizational commitment									
Emotional support received	7	1,526	.31	.37	.14	.14	[.19, .56]	[.25, .50]	$t = 0.98$
Emotional support availability	7	2,137	.37	.43	.09	.08	[.32, .53]	[.35, .50]	
Turnover intention									
Emotional support received	11	2,023	−.09	−.11	.15	.16	[−.32, .09]	[−.22, −.01]	$t = 3.43^{**}$
Emotional support availability	6	1,909	−.27	−.31	.09	.08	[−.41, −.21]	[−.39, −.23]	

Note. *k* = number of samples; *N* = total sample size; mean *r* = average weighted correlation coefficient; mean ρ = average weighted correlation coefficient corrected for unreliability in the dependent and independent variables; SD_r = standard deviation of mean *r*; SD_ρ = standard deviation of mean ρ; CrI = 80% credibility interval; CI = 95% confidence interval based around mean ρ; *t* value uses the mean corrected correlation.
* *t* value significant at $p < .05$. ** *t* value significant at $p < .01$.

presented in Table 7. Support was found for Hypothesis 17. Instrumental support availability was more strongly related to criteria variables than instrumental support received in six of eight comparisons. Specifically, instrumental support availability was more strongly associated with role conflict, $t = 3.81$, $p < .01$, role ambiguity, $t = 3.35$, $p < .01$, role overload, $t = 2.14$, $p < .05$, work–family conflict, $t = 2.66$, $p < .01$, emotional exhaustion, $t = 2.20$, $p < .05$, and job satisfaction, $t = 6.25$, $p < .01$, compared with instrumental support received. No significant differences were found for organizational commitment and turnover intention, but patterns were in the expected direction. Across the six relationships, the average corrected correlation strength for instrumental support availability with criteria was |.37|, whereas the average corrected correlation strength for instrumental support received with criteria was |.23|.

Limitations of Study 1

Study 1 meta-analyses are limited in two ways that are addressed in the subsequent Study 2. The meta-analyses in Study 1 are comprised primarily of cross-sectional studies, which enhances the probability of common-method variance and limits our ability to make causal claims. A total of 10% of the primary studies incorporated multiple waves of data collection, but the relationships examined in these studies varied and separate meta-analyses were too small for reliable interpretation. In addition, we were unable estimate the strength of support–stressor interaction effects. Although support–stressor interaction effects are commonly tested when studying support in the workplace, the primary studies varied in the statistics reported, number of interactions tested in a single analysis, type of job demands measured, and number of control variables. These issues made an average interaction effect size uninterruptable. We aim to address both of these limitations within Study 2 by incorporating a two-wave study design and testing for interaction effects.

When testing for buffering effects of support, researchers have emphasized the importance of the specificity hypothesis (Cohen & Wills, 1985; de Jonge & Dormann, 2006). De Jonge and Dormann demonstrated that the moderation effects of support on the stressor–strain relationships were more likely when support closely matched with stressors and strains. An example of emotion-oriented job stressors is an occupation high in emotional labor demands. Emotional support is expected to moderate the effect of emotional labor demands because emotional support provides additional resources that match the resources being threatened by the job demand. For example, a worker in a high emotional labor job may vent his or her emotions to a supervisor, which enables him or her to have more energy and motivation to regulate emotions with clients. This shift in energy and perspective in the emotional labor tasks should enable the worker to perform above and beyond the job expectations and have more favorable attitudes toward his or her job. Instrumental support also has some contextual match with emotional labor demands because both variables focus on job duties. In Study 2, we test for moderation effects of support on the relationship between emotional labor demands and work criteria (i.e., job satisfaction, organizational commitment, extra-role performance).

Table 7
Meta-Analyses for the Correlates of Instrumental Support Comparing Received and Availability

Relationship	*k*	*N*	*r*	ρ	SD_r	SD_ρ	80% CrI	95% CI	*t* value
Role conflict									
Instrumental support received	6	1,538	−.10	−.12	.15	.16	[−.33, .09]	[−.27, .03]	$t = 3.81^{**}$
Instrumental support availability	5	16,3676	−.33	−.37	.02	.01	[−.39, −.36]	[−.39, −.35]	
Role ambiguity									
Instrumental support received	7	1,545	−.22	−.27	.10	.09	[−.38, −.16]	[−.36, −.18]	$t = 3.35^{**}$
Instrumental support availability	7	17,031	−.34	−.39	.03	.03	[−.43, −.35]	[−.42, −.36]	
Role overload									
Instrumental support received	6	3,506	−.16	−.19	.08	.08	[−.29, −.08]	[−.26, −.11]	$t = 2.14^{*}$
Instrumental support availability	9	3,036	−.25	−.29	.10	.10	[−.42, −.16]	[−.37, −.21]	
Work–family conflict									
Instrumental support received	9	10,559	−.08	−.09	.05	.05	[−.16, −.03]	[−.13, −.05]	$t = 2.66^{**}$
Instrumental support availability	8	2,996	−.19	−.22	.12	.13	[−.38, −.06]	[−.32, −.12]	
Emotional exhaustion									
Instrumental support received	4	843	−.11	−.12	.15	.15	[−.31, .06]	[−.29, .04]	$t = 2.20^{*}$
Instrumental support availability	10	2,984	−.26	−.29	.08	.06	[−.37, −.22]	[−.35, −.24]	
Job satisfaction									
Instrumental support received	31	5,885	.30	.36	.12	.12	[.20, .52]	[.31, .41]	$t = 6.25^{**}$
Instrumental support availability	12	12,919	.51	.60	.10	.11	[.44, .76]	[.53, .68]	
Organizational commitment									
Instrumental support received	14	3,164	.36	.42	.12	.12	[.27, .58]	[.35, .50]	$t = 0.97$
Instrumental support availability	7	2,247	.42	.48	.14	.14	[.30, .66]	[.37, .60]	
Turnover intention									
Instrumental support received	13	11,187	−.23	−.28	.09	.09	[−.39, −.16]	[−.33, −.22]	$t = 1.27$
Instrumental support availability	7	1,780	−.31	−.35	.13	.13	[−.52, −.19]	[−.46, −.25]	

Note. *k* = number of samples; *N* = total sample size; mean *r* = average weighted correlation coefficient; mean ρ = average weighted correlation coefficient corrected for unreliability in the dependent and independent variables; SD_r = standard deviation of mean *r*; SD_ρ = standard deviation of mean ρ; CrI = 80% credibility interval; CI = 95% confidence interval based around mean ρ; *t* value uses the mean corrected correlation.
* *t* value significant at $p < .05$. ** *t* value significant at $p < .01$.

Method—Study 2

Data Collection and Participants

Participants were recruited using StudyResponse (The StudyResponse Project, n.d.). The StudyResponse database consists of over 80,000 people who are willing to be participants in questionnaire-based research in an online format and has been used to recruit participants in several published studies (Bowling & Eschleman, 2010; Judge, Ilies, & Scott, 2006; Piccolo & Colquitt, 2006). In the current study, participants were compensated with up to two $5 gift cards to an online store. Compensation was provided after the completion of the questionnaire at Wave 1 and Wave 2. Data were collected in two waves separated by ~1 month in an effort to minimize the effects of common-method variance (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Emotional support and instrumental support data were collected in Wave 1, and criteria data were collected in Wave 2. Participants who had experienced a change in supervisor, position, or organization during the last 30 days were removed from the sample. In addition, we included four dummy items in each survey that instructed participants to select a specific response (e.g., "strongly disagree") in an effort to identify random or careless responding (Bowling et al., 2016). Only participants who answered all eight dummy items correctly were included in the sample. A total of 340 participants completed the surveys at both time points and provided usable data. The final sample was 50% female, 81% Caucasian, 11% Asian, 7% Hispanic. Participants held a wide variety of occupations (e.g., administration support, managerial, education), worked an average of 40 hr per week, and had an average of 8 years of job tenure.

Measures

Supervisor support. Instrumental support from one's supervisor (Ducharme & Martin, 2000) and emotional support from one's supervisor (Zellars & Perrewé, 2001) were assessed with five items each. Each item was on a 5-point scale from 1 (*never*) to 5 (*very often*). An example instrumental support item is, "my supervisor assists with unusual work problems." An example emotional support item is, "my supervisor reassures me about the actions I've taken or my feelings." All items were adapted to measure support received. The internal consistency reliabilities for the emotional support and instrumental support scales were .90 and .89, respectively.

Job attitudes. Job attitudes included job satisfaction and organizational commitment. Job satisfaction was assessed with the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins, & Klesh, 1979). The Michigan Organizational Assessment Questionnaire includes three items (e.g., "all in all I am satisfied with my current job") on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The internal consistency reliability for the Job Satisfaction scale was .89. Organizational commitment was measured using the average of six items from the Organizational Commitment Questionnaire (Porter, Steers, Mowday, & Boulian, 1974). The response options are on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). An example item is, "For me the organization where I work is the best of all possible organizations for which to work." The internal consistency reliability for the Organizational Commitment scale was .91.

Job behavior. Job behavior included extra-role performance. Extra-role performance directed toward the supervisor (Lee & Allen, 2002) was assessed with nine items. Each item was on a 5-point frequency scale from 1 (*never*) to 5 (*very often*). An example extra-role performance item is, "Assist my supervisor with his or her duties." The internal consistency reliability for the Extra-Role Performance scale was .90.

Emotional labor demands. An objective scale of emotional labor demands was obtained following the same method as Study 1. Scores were kept as a continuous variable (0–100) to align with the moderator regression analyses. Job titles were recorded in both Wave 1 and Wave 2 to enable accurate coding. The internal consistency reliability for the Emotional Labor scale was .74.

Analyses

Study 2 tested Hypotheses 1, 2, 7a, 7b, 8a, 8b, 9c, 10c, 13, and 14. A one-tailed *z* test outlined by Steiger (1980) was used to compare uncorrected correlations. The moderation effects were tested using hierarchical moderated regression (Aiken & West, 1991). Separate analyses were run for each moderation effect. The regression equation included the predictor variables (e.g., emotional support, emotional labor demands) and their respective interaction term (e.g., Emotional Support × Emotional Labor Demands). Significant moderation effects were interpreted using Aiken and West's (1991) graphing method. Graphical displays represent the predictor–criteria relationships for higher (+1 *SD*) and lower (−1 *SD*) values of the moderator.

Results—Study 2

Relationship Between Emotional Support and Instrumental Support

Descriptive statistics and correlations are presented in Table 8. Hypothesis 1 is supported by the strong, positive uncorrected correlation between emotional support and instrumental support ($r = .67$; $p < .01$).

Hypothesis 2 is supported by the significant moderation effect of emotional labor demands on the emotional support–instrumental support relationship ($\beta = .19$, $\Delta R^2 = 4\%$, $p < .01$; see Table 9). Follow-up analyses (see Figure 1) indicate that the relationship between emotional support and instrumental support was stronger among workers in occupations higher in emotional labor demands compared with lower in emotional labor demands. The simple slope for an occupation higher in emotional labor, such as a registered nurse (emotional labor demand score = 85), is 1.11, whereas the simple slope for an occupation lower in emotional labor, such as a manufacturing inspector (emotional labor demand score = 53), is 0.48.

Correlates of Emotional Support and Instrumental Support

Job attitudes. Support was found for Hypotheses 7a and 7b. Greater emotional support was associated ($p < .01$) with greater job satisfaction ($r = .38$) and greater organizational commitment ($r = .47$). Support was found for Hypotheses 8a and 8b. Greater

Table 8
Descriptive Statistics and Correlations for Study 2 Variables

Variable	*M*	*SD*	1	2	3	4	5	6
1. Emotional support from supervisor	3.08	0.96	(.89)					
2. Instrumental support from supervisor	3.06	0.95	.67**	(.89)				
3. Job satisfaction	5.43	1.51	.38**	.35**	(.89)			
4. Organizational commitment	4.88	1.45	.47**	.44**	.69**	(.91)		
5. Extra-role performance	2.89	0.93	.42**	.40**	.16**	.18**	(.92)	
6. Emotional labor demands	65.02	12.26	.08	.07	−.02	.02	.06	(.80)

Note. $N = 340$. *SD* = standard deviation across individuals and teams. Alpha reliabilities at the individual level are presented on the diagonal.
** $p < .01$.

instrumental support was associated ($p < .01$) with greater job satisfaction ($r = .35$) and greater organizational commitment ($r = .44$).

Job behaviors. Support was found for Hypotheses 9c. Greater emotional support was associated ($p < .01$) with greater extra-role performance ($r = .42$). Support was found for Hypotheses 10c. Greater instrumental support was associated ($p < .01$) with greater extra-role performance ($r = .40$).

Comparisons of correlation strength. No support was found for Hypothesis 12g. Emotional support and instrumental support did not differ in their relationships with extra-role performance ($z = 0.50$, $p > .05$). Exploratory comparisons were conducted for the relationships between support and job attitudes. Emotional support and instrumental support did not differ in relation to job satisfaction ($z = 0.74$, $p > .05$) and organizational commitment ($z = 0.52$, $p > .05$).

Buffering and Reverse Buffering Effects of Support

The moderated regression results are presented in Table 9. Support was found for Hypotheses 13 and 14, as two significant buffering effects and no reverse buffering effects were found. Specifically, the emotional support moderation effect ($\beta = .16$, $\Delta R^2 = 2\%$, $p < .01$) and instrumental support moderation effect ($\beta = .22$, $\Delta R^2 = 5\%$, $p < .01$) explained unique variance in extra-role performance. No significant moderation effects were found involving either job satisfaction or organizational commitment. Follow-up analyses (see Figure 2) indicated that both significant moderation effects had a similar pattern and were in the expected direction (buffering effect). Emotional labor demands had a stronger positive relationship with extra-role performance when either emotional support or instrumental support were higher compared with when they were lower.

Table 9
Moderation Effects of Support on Relationships Between Emotional Labor Demands and Criteria in Study 2

Criterion	Predictors	β	ΔR^2
Emotional support	Instrumental support	.65**	
	EL demands	.06	.45**
	Instrumental Support × EL Demands	.19**	.04**
Extra-role performance	EL demands	.03	
	Emotional support	.39**	.18**
	EL Demands × Emotional Support	.16**	.02**
Extra-role performance	EL demands	.06	
	Instrumental support	.38	.16**
	EL Demands × Instrumental Support	.22**	.05**
Job satisfaction	EL demands	−.06	
	Emotional support	.41**	.15**
	EL Demands × Emotional Support	−.08	.01
Job satisfaction	EL demands	−.05	
	Instrumental support	.36**	.12**
	EL Demands × Instrumental Support	−.08	.01
Organizational commitment	EL demands	−.03	
	Emotional support	.49**	.22**
	EL Demands × Emotional Support	−.08	.01
Organizational commitment	EL demands	−.02	
	Instrumental support	.46**	.20**
	EL Demands × Instrumental Support	−.05	.00

Note. $N = 340$. β = standardized regression coefficients with all mean-centered predictors included. EL demands = emotional labor demands. ΔR^2 = unique variance explained by adding the interaction term to the regression equation.
** $p < .01$.

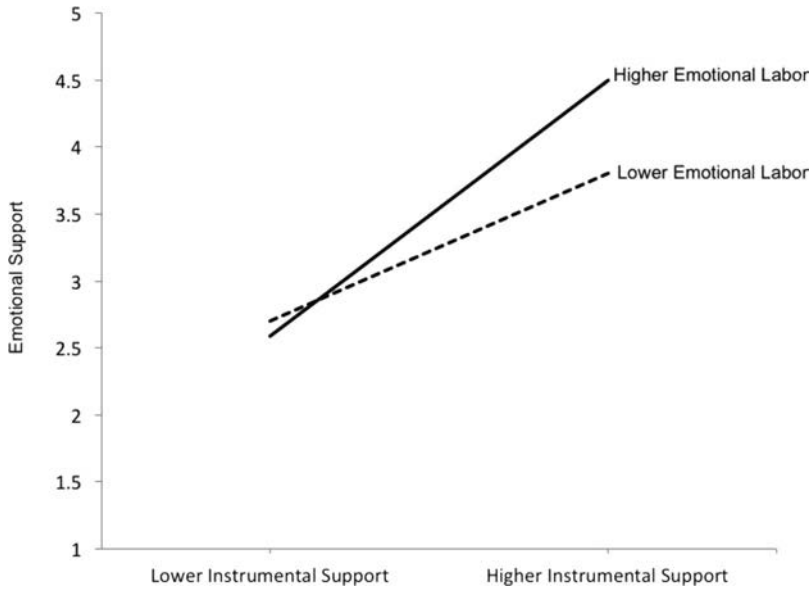

Figure 1. Moderation effect of emotional labor demands on the relationship between emotional support and instrumental support in Study 2.

Discussion

Relationship Between Emotional Support and Instrumental Support

According to COR (Hobfoll, 1989, 2002), humans strive to protect, retain, foster, and obtain resources. Through the protection of resources and accumulation of new resources, emotional support and instrumental support are expected to affect task-related criteria, health-related criteria, and job attitudes. Across two studies, we test for differences in the effects of emotional support and instrumental support to determine if the resources acquired from both types of support are different. The results of both studies indicate a strong degree of convergence between emotional support and instrumental support. The two variables are strongly interrelated and demonstrate a similar pattern of relationships with common criteria.

The strong relationship between emotional support and instrumental support may be for several reasons. For example, a coworker who helps a colleague complete a task may also be the one the colleague relies upon to discuss personal problems when they arise. Alternatively, the strong correlation is because the type of

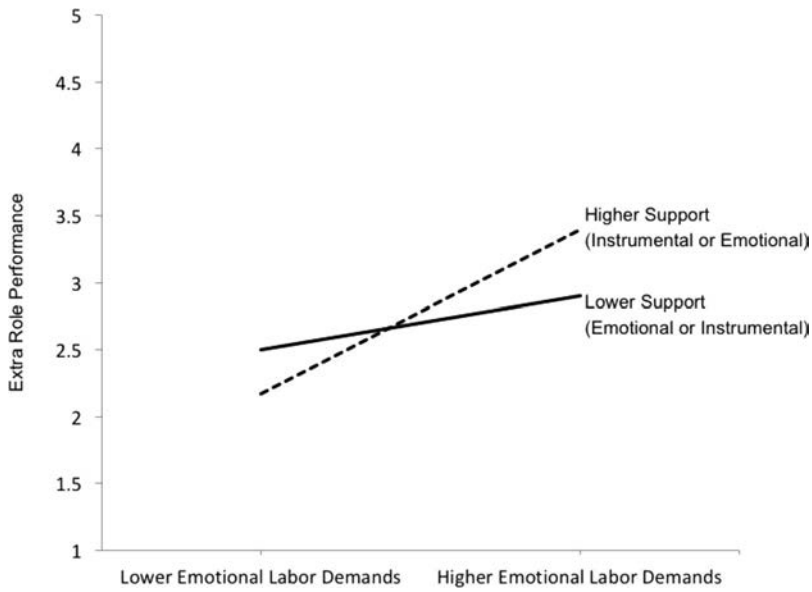

Figure 2. Moderation effects of support on the relationship between emotional labor demands and extra-role performance in Study 2.

resources gained from a supportive behavior is dependent upon how a worker perceives the event rather than the objective nature of the behavior. For example, a supervisor who listens to the personal issues of a subordinate may result in an immediate emotional boost for the subordinate, but the behavior may also be perceived as a way to improve their focus on tasks. This rationale places an emphasis on the worker's interpretation of the event and makes the support behavior itself less objectively emotional or instrumental. It is also an example of a halo bias, which can occur when a worker evaluates two similar behaviors (Balzer & Sulsky, 1992); imagine a coworker who is excellent at providing emotional support is also perceived as excellent at providing instrumental support regardless of their actual behavior.

Although emotional support and instrumental support were correlated across jobs in general, the strength of the relationship was dependent upon the type of occupation in both Studies 1 and 2. Specifically, the emotional support–instrumental support is stronger within occupations high in emotional labor demands. This finding is likely because emotional support and instrumental support are more commonly provided concurrently in high emotional labor jobs or the worker perceives both support behaviors as being both emotionally relevant and task-relevant.

Correlates of Emotional Support and Instrumental Support

The predictive validity for each type of support provides additional insight into the distinction between emotional support and instrumental support. If the two types of support are consistently perceived as distinct, then each type of support should have a distinguishable pattern of effects with criteria. Overall, both emotional support and instrumental support were correlated with stressors, strain, job attitudes, and job behaviors across both studies. Only partial support was found for our predictions that emotional support is more strongly associated with strain criteria whereas instrumental support is more strongly associated with stressors and job behaviors. A total of four of nine comparisons in Study 1 were in the expected direction. No differences in correlation strength were found in Study 2. We interpret the inconsistent findings as evidence that workers often perceive emotional support and instrumental support behaviors as providing similar or co-occurring resources. Despite the strong degree of convergence in general, the small differences in effect size for emotional support and instrumental support may be important for researchers and practitioners to consider when targeting specific outcomes.

A review of the unexpected findings provides some post hoc insight into when differences between emotional support and instrumental support may occur. For example, emotional support was more strongly related to work–family conflict than instrumental support. Although this difference in effect size was in the unexpected direction, it may be due to the multiple life domains inherent to work–life conflict. Emotional support resources may be more likely to transfer across life domains whereas instrumental support resources are more effective in the domain in which they are provided. This post hoc explanation is consistent with emotional support being a stronger predictor of physical symptoms, which was the only other nonwork criterion included in Study 1 or Study 2.

Buffering and Reverse Buffering Effects of Support

Based upon COR theory, we predicted support would moderate the relationship between emotional labor demands and work criteria. Specifically, we expected significant support moderation effects would more frequently represent a buffering effect (mitigating) rather than a reverse buffering effect (exacerbating) on the stressor–criteria relationships. A review of the studies testing support moderation effects indicated that significant moderation effects were present in the majority of studies that report the results. However, buffering effects were generally as common as reverse buffering effects of support. It is important to note that the summary of moderation effects could not account for the variety in how the moderation effects were tested. Study 2 further tested for moderation effects using an objective assessment of emotional labor demands. Consistent with the buffering hypothesis, emotional labor demands were positively associated with extra-role performance when workers perceived either higher emotional support or higher instrumental support. No significant moderation effects represented a reverse buffering effect in Study 2. Overall, the frequency and patterns of moderation effects were similar for both emotional support and instrumental support across both Studies 1 and 2. In addition, contextual factors of the relationship and job environment need to be considered when determining if support either mitigates or exacerbates the effects of job stressors on criteria.

Source of Support as a Moderator

Comparisons of source of support provided additional evidence for COR and resource spirals. Support from different sources were positively correlated, which indicates that workers who perceive support from coworkers are also likely to perceive support from supervisors. This effect may be because workers who perceive greater support from one source are more equipped to pursue additional support from other sources. Alternatively, the positive correlation may demonstrate a contagion effect of support within a workplace. That is, coworkers who observe supervisors being supportive to a worker are likely to replicate the behavior.

Moderation effects of source of support were also identified. In general, both emotional support and instrumental support had stronger relationships with criteria when the source of support was from the supervisor rather than the coworker, but the moderation effects were more consistent for instrumental support. This finding indicates that a supervisor rather than coworkers is a better source for instrumental support. Instrumental support from a supervisor, rather than a coworker, may be more effective in changing work outcomes because supervisors are often responsible for assigning job duties and evaluating job performance.

The stronger effects of support from supervisors compared with coworkers may shed light on how the various stress theories explain the effects of support in the workplace. Although support from supervisors and coworkers both provide the necessary resources to a worker so that they can perform and feel well, it may be that the additive effects of reciprocity are more relevant for support from supervisors. The norm of reciprocity (Eisenberger et al., 2001) indicates that a worker who perceives support will experience a felt obligation to reciprocate toward the organization in the form of behaviors, emotions, and commitment. Given that supervisors are the ambassadors of the organization, at least to a

greater extent than coworkers, the felt obligation experienced is likely greater when support comes from a supervisor. Similarly, support from a supervisor is believed to informally communicate the value of the worker to the organization (Bowling, Eschleman, Wang, Kirkendall, & Alarcon, 2010). This greater sense of organization-based self-esteem, in turn, affects the workers job satisfaction and turnover intentions.

The moderation findings should not be interpreted to devalue the role of coworkers. Ample research has demonstrated the value of support from coworkers (Chiaburu & Harrison, 2008). We suspect that coworkers may be more strongly associated with other criteria not available within our data, such as interpersonal team-based criteria (e.g., group cohesion). In addition, researchers have suggested that emotional support is most valuable when it is provided by someone who is characteristically similar to the recipient (Beehr, 1976). As a result, perceived similarity is likely a more consistent moderator of the effects of emotional support rather than source.

Support Received or Support Availability as a Moderator

The moderation effects of support received and support availability were tested by coding support scales as either received (no availability items) or available (at least one availability item). Both emotional support and instrumental support were more strongly correlated with criteria when scales included at least one availability item. This may be because support received is embedded within the context it occurred, which could include harmful contextual factors such as the support being unwanted (Beehr et al., 2010). Support availability removes the contextual factors by emphasizing an optional hypothetical scenario of when the worker is in need.

Implications

The overall findings demonstrate a strong convergence of emotional support and instrumental support, which has important implications for practitioners and organizations. For example, supervisors with limited resources can take comfort that their efforts to help with tasks and fill in when a worker is absent is not only helping workers complete duties, but also helping workers emotionally. In addition, convergence implies that supervisors (or any provider of support in the workplace) should tailor their supportive behaviors to fit their skills and personality rather than attempting to provide a type of support that they are uncomfortable with. Although we interpret the findings as a whole to indicate a strong convergence of emotional support and instrumental support, the individual findings may be of value to organizations targeting specific outcomes. For example, an organization interested in lower health care costs and reduced physical symptoms among their workforce, should not overlook promoting a work environment high in emotional support.

Although there was a strong convergence of emotional support and instrumental support in general, practitioners should note that the convergence is partially dependent upon the occupation requirements. Practitioners working with occupations lower in emotional labor demands are likely to see greater unique effects of both emotional support and instrumental support. As a result, workers may need distinct trainings for how to best provide each type of support if they are in low emotional labor occupations.

The moderation effects of source of support also have important implications for the role of supervisors. The findings indicate that supervisors should be the organizational member who provides instrumental support to workers rather than colleagues. Although it is not recommended that supervisors ignore the socioemotional concerns of their workers, supervisors with limited resources could focus on the instrumental support needs of workers and provide opportunities for colleagues to emotionally support each other. It is impractical to expect a supervisor to provide adequate support to all team members; promoting coworker support is likely a more efficient approach to improving work criteria.

Limitations and Future Research

Although Study 2 partially addressed limitations of cross-sectional studies within the meta-analysis and expanded upon the list of moderators tested, additional limitations should be addressed in future research. We have concerns that our targeted approach to the meta-analysis search excluded research within lesser known journals, which may have resulted in inflated effect sizes (Szucs & Ioannidis, 2017). This concern is lessened by the inclusion of unpublished theses and doctoral dissertations. Our meta-analysis search also demonstrated a limitation within the field of support research. The retrieved studies did not adequately represent all work domains. The majority of studies examined support within emotional labor occupations/industries (e.g., nurses, secretaries, customer service agents, teachers) or relied upon a convenience sampling approach. Few retrieved studies contained samples of an occupation or industry low in emotional labor. This lack of variability in occupations emphasizes the need to extend support research into occupations beyond those traditionally studied.

Summary

Drawing on COR theory (Hobfoll, 1989) and the specificity hypothesis (Cohen & Wills, 1985), we examined the extent to which emotional support and instrumental support differentially relate to stressors, strain, job attitudes, and job behaviors. Study 1 was a meta-analysis of 142 independent samples containing 68,354 participants. Study 2 compensated for the methodological shortcoming of the meta-analysis by utilizing a two-wave design and complimenting the findings of Study 1. Our analyses found that emotional and instrumental support are highly correlated, especially for job roles that are high in emotional labor. In general, emotional support and instrumental support have similar relationships with criteria. In addition to having main effect relationships with criteria, support is likely to moderate the stressor–criteria relationship. However, among the studies included in the meta-analyses, buffering effects and reverse buffering were equally common; contextual factors need to be considered when determining if support exacerbates or mitigates the effects of stressors. Moderation analyses indicate that supervisor support has a stronger influence on the criteria than does coworker support, with the effects being most consistent for instrumental support than emotional support. In addition, both emotional support and instrumental support are more strongly related to criteria when support scales

included at least one availability of support item compared with scales exclusively measuring received support.

References

References marked with an asterisk denote studies used in the meta-analysis.

References marked with a dagger denote meta-analyses used in the literature search.

Aguinis, H., Sturman, M. C., & Pierce, C. A. (2008). Comparison of three meta-analytic procedures for estimating moderating effects of categorical variables. *Organizational Research Methods, 11,* 9–34. http://dx.doi.org/10.1177/1094428106292896

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.

*Aryee, S., Chay, Y. W., & Chew, J. (1994). An investigation of the predictors and outcomes of career commitment in three career stages. *Journal of Vocational Behavior, 44,* 1–16. http://dx.doi.org/10.1006/jvbe.1994.1001

*Aryee, S., & Luk, V. (1996). Work and nonwork influences on the career satisfaction of dual-earner couples. *Journal of Vocational Behavior, 49,* 38–52. http://dx.doi.org/10.1006/jvbe.1996.0032

Bacharach, S. B., Bamberger, P., & Biron, M. (2010). Alcohol consumption and workplace absenteeism: The moderating effect of social support. *Journal of Applied Psychology, 95,* 334. http://dx.doi.org/10.1037/a0018018

*Baeriswyl, S., Krause, A., Elfering, A., & Berset, M. (2017). How workload and coworker support relate to emotional exhaustion: The mediating role of sickness presenteeism. *International Journal of Stress Management, 24,* S52–S73. http://dx.doi.org/10.1037/str0000018

*Baker, L. M., O'Brien, K. M., & Salahuddin, N. M. (2007). Are shelter workers burned out? An examination of stress, social support, and coping. *Journal of Family Violence, 22,* 465–474. http://dx.doi.org/10.1007/s10896-007-9103-1

Balzer, W. K., & Sulsky, L. M. (1992). Halo and performance appraisal research: A critical examination. *Journal of Applied Psychology, 77,* 975–985. http://dx.doi.org/10.1037/0021-9010.77.6.975

*Bamberger, P. A., Geller, D., & Doveh, E. (2017). Assisting upon entry: Helping type and approach as moderators of how role conflict affects newcomer resource drain. *Journal of Applied Psychology, 102,* 1719–1732. http://dx.doi.org/10.1037/apl0000243

Barling, J., MacEwen, K. E., & Pratt, L. I. (1988). Manipulating the type and source of social support: An experimental investigation. *Canadian Journal of Behavioural Science, 20,* 140–153. http://dx.doi.org/10.1037/h0079923

*Beehr, T. A. (1976). Perceived situational moderators of the relationship between subjective role ambiguity and role strain. *Journal of Applied Psychology, 61,* 35–40. http://dx.doi.org/10.1037/0021-9010.61.1.35

*Beehr, T. A., Bowling, N. A., & Bennett, M. M. (2010). Occupational stress and failures of social support: When helping hurts. *Journal of Occupational Health Psychology, 15,* 45–59. http://dx.doi.org/10.1037/a0018234

*Bentley, T. A., Teo, S. T. T., McLeod, L., Tan, F., Bosua, R., & Gloet, M. (2016). The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Applied Ergonomics, 52,* 207–215. http://dx.doi.org/10.1016/j.apergo.2015.07.019

*Bhanthumnavin, D. (2002). *Supervisory social support and the multi-level performance in Thai health centers* (Doctoral dissertation). Retrieved from PsycINFO (619943286; 2002–95006-074)

Bowling, N. A., & Eschleman, K. J. (2010). Employee personality as a moderator of the relationships between work stressors and counterproductive work behavior. *Journal of Occupational Health Psychology, 15,* 91–103. http://dx.doi.org/10.1037/a0017326

Bowling, N. A., Eschleman, K. J., Wang, Q., Kirkendall, C., & Alarcon, G. (2010). A meta-analysis of the predictors and consequences of organization-based self-esteem. *Journal of Occupational and Organizational Psychology, 83,* 601–626. http://dx.doi.org/10.1348/096317909X454382

Bowling, N. A., Huang, J. L., Bragg, C. B., Khazon, S., Liu, M., & Blackmore, C. E. (2016). Who cares and who is careless? Insufficient effort responding as a reflection of respondent personality. *Journal of Personality and Social Psychology, 111,* 218–229. http://dx.doi.org/10.1037/pspp0000085

*Boyd, B. (1997). *Effects of perceived professional support on teacher burnout* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 304420265)

*Bradley, J. R., & Cartwright, S. (2002). Social support, job stress, health, and job satisfaction among nurses in the United Kingdom. *International Journal of Stress Management, 9,* 163–182. http://dx.doi.org/10.1023/A:1015567731248

*Brass, D. J. (1981). Structural relationships, job characteristics, and worker satisfaction and performance. *Administrative Science Quarterly, 26,* 331–348. http://dx.doi.org/10.2307/2392511

*Brown, J. E. (2013). *Organizational and supervisor work-family support (WFS) as predictors of work-to-family facilitation and conflict* (Order No. AAI3553014). Retrieved from PsycINFO. (1499086382; 2013–99240-599)

*Burnette, C. M. (2012). *How leadership can influence well-being: The roles of leader-member exchange and social support* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 1023801464)

*Çakmak-Otluoğlu, K. Ö. (2012). Protean and boundaryless career attitudes and organizational commitment: The effects of perceived supervisor support. *Journal of Vocational Behavior, 80,* 638–646. http://dx.doi.org/10.1016/j.jvb.2012.03.001

Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). *The Michigan Organizational Assessment Questionnaire*. Unpublished manuscript, University of Michigan, Ann Arbor.

Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 1, pp. 687–732). Palo Alto, CA: Consulting Psychologists Press.

Caplan, R. D., Cobb, S., & French, J. R. (1975). *Job demands and worker health: Main effects and occupational differences* (Vol. 75). Washington, DC: Hew Publication (NIOSH) DHEW.

*Chang, E. (1999). Career commitment as a complex moderator of organizational commitment and turnover intention. *Human Relations, 52,* 1257–1278. http://dx.doi.org/10.1177/001872679905201002

*Chang, Y. (1993). *The role of social support in the context of job stress* (Doctoral dissertation). Retrieved from PsycINFO (618712842; 1995–70627-001)

*Chen, W., Wong, T., Yu, T., Lin, Y., & Cooper, C. L. (2003). Determinants of perceived occupational stress among Chinese offshore oil workers. *Work and Stress, 17,* 287–305. http://dx.doi.org/10.1080/02678370310001647302

†Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology, 93,* 1082–1103. http://dx.doi.org/10.1037/0021-9010.93.5.1082

†Chiaburu, D. S., Lorinkova, N. M., & van Dyne, L. (2013). Employees' social context and change-oriented citizenship: A meta-analysis of leader, coworker, and organizational influences. *Group and Organization Management, 38,* 291–333. http://dx.doi.org/10.1177/1059601113476736

*Chou, R. J. (2006). *Facility proprietary status, role overload, workplace support, and job satisfaction of direct care workers in assisted living*

(Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 304976619)

*Chun, J. U., Sosik, J. J., & Yun, N. Y. (2012). A longitudinal study of mentor and protégé outcomes in formal mentoring relationships. *Journal of Organizational Behavior, 33,* 1071–1094. http://dx.doi.org/10.1002/job.1781

Clark, S. C. (2001). Work cultures and work/family balance. *Journal of Vocational Behavior, 58,* 348–365. http://dx.doi.org/10.1006/jvbe.2000.1759

*Cohen, A., & Kirchmeyer, C. (1995). A multidimensional approach to the relation between organizational commitment and nonwork participation. *Journal of Vocational Behavior, 46,* 189–202. http://dx.doi.org/10.1006/jvbe.1995.1012

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98,* 310–357. http://dx.doi.org/10.1037/0033-2909.98.2.310

*Colbert, A. E., Bono, J. E., & Purvanova, R. K. (2016). Flourishing via workplace relationships: Moving beyond instrumental support. *Academy of Management Journal, 59,* 1199–1223. http://dx.doi.org/10.5465/amj.2014.0506

*Cooper, M. D. (2006). Exploratory analyses of the effects of managerial support and feedback consequences on behavioral safety maintenance. *Journal of Organizational Behavior Management, 26,* 1–41. http://dx.doi.org/10.1300/J075v26n03_01

*Cranmer, G. A., Goldman, Z. W., & Booth-Butterfield, M. (2017). The mediated relationship between received support and job satisfaction: An initial application of socialization resources theory. *Western Journal of Communication, 81,* 64–86. http://dx.doi.org/10.1080/10570314.2016.1231931

*Daniels, K., Glover, J., & Mellor, N. (2014). An experience sampling study of expressing affect, daily affective well-being, relationship quality, and perceived performance. *Journal of Occupational and Organizational Psychology, 87,* 781–805. http://dx.doi.org/10.1111/joop.12074

Deelstra, J. T., Peeters, M. C., Schaufeli, W. B., Stroebe, W., Zijlstra, F. R., & van Doornen, L. P. (2003). Receiving instrumental support at work: When help is not welcome. *Journal of Applied Psychology, 88,* 324–331. http://dx.doi.org/10.1037/0021-9010.88.2.324

de Jonge, J., & Dormann, C. (2006). Stressors, resources, and strain at work: A longitudinal test of the triple-match principle. [Correction *Journal of Applied Psychology, 92,* Jan. 2007]. *Journal of Applied Psychology, 91,* 1359–1374. http://dx.doi.org/10.1037/0021-9010.91.5.1359

Ducharme, L. J., & Martin, J. K. (2000). Unrewarding work, coworker support, and job satisfaction: A test of the buffering hypothesis. *Work and Occupations, 27,* 223–243. http://dx.doi.org/10.1177/0730888400027002005

†Eby, L. T., Allen, T. D., Hoffman, B. J., Baranik, L. E., Sauer, J. B., Baldwin, S., . . . Evans, S. C. (2013). An interdisciplinary meta-analysis of the potential antecedents, correlates, and consequences of protégé perceptions of mentoring. *Psychological Bulletin, 139,* 441–476. http://dx.doi.org/10.1037/a0029279

Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology, 86,* 42–51. http://dx.doi.org/10.1037/0021-9010.86.1.42

*Ellington, J. K., Dierdorff, E. C., & Rubin, R. S. (2014). Decelerating the diminishing returns of citizenship on task performance: The role of social context and interpersonal skill. *Journal of Applied Psychology, 99,* 748–758. http://dx.doi.org/10.1037/a0036102

*Ensher, E. A., Grant-Vallone, E., & Marelich, W. D. (2002). Effects of perceived attitudinal and demographic similarity on protégés' support and satisfaction gained from their mentoring relationships. *Journal of Applied Social Psychology, 32,* 1407–1430. http://dx.doi.org/10.1111/j.1559-1816.2002.tb01444.x

*Ensher, E. A., & Murphy, S. E. (2011). The Mentoring Relationship Challenges Scale: The impact of mentoring stage, type, and gender. *Journal of Vocational Behavior, 79,* 253–266. http://dx.doi.org/10.1016/j.jvb.2010.11.008

*Ensher, E. A., Thomas, C., & Murphy, S. E. (2001). Comparison of traditional, step-ahead, and peer mentoring on protégés' support, satisfaction, and perceptions of career success: A social exchange perspective. *Journal of Business and Psychology, 15,* 419–438. http://dx.doi.org/10.1023/A:1007870600459

*Eschleman, K. (2011). *The effects of causal attributions on subordinate responses to supervisor support* (Doctoral dissertation, Wright State University). Retrieved from https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1606&context=etd_all

*Fenlason, K. J., & Beehr, T. A. (1994). Social support and occupational stress: Effects of talking to others. *Journal of Organizational Behavior, 15,* 157–175. http://dx.doi.org/10.1002/job.4030150205

*Ferguson, M., Carlson, D., & Kacmar, K. M. (2015). Flexing work boundaries: The spillover and crossover of workplace support. *Personnel Psychology, 68,* 581–614. http://dx.doi.org/10.1111/peps.12084

Ferris, G. R., & Mitchell, T. R. (1987). The components of social influence and their importance for human resources research. *Research in Personnel and Human Resources Management, 5,* 103–128.

*Fisher, C. D. (1985). Social support and adjustment to work: A longitudinal study. *Journal of Management, 11,* 39–53. http://dx.doi.org/10.1177/014920638501100304

*Fleig-Palmer, M. (2010). *The impact of mentoring on retention through knowledge transfer, affective commitment, and trust* (Doctoral dissertation). Retrieved from PsycINFO (622205056; 2010–99010-096)

Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology, 95,* 1450–1466. http://dx.doi.org/10.1037/a0012633

Glomb, T. M., Kammeyer-Mueller, J. D., & Rotundo, M. (2004). Emotional labor demands and compensating wage differentials. *Journal of Applied Psychology, 89,* 700–714. http://dx.doi.org/10.1037/0021-9010.89.4.700

*Goldenhar, L. M., Williams, L. J., & Swanson, N. G. (2003). Modelling relationships between job stressors and injury and near-miss outcomes for construction labourers. *Work and Stress, 17,* 218–240. http://dx.doi.org/10.1080/02678370310001616144

*Greenglass, E., Fiksenbaum, L., & Burke, R. J. (1996). Components of social support, buffering effects and burnout: Implications for psychological functioning. *Anxiety, Stress, and Coping: An International Journal, 9,* 185–197. http://dx.doi.org/10.1080/10615809608249401

Greenhaus, J., & Beutell, N. (1985). Sources of conflict between work and family roles. *The Academy of Management Review, 10,* 76–88. http://dx.doi.org/10.5465/amr.1985.4277352

*Griffeth, R. W. (1985). Moderation of the effects of job enrichment by participation: A longitudinal field experiment. *Organizational Behavior and Human Decision Processes, 35,* 73–93. http://dx.doi.org/10.1016/0749-5978(85)90045-7

Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26,* 463–488. http://dx.doi.org/10.1177/014920630002600305

*Guveli, H., Anuk, D., Oflaz, S., Guveli, M. E., Yildirim, N. K., Ozkan, M., & Ozkan, S. (2015). Oncology staff: Burnout, job satisfaction and coping with stress. *Psycho-Oncology, 24,* 926–931. http://dx.doi.org/10.1002/pon.3743

*Hain, C. A. (2005). *Coworker relationships: Using a new measure to predict health related outcomes* (Doctoral dissertation, Saint Mary's University). Available from ProQuest Dissertations and Theses database. (UMI No. 305385203)

†Halbesleben, J. R. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology, 91,* 1134–1145. http://dx.doi.org/10.1037/0021-9010.91.5.1134

*Halbesleben, J. R. B., Zellars, K. L., Carlson, D. S., Perrewé, P. L., & Rotondo, D. (2010). The moderating effect of work-linked couple relationships and work-family integration on the spouse instrumental support-emotional exhaustion relationship. *Journal of Occupational Health Psychology, 15,* 371–387. http://dx.doi.org/10.1037/a0020521

*Hamilton, E. A. (2007). *Firm friends: Examining functions and outcomes of workplace friendship among law firm associates* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 304897506)

*Hammer, L. B., Kossek, E. E., Yragui, N. L., Bodner, T. E., & Hanson, G. C. (2009). Development and validation of a multidimensional measure of family supportive supervisor behaviors (FSSB). *Journal of Management, 35,* 837–856. http://dx.doi.org/10.1177/0149206308328510

*Harris, J. I., Winskowski, A. M., & Engdahl, B. E. (2007). Types of workplace social support in the prediction of job satisfaction. *The Career Development Quarterly, 56,* 150–156. http://dx.doi.org/10.1002/j.2161-0045.2007.tb00027.x

*Haynes, C. E., Wall, T. D., Bolden, R. I., Stride, C., & Rick, J. E. (1999). Measures of perceived work characteristics for health services research: Test of a measurement model and normative data. *British Journal of Health Psychology, 4,* 257–275. http://dx.doi.org/10.1348/135910799168614

*Higgins, M. C. (2000). The more, the merrier? Multiple developmental relationships and work satisfaction. *Journal of Management Development, 19,* 277–296. http://dx.doi.org/10.1108/02621710010322634

*Himle, D. P., Jayaratne, S., & Thyness, P. (1989). The effects of emotional support on burnout, work stress and mental health among Norwegian and American social workers. *Journal of Social Service Research, 13,* 27–45. http://dx.doi.org/10.1300/J079v13n01_02

*Hoang, H. (2014). *The roles of social support and job meaningfulness in the disturbing media exposure-job strain relationship* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 1545896421)

Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *American Psychologist, 44,* 513–524. http://dx.doi.org/10.1037/0003-066X.44.3.513

Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology, 6,* 307–324. http://dx.doi.org/10.1037/1089-2680.6.4.307

Hobfoll, S. E., Freedy, J., Lane, C., & Geller, P. (1990). Conservation of social resources: Social support resource theory. *Journal of Social and Personal Relationships, 7,* 465–478. http://dx.doi.org/10.1177/0265407590074004

*Hopkins, V. M. (2011). *The mediating role of work engagement and burnout in the relationship between job characteristics and psychological distress among lawyers: A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University, Albany, New Zealand* (Doctoral dissertation, Massey University). Retrieved from https://mro.massey.ac.nz/handle/10179/2771

†Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology, 92,* 1332–1356. http://dx.doi.org/10.1037/0021-9010.92.5.1332

Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings* (2nd ed.). Thousand Oaks, CA: Sage. http://dx.doi.org/10.4135/9781412985031

*Irving, P. G., & Montes, S. D. (2009). Met expectations: The effects of expected and delivered inducements on employee satisfaction. *Journal of Occupational and Organizational Psychology, 82,* 431–451. http://dx.doi.org/10.1348/096317908X312650

*Iverson, R. D., Olekalns, M., & Erwin, P. J. (1998). Affectivity, organizational stressors, and absenteeism: A causal model of burnout and its consequences. *Journal of Vocational Behavior, 52,* 1–23. http://dx.doi.org/10.1006/jvbe.1996.1556

*Jaaratne, S., & Chess, W. A. (1986). Job stress, job deficit, emotional support, and competence: Their relationship to burnout. *Journal of Applied Social Sciences, 10,* 135–155.

*Jagusztyn, N. E. (2010). *Perceived workplace discrimination as a mediator of the relationship between work environment and employee outcomes: Does minority status matter?* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 760076583)

*Jinadu, F. R. (2006). *A structural model of relationships between employee characteristics, supervisory mentoring behaviors and job satisfaction* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 304958427)

*Johnson, C. (2001). *In search of traditional and contemporary career success: What's an African American male to do?* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 276252774)

*Johnson, D. A. B. (2014). *The effects of family supportive supervisor behaviors (FSSB) on work and health related outcomes* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 1528551461)

*Jokisaari, M., & Nurmi, J. (2009). Change in newcomers' supervisor support and socialization outcomes after organizational entry. *Academy of Management Journal, 52,* 527–544. http://dx.doi.org/10.5465/amj.2009.41330971

Judge, T. A., Ilies, R., & Scott, B. A. (2006). Work–family conflict and emotions: Effects at work and at home. *Personnel Psychology, 59,* 779–814. http://dx.doi.org/10.1111/j.1744-6570.2006.00054.x

*Kahn, J. H., Schneider, K. T., Jenkins-Henkelman, T. M., & Moyle, L. L. (2006). Emotional social support and job burnout among high-school teachers: Is it all due to dispositional affectivity? *Journal of Organizational Behavior, 27,* 793–807. http://dx.doi.org/10.1002/job.397

*Karasek, R. A., Triantis, K. P., & Chaudhry, S. S. (1982). Coworker and supervisor support as moderators of associations between task characteristics and mental strain. *Journal of Occupational Behaviour, 3,* 181–200. http://dx.doi.org/10.1002/job.4030030205

*Karatepe, O. M., & Olugbade, O. A. (2017). The effects of work social support and career adaptability on career satisfaction and turnover intentions. *Journal of Management and Organization, 23,* 337–355. http://dx.doi.org/10.1017/jmo.2016.12

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110,* 265–284. http://dx.doi.org/10.1037/0033-295X.110.2.265

*Kickul, J., & Posig, M. (2001). Supervisory emotional support and burnout: An explanation of reverse buffering effects. *Journal of Managerial Issues, 13,* 328–344.

*Kidd, J. M., & Smewing, C. (2001). The role of the supervisor in career and organizational commitment. *European Journal of Work and Organizational Psychology, 10,* 25–40. http://dx.doi.org/10.1080/13594320042000016

*Kirchmeyer, C., & Cohen, A. (1999). Different strategies for managing the work/non-work interface: A test for unique pathways to work outcomes. *Work and Stress, 13,* 59–73. http://dx.doi.org/10.1080/026783799296192

†Kossek, E. E., Pichler, S., Bodner, T., & Hammer, L. B. (2011). Workplace social support and work–family conflict: A meta-analysis clarifying the influence of general and work–family-specific supervisor and organizational support. *Personnel Psychology, 64,* 289–313. http://dx.doi.org/10.1111/j.1744-6570.2011.01211.x

[*]Kowalski, K. B. (1997). *A model of the antecedents and outcomes of work-family conflict as moderated by social support* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9805239)

[*]Kraimer, M. L., Seibert, S. E., Wayne, S. J., Liden, R. C., & Bravo, J. (2011). Antecedents and outcomes of organizational support for development: The critical role of career opportunities. *Journal of Applied Psychology, 96,* 485–500. http://dx.doi.org/10.1037/a0021452

[*]Lankau, M. J., Carlson, D. S., & Nielson, T. R. (2006). The mediating influence of role stressors in the relationship between mentoring and job attitudes. *Journal of Vocational Behavior, 68,* 308–322. http://dx.doi.org/10.1016/j.jvb.2005.06.001

[*]Lankau, M. J., & Scandura, T. A. (2002). An investigation of personal learning in mentoring relationships: Content, antecedents, and consequences. *Academy of Management Journal, 45,* 779–790.

[*]Lapierre, L. M., & Allen, T. D. (2006). Work-supportive family, family-supportive supervision, use of organizational benefits, and problem-focused coping: Implications for work-family conflict and employee well-being. *Journal of Occupational Health Psychology, 11,* 169–181. http://dx.doi.org/10.1037/1076-8998.11.2.169

[*]LeBlanc, M. M. (2011). *The effects of partner aggression on women's work* (Doctoral dissertation). Retrieved from PsycINFO (884679927; 2011–99110-329)

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology, 87,* 131–142. http://dx.doi.org/10.1037/0021-9010.87.1.131

[*]Liaw, Y. J., Chi, N. W., & Chuang, A. (2010). Examining the mechanisms linking transformational leadership, employee customer orientation, and service performance: The mediating roles of perceived supervisor and coworker support. *Journal of Business and Psychology, 25,* 477–492. http://dx.doi.org/10.1007/s10869-009-9145-x

[*]Liberman, B. E. (2013). *The mediating role of family-work conflict on the relationship between family and work domain variables and employment trade-offs* (Doctoral dissertation). Retrieved from PsycINFO (1348795377; 2013–99040-239)

Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (1st ed., Vol. 1, pp. 1297–1349). Chicago, IL: Rand McNally.

[*]Lu, J. F., Siu, O. L., Spector, P. E., & Shi, K. (2009). Antecedents and outcomes of a fourfold taxonomy of work-family balance in Chinese employed parents. *Journal of Occupational Health Psychology, 14,* 182–192. http://dx.doi.org/10.1037/a0014115

[*]Lu, L., Kao, S., Cooper, C. L., Allen, T. D., Lapierre, L. M., O'Driscoll, M., . . . Spector, P. E. (2009). Work resources, work-to-family conflict, and its consequences: A Taiwanese-British cross-cultural comparison. *International Journal of Stress Management, 16,* 25–44. http://dx.doi.org/10.1037/a0013988

[†]Luchman, J. N., & González-Morales, M. G. (2013). Demands, control, and support: A meta-analytic review of work characteristics interrelationships. *Journal of Occupational Health Psychology, 18,* 37–52. http://dx.doi.org/10.1037/a0030541

[*]Madjar, N. (2008). Emotional and informational support from different sources and employee creativity. *Journal of Occupational and Organizational Psychology, 81,* 83–100. http://dx.doi.org/10.1348/096317907X202464

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour, 2,* 99–113. http://dx.doi.org/10.1002/job.4030020205

Mayo, M., Sanchez, J. I., Pastor, J. C., & Rodriguez, A. (2012). Supervisor and coworker support: A source congruence approach to buffering role conflict and physical stressors. *The International Journal of Human Resource Management, 23,* 3872–3889. http://dx.doi.org/10.1080/09585192.2012.676930

[*]McCusker, M. E. (1998). *An investigation of mentoring relationships: What factors contribute to satisfaction?* (Doctoral dissertation, California State University, San Bernardino). Retrieved from https://scholarworks.lib.csusb.edu/etd-project/1557/

Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A., & Baltes, B. B. (2011). Antecedents of work–family conflict: A meta-analytic review. *Journal of Organizational Behavior, 32,* 689–725. http://dx.doi.org/10.1002/job.695

[†]Michel, J. S., Mitchelson, J. K., Pichler, S., & Cullen, K. L. (2010). Clarifying relationships among work and family social support, stressors, and work–family conflict. *Journal of Vocational Behavior, 76,* 91–104. http://dx.doi.org/10.1016/j.jvb.2009.05.007

[*]Miller, P. M. (1983). *Non-work stress, work outcomes, social support and organizational control: An integration* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 303233337)

[*]Morales, J. (2012). *Someone who understands: The effect of support on law enforcement officers exposed to disturbing media* (Doctoral dissertation, Minnesota State University, Mankato). Available from ProQuest Dissertations and Theses database. (UMI No. 1125212531)

[*]Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology, 91,* 1321–1339. http://dx.doi.org/10.1037/0021-9010.91.6.1321

Morris, J. A., & Feldman, D. C. (1996). The dimensions, antecedents, and consequences of emotional labor. *The Academy of Management Review, 21,* 986–1010. http://dx.doi.org/10.5465/amr.1996.9704071861

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior, 14,* 224–247. http://dx.doi.org/10.1016/0001-8791(79)90072-1

[*]Murphy, L. A. (2011). *A macroergonomics approach examining the relationship between work-family conflict and employee safety* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 916925544)

[*]Murphy, S. E., & Ensher, E. A. (2001). The role of mentoring support and self-management strategies on reported career outcomes. *Journal of Career Development, 27,* 229–246. http://dx.doi.org/10.1177/089484530102700401

[*]Newman, D. A. (2004). *Is job (dis)satisfaction contagious? Simultaneous effects of social networks, task characteristics, and dispositions* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3147663)

[†]Ng, T. H., & Sorensen, K. L. (2008). Toward a further understanding of the relationships between perceptions of support and work attitudes: A meta-analysis. *Group and Organization Management, 33,* 243–268. http://dx.doi.org/10.1177/1059601107313307

[*]Nielson, T. R., Carlson, D. S., & Lankau, M. J. (2001). The supportive mentor as a means of reducing work-family conflict. *Journal of Vocational Behavior, 59,* 364–381. http://dx.doi.org/10.1006/jvbe.2001.1806

Nixon, A. E., Mazzola, J. J., Bauer, J., Krueger, J. R., & Spector, P. E. (2011). Can work make you sick? A meta-analysis of the relationships between job stressors and physical symptoms. *Work and Stress, 25,* 1–22. http://dx.doi.org/10.1080/02678373.2011.569175

[*]Odle-Dusseau, H. N., Hammer, L. B., Crain, T. L., & Bodner, T. E. (2016). The influence of family-supportive supervisor training on employee job performance and attitudes: An organizational work-family intervention. *Journal of Occupational Health Psychology, 21,* 296–308. http://dx.doi.org/10.1037/a0039961

[*]O'Driscoll, M. P., Poelmans, S., Spector, P. E., Kalliath, T., Allen, T. D., Cooper, C. L., & Sanchez, J. I. (2003). Family-responsive interventions, perceived organizational and supervisor support, work-family conflict, and psychological strain. *International Journal of Stress Management, 10,* 326–344. http://dx.doi.org/10.1037/1072-5245.10.4.326

Othman, N., & Nasurdin, A. M. (2013). Social support and work engagement: A study of Malaysian nurses. *Journal of Nursing Management, 21*, 1083–1090. http://dx.doi.org/10.1111/j.1365-2834.2012.01448.x

*Oxley, D., & Barrera, M., Jr. (1984). Undermanning theory and the workplace: Implications of setting size for job satisfaction and social support. *Environment and Behavior, 16*, 211–234. http://dx.doi.org/10.1177/0013916584162004

*Parfyonova, N. (2009). *Employee motivation, performance and well-being: The role of managerial support for autonomy, competence and relatedness needs* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 305105860)

*Peeters, M. W., Buunk, B. P., & Schaufeli, W. B. (1995). Social interactions and feelings of inferiority among correctional officers: A daily event-recording approach. *Journal of Applied Social Psychology, 25*, 1073–1089. http://dx.doi.org/10.1111/j.1559-1816.1995.tb00618.x

Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal, 49*, 327–340. http://dx.doi.org/10.5465/amj.2006.20786079

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903. http://dx.doi.org/10.1037/0021-9010.88.5.879

*Poortvliet, P. M., Anseel, F., & Theuwis, F. (2015). Mastery-approach and mastery-avoidance goals and their relation with exhaustion and engagement at work: The roles of emotional and instrumental support. *Work and Stress, 29*, 150–170. http://dx.doi.org/10.1080/02678373.2015.1031856

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology, 59*, 603–609. http://dx.doi.org/10.1037/h0037335

*Raabe, B., & Beehr, T. A. (2003). Formal mentoring, versus supervisor and coworker relationships: Differences in perceptions and impact. *Journal of Organizational Behavior, 24*, 271–293. http://dx.doi.org/10.1002/job.193

*Ray, E. B., & Miller, K. M. (1991). The influence of communication structure and social support on job stress and burnout. *Management Communication Quarterly, 4*, 506–527. http://dx.doi.org/10.1177/0893318991004004005

*Redman, T., & Snape, E. (2006). The consequences of perceived age discrimination amongst older police officers: Is social support a buffer? *British Journal of Management, 17*, 167–175. http://dx.doi.org/10.1111/j.1467-8551.2006.00492.x

*Reiber, J. U. (1998). *Personality and coping as predictors of job outcomes in the work environment* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9915744)

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15*, 150–163. http://dx.doi.org/10.2307/2391486

*Roe, R. A., Zinovieva, I. L., Dienes, E., & Ten Horn, L. A. (2000). A comparison of work motivation in Bulgaria, Hungary, and the Netherlands: Test of a model. *Applied Psychology, 49*, 658–687. http://dx.doi.org/10.1111/1464-0597.00039

*Rollins, A. L., Bond, G. R., Jones, A. M., Kukla, M., & Collins, L. A. (2011). Workplace social networks and their relationship with job outcomes and other employment characteristics for people with severe mental illness. *Journal of Vocational Rehabilitation, 35*, 243–252.

*Rousseau, D. M. (1977). Technological differences in job characteristics, employee satisfaction, and motivation: A synthesis of job design research and sociotechnical systems theory. *Organizational Behavior and Human Performance, 19*, 18–42. http://dx.doi.org/10.1016/0030-5073(77)90052-6

*Rusbasan, D. R. (2010). *Help boss, I'm stressed! Measuring types of perceived supervisor support and how they relate to subordinates' workplace stress* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 759460696)

Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: The social support questionnaire. *Journal of Personality and Social Psychology, 44*, 127–139. http://dx.doi.org/10.1037/0022-3514.44.1.127

*Sauer, J. B. (2012). *How mentoring buffers the relationship between a dissatisfying physical work environment and job satisfaction* (Doctoral dissertation, University of Georgia). Retrieved from https://getd.libs.uga.edu/pdfs/sauer_julia_b_201205_ms.pdf

Scandura, T. A. (1992). Mentorship and career mobility: An empirical investigation. *Journal of Organizational Behavior, 13*, 169–174. http://dx.doi.org/10.1002/job.4030130206

*Schat, A. C., & Kelloway, E. K. (2003). Reducing the adverse consequences of workplace aggression and violence: The buffering effects of organizational support. *Journal of Occupational Health Psychology, 8*, 110–122. http://dx.doi.org/10.1037/1076-8998.8.2.110

*Seiger, C. P., & Wiese, B. S. (2009). Social support from work and family domains as an antecedent or moderator of work–family conflicts? *Journal of Vocational Behavior, 75*, 26–37. http://dx.doi.org/10.1016/j.jvb.2009.03.001

Semmer, N. K., Elfering, A., Jacobshagen, N., Perrot, T., Beehr, T. A., & Boos, N. (2008). The emotional meaning of instrumental social support. *International Journal of Stress Management, 15*, 235–251. http://dx.doi.org/10.1037/1072-5245.15.3.235

*Shirom, A. (1976). On some correlates of combat performance. *Administrative Science Quarterly, 21*, 419–432. http://dx.doi.org/10.2307/2391852

*Shockley, K. M., & Allen, T. D. (2015). Deciding between work and family: An episodic approach. *Personnel Psychology, 68*, 283–318. http://dx.doi.org/10.1111/peps.12077

*Spooner-Lane, R. (2004). *The influence of work stress and work support on burnout in public hospital nurses* (Doctoral dissertation, Queensland University of Technology). Retrieved from https://eprints.qut.edu.au/15975/

Steiger, J. H. (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin, 87*, 245–251. http://dx.doi.org/10.1037/0033-2909.87.2.245

*Stelzner, S. P. (1989). *Job stress and job strain: Examining the role of social support* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 303793943)

*Susskind, A. M., Kacmar, K. M., & Borchgrevink, C. P. (2007). How organizational standards and coworker support improve restaurant service. *Cornell Hotel and Restaurant Administration Quarterly, 48*, 370–379. http://dx.doi.org/10.1177/0010880407300158

Szucs, D., & Ioannidis, J. P. (2017). Empirical assessment of published effect sizes and power in the recent cognitive neuroscience and psychology literature. *PLoS Biology, 15*, e2000797. http://dx.doi.org/10.1371/journal.pbio.2000797

*Taylor, J. M., & Neimeyer, G. J. (2009). Graduate school mentoring in clinical, counselling, and experimental academic training programs: An exploratory study. *Counselling Psychology Quarterly, 22*, 257–266. http://dx.doi.org/10.1080/09515070903157289

*ten Brummelhuis, L. L., Oosterwaal, A., & Bakker, A. B. (2012). Managing family demands in teams: The role of social support at work. *Group and Organization Management, 37*, 376–403. http://dx.doi.org/10.1177/1059601111435410

*Tenenbaum, H. R., Crosby, F. J., & Gliner, M. D. (2001). Mentoring relationships in graduate school. *Journal of Vocational Behavior, 59*, 326–341. http://dx.doi.org/10.1006/jvbe.2001.1804

*Tews, M. J., Michel, J. W., & Ellingson, J. E. (2013). The impact of coworker support on employee turnover in the hospitality industry.

Group and Organization Management, 38, 630–653. http://dx.doi.org/10.1177/1059601113503039

Thoits, P. A. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. *Journal of Health and Social Behavior, 23,* 145–159. http://dx.doi.org/10.2307/2136511

*Thomas, D. A. (1990). The impact of race on managers' experiences of developmental relationships (mentoring and sponsorship): An intra-organizational study. *Journal of Organizational Behavior, 11,* 479–492. http://dx.doi.org/10.1002/job.4030110608

*Thompson, C. A., Jahn, E. W., Kopelman, R. E., & Prottas, D. J. (2004). Perceived organizational family support: A longitudinal and multilevel analysis. *Journal of Managerial Issues, 16,* 545–565.

*Tucker, M. K., Jimmieson, N. L., & Bordia, P. (2018). Supervisor support as a double-edged sword: Supervisor emotion management accounts for the buffering and reverse-buffering effects of supervisor support. *International Journal of Stress Management, 25,* 14–34. http://dx.doi.org/10.1037/str0000046

*Valcour, M., Ollier-Malaterre, A., Matz-Costa, C., Pitt-Catsouphes, M., & Brown, M. (2011). Influences on employee perceptions of organizational work–life support: Signals and resources. *Journal of Vocational Behavior, 79,* 588–595. http://dx.doi.org/10.1016/j.jvb.2011.02.002

*Van Yperen, N. W., & Hagedoorn, M. (2003). Do high job demands increase intrinsic motivation or fatigue or both? The role of job control and job social support. *Academy of Management Journal, 46,* 339–348.

†Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior, 54,* 314–334. http://dx.doi.org/10.1006/jvbe.1998.1661

*Wallace, J. (2005). Job stress, depression and work-to-family conflict: A test of the strain and buffer hypotheses. *Industrial Relations, 60,* 510–539. http://dx.doi.org/10.7202/012157ar

*Wanberg, C. R., Kammeyer-Mueller, J., & Marchese, M. (2006). Mentor and protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behavior, 69,* 410–423. http://dx.doi.org/10.1016/j.jvb.2006.05.010

*Waters, L. (2004). Protege–mentor agreement about the provision of psychosocial support: The mentoring relationship, personality, and workload. *Journal of Vocational Behavior, 65,* 519–532. http://dx.doi.org/10.1016/j.jvb.2003.10.004

*Weng, R. H., Huang, C. Y., Tsai, W. C., Chang, L. Y., Lin, S. E., & Lee, M. Y. (2010). Exploring the impact of mentoring functions on job satisfaction and organizational commitment of new staff nurses. *BMC Health Services Research, 10,* 240–249. http://dx.doi.org/10.1186/1472-6963-10-240

*Xu, S., Van Hoof, H., Serrano, A. L., Fernandez, L., & Ullauri, N. (2017). The role of coworker support in the relationship between moral efficacy and voice behavior: The case of hospitality students in Ecuador. *Journal of Human Resources in Hospitality and Tourism, 16,* 252–269. http://dx.doi.org/10.1080/15332845.2017.1253431

*Yip, J. K. L. (2015). *Lonely at the top? How organizational position shapes the developmental networks of top executives* (Doctoral dissertation, Boston University). Available from ProQuest Dissertations and Theses database. (UMI No. 1666860762)

*Youngcourt, S. S. (2005). *Examination of supervisor assessments of employee work-life conflict, supervisor support, and subsequent outcomes* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 305380562)

*Zellars, K. L. (1998). *Vulnerable to job burnout: The influence of personality, social support, role stressors, and moods* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9839781)

Zellars, K. L., & Perrewé, P. L. (2001). Affective personality and the content of emotional social support: Coping in organizations. *Journal of Applied Psychology, 86,* 459–467. http://dx.doi.org/10.1037/0021-9010.86.3.459

Appendix

Journals Searched as Part of the Literature Search

Academy of Management Journal
Administrative Science Quarterly
European Journal of Work and Organizational Psychology
Group and Organization Management
Human Performance
Human Relations
International Journal of Selection and Assessment
International Journal of Stress Management
Journal of Applied Psychology
Journal of Applied Social Psychology
Journal of Business and Psychology
Journal of Health Psychology
Journal of Management
Journal of Occupational and Organizational Psychology
Journal of Occupational Health Psychology
Journal of Organizational Behavior
Journal of Organizational Behavior Management
Journal of Personality and Social Psychology
Journal of Vocational Behavior
Organizational Behavior and Human Decision Processes
Personnel Psychology
Psychological Bulletin
Scandinavian Journal of Work, Environment and Health
Work & Stress

Received January 2, 2018
Revision received August 6, 2018
Accepted August 8, 2018 ■