

# Supportive Supervisor Training Improves Family Relationships Among Employee and Spouse Dyads

Jacquelyn M. Brady

San José State University and Oregon Health & Science  
University

Leslie B. Hammer

Portland State University and Oregon Health & Science  
University

Cynthia D. Mohr and Todd E. Bodner

Portland State University


Employee family relationships have been increasingly tied to job outcomes and are known to be a strong predictor of employee health and well-being. As such, taking steps toward uncovering actionable tools organizations can implement to foster improvements in family relationship quality is important and should not be overlooked in occupational health psychology interventions. Supportive supervisor training (SST) targets improving employees' ability to meet their nonwork needs; however, the focus and discussions of the implications tied to SST have largely excluded marital and parent–child relationships, spouses, and spousal outcomes. Further, mounting evidence suggests contextual factors shape when SST is most meaningful; however, more research is needed to uncover individual-level factors that may facilitate training effects. This study used a cluster-randomized controlled trial design to evaluate a worksite-based SST with a sample of 250 employees (separated military veterans) and their matched spouses. Using an intent-to-treat approach and 2-level random effects models, results demonstrated that the SST promoted couples' dyadic marital relationship quality 9 months following baseline. Additionally, when employees were under higher levels of baseline stress, couples' dyadic marital relationship quality and positive parenting both improved following the SST. Thus, an SST is beneficial for family relationships as reported by both employees and spouses, which goes beyond previously demonstrated employee health and well-being benefits.

**Keywords:** supportive supervisor training, family relationships quality, dyadic marital relationship, employee stress, worksite interventions

There is mounting evidence that worksite-based supportive supervisor training (SST), which focuses on providing supervisors with tools to support employees in their work and nonwork lives, can have positive effects on employee well-being across domains (e.g., reductions in turnover intentions and functional impairment, and improvements in sleep and physical and psychological health;

Hammer, Brady, & Perry, 2020; Hammer, Kossek, Anger, Bodner, & Zimmerman, 2011; Hammer, Wan, Brockwood, Bodner, & Mohr, 2019). However, despite the focus of SST on improving employees' abilities to effectively meet their work *and* family needs, outcomes have almost exclusively focused on employee work and well-being outcomes, and in some cases their children's

This article was published Online First October 29, 2020.

 Jacquelyn M. Brady, Department of Psychology, San José State University, and Oregon Institute of Occupational Health Sciences, Oregon Health & Science University; Leslie B. Hammer, Department of Psychology, Portland State University, and Oregon Institute of Occupational Health Sciences, Oregon Health & Science University; Cynthia D. Mohr and Todd E. Bodner, Department of Psychology, Portland State University.

The U.S. Army Medical Research Acquisition Activity, 820 Chandler Street, Fort Detrick, Maryland 21702-5014, is the awarding and administering acquisition office. This work was supported by the Office of the Assistant Secretary of Defense for Health Affairs, through the United States Army Medical Research and Development Command (USAMRMC) Broad Agency Announcement under Award W81XWH13-2-0020. Opinions, interpretations, conclusions, and recommendations are those of the authors and are not necessarily endorsed by the Department of Defense. Portions of this research were supported by the Grant T03OH008435

awarded to Portland State University, funded by the Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, or U.S. Department of Health and Human Services (HHS).

This work was also partly supported by the Oregon Institute of Occupational Health Sciences at Oregon Health & Science University via funds from the Division of Consumer and Business Services of the State of Oregon (ORS 656.630).

Previous versions of this article, including the data and some of the ideas discussed, were presented at the 2017 Society for Industrial and Organizational Psychology annual conference in Orlando, Florida, and as part of a dissertation.

Correspondence concerning this article should be addressed to Jacquelyn M. Brady, Department of Psychology, San José State University, One Washington Square, San José, CA 95192. E-mail: [jacquelyn.brady@sjsu.edu](mailto:jacquelyn.brady@sjsu.edu)

well-being (e.g., time spent with children, children's affective well-being, and children's sleep; Davis et al., 2015; Lawson, Davis, McHale, Hammer, & Buxton, 2014; McHale et al., 2015), but have largely ignored spouses and marital and family relationships. The exclusion of family relationships and spousal outcomes are surprising in light of meta-analytic evidence indicating that social relationships are a leading indicator of disease and mortality (Holt-Lunstad, Smith, & Layton, 2010), marital relationships are critical for health and well-being (for review see, Umberson & Montez, 2010), and spouses are increasingly recognized as shapers of employee work outcomes (e.g., absenteeism; Carlson, Thompson, & Kacmar, 2019). Given the tremendous importance of such family relationships for health and well-being, and the clear link between work and family life, it is vital to uncover whether an SST can influence marital and family relationships.

Using an SST framework and an employee and matched spouse sample, the current study seeks to advance knowledge in several areas. First, the current study extends the effects of an SST to critical home domain outcomes, marital and parental relationship quality, and dyadic (i.e., employee and spouse reports) outcomes. SST has yet to be extended to the most critical social relationships an individual has, their spousal and parent-child relationships, rendering this a significant advancement in the SST literature. Second, as efforts to implement worksite-based SST have increased, the moderating conditions that highlight when such interventions are most useful have not been fully elucidated. This study fills that gap by demonstrating pronounced beneficial effects of an SST on family relationship quality, including both marital relationship quality and positive parenting under conditions of high employee stress. This approach helps to clarify the individual-level moderating conditions that promote training effectiveness. Finally, military veterans and their spouses represent a unique underserved population in workplace literature (Colella, Hebl, & King, 2017). Taken together, these contributions fill important gaps in the existing literature, thereby elucidating the efficacy of an SST in terms of for whom, what outcomes, and under what conditions, training is most effective (see Figure 1).

### Theoretical Background of Supportive Supervisor Trainings

Social support theory (Cohen & Wills, 1985) suggests that positive social relationships and social support can affect well-being through multiple direct and indirect pathways (Cohen &

Wills, 1985; House, 1981). For instance, positive social relationships can promote healthy behaviors, affect physiological processes, reduce stress through the provision of social support, and buffer against poor outcomes associated with stress (for a review, see Umberson, Crosnoe, & Reczek, 2010). Workplace social relationships and support are also important (Cohen & Wills, 1985), explaining why workplace social support is central to many theories of employee resources, stress, and well-being (e.g., conservation of resources theory; Hobfoll, 1989; demand-control-support model; Johnson & Hall, 1988; Van der Doef, & Maes, 1999). Within the work-place context, supervisor support is thought to be critical because it shapes perceptions of organizational support (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002) and because supervisors are often capable of providing employees with essential resources (Kelloway & Barling, 2010). For example, supervisors can provide emotional support, connect employees to instrumental resources (e.g., raises, time off, employee assistance programs), and signal important information about the supportiveness of the workplace culture. Importantly, increases in social support do not necessarily need to be perceived for the support to benefit employees. Some social support research (Bolger & Amarel, 2007; Bolger, Zuckerman, & Kessler, 2000) has suggested support occurring outside the recipient's conscious awareness or that is subtle enough to not be identified as social support can be more beneficial than visible or overtly perceived support (Bolger et al., 2000). Thus, even small changes in support can be beneficial.

In line with the critical role that supervisors play in shaping the workplace and social support theory, several studies examining work-site based SST have demonstrated effectiveness in promoting employee well-being across work and nonwork domains. For example, previous SST studies have been linked to improved employee job outcomes, reductions in work-family conflict, and improved sleep, particularly when contextual factors are considered (Crain et al., 2014; Crain & Stevens, 2018; Hammer et al., 2011, 2016; Kossek, Pichler, Bodner, & Hammer, 2011; O'Driscoll et al., 2003). Several reviews have indicated there are additional beneficial effects resulting from such training (e.g., organizational citizenship behaviors and safety; Hammer et al., 2016; Kossek, Odle-Dusseau, & Hammer, 2018), which have the potential to further bolster positive employee outcomes. From a practical standpoint, an SST may also be promoted because it can involve training a relatively smaller group of supervisors within an organization, while having positive effects for a larger number of employees, and altering aspects of the work culture (e.g., supervisor attitudes; Hammer et al., 2019) that allow for a more supportive environment. Consistent with this perspective, reviews have indicated there are additional beneficial effects resulting from such training (e.g., organizational citizenship behaviors and safety; Hammer et al., 2016; Kossek et al., 2018), which have the potential to further bolster positive employee outcomes because they change psychosocial aspects of the workplace and can therefore reduce stress and increase support.

### Foundation of the Current Training

Earlier SST studies, which serve as the foundation for the current SST, have focused on promoting family supportive supervisor behaviors (FSSB; Hammer et al., 2011; Hammer, Kossek, Yragui, Bodner, & Hanson, 2009), and have therefore been called

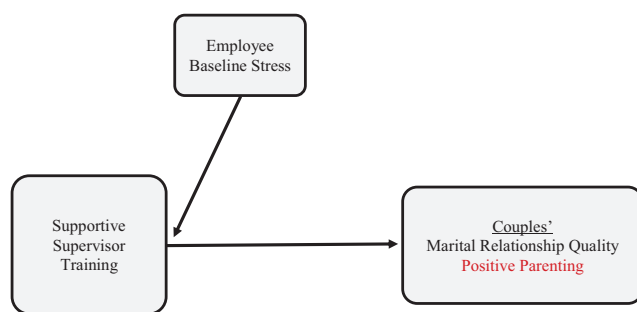


Figure 1. Study conceptual model. See the online article for the color version of this figure.

family supportive supervisor training (FSST). FSSB is composed of behaviors that supervisors can engage in to support employees' work and nonwork life and are made up of four overarching dimensions. These dimensions include emotional support (e.g., empathizing with employees struggling to meet their nonwork or life needs), instrumental support (e.g., directing employees to organizational resources, or giving employees time off), role-modeling healthy work-life behaviors (e.g., taking a day off to meet life needs and sharing this with employees), and creative win-win management strategies (e.g., employing solutions that serve both employee and organization needs; Hammer et al., 2009). FSST research has largely focused on highlighting the importance of work-family support by training skills that are aligned with the four dimensions of FSSB. FSST includes providing real-world examples of each type of support as they relate to employee work-family lives, and promotes employee well-being, safety behaviors, and other positive employee outcomes (Hammer et al., 2011, 2016), while also meeting Kirkpatrick's (1994) training effectiveness criteria (e.g., reactions, learning, behaviors, and results; Hammer et al., 2011).

### Current Supportive Supervisor Training

Although the first versions of worksite SST were focused on meeting work-family needs (Hammer et al., 2011), the present SST was designed to have broader implications for the workplace by focusing not only on family-specific support, but general employee nonwork support (e.g., general life demands) and military veteran-specific support. Mounting evidence suggests that although the majority of veterans integrate successfully to civilian life, integration into the civilian workforce presents one of the larger challenges. For instance, in a qualitative study of veteran postservice employment experiences, Keeling, Kintzle, and Castro (2018) found that reintegration is challenging due to a variety of organizational and individual barriers (e.g., negative support experiences, perceived discrimination, and difficulty adjusting to working with civilians). Further, attending to the family support needs of veterans may be particularly important, as these relationships can foster improved aspects of well-being (e.g., reduced posttraumatic stress disorder; Romero, Riggs, & Ruggero, 2015; veteran and spouse sleep; Arpin, Starkey, Mohr, Greenhalgh, & Hammer, 2018). Additionally, building positive marital relationships may be particularly important for veterans who are, or have recently, transitioned back into the workplace given their and their families' particular needs and sensitivities related to such transitions (Hammer, Wan, Brockwood, Mohr, & Carlson, 2017; Wan, Haverly, & Hammer, 2018). However certain risk factors of military service may create difficulty maintaining these family relationships (e.g., posttraumatic stress disorder; Ray & Vanstone, 2009).

The current worksite training was designed to help address such veteran-specific challenges, including those still serving in the National Guard, and was therefore titled the Veteran Supportive Supervisor Training (VSST; for general baseline sample descriptive statistics, see Hammer et al., 2017). The training includes the support components of the FSST (emotional support, instrumental support, role-modeling, and creative win-win management), includes a module on understanding military culture and specific support needs of veterans, and also includes additional types of

support geared toward employee performance management. The performance support skills were measurement and direction (e.g., behaviors that let employees and veterans know what is expected), feedback and coaching (e.g., guiding communication that supports veterans and employees in knowing how to do what is expected), providing resources (e.g., providing materials necessary to do what is expected), and health protection (e.g., removing or reducing physical and psychological hazards from the workplace). Thus, there were eight types of support skills included in the training.

In addition to the four new components, training examples matched to the eight overall components were also appended to include general and veteran-specific support behaviors. For instance, family emotional support was defined more broadly in this training as "what you do to help employees and veterans feel listened to, and to show that you know and understand their family and personal demands." Examples for this included traditional family support, and veteran-specific support (e.g., expressing appreciation for military service and other forms of employee service outside of work, or asking how a service member or employee prefers to communicate). As another addition, examples of instrumental support included not only instrumental family support, but military specific instrumental support (e.g., finding coverage for employees on drill weekends, or asking about military commitments in advance; additional information about the training is provided in the Methods section). The inclusion of the general and veteran-specific components are critical because previous research has shown that the type of support provided is most effective when it is tied to employee needs (Kossek et al., 2011), and the goal of this study was to provide support to employees, particularly veterans, who have potentially diverse sets of needs. Overall, the current worksite training emphasizes a broad approach to improving veteran and spouse outcomes, and therefore we anticipate the intervention to work through different pathways for different supervisors, organizations, couples, and individuals.

### Family Relationships

#### Marital Relationships

Marital relationships are investigated as a key outcome of the present SST due to their social support and stress-reducing potential (Cohen, 2004), as well as the link between marital quality and lower blood pressure, decreased stress and depression, and higher life satisfaction (Holt-Lunstad, Birmingham, & Jones, 2008). Further, given that social support buffers against stressful experiences, and that service members and reintegrating veterans may be at greater risk for exposure to stressful experiences, we consider family relationships particularly critical for this population. Before overviewing how an SST may influence marital relationship quality, it is important to describe how marital relationships are defined and conceptualized. *Marital relationship quality* refers to how spouses feel about the state of their marriage, and although marital quality is linked to marital success (e.g., not divorcing), success and quality are not the same (Glenn, 1990). Given that long-term relationship quality is complex, researchers have argued that it is best understood as a process (Bradbury, Fincham, & Beach, 2000; Spanier, 1976), for instance how couples interact. However, there are a number of key factors that play into one's marital relationship

quality. For instance, marital relationship quality tends to decline over time (Amato & James, 2018). However, Bradbury and colleagues (2000) identified six important relational themes including affect, partner attributions of negative behavior, and social support that can reduce these effects. This suggests that the development of high quality marital relationships occurs through multiple pathways and is likely unique for each dyadic couple based on social, economic, workplace, and interpersonal factors surrounding their relationship.

### Positive Parenting

Given our interest and focus on marital and family relationships, we were also interested in couples' parent-child relationships. The parenting role and satisfaction (for those who are partnered) are embedded within the larger context of marital quality (Bradbury et al., 2000). Longitudinal studies show clear interdependencies between marriage and parenting domains over time, also in relation to work hours (Keizer & Schenk, 2012). Thus, aspects of parent-child relationships and interactions are critical when considering family health, well-being, and flourishing (Becvar & Becvar, 2017; Newland, 2015). Furthermore, parenting affects brain development, which can have profound effects on children throughout their lives (Belsky & de Haan, 2011).

Positive parenting is an approach to parenting that is thought to build positive parent-child relationships and support children's growth. Although definitions in the literature vary, for the purposes of the current study *positive parenting* can be thought of as parents' supportive interactions with their child. Although negative interactions and parenting strategies (e.g., inconsistent discipline and harsh punishment) lead to higher levels of behavioral problems and externalizing problems in children (Dadds, 1995), behaviorally and emotionally affectionate interactions help children thrive in terms of the emotional and cognitive well-being (Dodici, Draper, & Peterson, 2003; Newland, 2015), and the effects can last into adulthood (e.g., warm positive interactions foster long-term child flourishing and improved mental health of children in early adulthood; Chen, Haines, Charlton, & VanderWeele, 2019; Chen, Kubzansky, & VanderWeele, 2019). Furthermore, work-family dynamics can affect intrafamily relationships, including relationships with children. For example, Vieira, Matias, Lopez, and Matos (2016) demonstrated couples' dyadic relationships between work-family conflict (WFC) and work-family enrichment (WFE) affects parenting, which has important effects on children, and Matias et al. (2017) found recipients of workplace support and their partners may have improved parental experiences and reductions in WFC.

### VSST and Family Relationships

The notion that work influences one's home life and vice versa is well established (Bolger, DeLongis, Kessler, & Wethington, 1989; Sandberg, Yorgason, Miller, & Hill, 2012; Story & Repetti, 2006), and work can influence relationships via multiple pathways. For example, work stress can indirectly influence relationship quality (Bakker, Demerouti, & Burke, 2009), and can lead to behaviors directed toward both spouse and child family members (e.g., spousal support; Bakker & Demerouti, 2013; withdrawal and anger from spouses and chil-

dren; Repetti, 1989; Repetti & Wood, 1997; Story & Repetti, 2006). Factors originating from work can also crossover to partners (e.g., WFC; Hammer, Allen, & Grigsby, 1997), via multiple potential crossover pathways including direct (via empathy), indirect (mediating mechanisms such as interactions), or spurious (shared environmental stressors or resources) processes (Westman, 2001). Chen, Westman, and Hobfoll (2015) elaborated on crossover and suggested that not only can positive emotions crossover, but positive resources can also lead to dyadic resource gains through the same crossover mechanisms (e.g., direct, indirect, and spurious). Taken together, the literature indicates that social factors, and the workplace in particular, play an important role in marital and family relationships, and that the effects of work on marital relationships may occur through numerous avenues.

Consistent with social support frameworks, organizational resources such as supervisor support are widely accepted as beneficial to employees and their relationships. For instance, supervisor support has been shown to have significant positive relationships with employee work, family, and work-family outcomes such as WFC and work-family cross-domain positive spillover (Hammer et al., 2009). In regard to SST and the VSST in particular, the different support dimensions could promote marital relationship quality and parenting in many ways. Providing emotional support, for example, could lead to changes in positive mood crossover and/or positive interactions with spouses or children, whereas providing time off (instrumental support) may reduce the negative consequences of stress or shared stressors on family relationships. Additionally, time off might increase opportunities for positive interactions, which is consistent with work from Davis et al. (2015) suggesting that a supportive worksite training increases time spent with children. Thus, improving one's work context, may then allow for more of the types of behaviors and factors that are considered critical for marital and parent-child relationships as described above (Bradbury et al., 2000), and is consistent with perspectives on social support (Taylor, 2011), as well as positive spillover, and crossover perspectives (e.g., effects that crossover from one person to another; Chen et al., 2015; Westman, 2001). Given the efficacy of an SST, modifications implemented in the VSST that should improve marital relationships and parenting, the background for how high quality marital relationships develop, and previous evidence that trainings may promote improvements in time spent with children, we posit that the VSST will have a positive influence on marital relationship quality and parenting for employees and spouses alike. We note that the VSST is likely to produce changes via multiple processes, however in this study we focus on changes in family relationships, and for whom the VSST is most effective, whereas future research should clarify the underlying processes between support at work, training, and observed outcomes.

*Hypothesis 1:* The VSST will improve employee and spouse marital relationship quality.

*Hypothesis 2:* The VSST will improve employee and spouse positive parenting.



### Stress as a Moderator of Training Effectiveness

Stress is largely understood as encompassing multiple phenomena and variables. For the purpose of the current study, stress can be defined as the psychological reaction that results from the perceptions of having demands (stressors) that exceed one's adaptive capacity (Cohen, Janicki-Deverts, & Miller, 2007; Cohen, Kessler, & Gordon, 1995), or the psychological, behavioral, or physiological outcomes resulting from stressors (Bliese, Edwards, & Sonnentag, 2017), and are not limited to the workplace. There is a large body of evidence suggesting that stress also negatively affects family relationships (e.g., marital relationship quality; Randall & Bodenmann, 2009). Stress can undermine relationships by deteriorating communication skills (Bodenmann, Ledermann, & Bradbury, 2007). As Randall and Bodenmann (2009) noted, researchers generally agree with the view that the stress of one partner in a marital relationship is considered to affect the other, and that stress has detrimental effects on marital relationship quality. In regards to parent-child interactions, research has demonstrated that stress is linked to lower levels of positive parenting (Respler-Herman, Mowder, Yasik, & Shamah, 2012) and work stress is associated with negative parent-child and spousal interactions such as anger (Repetti, 1994; Story & Repetti, 2006), or lack of interactions, such as withdrawal (Repetti & Wood, 1997).

In regard to the potential interaction effects of stress, previous research has demonstrated that those with higher levels of work-family conflict benefitted from SST, whereas those with lower levels did not (Hammer et al., 2011), suggesting that those with higher need may benefit more. Indeed, stressed individuals tend to respond to both positive and negative environmental changes in a more pronounced way (Belsky & Pluess, 2009). Thus, when feeling high levels of stress, having one's supervisor trained to support their work and nonwork needs, may prove particularly valuable, whereas for those with low levels of stress, such trainings may be less beneficial for both members of the marital dyad. Given the heightened response to environmental changes (both positive and negative) by individuals under high levels of stress, it is hypothesized that training supervisors to be more supportive of employees in the workplace will lead to greater improvement in marital relationship quality for couples in which the focal employee has higher levels stress prior to the VSST being implemented. In other words, the VSST will be more effective for couples when the veteran employee has high baseline stress.

*Hypothesis 3:* The effects of the VSST on employee and spouse marital relationship quality will be moderated by stress such that the VSST will improve marital relationship quality under conditions of higher baseline employee stress.

*Hypothesis 4:* The effects of the VSST on employee and spouse parent-child relationship quality will be moderated by stress such that the VSST will improve parent-child relationship quality under conditions of higher baseline employee stress.

### Method

The current study uses data from a cluster randomized controlled trial (RCT) of a supportive supervisor training funded by the Department of Defense. Institutional review board approval

was obtained from Portland State University as the primary oversight of the study "Development and Validation of the Veteran Supportive Supervisor Behavior Training Program (SERVe Project)," protocol number 122364. For a detailed description of the baseline characteristics of study participants, see Hammer et al., 2017, and see Hammer et al., 2019, for a detailed description of the training design that examined the effects on employees impairment (not spouses or couples), although both are presented here with some brevity. All protocols and methods were approved by independent review boards for the institutions involved in the study.

### Recruitment

Organizations ( $N = 35$ ) were recruited to participate in the study to evaluate the effectiveness of a supervisor training designed to increase support for employees who have, or are, transitioning into the civilian workforce, as well as employees more generally. Organizations ranged in terms of size from  $min = 50$  to  $max = 17,000$  ( $M = 2,089.60$ ,  $SD = 3,206.47$ ), with 97% ( $N = 34$ ) of organizations employing 7,500 or fewer employees. Organization recruitment took place through numerous outlets, including but not limited to veteran employment events, contacting industries known to have a higher proportion of veteran employees (e.g., first responders, security firms), and contact with the State Senate committee for Veterans' Affairs Representatives. Seven additional organizations participated, but were not randomized because they did not have any participating employees ( $m = 6$ ) or any participating supervisors ( $m = 1$ ). Participating organizations were representative of a broad range of industries including those such as technology, service, health care, security, government, and transportation.

Following organization recruitment two e-mails were sent to employees within the organizations. The first was an e-mail announcing the organization's participation in the study and an outline of general procedures. The second was aimed at identifying and recruiting eligible veteran employees (see eligibility criteria in the following text) and provided a link to a screener survey. Veterans in participating organizations were recruited primarily through e-mail, but also via flyers, newsletters, and oral presentations. In the screener survey, we asked participants if they were married or partnered and gave them the opportunity to provide their spouse's e-mail to potentially participate in the spouse survey. Participants were also given information about the spouse/partner portion of the study to share with their significant other. Identified spouses were followed-up with by a member of the research team to invite them to participate in the study (see eligibility and participants sections below).

Supervisors were provided the computer-based training via a secure personalized link sent to their e-mail addresses provided by the organization (77% of organizations). All other organizations chose to have supervisors sign up themselves by sending an e-mail coming from the organization but crafted by the research team. Supervisors did not receive a monetary incentive for participation, and were to complete the training on work time. The components of the training are described in the following text.

### Eligibility

Employees completed a brief online screener survey to determine their eligibility and to gather contact information. Employee

participants had to (a) work at a participating organization for at least 20 hr per week, and (b) have served in the U.S. military in any branch (including National Guard and Reserves) any time after December 31, 2001 (i.e., post 9/11 era). Participants received surveys via e-mail and completed their survey during nonwork hours. If employees were eligible and indicated they had a partner that met eligibility criteria (e.g., together for  $\geq 6$  months, cohabiting, and in agreement they were still together at each time point), we contacted the partners to see if they would like to participate. Following recruitment and confirmation of eligibility through a screener survey, couples provided a paper version of informed consent and were sent surveys to their e-mail addresses. Upon confirming their intentions to participate and reconfirming eligibility, and completion of consent, participants completed a survey containing demographic information, and a larger study questionnaire. An e-mail message detailing the process and containing the survey link was also sent to the partners of the employee. Both the employee and their partner completed the same survey items used in this study. A \$25 gift card was provided to each partner for each survey completed.

## Procedure

This study included three waves of participant data collection (baseline, 3 months, and 9 months), and was designed as a two-group cluster RCT in which organizations were randomized following baseline data collection (Bodner & Bliese, 2018). A total of 16 organizations were randomized into the training condition and 19 randomized into the waitlist control. Once randomization occurred, supervisors in the training group received the VSST (description provided in the following text), whereas those organizations in the wait-list control were provided the training following 9-month data collection.

## Veteran Supportive Supervisor Training

The VSST (Hammer et al., 2019) is a three-part training that includes a computer-based training, behavior monitoring and tracking of support behaviors, and above and beyond activities such as a moderated discussion board. As a summary of the description above, the VSST appends multiple components to the FSST, including types of support trained, descriptions of the importance of the types of support as they relate to family specific, general employee, and veteran-specific support, and specific behavioral examples and real-world applications of each type of support. Additionally, the VSST includes information about military service related physical and psychological health, while also including information about misconceptions about veterans to help reduce stigma associated with veteran status.

Next, we describe the components of the training which can also be found in Hammer et al. (2019). The computer-based portion of the training took about one hour to complete, was self-paced, and was designed to be engaging with videos, pictures, text, and quizzes that would immediately give feedback by redirecting the trainee to the appropriate content. The information presented drew on literature and information gleaned from interviews with veterans and spouses. Module 1 highlighted the importance of creating a military inclusive and family inclusive culture and provided information on where additional resources could be found to

support employees and veterans. Module 2 focused on training the supportive supervisor behaviors highlighted above with specific examples about unique support (family, work, and nonwork) needs of veterans. Module 3 described examples of how to translate what was learned to action.

The second portion of the training included behavior tracking that occurred over a 2-week period via a secure online website. The purpose of behavior tracking was to support transfer of knowledge from the training to actual behaviors in the workplace and has been supported as an effective approach in other similar studies (Hammer et al., 2011; Olson et al., 2015). Supervisors were provided a description of behavior tracking as well as the importance of it for ensuring the training was effective. Additionally, supervisors were able to set their own goals for the total number of behaviors they would record over the behavior-tracking period. Supervisors were sent a reminder e-mail each day to log in to the website and track their behaviors, and upon log in were presented with information about the types of behaviors and a graph that was automatically populated showing their progress. Of the randomized supervisors who consented to us using their training data for research purposes,  $\sim 70\%$  tracked at least one behavior ( $n = 669$  out of 928). Behavior tracking took  $\sim 5$  min per day.

The third part of the training was the above and beyond activities which were composed of three additional short training modules (planning for military leave with respect to reservists who need to take monthly drill leave, communicating and relating to veterans, and translation of military skills to the workplace). Each above and beyond activity took about 5–10 min to complete, and completion was rewarded by receiving higher levels of VSST certification. A total of 333 supervisors completed at least one of the above and beyond activities (35.1%).

## Participants

Of the 497 employees who completed the baseline survey,  $n = 395$  met eligibility criteria to for spousal inclusion. Of those employees, a total of  $n = 260$  matched spouses were recruited for baseline survey data collection. We subsequently removed couples from the current study if the primary employee member of the couple was a supervisor who completed the training ( $n = 8$ ), or left their place of employment prior to completing the baseline survey ( $n = 2$ ), leaving a total of  $n = 250$  (96%) matched couples completing baseline data, and  $n = 137$  in the training group. Of the 250 matched couples at baseline, 179 matched partners completed the 3-month follow-up (72%); however, one couple indicated they were no longer together, leaving a sample of  $n = 178$  (71%) for the 3-month wave of data. At 9 months,  $n = 158$  (63%) matched couples participated; however,  $n = 4$  indicated separation, leaving a total of  $n = 154$  (62%) for the 9-month wave of data collection. Thus, our final sample of matched couples for each time point were  $n = 250$ , 178, and 154 for baseline, 3 months, and 9 months, respectively.

Eighty-nine percent of the  $n = 250$  couples were married, 80% identified as parents, and  $\sim 70\%$  had a child living in the home. Employees were primarily White (83%) and male (89%), with an average age of 38 ( $SD = 9.17$ ), and their partners were primarily White (78%) and female (89%), with an average age of 35 ( $SD = 9.06$ ), who worked full time (49%) or were a stay-at-home parent (29%), whereas the rest were unemployed or worked part-time

(22%). Full sample characteristics can be seen in Table 1, and family characteristics in Table 2.

## Measures

**Employee stress.** Four items from the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) were used to measure employee stress over the past 30 days ( $\alpha = .76$ ). Participants responded to the items (e.g., in the last month, how often have you felt that you were unable to control the important things in your life?) on a 1 (*never*) to 5 (*very often*) scale. Responses were assessed at baseline and averaged to create a composite score, where higher scores indicate greater baseline stress.

**Marital relationship quality.** Employee and spouse relationship quality were assessed with the short form Dyadic Adjustment (DAS-7; Hunsley, Pinsent, Lefebvre, James-Tanner, & Vito, 1995). Dyadic adjustment is one measure of dyadic relationship

quality and is frequently cited as one of the most used indicators. Because long-term relationship quality is complex, researchers have argued that it is best measured in a way that demonstrates a process (Spanier, 1976), as dyadic adjustment does. Dyadic adjustment as a tool has consistently been shown to be an effective relationship quality indicator (e.g., see meta-analysis by Graham, Liu, & Jeziorski, 2006), which can point to relationship distress, and predict divorce (Crane, Busby, & Larson, 1991). Couples tend to have relatively strong agreement in their assessment of their dyadic adjustment (examples: .53, .63; Badr & Acitelli, 2005; Humbad, Donnellan, Iacono, & Burt, 2010). The DAS-7 has been shown to be a reliable and valid measure of the longer version (Hunsley, Best, Lefebvre, & Vito, 2001; Hunsley et al., 1995) and includes three subscales that should not be separated to maintain consistency (Graham et al., 2006): Dyadic Agreement (e.g., level of agreement on items such as aims, goals, and things believed

Table 1  
*Employee and Spouse Demographic Characteristics*

Employee Variable	Overall ( <i>Ns</i> = 153–250)	Control ( <i>Ns</i> = 112–113)	Training ( <i>Ns</i> = 133–137)
	<i>M</i> ( <i>SD</i> )/%	<i>M</i> ( <i>SD</i> )/%	<i>M</i> ( <i>SD</i> )/%
Age	38.38 (9.17)	38.95 (9.06)	37.91 (9.26)
Male	88.8	90.3	87.6
Ethnicity	—	—	—
American Indian/Alaskan Native	1.6	0	2.9
Asian	2.0	2.7	1.5
Black or African American	0.8	0.9	0.7
White	82.8	85.8	80.3
Multiple/other	11.6	9.7	13.2
Education	—	—	—
High school diploma/GED	5.6	3.5	7.3
Some college	25.6	28.3	23.4
College degree/certificate	49.2	48.7	49.6
Graduate degree or in progress	18.8	18.6	19
Employment	—	—	—
Hours per week	42.26 (6.33)	42.46 (7.05)	42.10 (5.68)
Work tenure in years	5.68 (5.58)	5.90 (5.49)	5.50 (5.66)
Spouse	( <i>Ns</i> = 153–250)	( <i>Ns</i> = 67–113)	( <i>Ns</i> = 86–137)
Age	36.50 (9.10)	36.91 (9.43)	36.16 (8.76)
Female	88.0	91.2	85.4
Ethnicity	—	—	—
American Indian/Alaskan Native	0.8	0.9	0.7
Asian	4.8	3.5	5.8
Black or African American	0.8	0	1.5
White	78.4	83.2	74.5
Multiple/other	13.6	11.5	15.3
Education	—	—	—
High school diploma/GED	7.2	7.1	7.5
Some college	26.8	31	23.4
College degree/certificate	46.8	46.9	46.7
Graduate degree or in progress	16.4	13.3	19
Employment	—	—	—
Hours per week	37.38 (11.79)	36.92 (11.68)	37.74 (11.94)
Full-time	49.8	46	51.1
Stay-at-home parent	29	29.2	29.2
Work tenure in years	4.72 (5.32)	5.10 (5.76)	4.46 (4.97)

*Note.* GED = general equivalency diploma. *Ns* refer to number of observations for descriptive variables dependent on the grouping variable (overall, control, or training) for the respective member of the couple (employee or spouse).

Table 2  
Family Descriptive Statistics of Couples

Variable	Overall couple	Couple control	Couple training
	( <i>Ns</i> = 171–250) <i>M</i> ( <i>SD</i> )/%	( <i>Ns</i> = 74–113) <i>M</i> ( <i>SD</i> )/%	( <i>Ns</i> = 97–137) <i>M</i> ( <i>SD</i> )/%
Relationship			
Married	89	92	86.9
Committed relationship	11	8	13.1
Parenting			
Has children	80	77	82.5
Has children living at home	69.6	66.4	72.3
Age of youngest child	6.33 (6.07)	6.89 (6.64)	5.90 (5.60)

*Note.* *Ns* refer to number of observations for each descriptive variable dependent on grouping variable (overall, control, or training).

important), Dyadic Cohesion (e.g., how often couples engage in items such as having a stimulating exchange of ideas), and Overall Dyadic Satisfaction. Dyadic Agreement and Cohesion items are rated on a scale of 0 (*always disagree/never*) to 5 (*always agree/more often*) and contain three items each. Satisfaction is rated on a scale of 0 (*extremely unhappy*) to 6 (*perfect*) and contains one item (e.g., please select the place on the scale that best describes the degree of happiness, all things considered, of your relationship). Responses to items were sum scored for each partner and can range from 0 to 36. Reliability for employee DAS scores were  $\alpha = .87, .86$ , and  $.85$  for baseline, 3 months, and 9 months, respectively. For spouses, reliability estimates for DAS were  $\alpha = .84, .87$ , and  $.85$  at baseline, 3 months, and 9 months, respectively.

**Positive parenting.** Employee and spouse positive parenting was assessed with the Positive Parenting subscale from the short form of the Alabama Parenting Questionnaire, which has been demonstrated to be a reliable and valid tool for assessing parenting (APQ-9; Elgar, Waschbusch, Dadds, & Sigvaldason, 2007). The Positive Parenting subscale is rated on a 1 (*never*) to 5 (*always*) scale and consists of three items (e.g., you let your child know when he or she is doing a good job with something). Responses were averaged to obtain an average positive parenting score. Reliability estimates for employee positive parenting scores were  $\alpha = .92, .95$ , and  $.95$  for baseline, 3 months, and 9 months, respectively. For spouses, reliability estimates for positive parenting scores were  $\alpha = .89, .92$ , and  $.95$  at baseline, 3 months, and 9 months, respectively.

**Family supportive supervisor behaviors.** Employee and supervisor self-rated perceptions of FSSB were assessed with the Family Supportive Supervisor Behavior–Short Form (Hammer, Ernst Kossek, Bodner, & Crain, 2013) to assess whether training completion could be explained by higher levels of baseline FSSB. The scale consists of four items rated on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale. For employees an example item is “My supervisor makes me feel comfortable talking to him/her about my conflicts between work and non-work.” Supervisor items were adapted and replaced “my supervisor” with “I.” Reliability of the measure was  $\alpha = .93$  for employees and  $\alpha = .74$  for supervisors.

## Analysis Strategy

Our models testing for main and moderated effects were two-level random effects models, which accounted for the nesting of

couples in randomized organizations, an approach appropriate for group randomized designs (Murray, 1998). We also used an analysis of covariance approach that controls for baseline values of the dependent variable and maximizes statistical power consistent with recommendations from Bodner and Bliese (2018).

Because the focus of the current study was on couples’ marital relationship quality and positive parenting, dyads were the unit of analysis, with employees and their spouses nested in dyads. We used a conservative intent-to-treat approach where individuals in organizations randomized to receive the treatment were included in the treatment condition regardless of supervisor completion of the training. This approach reduces bias that would be introduced (e.g., sampling error) that would undermine the RCT. Furthermore, this approach remains preferred for RCT designs because of generalizability (Shadish & Cook, 2009). Specifically considering informing policy, those implementing the recommended training frequently cannot guarantee adherence or require people to complete the training. For a review of the benefits of an intent-to-treat approach, see McCoy (2017).

Thus, couples were included in the training condition (condition = 1) if the organization that the employee worked for was part of the training group, and in the control condition (condition = 0) if the organization the employee worked for was part of the waitlist control group. Mplus (V8; Muthén & Muthén, 1998–2017) was used for all analyses, and couples’ dyadic adjustment and positive parenting were modeled as outcomes at 3 and 9 months.

Consistent with our dyadic interest, we also used a model comparison approach to determine whether it was appropriate to use the data in a dyadic fashion (e.g., effects constrained across couples). Determining whether effects can be constrained across partners is the standard approach when assessing whether effects are observed on the couple level. For instance, in actor–partner interdependence models, Kenny and Ledermann (2010) recommended testing dyadic actor–partner effect models by first assessing whether predictor and outcome effects can be set equal across partners. If complex models yield results where some significant and nonsignificant effects occur, researchers may make the inferential error that effects are different (cf. Bodner, 2018). However to our knowledge there has been no formal test of whether effects such as those in the current study are similar across partners. If the constrained model does not fit significantly worse than the unconstrained model, the constrained model should be used to examine



couple effects because it suggests findings do not differ across partners, simplifies otherwise complex findings, and allows for making broad conclusions about training effects. Therefore, we compared our initial model with a subsequent model in which we constrained the effects of the training on marital relationship quality across partners.

### Additional Statistical Tests

We also assessed whether there was the presence of nonrandom sampling effects of subject attrition following recommendations from Goodman and Blum (1996). We created two dichotomous variables to identify stayers and leavers for employees and spouses, respectively. The first variable created was whether a participant completed the 9-month time-point survey (1 = stayer, 0 = leaver), whereas the second was whether the participant completed all three time-points (1 = stayer, 0 = leaver). We performed a logistic regression with the outcome regressed on each predictor (baseline values of the outcome, treatment, and stress). We found no evidence to support that nonrandom sampling effects of subject attrition were responsible for our results in either set of analyses for marital relationship quality ( $ps$  range = .08–.94) or positive parenting ( $ps$  range = .17–.93).

We also sought to uncover whether supervisors who were more supportive at baseline were more likely to complete the training (0 = not completed, 1 = completed). Supervisors self-reported FSSB among those who completed the training ( $M = 3.98$ ,  $SD = .55$ ) compared with those who did not ( $M = 3.98$ ,  $SD = .57$ ) were not significantly higher,  $t(572) = -.10$ ,  $p = .92$ , at baseline. Similarly, comparing treatment group employee perceptions of FSSB for supervisors who completed the training ( $M = 3.84$ ,  $SD = .84$ ) to employees with supervisors who did not ( $M = 3.84$ ,  $SD = .80$ ) showed no significant differences,  $t(135) = .02$ ,  $p = .99$ .

Additionally, in light of research suggesting that experiences during deployment can affect veterans as they navigate the return to home (Adler, Britt, Castro, McGurk, & Bliese, 2011), it is plausible to think that military-related variables such as number and length of deployments may affect the ability of the training to facilitate marital relationship quality and positive parenting. Therefore, we included total amount of time deployed and total number of deployments as control variables in our models. Because inclusion of total number of deployments and total length of deployments did not alter our conclusions, we do not report the results of those models for simplicity.

## Results

### Training Manipulation Effects and Evaluation

In addition to rigorous training design, we also assessed training effectiveness based on Kirkpatrick's (1994) training effectiveness criteria (e.g., reactions, learning, behaviors, and results). In regard to reactions, as reported in Hammer et al. (2019), ~83% ( $n = 313$ ) of supervisors who participated in the above and beyond message board communicated positive reactions to the training. In regard to learning, the training was demonstrated to improve knowledge as supervisors had a mean knowledge pretest score of 55% ( $SD = 13\%$ ) and a mean posttest score of 98% ( $SD = 5\%$ );  $t(927) = -100.33$ ,  $p < .001$ ,  $d =$

3.31. In regard to behaviors, of those who participated in above and beyond activities, ~70% reported engaging in at least one behavior type that was taught in the training. Additionally, we assessed whether supervisors who also responded to a baseline ( $n = 1,253$ ;  $n_{\text{treatment}} = 574$ ,  $n_{\text{control}} = 679$ ) and 9-month follow-up ( $n = 968$ ;  $n_{\text{treatment}} = 369$ ,  $n_{\text{control}} = 599$ ) survey had improvements in self-reported FSSB. Of those supervisors in the training group who also completed the follow-up survey,  $n = 253$  completed the training and  $n = 116$  did not. When controlling for baseline FSSB, those supervisors in the training group who completed the training relative to those supervisors who did not complete the training had improved self-reported FSSB at follow-up ( $b = .09$ ,  $SE = .04$ ,  $p = .037$ ;  $\Delta R^2 = .01$ ). We note that a total of 28% ( $N = 38$ ) of participating couples had direct and linked supervisors that completed the training, whereas 72% ( $N = 99$ ) did not. We also assessed whether those supervisors who were linked to a participating couple and completed the baseline survey ( $n = 66$ ;  $n_{\text{treatment}} = 24$ ,  $n_{\text{control}} = 42$ ) had improvements in 9-month follow-up ( $n = 50$ ;  $n_{\text{treatment}} = 14$ ,  $n_{\text{control}} = 36$ ) FSSB. Of those supervisors in the training group who also completed the follow-up survey,  $n = 8$  completed the training and  $n = 6$  did not. When controlling for baseline FSSB, those supervisors in the training group who completed the training relative to those supervisors who did not complete the training had improved self-reported FSSB at follow-up ( $b = .17$ ,  $SE = .07$ ,  $p = .014$ ;  $\Delta R^2 = .01$ ). We highlight that the subsample of supervisors who also completed the optional and additional survey and were linked to a participating couple was small, and therefore caution should be used when interpreting these effects, and strong inferences should not be made based on this subsample of supervisors. Finally, we note that on average, 55% of the identified supervisors completed the training across the 16 organizations in the treatment condition.

In terms of results, we point to previous research in a subsample of matched veteran-supervisor data, which demonstrated that the supervisors randomized to the training condition had improved attitudes toward veteran employees (Hammer et al., 2020), and a range of health and work outcomes of a larger sample of employees (Hammer et al., 2019).

### Descriptive Analyses of Study Variables

Table 3 displays the means and standard deviations of the study variables for employees and spouses in the training and control group at each time point. The number of employee and spouse observations for dyadic adjustment ratings at baseline were  $n_{\text{employee}} = 246$ ,  $n_{\text{spouse}} = 249$ ; at 3 months were  $n_{\text{employee}} = 177$ ,  $n_{\text{spouse}} = 177$ ; and at 9 months were  $n_{\text{employee}} = 154$ ,  $n_{\text{spouse}} = 154_{\text{Redundant}}$ . The number of employee and spouse observations for positive parenting ratings at baseline were  $n_{\text{employee}} = 116$ ,  $n_{\text{spouse}} = 109$ ; at 3 months were  $n_{\text{employee}} = 80$ ,  $n_{\text{spouse}} = 74$ ; and 9 months were  $n_{\text{employee}} = 67$ ,  $n_{\text{spouse}} = 63$ . Note that clinical levels of dyadic adjustment tend to appear high, given that the score is summed on a larger scale (e.g., scores less than 21 indicate marital distress; Hunsley et al., 1995). Scores from participants in this study indicate that on average, couples were not distressed ( $M_{\text{employee}} = 24.49$ ,  $SD_{\text{employee}} = 5.45$ ;  $M_{\text{spouse}} = 25.25$ ,  $SD_{\text{spouse}} = 5.28$ ), and generally reported engaging in positive parenting often ( $M_{\text{employee}} = 4.26$ ,  $SD_{\text{employee}} = .63$ ;  $M_{\text{spouse}} = 4.42$ ,  $SD_{\text{spouse}} = .57$ ). Additionally, we estimated correlations between study

Table 3  
Employee and Spouse Descriptive Statistics of Study Variables

Variable	Overall <i>M</i> ( <i>SD</i> ) <i>N</i>	Control <i>M</i> ( <i>SD</i> ) <i>N</i>	Training <i>M</i> ( <i>SD</i> ) <i>N</i>
Employee stress	2.33 (0.84) 250	2.36 (0.88) 113	2.30 (0.80) 137
Employee MRQ			
Baseline	24.49 (5.45) 246	24.84 (5.75) 112	24.20 (5.18) 134
3 months	24.78 (5.42) 177	25.18 (5.09) 82	24.43 (5.69) 95
9 months	24.55 (5.32) 154	24.50 (4.74) 69	24.59 (5.77) 85
Spouse MRQ			
Baseline	25.25 (5.28) 249	25.46 (5.42) 113	25.07 (5.17) 136
3 months	24.74 (5.48) 177	24.14 (5.83) 82	25.26 (5.12) 95
9 months	25.35 (5.26) 154	25.08 (5.94) 69	25.56 (4.66) 85
Employee PPAR			
Baseline	4.26 (0.63) 116	4.39 (0.62) 46	4.17 (0.63) 70
3 months	4.20 (0.66) 80	4.31 (0.52) 32	4.13 (0.73) 48
9 months	4.20 (0.74) 67	4.15 (0.86) 27	4.23 (0.66) 40
Spouse PPAR			
Baseline	4.42 (0.57) 109	4.44 (0.55) 46	4.40 (0.59) 63
3 months	4.37 (0.59) 74	4.23 (0.64) 28	4.46 (0.55) 46
9 months	4.43 (0.62) 63	4.46 (0.59) 24	4.42 (0.64) 49

Note. MRQ = marital relationship quality assessed with the DAS-7; PPAR = positive parenting. *M* (*SD*) and *N* refers to the mean, standard deviation, and the number of observations for each outcome variable based on grouping variable (overall, control, and training) at baseline, 3 months, and 9 months.

variables for both employees and spouses in Table 4. The correlation between employees and spouse ratings of dyadic adjustment were relatively strong, suggesting agreement within couples, whereas positive parenting was stronger within person, although there were some small-moderate correlations at baseline and 9 months across partners. Finally, note that our inter-class correlations ranged from .007 to .07, for all of our mixed models, indicating very little variation dependent on organization identification.

### Evaluation of Within-Couple Differences in Training Effects

As we were interested in the training effects on the couples, we used a model building approach and evaluated whether the training

effects on partners (e.g., employee and spouse) differed from one another. Following initial evidence of relative strong within-couple agreement on marital relationship quality and some agreement on positive parenting, we tested whether an unconstrained model fit the data better than a model that constrained the effects of the training and moderator across partners at the 3- and 9-month time points. Specifically, a  $\chi^2$  difference test was used to compare the nested models. In this approach, a statistically significant  $\chi^2$  difference value indicates that the model without the constraint fits the data better. Results indicated that the initial main and moderated effects models for marital relationship quality and positive parenting did not fit the data better than the couple constrained main effects models,  $\Delta\chi^2(2) = 1.98, p = .37$ ;  $\Delta\chi^2(2) = 1.06, p = .59$ , and moderated effects model,  $\Delta\chi^2(6) = 6.09, p = .41$ ;

Table 4  
Correlation Matrix of Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Employee stress (baseline)	.77												
2. Employee MRQ (baseline)	-.35**	.87											
3. Employee MRQ (3 months)	-.27**	.66***	.86										
4. Employee MRQ (9 months)	-.20*	.63***	.64**	.85									
5. Spouse MRQ (baseline)	-.17**	.47***	.51***	.38***	.84								
6. Spouse MRQ (3 months)	-.08	.44***	.54***	.34***	.78***	.87							
7. Spouse MRQ (9 months)	-.20*	.51***	.48***	.50***	.73***	.74***	.85						
8. Employee PPAR (baseline)	-.19*	.29**	.19	.36**	.15	.16	.36**	.92					
9. Employee PPAR (3 months)	-.27*	.26*	.24*	.26	.17	.13	.30*	.54***	.95				
10. Employee PPAR (9 months)	-.10	.24*	-.04	.22†	-.07	.09	.15	.73***	.43**	.95			
11. Spouse PPAR (baseline)	-.04	.04	.14	.10	.14	.19	.13	.22*	.05	.15	.89		
12. Spouse PPAR (3 months)	.10	.01	.10	.13	.04	.20†	.06	.18	.11	.38**	.74***	.92	
13. Spouse PPAR (9 months)	-.06	.03	.26*	.16	.26*	.44***	.26*	.36**	.21	.22†	.64***	.58***	.95

Note. MRQ = marital relationship quality assessed with the DAS-7; PPAR = positive parenting. Reliability coefficients are on the diagonal. Significance tests do not account for the nesting of the participants within organization. Employee stress and MRQ *N*s range = 154–250; PPAR *N*s range 63–116.

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

$\Delta\chi^2(6) = 11.14, p = .08$ , respectively. Thus, the results of the comparison models indicated that the effects of the training and moderator did not differ across employees and spouses. Both the initial and final constrained model results can be viewed in Table 5.

## Hypothesis Tests

**Main training effects on marital relationship quality.** Although there were no statistically significant direct effects of the training on couples' marital relationship quality at 3 months ( $b = 0.36, SE = .53, p = .53$ , pseudo  $\Delta R^2_{\text{employee}} = .04$ , pseudo  $\Delta R^2_{\text{spouse}} = .16$ ), there was a statistically significant main effect of the training on couples marital relationship quality at 9 months ( $b = 1.12, SE = .56, p = .047$ , pseudo  $\Delta R^2_{\text{employee}} = .34$ , pseudo  $\Delta R^2_{\text{spouse}} = .36$ ), such that the training was associated with improvements in marital relationship quality for couples 9 months following the training, thus supporting Hypothesis 1.

**Main training effects on positive parenting.** There were no significant direct effects of the training on couples' positive parenting at 3 months ( $b = 0.02, SE = .07, p = .82$ , pseudo  $\Delta R^2_{\text{employee}} = .002$ , pseudo  $\Delta R^2_{\text{spouse}} = .002$ ), or 9 months ( $b = 0.04, SE = .07, p = .49$ , pseudo  $\Delta R^2_{\text{employee}} = .03$ , pseudo  $\Delta R^2_{\text{spouse}} = .02$ ), and therefore Hypothesis 2 was not supported.

**Moderated training effects on marital relationship quality.** Although stress did not significantly moderate the effects of the training on couples' marital relationship quality at 3 months ( $b = 0.52, SE = .49, p = .28$ , pseudo  $\Delta R^2_{\text{employee}} < .01$ , pseudo  $\Delta R^2_{\text{spouse}} < .01$ ), stress significantly moderated the effect of the training on couples' marital relationship quality at 9 months ( $b =$

$1.49, SE = .43, p = .001$ , pseudo  $\Delta R^2_{\text{employee}} = .02$ , pseudo  $\Delta R^2_{\text{spouse}} = .01$ ). In particular, 9 months following the training, couples in the training condition tended to report higher levels of dyadic adjustment, and this was more pronounced when employees had higher levels of baseline stress; this result suggests that the training promoted improved perceptions of relationship quality for couples, particularly under conditions of higher levels of baseline stress. These findings are consistent with Hypothesis 3 that the supportive supervisor training supports improved marital relationship quality for couples particularly when employees have higher levels of baseline stress. See Figure 2 for a visual representation of these moderated effects.

**Moderated training effects on positive parenting.** Although stress did not significantly moderate the effects of the training on couples' positive parenting at 3 months ( $b = 0.002, SE = .10, p = .99$ , pseudo  $\Delta R^2_{\text{employee}} < .01$ , pseudo  $\Delta R^2_{\text{spouse}} < .01$ ), stress significantly moderated the effect of the training on couples' marital relationship quality at 9 months ( $b = 0.25, SE = .06, p < .001$ , pseudo  $\Delta R^2_{\text{employee}} = .02$ , pseudo  $\Delta R^2_{\text{spouse}} = .03$ ). Nine months following the training, couples in the training condition tended to report higher levels of positive parenting when employees had higher levels of baseline stress; this result suggests that the training promoted improvements in couples' parenting under conditions of higher levels of baseline stress. These findings are consistent with Hypothesis 4 that the supportive supervisor training would lead to improvements in positive parenting for couples when employees have higher levels of baseline stress. See Figure 3 for a visual representation of these moderated effects (Table 6).

Table 5

Main and Stress-Moderated Effects of the Supportive Supervisor Training on Marital Relationship Quality

Variable	Initial model				Final model			
	Employee 3M Est. (SE)	Spouse 3M Est. (SE)	Employee 9M Est. (SE)	Spouse 9M Est. (SE)	Employee 3M Est. (SE)	Spouse 3M Est. (SE)	Employee 9M Est. (SE)	Spouse 9M Est. (SE)
<b>Training effects</b>								
Intercept	25.14 (0.55)***	24.19 (0.54)***	23.91 (0.56)***	24.18 (0.68)***	24.83 (0.38)***	24.38 (0.39)***	23.73 (0.43)***	24.29 (0.57)***
Condition	−0.34 (0.87)	0.68 (0.47)	1.33 (0.69) <sup>†</sup>	1.37 (0.67)*	0.36 (0.58)	0.36 (0.58)	1.12 (0.56)*	1.12 (0.56)*
MRQ <sub>E</sub>	0.59 (0.10)***	0.12 (0.07) <sup>†</sup>	0.70 (0.06)***	0.23 (0.08)**	0.59 (0.07)***	0.12 (0.06) <sup>†</sup>	0.70 (0.06)***	0.23 (0.08)**
MRQ <sub>S</sub>	0.27 (0.07)***	0.81 (0.06)***	0.07 (0.07)	0.68 (0.05)***	0.27 (0.07)***	0.81 (0.06)***	0.07 (0.07)	0.68 (0.06)***
Residual V.	14.05 (2.41)***	11.04 (1.76)***	16.72 (2.90)***	11.47 (1.28)***	14.05 (2.40)***	11.01 (1.64)***	16.77 (2.74)***	11.49 (1.29)***
Intercept V.	0.54 (0.89)	0.09 (0.84)	0.50 (0.98)	0.57 (1.07)	0.71 (0.79)	0.18 (1.15)	0.61 (0.91)	0.55 (1.07)
Model R <sup>2W</sup>	0.51 (0.08)***	0.64 (0.05)***	0.46 (0.06)***	0.60 (0.05)***	0.51 (0.08)***	0.64 (0.04)***	0.46 (0.06)***	0.60 (0.05)***
Model R <sup>2B</sup>	0.05 (0.26)	0.65 (2.21)	0.19 (0.47)	0.44 (0.43)	0.04 (0.11)	0.15 (1.10)	0.34 (0.26)	0.36 (0.48)
<b>Moderated effects</b>								
Intercept	25.13 (0.82)***	24.19 (1.05)***	23.89 (0.52)***	24.16 (0.66)***	24.82 (0.39)***	24.37 (0.38)***	23.69 (0.37)***	24.26 (0.57)***
Stress	−0.87 (0.46) <sup>†</sup>	0.21 (0.47)	−0.77 (0.43) <sup>†</sup>	−0.71 (0.40) <sup>†</sup>	−0.25 (0.39)	−0.25 (0.39)	−0.70 (0.34)*	−0.70 (0.34)*
Condition	−0.33 (1.10)	0.82 (0.51)	0.73 (0.83)	1.35 (0.71) <sup>†</sup>	0.37 (0.55)	0.37 (0.55)	1.19 (0.62) <sup>†</sup>	1.19 (0.62) <sup>†</sup>
Moderator	1.00 (0.69)	0.27 (0.82)	1.73 (0.59)**	1.34 (0.59)*	0.58 (0.48)	0.58 (0.48)	1.49 (0.43)***	1.49 (0.43)***
MRQ <sub>E</sub>	0.57 (0.09)***	0.14 (0.07) <sup>†</sup>	0.72 (0.07)***	0.24 (0.08)**	0.59 (0.10)***	0.12 (0.05)*	0.71 (0.07)***	0.24 (0.08)**
MRQ <sub>S</sub>	0.27 (0.07)***	0.81 (0.09)***	0.08 (0.07)	0.68 (0.05)***	0.27 (0.07)***	0.82 (0.06)***	0.07 (0.06)	0.68 (0.05)***
Residual V.	13.80 (2.55)***	10.96 (1.80)***	16.39 (3.00)***	11.29 (1.33)***	13.93 (2.50)***	10.99 (1.66)***	16.26 (2.80)***	11.35 (1.33)***
Intercept V.	0.55 (2.21)	0.06 (1.35)	0.52 (0.89)	0.42 (1.83)	0.71 (1.10)	0.17 (1.22)	0.66 (1.15)	0.35 (1.27)
Model R <sup>2W</sup>	0.52 (0.08)***	0.64 (0.06)***	0.48 (0.06)***	0.61 (0.05)***	0.51 (0.08)***	0.64 (0.05)***	0.48 (0.05)***	0.61 (0.05)***
Model R <sup>2B</sup>	0.05 (0.24)	0.73 (4.35)	0.20 (0.41)	0.52 (1.13)	0.05 (0.11)	0.16 (1.23)	0.35 (0.27)	0.51 (0.89)

*Note.* Results from the initial unconstrained models and the final partner constrained effects models are on the left and right sides of the table respectively. Main training (condition) effects are on the top half of the table, and moderated effects (stress) are on the bottom half. Condition: 1 = training, 0 = control. 3M = 3 months; 9M = 9 months; Est. = estimate; MRQ = marital relationship quality assessed with the DAS-7 scale; MRQ<sub>E</sub> = employee baseline marital relationship quality; MRQ<sub>S</sub> = spouse baseline marital relationship quality; Residual V. = residual variance; Intercept V. = intercept variance; Model R<sup>2W</sup> = model  $\Delta R^2$  within; Model R<sup>2B</sup> = model  $\Delta R^2$  between; Stress = employee baseline stress; Moderator = Condition  $\times$  Stress; DAS-7 = seven-item Dyadic Adjustment Scale listed for the respective member of the couple (employee or spouse). MRQ<sub>E</sub>, MRQ<sub>S</sub>, and stress are grand mean centered.

<sup>†</sup>  $p < .10$ . \*  $p \leq .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

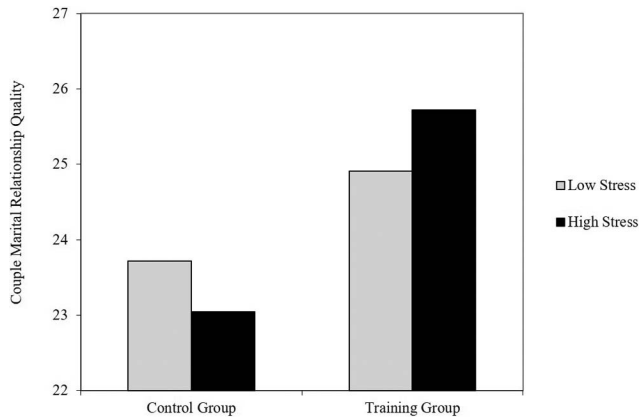


Figure 2. Baseline stress moderated training effects on couples' marital relationship quality 9 months following baseline data collection.

## Discussion

Results from the current study demonstrated that the worksite VSST facilitated couples' marital relationship quality 9 months following baseline data collection. Additionally, when employees had higher levels of stress the training led to improvements in couples' marital relationship quality and positive parenting. Finally, the results of this study demonstrated training effects on marital relationship quality and stress-moderated positive parenting are not limited to employees, but extend to their spouses, and do not differ across the couple unit. Thus, this study, which used a rigorous design and an intent-to-treat approach, enhances our understanding of SST in terms of for *whom*, *what* outcomes, and under what *conditions* training is most effective, and therefore makes several contributions to the literature from both a theoretical and practical standpoint.

## Theoretical Implications

Findings from this study suggest that SST frameworks can be effectively extended to spouse outcomes, which enhances understanding about *who* an SST can provide direct benefits for. Spouses were not directly exposed to the worksite training or supervisor who received the training, yet their perceptions of their marital relationship were positively influenced by the training, thereby demonstrating the training can facilitate positive outcomes for individuals not in the workplace environment where the training occurred. Indeed, the effects of SST have almost exclusively focused on employees despite SST being designed with employees' family lives in mind. Given what is known about the interdependencies of work and family domains, and well-being and family relationships, this previously unresolved extension of supportive supervisor training studies is consequential for future SST frameworks and research. Additionally, considering that previous work has demonstrated SST can affect employees' work and well-being outcomes (see Hammer et al., 2011, 2019, and 2020), and the effects of the SST in the current study were not different across employee and spouse dyads, this study highlights the importance of considering additional positive outcomes for both members of a spousal dyad following an SST, which can now be effectively considered within SST frameworks.

Findings from this study suggest that SST frameworks can be effectively extended to include the effect of an SST on family relationships, both in terms of marital relationship quality and positive, supportive parenting, which goes beyond previously observed effects on employee well-being (Hammer et al., 2019, 2020). This extension answers the question of *what types* of outcomes an SST can affect. Whereas the majority of previous SST research has considered well-being and work outcomes, this study is the first to consider the cross-domain family relational outcomes. As noted earlier, the marital and parent-child relationship are critical for predicting each individual family members' well-being, and vice versa. Thus, the improvements in marital relationship quality and positive parenting observed in this study may catalyze reciprocal downstream effects from the worksite training on employee and family indicators of well-being. Furthermore, for couples who are also parents, improvements in the marital relationship or parent-child relationship may facilitate additional family benefits, as evidence suggests that marital relationship quality is strongly tied to parental roles (Keizer & Schenk, 2012), and interactions can spillover between family members (Sears, Repetti, Reynolds, Robles, & Krull, 2016). Thus, this theoretical extension of SST frameworks to family relational outcomes opens avenues for future researchers to assess the potential longer term effects that SST may have on couple and family health and well-being.

Finally, by identifying stress as an individual-level factor in which training effects are more fully realized, this study extends our understanding of the *conditions* in which pronounced training effectiveness will occur. Evidence suggests that specific workplace contextual conditions such as baseline levels of support, and supervisor attitudes towards employees (Hammer et al., 2019, 2020) facilitate the attainment of SST effects. However, individual-level factors can also facilitate or inhibit the effects of an SST (e.g., WFC; Hammer et al., 2011). This study broadens the scope of the individual-level factors that moderate training effectiveness by demonstrating that those who are generally stressed, perhaps those who need the support most, are those who benefit most from the training. Stress is detrimental for both partners and their marital

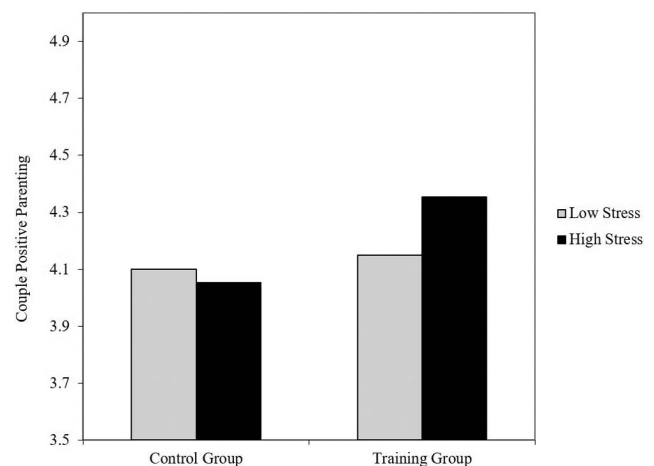


Figure 3. Baseline stress moderated training effects on couples' positive parenting 9 months following baseline data collection.



Table 6  
Main and Stress-Moderated Effects of the Supportive Supervisor Training on Positive Parenting

Variable	Initial model				Final model			
	Employee 3M Est. (SE)	Spouse 3M Est. (SE)	Employee 9M Est. (SE)	Spouse 9M Est. (SE)	Employee 3M Est. (SE)	Spouse 3M Est. (SE)	Employee 9M Est. (SE)	Spouse 9M Est. (SE)
<b>Training effects</b>								
Intercept	4.27 (0.11)***	4.32 (0.12)***	4.09 (0.17)***	4.37 (0.11)***	4.20 (0.08)***	4.37 (0.09)***	4.11 (0.07)***	4.35 (0.09)***
Condition	-0.15 (0.21)	0.08 (0.22)	0.10 (0.15)	0.01 (0.20)	-0.02 (0.07)	-0.02 (0.07)	0.05 (0.07)	0.05 (0.07)
PPAR <sub>E</sub>	0.57 (0.11)***	0.10 (0.09)	0.75 (0.08)***	0.17 (0.11)	0.58 (0.10)***	0.10 (0.08)	0.75 (0.11)***	0.17 (0.12)
PPAR <sub>S</sub>	-0.07 (0.12)	0.75 (0.08)***	-0.03 (0.18)	0.72 (0.09)***	-0.08 (0.14)	0.76 (0.07)***	-0.03 (0.08)	0.73 (0.08)***
Residual V.	0.27 (0.04)***	0.14 (0.02)***	0.18 (0.03)***	0.19 (0.04)***	0.28 (0.04)***	0.14 (0.02)***	0.18 (0.02)***	0.19 (0.04)***
Intercept V.	0.02 (0.03)	0.02 (0.03)	0.02 (0.09)	0.03 (0.04)	0.02 (0.03)	0.02 (0.03)	0.02 (0.02)	0.03 (0.06)
Model $R^{2w}$	0.30 (0.09)***	0.57 (0.09)***	0.53 (0.06)***	0.50 (0.12)***	0.51 (0.08)***	0.64 (0.04)***	0.46 (0.06)***	0.60 (0.05)***
Model $R^{2B}$	0.20 (0.62)	0.06 (0.33)	0.11 (0.78)	0.00 (0.02)	0.04 (0.11)	0.15 (1.10)	0.34 (0.26)	0.36 (0.48)
<b>Moderated effects</b>								
Intercept	4.26 (0.10)***	4.33 (0.12)***	4.12 (0.08)***	4.36 (0.09)***	4.20 (0.08)***	4.37 (0.09)***	4.10 (0.06)***	4.35 (0.07)***
Stress	-0.10 (0.15)	0.09 (0.12)	0.06 (0.15)	-0.19 (0.40) <sup>†</sup>	0.03 (0.09)	0.03 (0.09)	-0.06 (0.05)	-0.06 (0.05)
Condition	-0.14 (0.11)	0.08 (0.13)	0.06 (0.08)	0.01 (0.12)	-0.02 (0.07)	-0.02 (0.07)	0.05 (0.05)	0.05 (0.05)
Moderator	0.07 (0.15)	-0.03 (0.12)	0.20 (0.09)**	0.33 (0.15)*	0.002 (0.10)	0.002 (0.10)	0.25 (0.06)***	0.25 (0.06)***
PPAR <sub>E</sub>	0.56 (0.12)***	0.14 (0.07) <sup>†</sup>	0.81 (0.09)***	0.20 (0.11) <sup>†</sup>	0.59 (0.10)***	0.11 (0.07)	0.79 (0.07)***	0.22 (0.11)*
PPAR <sub>S</sub>	-0.06 (0.12)	0.75 (0.07)***	-0.07 (0.11)	0.71 (0.11)***	-0.09 (0.12)	0.76 (0.06)***	-0.06 (0.09)	0.70 (0.06)***
Residual V.	0.27 (0.04)***	0.14 (0.02)***	0.16 (0.02)***	0.18 (0.04)***	0.28 (0.04)***	0.14 (0.02)***	0.16 (0.02)***	0.17 (0.04)***
Intercept V.	0.02 (0.04)	0.03 (0.02)	0.01 (0.02)	0.03 (0.08)	0.02 (0.03)	0.02 (0.02)	0.01 (0.01)	0.04 (0.04)
Model $R^{2w}$	0.31 (0.19)*	0.58 (0.08)***	0.59 (0.06)***	0.63 (0.13)***	0.31 (0.08)***	0.58 (0.07)***	0.58 (0.06)***	0.53 (0.13)***
Model $R^{2B}$	0.22 (0.59)	0.05 (0.17)	0.13 (0.44)	0.002 (0.04)	0.002 (0.02)	0.002 (0.02)	0.05 (0.10)	0.02 (0.03)

*Note.* Results from the initial unconstrained models and the final partner constrained effects models are on the left and right sides of the table respectively. Main training (condition) effects are on the top half of the table, and moderated effects (stress) are on the bottom half. Condition: 1 = training, 0 = control. 3M = 3 months; 9M = 9 months; Est. = estimate; PPAR = positive parenting measured with the Positive Parenting Scale; PPAR<sub>E</sub> = employee baseline positive parenting; PPAR<sub>S</sub> = spouse baseline positive parenting; Residual V. = residual variance; Intercept V. = intercept variance; Model  $R^{2w}$  = model  $\Delta R^2$  within; Model  $R^{2B}$  = model  $\Delta R^2$  between; Stress = employee baseline stress; Moderator = Condition  $\times$  Stress. PPAR<sub>E</sub>, PPAR<sub>S</sub>, and stress are grand mean centered.

<sup>†</sup>  $p < .10$ . \*  $p \leq .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

relationships (Randall & Bodenmann, 2009) and parent-child interactions (Respler-Herman et al., 2012; Story & Repetti, 2006), and according to the American Psychological Association (APA, 2014), parents in particular report more stress than nonparents (APA, 2014). Still, the moderating effects of stress are not limited to parents, as in recent years up to 75% of adults have reported experiencing physical symptoms associated with stress (APA, 2017). Additionally, stress may be higher among at risk populations, or those who have increased risk factors for experiencing stress such as military veterans or other stigmatized groups (e.g., nonheterosexual orientation, minority status, etc.; APA, 2019). Thus, although the implications of this study demonstrate that those couples and families who may be in the highest need of support seem to benefit most from an SST, they may also be extended to other populations at risk of being more highly stressed (e.g., health care workers, couples with financial strain, and stigmatized populations), and suggest those individuals may stand to experience pronounced benefits from an SST.

## Practical Implications

In terms of practical implications, recall that this training was developed to support veterans and their families as they navigate the civilian workforce. Given that the experiences of underserved populations in the workplace (e.g., veterans) may be unique, scholars have increasingly called for additional research on such underserved populations (Colella et al., 2017). As suggested by Wan et al. (2018), there is a clear need for supports that can lead to improved family relationships for veterans and their families.

Unfortunately, veterans face many potential difficulties arising from the organizational context, including a lack of positive support interactions and stigma in the workplace (Keeling et al., 2018). Stigma in particular is detrimental as veterans may be less likely to access mental health care when they face real or perceived stigma (Kim, Thomas, Wilk, Castro, & Hoge, 2010). Thus, training that promotes organizational supports for veterans in the civilian workplace via supervisors is important to consider. Such training cannot only improve supervisor perceptions of veteran employees (Hammer et al., 2020) but can also foster improvements in critical sources of support outside of work. This study demonstrates how providing supervisors with clear and practical tools may benefit the lives and relationships of service members and their families.

Furthermore, this study demonstrated an evidence-based solution for organizations interested in positively influencing improvements in their employees' family relationships, particularly when their employees have higher levels of stress. Organizations have emphasized reducing the costs associated with work-stress specifically (Le Fevre, Kolt, & Matheny, 2006). If organizations foster environments that allow employees to maintain and improve home life, employees and their families will be happier, and potentially healthier and more productive at work. If organizations do nothing, they should be aware that stress leads to poor workplace (e.g., turnover; Avey, Luthans, & Jensen, 2009) and individual (e.g., health; Cohen, 2004; Goh, Pfeffer, & Zenios, 2016) outcomes. Accumulating evidence suggests that the effect that work has on home-life relationships is important for the bottom line, as it

predicts turnover intentions and absenteeism (Carlson et al., 2019; Ferguson et al., 2016). Thus, we argue that taking this positive approach to supporting employees may not only spillover and crossover to create more positive workplace outcomes, particularly for those employees who are stressed, but may also prevent downstream negative home-to-work spillover. As such, findings from the current study begin to pave the way for future research focused on understanding how to prevent negative workplace outcomes and/or facilitating more positive trickle-back effects.

## Limitations

As with all research there are some limitations to the current study. First, more work is needed to uncover the indirect processes that unfold within the workplace and mediate the direct and moderated effects of an SST on couples' relationships. However, when attempting to determine the mechanisms within a workplace context, researchers must also attend to bodies of work suggesting there are likely multiple mechanisms and moderating conditions at play. For instance, some supervisors may be better able to enact certain aspects of the training based on individual differences (e.g., personality) and contextual factors (e.g., managerial decision latitude). Along these lines, it is possible that this worksite training also promoted improvements in leadership or supervisor–employee relationships more broadly, which would indicate this training might be a type of wise intervention (Walton, 2014). Additionally, mediation may occur through a variety of pathways related to interpersonal factors (Sorensen, Linnan, & Hunt, 2004) or “diffusion” effects, where outcomes may not only occur as a result of treatment, but through social networks, interpersonal communications, and relationships (e.g., diffusion of innovation theory; see Valente & Davis, 1999). Along these lines there may be cross-level pathways whereby interventions targeting one level (e.g., supervisory) affect other levels (e.g., org policy; Heaney, 2003). Thus, mediating mechanisms are likely to differ depending on supervisors, social networks and other interpersonal factors, and organizational context, and taken together highlight the difficulty in uncovering workplace mechanisms of such occupational health interventions.

Additionally, we note two related limitations; first, consistent with other SST studies (Hammer et al., 2019, 2020), the observed moderated effects in this study were small in magnitude. Second, although nearly half of targeted supervisors across all randomized organizations completed the training, the large percent that did not may limit our ability to detect other meaningful effects of the training. Determining ways to improve the strength of training effects and uncovering factors that facilitate supervisor participation are critical for increasing the ultimate effectiveness of the training, despite the possibility of diffusion effects noted above (Valente & Davis, 1999). For example, if supervisors have a heavy workload which is making participation more difficult, part of future intervention strategies may be to ask organizations to temporarily provide some workload relief to facilitate participation. Future research can begin to address these issues by asking supervisors questions about the barriers and facilitators of training participation. Alternatively, one potential route to strengthen positive training effects for employees and couples more broadly may be to implement multipronged interventions targeting multiple levels within an organization (e.g., top leadership, supervisors, and

coworkers). Such an approach may have more pronounced effects than the current and previous research because such an approach would have more targets and thus a stronger ability to shift the larger organizational culture. Still, we note that the small to modest effects following the implementation of a practical training, and observed when using a very conservative intention-to-treat approach, where not all supervisors necessarily completed the training, are quite meaningful, as the importance of an effect is also a function of the expected difficulty of influencing a dependent variable based on the intervention approach (Prentice & Miller, 1992). Furthermore, we believe a modest intervention that produces modest effects in one's home life is a significant success considering that direct treatment effects of the training—even in the workplace, are rarely observed. We consider this RCT to be a strong design, and as suggested by Adler et al. (2015) “weak evidence from a strong design bolsters the impact of findings from studies that have found stronger effects using weaker designs” (p. 9).

## Future Directions

The results of this study also highlight potential routes for future research. For example, the main and moderated effects observed in this study were only at 9 months, as opposed to both 3 and 9 months, and although this is consistent with previous findings of SST on well-being (Hammer et al., 2020), future research efforts should aim to clarify why this occurs. In regard to marital relationship quality specifically, it may be the result of the dynamic, accumulative, and increasingly stable nature of long-term relationship quality (see Karney & Bradbury, 1995, for a meta-analytic review). From a relationship changing aspect, one potential approach to further enhance understanding of how effects unfold over time would be to use growth modeling. Growth modeling requires specification of a functional form of change, and to adequately do so methodological research suggests the need for a minimum of three to four time-points. In RCT designed studies, this would need to apply to both pre- and post-intervention periods, requiring a minimum of six to eight assessments. Researchers aiming to examine the growth in change trajectories across treatment and control conditions should also attend to comments by Bodner and Bliese (2018) about the differential change model, in which they find that the approach, although interesting, suffers from relatively low levels of statistical power to detect intervention effects. On the other hand, the change in relationships occurring at 9 months as opposed to 3 may have less to do with relational processes between families and more to do with supervisory practices, organizational culture shifts, and/or employee uptake of additional resources. For instance, supervisors may need to practice providing resources before they become more effective resource allocators or organizational policy changers.

Additionally, although this study demonstrated that a supportive supervisor training was effective for promoting marital relationship quality compared with a practice-as-usual control group, including an active comparison group would allow for stronger conclusions about the effectiveness of the training to be made. Thus, this would be an interesting direction for future research; however, we also note that this would require a large sample of organizations, and may not be necessitated when interventions are rigorously designed, executed (e.g., randomized control study),

and analyzed (e.g., intent-to-treat approach). Specifically, such approaches are rigorous and conservative, which allow for confidence in observed effects.

As a final future direction, we bring attention back to the idea of diffusion of interventions in organizations. The current study was designed with an intent-to-treat approach and was not designed to test or examine the mechanisms by which the treatment effects may spread within organizations (e.g., diffusion) and affect couples. Thus, we highlight that future research should be designed to enhance understanding about how organizational interventions may affect employees through multiple processes that result from the introduction of the training. If researchers can empirically demonstrate the spread of treatment effects across networks and workgroups, this has important and significant practical implications. For instance, if diffusion of treatment is the primary instigator of the effects, then perhaps targeting the different levels of an organizations would not be necessary to observe beneficial effects. On the other hand, a multipronged intervention that targets multiple levels may be used to enhance diffusion and therefore treatment effectiveness, and perhaps may be better suited for larger organizations. Researchers designing such studies should consider the outcomes they are targeting, organizational size, and factors related to contact with colleagues and supervisors when considering how diffusion may unfold.

## Conclusion

In conclusion, supportive supervisor training is beneficial beyond the immediate psychological, physical health, and work benefits they have been previously demonstrated to provide for employees, as they also promote improvements in family relationships for couples. Further, they have more pronounced effects for couples in terms of their marital relationship quality and supportive, positive parenting for those who have more need, that is, couples in which the employee is experiencing higher levels of stress. Considering the substantial role that both stress and marital relationships play in health, and their role in employees' work behavior, we recommend organizations and scholars take a careful look at how workplace practices can enrich the lives of workers and their families.

## References

- Adler, A. B., Bliese, P. D., Pickering, M. A., Hammermeister, J., Williams, J., Harada, C., . . . Ohlson, C. (2015). Mental skills training with basic combat training soldiers: A group-randomized trial. *Journal of Applied Psychology, 100*, 1752–1764. <http://dx.doi.org/10.1037/apl0000021>
- Adler, A. B., Britt, T. W., Castro, C. A., McGurk, D., & Bliese, P. D. (2011). Effect of transition home from combat on risk-taking and health-related behaviors. *Journal of Traumatic Stress, 24*, 381–389. <http://dx.doi.org/10.1002/jts.20665>
- Amato, P. R., & James, S. L. (2018). Changes in spousal relationships over the marital life course. In D. Alwin, D. Felmler, & D. Kreager (Eds.), *Social networks and the life course: Frontiers in sociology and social research* (2nd ed., pp. 139–158). Cham, Switzerland: Springer. [http://dx.doi.org/10.1007/978-3-319-71544-5\\_7](http://dx.doi.org/10.1007/978-3-319-71544-5_7)
- American Psychological Association (APA). (2014). *Stress in America: Paying with our health: Stress in America™ Survey*. Washington, DC: Author.
- American Psychological Association (APA). (2017). *Stress in America: The state of our nation: Stress in America™ Survey*. Washington, DC: Author.
- American Psychological Association (APA). (2019). *Stress in America: Stress and current events: Stress in America™ Survey*. Washington, DC: Author.
- Arpin, S. N., Starkey, A. R., Mohr, C. D., Greenhalgh, A. M. D., & Hammer, L. B. (2018). "A well spent day brings happy sleep": Findings from a dyadic study of capitalization support, loneliness, and sleep outcomes. *Journal of Family Psychology, 32*, 975–985. <http://dx.doi.org/10.1037/fam0000469>
- Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management, 48*, 677–693. <http://dx.doi.org/10.1002/hrm.20294>
- Badr, H., & Acitelli, L. K. (2005). Dyadic adjustment in chronic illness: Does relationship talk matter? *Journal of Family Psychology, 19*, 465–469. <http://dx.doi.org/10.1037/0893-3200.19.3.465>
- Bakker, A. B., & Demerouti, E. (2013). The spillover-crossover model. In J. G. Grzywacz and E. Demerouti (Eds.), *New frontiers in work and family research* (pp. 54–70). New York, NY: Psychology Press.
- Bakker, A. B., Demerouti, E., & Burke, R. (2009). Workaholism and relationship quality: A spillover-crossover perspective. *Journal of Occupational Health Psychology, 14*, 23–33. <http://dx.doi.org/10.1037/a0013290>
- Becvar, R. J., & Becvar, D. S. (2017). *Systems theory and family therapy: A primer*. Lanham, MD: Rowman & Littlefield.
- Belsky, J., & De Haan, M. (2011). Annual research review: Parenting and children's brain development: The end of the beginning. *Journal of Child Psychology and Psychiatry, 52*, 409–428.
- Belsky, J., & Pluess, M. (2009). Beyond diathesis stress: Differential susceptibility to environmental influences. *Psychological Bulletin, 135*, 885–908. <http://dx.doi.org/10.1037/a0017376>
- Bliese, P. D., Edwards, J. R., & Sonnentag, S. (2017). Stress and well-being at work: A century of empirical trends reflecting theoretical and societal influences. *Journal of Applied Psychology, 102*, 389–402. <http://dx.doi.org/10.1037/apl0000109>
- Bodenmann, G., Ledermann, T., & Bradbury, T. N. (2007). Stress, sex, and satisfaction in marriage. *Personal Relationships, 14*, 551–569. <http://dx.doi.org/10.1111/j.1475-6811.2007.00171.x>
- Bodner, T. E. (2018). Estimating and testing for differential treatment effects on outcomes when the outcome variances differ. *Psychological Methods, 23*, 125–137. <http://dx.doi.org/10.1037/met0000158>
- Bodner, T. E., & Bliese, P. D. (2018). Detecting and differentiating the direction of change and intervention effects in randomized trials. *Journal of Applied Psychology, 103*, 37–53. <http://dx.doi.org/10.1037/apl0000251>
- Bolger, N., & Amarel, D. (2007). Effects of social support visibility on adjustment to stress: Experimental evidence. *Journal of Personality and Social Psychology, 92*, 458–475. <http://dx.doi.org/10.1037/0022-3514.92.3.458>
- Bolger, N., DeLongis, A., Kessler, R. C., & Wethington, E. (1989). The contagion of stress across multiple roles. *Journal of Marriage and the Family, 51*, 175–183. <http://dx.doi.org/10.2307/352378>
- Bolger, N., Zuckerman, A., & Kessler, R. C. (2000). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology, 79*, 953–961. <http://dx.doi.org/10.1037/0022-3514.79.6.953>
- Bradbury, T. N., Fincham, F. D., & Beach, S. R. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and the Family, 62*, 964–980. <http://dx.doi.org/10.1111/j.1741-3737.2000.00964.x>
- Carlson, D. S., Thompson, M. J., & Kacmar, K. M. (2019). Double crossed: The spillover and crossover effects of work demands on work



- outcomes through the family. *Journal of Applied Psychology*, 104, 214–228. <http://dx.doi.org/10.1037/apl0000348>
- Chen, S., Westman, M., & Hobfoll, S. E. (2015). The commerce and crossover of resources: Resource conservation in the service of resilience. *Stress and Health*, 31, 95–105. <http://dx.doi.org/10.1002/smi.2574>
- Chen, Y., Haines, J., Charlton, B. M., & VanderWeele, T. J. (2019). Positive parenting improves multiple aspects of health and well-being in young adulthood. *Nature Human Behaviour*, 3, 684–691. <http://dx.doi.org/10.1038/s41562-019-0602-x>
- Chen, Y., Kubzansky, L. D., & VanderWeele, T. J. (2019). Parental warmth and flourishing in mid-life. *Social Science and Medicine*, 220, 65–72. <http://dx.doi.org/10.1016/j.socscimed.2018.10.026>
- Cohen, S. (2004). Social relationships and health. *American Psychologist*, 59, 676–684. <http://dx.doi.org/10.1037/0003-066X.59.8.676>
- Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease. *Journal of the American Medical Association*, 298, 1685–1687. <http://dx.doi.org/10.1001/jama.298.14.1685>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385–396. <http://dx.doi.org/10.2307/2136404>
- Cohen, S., Kessler, R. C., & Gordon, L. U. (Eds.). (1995). Strategies for measuring stress in studies of psychiatric and physical disorders. *Measuring stress: A guide for health and social scientists* (pp. 3–26). New York, NY: Oxford University Press.
- 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>
- Colella, A., Hebl, M., & King, E. (2017). One hundred years of discrimination research in the Journal of Applied Psychology: A sobering synopsis. *Journal of Applied Psychology*, 102, 500–513. <http://dx.doi.org/10.1037/apl0000084>
- Crain, T. L., Hammer, L. B., Bodner, T., Kossek, E. E., Moen, P., Lilienthal, R., & Buxton, O. M. (2014). Work-family conflict, family-supportive supervisor behaviors (FSSB), and sleep outcomes. *Journal of Occupational Health Psychology*, 19, 155–167. <http://dx.doi.org/10.1037/a0036010>
- Crain, T. L., & Stevens, S. C. (2018). Family supportive supervisor behaviors: A review and recommendations for research and practice. *Journal of Organizational Behavior*, 39, 869–888. <http://dx.doi.org/10.1002/job.2320>
- Crane, D. R., Busby, D. M., & Larson, J. H. (1991). A factor analysis of the Dyadic Adjustment Scale with distressed and nondistressed couples. *American Journal of Family Therapy*, 19, 60–66. <http://dx.doi.org/10.1080/01926189108250835>
- Dadds, M. R. (1995). *Families, children and the development of dysfunction* (Vol. 32). Thousand Oaks, CA: Sage Publications Inc.
- Davis, K. D., Lawson, K. M., Almeida, D. M., Kelly, E. L., King, R. B., Hammer, L., . . . McHale, S. M. (2015). Parents' daily time with their children: A workplace intervention. *Pediatrics*, 135, 875–882. <http://dx.doi.org/10.1542/peds.2014-2057>
- Dodici, B. J., Draper, D. C., & Peterson, C. A. (2003). Early parent—child interactions and early literacy development. *Topics in Early Childhood Special Education*, 23, 124–136.
- Eisenberger, R., Stinglhamer, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87, 565–573. <http://dx.doi.org/10.1037/0021-9010.87.3.565>
- Elgar, F., Waschbusch, D., Dadds, M., & Sigvaldason, N. (2007). Development and validation of a short form of the Alabama Parenting Questionnaire. *Journal of Child and Family Studies*, 16, 243–259. <http://dx.doi.org/10.1007/s10826-006-9082-5>
- Ferguson, M., Carlson, D., Boswell, W., Whitten, D., Butts, M. M., & Kacmar, K. M. (2016). Tethered to work: A family systems approach linking mobile device use to turnover intentions. *Journal of Applied Psychology*, 101, 520–534. <http://dx.doi.org/10.1037/apl0000075>
- Glenn, N. D. (1990). Quantitative research on marital quality in the 1980s: A critical review. *Journal of Marriage and the Family*, 52, 818–831. <http://dx.doi.org/10.2307/353304>
- Goh, J., Pfeffer, J., & Zenios, S. A. (2016). The relationship between workplace stressors and mortality and health costs in the United States. *Management Science*, 62, 303–608. <http://dx.doi.org/10.1287/mnsc.2014.2115>
- Goodman, J. S., & Blum, T. C. (1996). Assessing the non-random sampling effects of subject attrition in longitudinal research. *Journal of Management*, 22, 627–652. <http://dx.doi.org/10.1177/014920639602200405>
- Graham, J. M., Liu, Y. J., & Jezierski, J. L. (2006). The dyadic adjustment scale: A reliability generalization meta-analysis. *Journal of Marriage and Family*, 68, 701–717. <http://dx.doi.org/10.1111/j.1741-3737.2006.00284.x>
- Hammer, L. B., Allen, E., & Grigsby, T. D. (1997). Work-family conflict in dual-earner couples: Within-individual and crossover effects of work and family. *Journal of Vocational Behavior*, 50, 185–203. <http://dx.doi.org/10.1006/jvbe.1996.1557>
- Hammer, L. B., Brady, J. M., & Perry, M. L. (2020). Training supervisors to support veterans at work: Effects on supervisor attitudes and employee sleep and stress. *Journal of Occupational and Organizational Psychology*, 93, 273–301. <http://dx.doi.org/10.1111/joop.12299>
- Hammer, L. B., Ernst Kossek, E., Bodner, T., & Crain, T. (2013). Measurement development and validation of the Family Supportive Supervisor Behavior Short-Form (FSSB-SF). *Journal of Occupational Health Psychology*, 18, 285–296. <http://dx.doi.org/10.1037/a0032612>
- Hammer, L. B., Johnson, R. C., Crain, T. L., Bodner, T., Kossek, E. E., Davis, K. D., . . . Berkman, L. (2016). Intervention effects on safety compliance and citizenship behaviors: Evidence from the work, family, and health study. *Journal of Applied Psychology*, 101, 190–208. <http://dx.doi.org/10.1037/apl0000047>
- Hammer, L. B., Kossek, E. E., Anger, W. K., Bodner, T., & Zimmerman, K. L. (2011). Clarifying work-family intervention processes: The roles of work-family conflict and family-supportive supervisor behaviors. *Journal of Applied Psychology*, 96, 134–150. <http://dx.doi.org/10.1037/a0020927>
- 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>
- Hammer, L. B., Wan, W. H., Brockwood, K. J., Bodner, T., & Mohr, C. D. (2019). Supervisor support training effects on veteran health and work outcomes in the civilian workplace. *Journal of Applied Psychology*, 104, 52–69. <http://dx.doi.org/10.1037/apl0000354>
- Hammer, L. B., Wan, W. H., Brockwood, K. J., Mohr, C. D., & Carlson, K. F. (2017). Military, work, and health characteristics of separated and active service members from the Study for Employment Retention of Veterans (SERVe). *Military Psychology*, 29, 491–512. <http://dx.doi.org/10.1037/mil0000196>
- Heaney, C. A. (2003). Worksite health interventions: Targets for change and strategies for attaining them. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (2nd ed., pp. 305–323). Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/10474-015>
- 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>



- Holt-Lunstad, J., Birmingham, W., & Jones, B. Q. (2008). Is there something unique about marriage? The relative impact of marital status, relationship quality, and network social support on ambulatory blood pressure and mental health. *Annals of Behavioral Medicine*, 35, 239–244. <http://dx.doi.org/10.1007/s12160-008-9018-y>
- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine*, 7, e1000316. <http://dx.doi.org/10.1371/journal.pmed.1000316>
- House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison Wesley.
- Humbad, M. N., Donnellan, M. B., Iacono, W. G., & Burt, S. A. (2010). Externalizing psychopathology and marital adjustment in long-term marriages: Results from a large combined sample of married couples. *Journal of Abnormal Psychology*, 119, 151–162. <http://dx.doi.org/10.1037/a0017981>
- Hunsley, J., Best, M., Lefebvre, M., & Vito, D. (2001). The seven-item short form of the Dyadic Adjustment Scale: Further evidence for construct validity. *American Journal of Family Therapy*, 29, 325–335. <http://dx.doi.org/10.1080/01926180126501>
- Hunsley, J., Pinsent, C., Lefebvre, M., James-Tanner, S., & Vito, D. (1995). Construct validity of the short forms of the Dyadic Adjustment Scale. *Family Relations*, 44, 231–237. <http://dx.doi.org/10.2307/585520>
- Johnson, J. V., & Hall, E. M. (1988). Job strain, work place social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish working population. *American Journal of Public Health*, 78, 1336–1342. <http://dx.doi.org/10.2105/AJPH.78.10.1336>
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin*, 118, 3–34. <http://dx.doi.org/10.1037/0033-2909.118.1.3>
- Keeling, M., Kintzle, S., & Castro, C. A. (2018). Exploring U.S. Veterans' post-service employment experiences. *Military Psychology*, 30, 63–69. <http://dx.doi.org/10.1080/08995605.2017.1420976>
- Keizer, R., & Schenk, N. (2012). Becoming a parent and relationship satisfaction: A longitudinal dyadic perspective. *Journal of Marriage and Family*, 74, 759–773. <http://dx.doi.org/10.1111/j.1741-3737.2012.00991.x>
- Kelloway, E. K., & Barling, J. (2010). Leadership development as an intervention in occupational health psychology. *Work and Stress*, 24, 260–279. <http://dx.doi.org/10.1080/02678373.2010.518441>
- Kenny, D. A., & Ledermann, T. (2010). Detecting, measuring, and testing dyadic patterns in the actor-partner interdependence model. *Journal of Family Psychology*, 24, 359–366. <http://dx.doi.org/10.1037/a0019651>
- Kim, P. Y., Thomas, J. L., Wilk, J. E., Castro, C. A., & Hoge, C. W. (2010). Stigma, barriers to care, and use of mental health services among active duty and National Guard soldiers after combat. *Psychiatric Services*, 61, 582–588. <http://dx.doi.org/10.1176/ps.2010.61.6.582>
- Kirkpatrick, D. (1994). *Evaluating training programs: The four levels*. San Francisco, CA: Berrett-Koehler Publishers.
- Kossek, E. E., Odle-Dusseau, H. N., & Hammer, L. B. (2018). Family supportive supervision around the globe. In K. M. Shockley, W. Shen, & R. E. Johnson (Eds.), *The Cambridge handbook of the global work-family interface* (pp. 570–596). New York, NY: Cambridge University Press. <http://dx.doi.org/10.1017/9781108235556.031>
- 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>
- Lawson, K. M., Davis, K. D., McHale, S. M., Hammer, L. B., & Buxton, O. M. (2014). Daily positive spillover and crossover from mothers' work to youth health. *Journal of Family Psychology*, 28, 897–907. <http://dx.doi.org/10.1037/fam0000028>
- Le Fevre, M., Kolt, G. S., & Matheny, J. (2006). Eustress, distress and their interpretation in primary and secondary occupational stress management interventions: Which way first? *Journal of Managerial Psychology*, 21, 547–565. <http://dx.doi.org/10.1108/02683940610684391>
- Matias, M., Ferreira, T., Vieira, J., Cadima, J., Leal, T., & Mena Matos, P. (2017). Workplace family support, parental satisfaction, and work-family conflict: Individual and crossover effects among dual-earner couples. *Applied Psychology*, 66, 628–652. <http://dx.doi.org/10.1111/apps.12103>
- McCoy, C. E. (2017). Understanding the Intention-to-treat Principle in Randomized Controlled Trials. *The Western Journal of Emergency Medicine*, 18, 1075–1078. <http://dx.doi.org/10.5811/westjem.2017.8.35985>
- McHale, S. M., Lawson, K. M., Davis, K. D., Casper, L., Kelly, E. L., & Buxton, O. (2015). Effects of a workplace intervention on sleep in employees' children. *Journal of Adolescent Health*, 56, 672–677. <http://dx.doi.org/10.1016/j.jadohealth.2015.02.014>
- Murray, D. M. (1998). *Design and analysis of group-randomized trials*. New York, NY: Oxford University Press.
- Muthén, L. K., & Muthén, B. O. (1998–2017). *Mplus user's guide* (8th ed.). Los Angeles, CA: Author.
- Newland, L. A. (2015). Family well-being, parenting, and child well-being: Pathways to healthy adjustment. *Clinical Psychologist*, 19, 3–14. <http://dx.doi.org/10.1111/cp.12059>
- 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>
- Olson, R., Crain, T. L., Bodner, T. E., King, R., Hammer, L. B., Klein, L. C., . . . Buxton, O. M. (2015). A workplace intervention improves sleep: Results from the randomized controlled Work, Family, and Health Study. *Sleep Health*, 1, 55–65. <http://dx.doi.org/10.1016/j.sleh.2014.11.003>
- Prentice, D. A., & Miller, D. T. (1992). When small effects are impressive. *Psychological Bulletin*, 112, 160–164. <http://dx.doi.org/10.1037/0033-2909.112.1.160>
- Randall, A. K., & Bodenmann, G. (2009). The role of stress on close relationships and marital satisfaction. *Clinical Psychology Review*, 29, 105–115. <http://dx.doi.org/10.1016/j.cpr.2008.10.004>
- Ray, S. L., & Vanstone, M. (2009). The impact of PTSD on veterans' family relationships: An interpretative phenomenological inquiry. *International Journal of Nursing Studies*, 46, 838–847. <http://dx.doi.org/10.1016/j.ijnurstu.2009.01.002>
- Repetti, R. L. (1994). Short-term and long-term processes linking job stressors to father-child interaction. *Social Development*, 3, 1–15.
- Repetti, R. L. (1989). Effects of daily workload on subsequent behavior during marital interaction: The roles of social withdrawal and spouse support. *Journal of Personality and Social Psychology*, 57, 651–659. <http://dx.doi.org/10.1037/0022-3514.57.4.651>
- Repetti, R. L., & Wood, J. (1997). Effects of daily stress at work on mothers' interactions with preschoolers. *Journal of Family Psychology*, 11, 90–108. <http://dx.doi.org/10.1037/0893-3200.11.1.90>
- Respler-Herman, M., Mowder, B. A., Yasik, A. E., & Shamah, R. (2012). Parenting beliefs, parental stress, and social support relationships. *Journal of Child and Family Studies*, 21, 190–198. <http://dx.doi.org/10.1007/s10826-011-9462-3>
- Romero, D. H., Riggs, S. A., & Ruggero, C. (2015). Coping, family social support, and psychological symptoms among student veterans. *Journal of Counseling Psychology*, 62, 242–252. <http://dx.doi.org/10.1037/cou0000061>
- Sandberg, J. G., Yorgason, J. B., Miller, R. B., & Hill, E. J. (2012). Family-to-work spillover in Singapore: Marital distress, physical and

- mental health, and work satisfaction. *Family Relations*, 61, 1–15. <http://dx.doi.org/10.1111/j.1741-3729.2011.00682.x>
- Sears, M. S., Repetti, R. L., Reynolds, B. M., Robles, T. F., & Krull, J. L. (2016). Spillover in the home: The effects of family conflict on parents' behavior. *Journal of Marriage and Family*, 78, 127–141. <http://dx.doi.org/10.1111/jomf.12265>
- Shadish, W. R., & Cook, T. D. (2009). The renaissance of field experimentation in evaluating interventions. *Annual Review of Psychology*, 60, 607–629. <http://dx.doi.org/10.1146/annurev.psych.60.110707.163544>
- Sorensen, G., Linnan, L., & Hunt, M. K. (2004). Worksite-based research and initiatives to increase fruit and vegetable consumption. *Preventive Medicine*, 39, S94–S100. <http://dx.doi.org/10.1016/j.ypmed.2003.12.020>
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15–28. <http://dx.doi.org/10.2307/350547>
- Story, L. B., & Repetti, R. (2006). Daily occupational stressors and marital behavior. *Journal of Family Psychology*, 20, 690–700. <http://dx.doi.org/10.1037/0893-3200.20.4.690>
- Taylor, S. E. (2011). Social support: A review. In H. S. Friedman (Ed.), *The Oxford handbook of health psychology* (pp. 189–214). New York, NY: Oxford University Press.
- Umberson, D., Crosnoe, R., & Reczek, C. (2010). Social relationships and health behavior across the life course. *Annual Review of Sociology*, 36, 139–157. <http://dx.doi.org/10.1146/annurev-soc-070308-120011>
- Umberson, D., & Montez, J. K. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health and Social Behavior*, 51, S54–S66. <http://dx.doi.org/10.1177/0022146510383501>
- Valente, T. W., & Davis, R. L. (1999). Accelerating the diffusion of innovations using opinion leaders. *The Annals of the American Academy of Political and Social Science*, 566, 55–67. <http://dx.doi.org/10.1177/000271629956600105>
- Van der Doef, M., & Maes, S. (1999). The job demand-control (-support) model and psychological well-being: A review of 20 years of empirical research. *Work and Stress*, 13, 87–114. <http://dx.doi.org/10.1080/026783799296084>
- Vieira, J. M., Matias, M., Lopez, F. G., & Matos, P. M. (2016). Relationships between work–family dynamics and parenting experiences: A dyadic analysis of dual-earner couples. *Work and Stress*, 30, 243–261. <http://dx.doi.org/10.1080/02678373.2016.1211772>
- Walton, G. M. (2014). The new science of wise psychological interventions. *Current Directions in Psychological Science*, 23, 73–82. <http://dx.doi.org/10.1177/0963721413512856>
- Wan, W., Haverly, S. N., & Hammer, L. (2018). Work, stress, and health of military couples across transitions. In P. D. Harms & P. L. Perrewé (Eds.), *Research in occupational stress and well-being: Vol. 16. Occupational stress and well-being in military contexts* (pp. 69–90). Bingley, United Kingdom: Emerald Publishing. <http://dx.doi.org/10.1108/S1479-355520180000016005>
- Westman, M. (2001). Stress and strain crossover. *Human Relations*, 54, 717–751. <http://dx.doi.org/10.1177/0018726701546002>

Received October 7, 2019

Revision received August 7, 2020

Accepted August 17, 2020 ■