Supervisor Health and Safety Support: Scale Development and Validation

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Executive Summary

Two studies were conducted to develop a psychometrically sound measure of supervisor health and safety support (SHSS). We identified three dimensions of supervisor support (physical health, psychological health, safety) and used Study 1 to develop items and establish content validity. Study 2 was used to establish the dimensionality of the new measure and provide criterion-related and discriminant validity evidence of the measure using supervisor and subordinate data. The measure had incremental validity in predicting employee performance and psychological strain outcomes above and beyond general work support variables. Implications of these findings and for workplace support theory and practice are discussed.

Introduction

Employee health can substantially affect an organization’s operating costs, productivity, and competitiveness (Bellingham & Pelletier, 1995). According to the National Coalition on Health Care, total health care spending was $2.4 trillion in 2007 ($7,900 per person). Further, the Kaiser Family Foundation reports that average premiums for family coverage have increased by 119% since 1999 (www.kff.org). Along with increasing insurance costs, organizations incur additional costs when employees take time off to deal with illnesses. The Centers for Disease Control and Prevention (2002) reported that employers can lose 4 work days per person per year due to illness or injury, or approximately 637 million work-loss days. Organizations are also affected when employees suffer from psychological disorders. For example, the cost of depression has exceeded over $40 billion, with over half of that amount attributed to workplace costs such as reduced productivity and absenteeism (Truax & McDonald, 2002).

While managers realize the financial consequences of poor health in the workplace, they may be less aware of the steps they can take to improve the health of their employees. This may be a function of the traditional approach to health promotion, focusing primarily on large-scale interventions targeting general health and well-being (e.g., smoking cessation). These health promotion programs remain largely ineffective (Heaney, 2003), perhaps because organizational interventions only offer formal services to employees, whereas other more informal means of health promotion, such as support from one’s supervisor, may be more readily available and applicable. In fact, training of managers in recognizing subordinates’ psychological strain and underlying risk factors is a cornerstone of NIOSH’s strategy for controlling stress in the workplace (Sauter, 1992). Informal support may also be important with respect to workplace
safety issues. Although historically managers have been more concerned with traditional safety and environment-related issues such as compliance and conservation rather than enhancing employee well-being (Bellingham & Pelletier, 1995), simply discussing safety issues with employees may have a meaningful impact on both employee health and behavioral outcomes.

Meta-analytic findings highlight the importance of social support from managers as an important predictor of psychological strain (Lee & Ashforth, 1996). However, researchers note the existing literature gives little guidance as to the behaviors that actually constitute health-specific support from supervisors (Beehr, 1995). That is, existing measures of general support fail to operationalize the specific health and safety support behaviors in which supervisors might engage to benefit employees. Therefore, the purpose of this study is to develop and provide initial validity evidence for a measure of supervisor health and safety support (SHSS).

Supervisor Health and Safety Support

Decades of psychological research support main and buffering effects for social support in predicting well-being and performance (e.g., Lee & Ashforth, 1996; Nieuwenhuijzen, Bruinvels, & Frings-Dresen, 2010; Rhodes & Eisenberger, 2002). However, in the organizational literature, support is often examined based on the referent, such as one’s supervisor or coworker. Most of these measures are very general. For example, supervisor emotional support is measured with items such as “How would you rate your immediate supervisor/manager on 1) providing you with the support you need to do a quality job and 2) treating you with respect as an individual” and “coworker instrumental support is measured by responses to ‘How would you rate each of the following 1) teamwork between your department and other groups you depend on and 2) the quality of work you receive from other associates you depend upon’” (Graen, 2006).

Although the positive effect of supervisor support on individual reactions, attitudes, and outcomes is generally accepted, questions remain with regard to which types of supervisor support may be most beneficial to employees and in what situations. House (1981) argues that social support can be either general or problem-focused and that the key to understanding it is to “understand who gives what to whom about which problems” (p.28). In their review of the supervisor support literature, Hammer, Kossek, Yragui, Bodner, and Hendon (2009) also observed a lack of measures of general behavioral supervisor support. Their measure of family supportive supervisor behaviors was designed to address this gap in the family domain.

However, the existing lack of specificity in the work domain, coupled with recent emphasis on studying health promotion in the workplace (Frone, 2008), demonstrates an area in the literature where further research is needed. That is, in order to determine how supervisor support is beneficial for reducing the impact of work-related health and safety stressors on employees, it is important to identify specific behaviors considered supportive under stress.

Study 1: Scale Development

Study 1 evolved in four phases and was designed as an inductive approach to identify the occurrence of health- and safety-related support behaviors to develop a measure of SHSS.

Item Generation

Participants and Procedure. Participants involved in instrument development were currently employed as substance abuse treatment counselors attending a continuing education course. During the course, 30 contacts willing to participate in a 30-minute telephone interview on the relationship with their supervisor provided their contact information, 4 of whom later participated. Half of the participants were female and their average career tenure was 16 years (SD = 8.29) and organizational tenure was 4 years (SD = 3.00). Interviews consisted of semi-structured questions to determine the nature of health-related topics discussed with supervisors. The interview protocol asked specific questions about three dimensions of health and well-being: physical, psychological, and spiritual (e.g., “Does your supervisor talk to you or express concern about your physical health/wellbeing?” and “Does your supervisor talk to you or express concern about your mental health/psychological wellbeing?”). Interviews also allowed for open-ended discussion of other areas deemed important by participants. Spiritual support was initially included due to the reliance in this occupation on a 12-step ideology in treatment of clients (Klutschinowski & Troth, 1995), which involves a spiritual component. However, as discussed in detail below, the third dimension later became safety rather than spiritual health.

Results. Interview responses consistently indicated physical and psychological health issues were discussed with supervisors but interestingly, spiritual health issues were not commonly discussed with participants’ supervisors and participants did not report spiritual health as something individuals in their profession would generally discuss with supervisors. Instead, although not originally included in the semi-structured interview questions, participants’ responses indicated agreement an additional dimension of health-related topics discussed with their supervisor is that of safety issues. When asked what they would call these kinds of discussions, participants labeled these exchanges as “support.” Regarding physical health, participants mentioned a variety of topics such as employee illnesses and diseases. Some of the psychological health topics participants discussed were depression and stress. Safety topics included crisis management techniques and the ability to identify threatening situations. Based on these results, we created an initial list of 15 items.

Initial Item Reduction

Participants and Procedure. Three groups of participants were involved in the initial item reduction process. First, five subject matter experts (SMEs) with considerable experience in high-level positions within their respective organizations (e.g., CFO, CEO) in the substance abuse treatment field rated the importance of the items developed to measure the health and safety themes reported in the interviews. Next, seven psychology graduate students and faculty
reviewed and categorized items according to their belongingness in each of the three construct
domains. Finally, the last group of participants (N = 127) were subscribers to a graduate student
domains. The final dimension of SHSS identified was safety support. Supervisors can engage in
this type of support by having conversations with employees about workplace safety issues such as
maintaining a safe environment or dealing with threatening situations at work, as well as by
encouraging employees to alert the supervisor of safety issues that should be addressed. Meta-
analytic findings of the usefulness of supervisor support for safety climate in predicting accidents
and injuries suggest only weak to moderate effects (Christian et al., 2009), perhaps because
measures tend to focus on general perceptions of climate, and those that address specific
behaviors (e.g., Zohar, 2000) emphasis how it is perceived by or demonstrated to a group.
Examination of the safety support items developed in the current study reveal employees may
find one-on-one conversations useful.

In summary, Study 1 was used to develop the SHSS measure and to provide some initial
evidence of the scale’s reliability and validity. Study 2 was conducted to further examine the
scale’s validity and to explore the nomological network associated with SHSS. This is an
important step toward understanding health- and safety-related behaviors at work, which may
have implications for important employee outcomes. However, before research can explore these
possibilities, additional validity evidence is warranted.

Study 2: Nomological Network Associated with Supervisor Health and Safety Support

One objective of Study 2 is to provide additional evidence of construct validity for the
SHSS dimensions. In addition, examining the nomological network of variables related to a
construct reflect a critical step in the instrument development process (Cronbach & Meehl, 1955). As such, the following sections outline the nomological network of variables we
examined in relation to SHSS.

Criterion-Related, Discriminant, and Incremental Validity

Workplace stressors are characteristics of the environment that impair performance and
lead to negative or harmful reactions for the employee (i.e., strain). In general, supervisor
support is thought to reduce the impact of stressors at work (e.g., Beehr, 1995). Thus, we expect
the dimensions of SHSS to have a beneficial impact on several performance and psychological
strain outcomes. First, research reveals a link between received social support and quality of the
supervisor-subordinate relationship (Lavelle, McMahan, & Harris, 2009) suggesting SHSS may
be associated with higher ratings of supervisor job performance. Further, although SHSS may
not be a formal requirement of supervisors’ roles, subordinates may view it as reflecting
important behaviors they expect from their supervisors and rate supervisors’ performance higher
when they discuss health- and safety-related issues. SHSS may also be related to higher ratings
of subordinate job performance. The general support literature reveals a positive relationship
between supervisor support and subordinate performance (e.g., Groene, 1975). Having
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withdrawal to more general reports of well-being such as depressed mood and propose the following:

**Hypothesis 3:** Supervisor health and safety support will be negatively related to subordinate reports of psychological withdrawal.

**Hypothesis 4:** Supervisor health and safety support will be negatively related to subordinate reports of depressed mood.

Another strategy for examining the validity of a construct is to examine its relationships with other constructs that are considered to be theoretically distinct (discriminant validity) from the construct of interest (Campbell & Fiske, 1959). For example, SHSS should not just reflect individual tendencies to view everything in a positive light (i.e., positive affect). Moreover, due to the level of specificity associated with SHSS, it should not simply reflect the existence of more broad forms of social support at work such as general supervisor support, perceived organizational support (POS), and coworker support. Rather, SHSS is conceptualized as a unique type of support linked to particular supervisor behaviors. Thus, the following predictions assess the discriminant validity of the SHSS measure:

**Hypothesis 5:** Supervisor health and safety support will be positively related to but distinct from positive affect.

**Hypothesis 6:** Supervisor health and safety support will be positively related to but distinct from supervisor support, perceived organizational support, and coworker support.

Finally, it is important to demonstrate that SHSS has incremental validity in predicting outcomes. Because SHSS is conceptually as distinct from more broad types of social support available at work, we expect SHSS to uniquely contribute to the prediction of performance and psychological strain outcomes above and beyond general work-related support variables.

**Hypothesis 7:** Supervisor health and safety support will be a unique predictor of performance and psychological strain above and beyond general support variables (supervisor support, perceived organizational support, coworker support).

**Study 2 Method**

**Participants and Procedure.** Participants in Study 2 were substance abuse treatment professionals employed across 86 free-standing centers. A total of 936 participants completed surveys (738 subordinates, 198 supervisors). The average age of subordinates was 43 (supervisors = 47). The majority of participants were female (64% subordinates, 63% supervisors) and Caucasian (66% subordinates, 73% supervisors). Forty-five percent of subordinates and 65% of supervisors had completed a masters or professional degree. The average organizational tenure was 5.1 years for subordinates and 9.6 years for supervisors. Subordinates’ average annual salary was $34,704 and supervisors’ was $52,307.

**Measures.** Supervisor Health and Safety Support was measured with the items developed in Study 1. Job performance was measured with two other-rated scales created and validated in a
larger study of clinical supervision and turnover. Counselors rated supervisors' job performance with a 14-item measure (e.g., "demonstrates clinical knowledge") and supervisors rated counselors' job performance with a 23-item measure (e.g., "facilitates individual counseling sessions with clients"). Organizational citizenship behaviors were other-rated and measured with items from Williams and Anderson's (1991) 14-item measure (e.g., "helps others who have heavy workloads"). Both counselors and supervisors completed the measure to rate the other's OCBS performance.

Psychological withdrawal was measured with 6 items from Lehan and Simpson's (1992) measure. Depressed mood was measured with items (e.g., "I put less effort into the job than I should"). Positive Quinn and Shepherd's (1974) 10-item measure (e.g., "I often feel downhearted or blue"). Positive affect was measured with Watson, Clark, and Tellegen's (1988) 10-item measure asking participants how they feel on a typical day using adjective markers (e.g., enthusiastic, inspired). The measure is based on House's (1981) index and closely parallels Yoon and Lim's (1999) adapted measure based on House's index. The measure is conceptually similar to the Supervisory Suppport was measured with a 3-item scale created for this study (e.g., "My supervisor listens carefully to my perspective on clinical issues"). Perceived organizational support was measured with Eisenberger, Cummings, Armeli, and Lynch's (1997) 8-item measure (e.g., "My organization cares about my opinions"). Coworker support was measured with 6 items from Cotrona and Silver's (1987) Social Provisions Scale (e.g., "I can depend on my coworkers to help me if I really need it"). Participants responded to the except those for job performance on a 1 to 5 Likert-type scale. Participants rated the items on the second factor. Each of these nested model comparisons resulted in a significant $\Delta \chi^2$ (see Table 2), demonstrating that the a priori three-factor model fit the data significantly better than did any of the alternative models. This provides strong construct validity evidence for the appropriateness of the 3-dimensional measure. Finally, to fully examine the relationships among variables, we used a partial disaggregation approach with item parcels to test a CFA measurement model using the three dimensions of supervisor health and safety support as separate dimensions and all other constructs available from Study 2. In order to balance model complexity and available sample size requirements, we chose to use 3-item parcels for each construct in our measurement model. This model fit the data well. Specifically, although the $\chi^2$ was significant, $\chi^2(25) = 1235.04, p < .01$, all fit indices were well within suggested cut-off thresholds (i.e., $CFI = .97$, $NNFI = .97$, $SRMR = .05$).

Criterion-Related Validity. Hypotheses 1–4 predicted that SHSS is associated with performance and psychological strain outcomes. Performance outcomes for Hypothesis 1a and 1b, supervisor physical health support, psychological health support, and safety support were significantly and positively correlated with supervisor job performance ($r = .46, .51, .54; p < .05$) and subordinate job performance ($r = .14,.19,.12; p < .05$). Further, in support of Hypotheses 2a and 2b, physical, psychological, and safety support were positively and significantly related to supervisor OCBS ($r = .48, .55, .62; p < .05$) and subordinate OCBS ($r = .18,.24,.23; p < .05$). Supporting Hypotheses 3 and 4, physical, psychological, and safety support were significantly and negatively correlated with psychological withdrawal ($r = -.15,.11,-.21; p < .05$) and depressed mood ($r = -.21,.14,-.21; p < .05$).

Discriminant and Incremental Validity. The correlations in Table 1 also provide evidence for discriminant validity, supporting Hypothesis 5 and 6. The correlations between the three dimensions of SHSS and positive affect were small in magnitude (Cohen, 1988), ranging from .12 to .15, and shared variance was between 15% to 25%. The correlations between SHSS and the general support variables (supervisor support, POS, and coworker support) were much higher, ranging from .26 to .59. We expected SHSS to have some domain overlap with general support, so the reported shared variance between 7% to 35% still provides evidence of the construct's distinctiveness. To further explore the discriminant validity of SHSS, we conducted second-order CFA. The first second-order CFA specified two higher-order latent factors comprised of SHSS (represented by the three dimensions of physical, psychological, and safety support as first-order factors) as one factor and general support (represented by supervisor support, POS, and coworker support as first-order factors) as the other factor. The two-factor model provided a good fit to the data. Although the $\chi^2$ was significant, $\chi^2(171) = 1288.02, p < .01$, other fit indices suggested good model fit ($CFI = .96$, $NNFI = .95$, $SRMR = .06$). Standardized factor loadings of the first-order factors on the second-order factors are provided in Table 3. We also conducted an alternative second-order CFA specifying a single higher-order latent construct comprised of all six dimensions of support (physical, psychological, and safety, supervisor, POS, and coworker). The fit for this model was not as good ($\chi^2(171) = 1345.44, p < .01$; $CFI = .95$, $NNFI = .94$, $SRMR = .19$), and this model fit the data significantly worse than the proposed second-order two-factor model.
model ($\Delta R^2 = 0.115, p < .01$). These results provide additional support for the distinctness of SHSS, even in the context of other types of support.

Next, we examined the incremental validity of SHSS in predicting performance and psychological strain outcomes over and above general work support variables (supervisor support, POS, coworker support) using hierarchical multiple regression. Significant results are provided in Table 4. As shown, SHSS added significant and unique variance in the prediction of supervisor job performance ($\Delta F(1, 119) = 22.55, \Delta R^2 = .05, p < .01$), supervisor OCBs ($\Delta F(3, 116) = 40.87, \Delta R^2 = .09, p < .01$) subordinate OCBs ($\Delta F(3, 45) = 2.68, \Delta R^2 = .02, p < .05$), and psychological withdrawal ($\Delta F(3, 269) = 4.89, \Delta R^2 = .02, p < .01$). However, SHSS did not add significant incremental variance to the prediction of subordinate job performance ($\Delta F(3, 45) = 1.83, \Delta R^2 = .04, p < .05$) or depressed mood ($\Delta F(3, 269) = 2.20, \Delta R^2 = .01, p < .05$). Taken together, these results provide general support for Hypothesis 7.

**Study 2 Discussion**

The results of Study 2 suggest receiving health- and safety-related forms of support may beneficially impact employees both professionally and personally. That is, SHSS was positively related to each of the performance outcomes (supervisor and employee job performance and OCBs) and negatively related to psychological strain outcomes (psychological withdrawal and depressed mood). In addition, SHSS added incremental validity in predicting performance and psychological strain above and beyond more general types of work support. Interestingly, SHSS demonstrated incremental validity in predicting psychological withdrawal but not depressed mood. It may be more difficult to explain unique variance in depressed mood because it is dependent upon a variety of factors ranging from genetics to environmental and behavior factors.

**General Discussion**

The development of the SHSS scale answers a call in the literature for identification of more situation-specific behaviors that supervisors use to support their employees (Ilgen, 1990). In Study 1, we identified three distinct types of SHSS (physical health support, psychological health support, and safety support), and CFA results from Study 2 supported the dimensional distinctness of the scale. Moreover, results of Study 2 provided evidence of the scale’s criterion-related, discriminate, and incremental validity.

**Implications for Research and Theory**

The results of the present study suggest SHSS represents a multi-dimensional construct that is conceptually and empirically distinct from more general forms of workplace support. Future investigations of the relationship between workplace support and employee outcomes should include not only measures of general support received at work but also SHSS, because they are distinct constructs with differential effects. Further, based on the different pattern of relationships with outcomes, and the conceptual differences between the three types of SHSS, we recommend these three scales be used separately rather than combined.

The strong effects we found for the dimension of supervisor safety support have implications for safety climate theory and research. Safety climate relates to shared perceptions of the organization’s safety policies, procedures, and practices, but safety climate measures have been criticized for their inability to distinguish between formally declared policies and their enforced counterparts via managerial behaviors (Zohar, 2003). Supervisor safety support will help researchers differentiate this type of one-on-one support from other supervisor behaviors aimed at groups of employees (Zohar, 2000).

**Implications for Practice**

Work-related stress can have substantial costs for individuals, organizations, and society as a whole. Because SHSS relates to both work and nonwork outcomes, supervisors should be informed of the importance of providing these kinds of support. Supervisors and subordinates alike could benefit from the provision of training focused generally on strategies for providing or seeking out social support. SHSS may be another important resource for addressing employees’ other health promotion activities are readily available. Furthermore, the potential costs of developing training such as this could be substantially lower than other large-scale health/safety promotion interventions (e.g., safety training, on-site fitness centers), the latter of which may not be a realistic option for many organizations.

**Avenues for Future Research**

Additional research is needed that examines the impact of health- and safety-specific support behaviors provided by other employees in an individual’s support network. Coworkers are often cited as an important workplace resource and may provide unique support functions consistent with our findings for supervisor support. Beehr, Xex, Stacy, and Murray (2000) found that coworker support was linked to both psychological strain and job performance, though their measure of coworker support was not health/safety-related. Other research has begun to address the idea of coworker support for safety (Tucker, Chmiele, Turner, Henshovis, & Stride, 2008), finding that it mediates the relationship between POS for safety and employee safety voice (e.g., reporting safety violations). Thus, developing a safety climate that includes coworker support for safety may impact individual safety decisions.

**Limitations and Conclusion**

Several study limitations are noteworthy. First, the use of cross-sectional data leads to concerns about reverse causality, and longitudinal work addressing this issue is warranted. Second, although data were collected from both subordinates and their supervisors and some
measures were other-rated, all data were collected using perceptual measures, raising concerns about possible common method bias. We performed a single-factor CFA as an initial diagnostic to determine if common method variance is a major problem (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), which showed poor fit with the data ($$\chi^2/df = 896.75/703$$, $$CFI = .64$$, $$NNFI = .62$$, $$SRMR = .25$$) suggesting common method bias is not a major concern. Next, common method variance was examined using the “single unmeasured latent method factor” CFA approach recommended by Podsakoff et al. (2003). Although the model including all latent measurement factors and a method factor fit the data better than the measurement model alone ($$\chi^2(39) = 233.40, p < .01$$), the average proportion of variance attributed to the measurement factors was substantially higher than that attributed to the method factor (69% vs. 39%, respectively), providing further evidence that substantive relationships, and not common method bias, are likely responsible for our observed findings.

Lastly, although Study 2 included a demographically diverse sample of employees from many organizations, the participants were all substance abuse treatment professionals. However, the job tasks and work environment associated with the field of substance abuse counseling is highly similar to other healthcare occupations such as child, family, and school social workers, social service assistants, occupational therapists, physical therapists, and residential advisors, which collectively employ over 84,000 people (http://www.onetonline.org/link/summary/21-1011.00). Medical personnel (e.g., nurses, emergency room physicians) also come into frequent contact with patients suffering from substance abuse issues and often conduct assessments of the patient drug use, offer brief therapeutic interventions, or work directly with patients in the detoxification process (Cohagan, Worthington, & Krause, 2011). Therefore, it is reasonable to expect that our findings would generalize to a wide range of related healthcare occupations. Like substance abuse counseling, occupations that involve daily customer contact (e.g., teaching, public safety, retail sales, hospitality, customer service) place employees at high risk for burnout (Maslach & Jackson, 1981). In such occupations, supervisor support for health and safety seems highly relevant given the established relationship between social support at work and burnout (Lee & Ashforth, 1986).

To provide some evidence for the generalizability of our results to other samples, we conducted multi-group CFA tests of measurement invariance between our Study 2 sample and data collected from a sample of employees occupying a variety of jobs in a southeastern hospital ($$N = 121$$). Results indicated that the assumption of configural (i.e., the nature of the overarching construct that is operationalized by measured items remains unchanged across groups) and metric (i.e., the pattern of relationships between measured items and their corresponding constructs are invariant across groups) invariance was tenable for SHSS. Further, a CFA conducted only on the hospital sample produced similar fit for the three-factor a priori measurement model ($$\chi^2(118) = 176.79, p < .01$$; $$CFI = .95$$; $$NNFI = .93$$; $$SRMR = .08$$), with standardized factor loadings ranging from .57 to .97 and factor inter-correlations ranging from .65 to .89. Notwithstanding these results, research should attempt to replicate these findings in a variety of organizational settings prior to generalizing the results from this study.

References


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<td>Subordinate JPM</td>
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<td>-.12</td>
<td>-.13</td>
<td>-.15</td>
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<td>-.12</td>
<td>-.14</td>
<td>-.12</td>
<td>-.13</td>
<td>-.14</td>
<td>-.12</td>
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<td>Depressed mood</td>
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<td>-.14</td>
<td>-.12</td>
<td>-.14</td>
<td>-.15</td>
<td>-.14</td>
<td>-.13</td>
<td>-.12</td>
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<td>-.13</td>
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<td>supervisor support</td>
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<td>.56</td>
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<td>POS</td>
<td>3.07</td>
<td>3.32</td>
<td>3.54</td>
<td>2.72</td>
<td>2.81</td>
<td>3.31</td>
<td>3.03</td>
<td>3.19</td>
<td>3.07</td>
<td>3.32</td>
<td>3.54</td>
<td>2.72</td>
<td>2.81</td>
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</table>

Note: Correlation coefficients are in the diagonal. N = 738 for all variables except POS = 498. Supervised JPM is superiors-rated, subordinate JPM is subordinates-rated, POS = perceived organizational support. OCBs = Organizational Citizenship Behavior.
### Table 2

**Study 2 Confirmatory Factor Analysis Fit Indices and Nested Model Comparisons (N = 719)**

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>NNFI</th>
<th>SRMR</th>
<th>Model comparisons</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 3 factor</td>
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<td>.97</td>
<td>.97</td>
<td>.05</td>
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<tr>
<td>2. 2 factor A</td>
<td>1373.28**</td>
<td>53</td>
<td>.92</td>
<td>.90</td>
<td>.07</td>
<td>2 vs. 1</td>
<td>889.05**</td>
<td>2</td>
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<tr>
<td>3. 2 factor B</td>
<td>1406.72**</td>
<td>53</td>
<td>.92</td>
<td>.89</td>
<td>.07</td>
<td>3 vs. 1</td>
<td>922.49**</td>
<td>2</td>
</tr>
<tr>
<td>4. 2 factor C</td>
<td>1509.28**</td>
<td>53</td>
<td>.91</td>
<td>.89</td>
<td>.08</td>
<td>4 vs. 1</td>
<td>1025.05**</td>
<td>2</td>
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<tr>
<td>5. 1 factor</td>
<td>2163.68**</td>
<td>56</td>
<td>.87</td>
<td>.84</td>
<td>.10</td>
<td>5 vs. 1</td>
<td>1679.45**</td>
<td>5</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>5 vs. 2</td>
<td>790.40**</td>
<td>3</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>5 vs. 3</td>
<td>756.96**</td>
<td>3</td>
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<td></td>
<td></td>
<td></td>
<td>5 vs. 4</td>
<td>654.40**</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note.* df = model degrees of freedom, CFI = comparative fit index, NNFI = non-normed fit index, SRMR = standardized root mean square residual. 3 factor = physical health support, psychological health support, and safety support; 2 factor A = physical health support and psychological health support items loading on one factor and safety support items loading on second factor; 2 factor B = psychological health support and safety support items loading on one factor and physical health support items loading on second factor; 2 factor C = physical health support and safety support items loading on one factor and psychological health support items loading on second factor. **$p < .01$**

### Table 3

**Study 2 Standardized Factor Loadings of First-Order Latent Variables on Second-Order Latent Variables**

<table>
<thead>
<tr>
<th>First-order factors</th>
<th>Second-order latent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supervisor health &amp; safety support</td>
</tr>
<tr>
<td>Physical Health Support</td>
<td>.78</td>
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<tr>
<td>Psychological Health Support</td>
<td>.84</td>
</tr>
<tr>
<td>Safety Support</td>
<td>.85</td>
</tr>
<tr>
<td>Supervisor Support</td>
<td></td>
</tr>
<tr>
<td>Perceived Organizational Support</td>
<td></td>
</tr>
<tr>
<td>Coworker Support</td>
<td></td>
</tr>
</tbody>
</table>
Table 4

Study 2 Hierarchical Regression Results for Incremental Validity Evidence with Regard to General Work Support Variables

<table>
<thead>
<tr>
<th></th>
<th>Supervisor JP</th>
<th>Supervisor OCBs</th>
<th>Subordinate OCBs</th>
<th>Psychological withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1 (general support variables)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor support</td>
<td>.56**</td>
<td>.45**</td>
<td>.16**</td>
<td>-0.05</td>
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<tr>
<td>POS</td>
<td>.13**</td>
<td>.24**</td>
<td>.13**</td>
<td>-0.17</td>
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<tr>
<td>Coworker support</td>
<td>.02</td>
<td>.12**</td>
<td>.07</td>
<td>-0.07</td>
</tr>
<tr>
<td>F</td>
<td>181.34**</td>
<td>173.60**</td>
<td>12.55**</td>
<td>13.06**</td>
</tr>
<tr>
<td>(df = 3, 718)</td>
<td>(df = 3, 719)</td>
<td>(df = 3, 457)</td>
<td>(df = 3, 723)</td>
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<tr>
<td>r^2</td>
<td>.43</td>
<td>.42</td>
<td>.08</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>Step 2 (supervisor health and safety support)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor support</td>
<td>.40**</td>
<td>.30**</td>
<td>.15</td>
<td>.01</td>
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<tr>
<td>POS</td>
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<td>.15**</td>
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<td>-0.13</td>
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<tr>
<td>Coworker support</td>
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<td>.08**</td>
<td>.07</td>
<td>-0.05</td>
</tr>
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<td>Physical health support</td>
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<td>.00</td>
<td>-.03</td>
<td>-0.05</td>
</tr>
<tr>
<td>Psych. health support</td>
<td>-.14**</td>
<td>.14**</td>
<td>.15</td>
<td>-0.09</td>
</tr>
<tr>
<td>Safety support</td>
<td>-.16**</td>
<td>.28**</td>
<td>.03</td>
<td>-0.19</td>
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<tr>
<td>ΔF</td>
<td>22.55**</td>
<td>40.87**</td>
<td>2.68</td>
<td>1.49**</td>
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<tr>
<td>(df = 3, 715)</td>
<td>(df = 3, 716)</td>
<td>(df = 3, 454)</td>
<td>(df = 3, 720)</td>
<td></td>
</tr>
<tr>
<td>Δr^2</td>
<td>.05</td>
<td>.09</td>
<td>.02</td>
<td>.02</td>
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<tr>
<td>Total r^2</td>
<td>.48</td>
<td>.51</td>
<td>.10</td>
<td>.07</td>
</tr>
</tbody>
</table>

Note: Standardized betas are from each step of the regression sequence. POS = perceived organizational support. Jp = job performance. OCB = organizational citizenship behavior. *p < .05 ** p < .01.

Appendix

Supervisor Health and Safety Support Items

<table>
<thead>
<tr>
<th>Original Items</th>
<th>Modified Items</th>
<th>Final Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My supervisor encourages me to take steps to prevent illnesses. (3.0)</td>
<td>1. My supervisor encourages me to take steps to prevent physical illnesses. (100%)</td>
<td>1. My supervisor encourages me to take steps to prevent personal physical illnesses. (Physical)</td>
</tr>
<tr>
<td>2. My supervisor and I discuss diseases that affect my work. (2.5)</td>
<td>2. My supervisor and I discuss diseases that might affect my work. (80%)</td>
<td>2. My supervisor and I discuss ways to improve my physical health. (Physical)</td>
</tr>
<tr>
<td>3. My supervisor and I discuss the health of my family. (1.3)</td>
<td>3. My supervisor encourages me to engage in healthy behaviors (e.g., stop smoking, exercise, healthy diet). (100%)</td>
<td>3. My supervisor encourages me to take better physical care of myself (e.g., stop smoking, healthy diet, exercise, rest). (Physical)</td>
</tr>
<tr>
<td>4. My supervisor and I discuss illnesses that affect my work. (2.5)</td>
<td>4. My supervisor and I discuss illnesses that might affect my work. (80%)</td>
<td>4. My supervisor and I discuss my concerns about my physical health. (Physical)</td>
</tr>
<tr>
<td>5. My supervisor and I discuss personal issues that cause me to experience stress. (2.5)</td>
<td>5. My supervisor and I discuss personal issues that cause me to experience stress. (100%)</td>
<td>5. My supervisor and I discuss things at work that I find stressful. (Psychological)</td>
</tr>
<tr>
<td>6. My supervisor and I discuss things that are bothering me or causing me to feel upset. (3.0)</td>
<td>6. My supervisor and I discuss things that are bothering me or causing me to feel upset. (100%)</td>
<td>6. My supervisor and I discuss things that are bothering me or causing me to feel upset. (Psychological)</td>
</tr>
<tr>
<td>7. My supervisor encourages me to take steps to prevent burnout. (2.5)</td>
<td>7. My supervisor encourages me to take steps to prevent burnout. (86%)</td>
<td>7. My supervisor and I discuss ways to improve my psychological well-being. (Psychological)</td>
</tr>
<tr>
<td>8. My supervisor and I discuss personal issues that cause me to feel depressed. (2.5)</td>
<td>8. My supervisor and I discuss personal issues that cause me to feel depressed. (100%)</td>
<td>8. My supervisor and I discuss ways to improve my psychological well-being. (Psychological)</td>
</tr>
<tr>
<td>9. My supervisor encourages me to avoid threatening situations at work. (3.0)</td>
<td>9. My supervisor and I discuss ways to identify and respond to threatening situations at work. (100%)</td>
<td>9. My supervisor and I discuss ways to identify and respond to threatening situations at work. (Safety)</td>
</tr>
</tbody>
</table>
10. My supervisor and I discuss crisis management techniques such as CPR or suicide prevention. (86%)  
11. My supervisor and I discuss strategies for preventing exposure to illnesses or diseases at work. (86%)  
12. My supervisor and I discuss strategies for dealing with clients’ violent behavior. (86%)  
13. My supervisor and I discuss situations that cause me to feel exhausted or tired. (57%)  
14. My supervisor and I discuss ways to improve my morale at work. (57%)  
15. My supervisor and I discuss ways to maintain healthy boundaries with their clients. (71%)  
16. If my supervisor notices a decrease in my physical health, we discuss changes that may improve my health. (71%)  
17. If my supervisor notices a decrease in my emotional status, we discuss changes that may improve my psychological health or well-being. (71%)  

*Notes. Original items include mean importance ratings in parentheses (0=unimportant, 1=of some importance, 2=important, 3=critical). Modified items include percent agreement in parentheses. Of those, the 12 with the highest belongingness scores were retained. Final items include health and safety support dimension in parentheses.