

CONVERSATIONS ABOUT HEALTH: SUPERVISOR HEALTH AND SAFETY SUPPORT
SCALE DEVELOPMENT AND MODERATING INFLUENCE ON SUBSTANCE ABUSE
COUNSELOR BURNOUT AND HEALTH

by

CARRIE S. HURST

(Under the direction of Lillian T. Eby)

ABSTRACT

Pilot studies were used to create a measure of supervisor health and safety support and this measure was examined in relation to substance abuse counselor burnout and health in the primary study. Primary study results supported the factor structure and reliability of the supervisor health and safety support measure. As expected, participant depersonalization and emotional exhaustion related positively to depressed mood, but only the emotional exhaustion component of burnout related negatively to self-reported physical health. The supervisor health and safety support variables did not relate significantly to depressed mood. The physical health support dimension of supervisor health and safety support related significantly to self-reported physical health, but this relationship was negative and opposite prediction. Results did not support the proposed moderation effects. Implications for theory and suggestions for practice are provided and an exploratory model is tested and discussed.

INDEX WORDS: Supervisor physical health support, Supervisor psychological health support, Supervisor safety support, Emotional exhaustion, Depersonalization, Depressed mood, Self-reported physical health

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iv
CHAPTER	
1 INTRODUCTION	1
Purpose of the Study	1
Health Promotion Literature	5
Burnout	6
Supervisor Social Support.....	8
Supervisor Physical Health Support	11
Supervisor Psychological Health Support	12
Supervisor Safety Support	13
Health and Safety Conversations as Moderators of the Burnout-Health Relationships.....	14
2 PILOT STUDY	17
Method	17
Results	19
Discussion.....	22
3 PRIMARY STUDY	24
Method	24
Results	27

4	DISCUSSION	37
	Overview	37
	Supervisor Health and Safety Support Scale	37
	Burnout and Health	38
	Supervisor Health and Safety Support and Health	40
	Implications for Theory and Practice	42
	Limitations and Concluding Remarks	44
	REFERENCES	46
	APPENDICES	
	A SOLICITATION EMAIL FOR INTERVIEW PARTICIPANTS	55
	B TELEPHONE INTERVIEW: INTEREST INDICATOR	56
	C PILOT STUDY TELEPHONE INTERVIEW PROTOCOL	57
	D CONTENT VALIDITY PILOT TEST	59
	E HEALTH ITEM CATEGORIES PILOT TEST	61
	F PILOT TEST FOR FACTOR STRUCTURE OF SUPPORT ITEMS	66
	G SURVEY ITEMS	67

CHAPTER 1

INTRODUCTION

Purpose of the Study

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 trillion in 2005 (\$6,700 per person). This figure represents 16% of the gross domestic product (www.nchc.org). Regarding health insurance, the Kaiser Family Foundation's annual survey revealed that employer health insurance premiums for family coverage increased by 9.2% in 2005 (www.kff.org). This increase almost triples both the overall rate of inflation and the average annual increase in workers' earnings. 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 reported that in 2006, adult employees lost 4 work days per person due to illness or injury, resulting in an approximate total of 637 million work-loss days. In addition to costs associated with employees' physical illnesses, organizations are also affected when employees suffer from psychological disorders. For example, the cost of depression in 1990 was over \$40 billion, with over 50% of that amount attributed to workplace costs, including reduced productivity and absenteeism (Truax & McDonald, 2002).

The three leading causes of death in the United States in 1990 were tobacco, diet and activity patterns, and alcohol (McGinnis & Foege, 1993), all of which are related to behavioral choices. Therefore, many of the costs associated with health care can be avoided. Occupational health and wellness programs are one strategy for promoting healthy employee lifestyles that

could reduce organizational expenses. These programs have become a topic of interest in the popular press (e.g., Ready, 2007), as well as the academic literature (e.g., Quick & Tetrick, 2003).

Typical health-related behaviors targeted by these interventions include diet, exercise, smoking cessation, and substance abuse prevention and treatment (Ilgen, 1990). While managers may realize the consequences of poor health in the workplace, they may be less aware of the steps they can take to help improve the health of their employees. This may be a function of the typical approach to health promotion, which tends to focus on large-scale interventions implemented in organizations to improve health (e.g., Heaney, 2003). However, health promotion programs such as smoking cessation still remain largely ineffective (Heaney, 2003) perhaps because organizational interventions can only offer services to employees, whereas other more informal forms of health promotion, such as informal support from one's supervisor may be more readily available.

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 than enhancing employee well-being, per se (Bellingham & Pelletier, 1995), simply discussing safety-related issues with employees could have a meaningful impact on employee health. Although supervisor support for workplace safety issues has not been examined specifically in the workplace safety literature, safety climate has been discussed as an important predictor of accidents and injuries in the workplace (see Clarke, 2006).

Researchers have highlighted the importance of general social support for predicting employee health, as meta-analytic findings reveal that social support from one's manager is

related to less perceived stress and burnout (Lee & Ashforth, 1996). However, the existing literature gives little guidance as to what constitutes support (Offermann & Hellmann, 1996), and health researchers agree that the construct deserves additional theoretical and empirical attention in order to be useful (Ilgen, 1990). The counselor supervision literature has operationalized support more specifically in terms of what constitutes support in clinical supervision. For example, the Supervision Questionnaire (Worthington, 1984; Worthington & Roehlke, 1979) includes specific support items such as, “helped you with your personal problems that may interfere with your counseling.” In the work-family literature, several studies of supervisor family supportiveness have utilized a scale identifying supervisor behaviors that are specific to one type of work-related stressor, work-family conflict (Allen, 2001; Thomas & Ganster, 1995; Shinn, Wong, Simko, & Ortiz-Torres, 1989). However, existing measures still fail to operationalize the specific *health and safety support* actions in which supervisors might engage to support employee health. Doing so could be useful for studying the effects of other work-related stressors, such as burnout, and it may be the case that supervisors can influence health outcomes simply by discussing health-related topics with employees.

Burnout is a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals whose jobs require them to work with other people (Maslach, 1993). Identifying the influence of stressors such as burnout in relation to health outcomes is important because in any given organization, as many as 40% of the labor force may have jobs so stressful that they experience burnout (Northwestern National Life, 1992). Burnout may lead to both psychological (e.g., sleep disorders, anxiety) and physical (e.g., gastrointestinal problems, high blood pressure) health outcomes (e.g., Maslach & Leiter,

1997). However, because of the limited amount of research in this area overall, authors have called for additional studies linking burnout with health outcomes (e.g., Maslach, 2001).

Research indicates that social support from others plays an important role in reducing burnout (Lee & Ashforth, 1996). However, the specific aspects of support that affect burnout have not been explored, even though identifying them could have major implications for supervisors and their employees. One area of support that has not been studied to date is supervisor supportiveness of health and safety related issues. Therefore, it is important to examine the potential role of supervisor health and safety support on the relationships between burnout and physical and psychological health among employees.

In summary, the present study examines how employees' conversations with their clinical supervisors about health and safety issues relate to the relationship between burnout and well-being (physical and psychological). In order to do so, and because no previous measure exists, the first objective of this study is to develop and provide initial reliability and validity evidence for a measure of supervisor health and safety support. A second goal of this study is to examine the links between substance abuse counselor burnout and physical and psychological health outcomes. Lastly, this study also will examine the direct and moderating effects of supervisor health and safety support in the burnout-health relationships.

Individuals working in human service professions, such as substance abuse treatment counselors, may be especially prone to burnout because these occupations are often emotionally demanding (Pines & Aronson, 1988). Substance abuse treatment counselors face a wide range of stressors that result from organizational conditions and the type of clients they serve. For example, many clients are often recidivists because of the chronic, relapsing nature of addiction (McLellan, Lewis, O'Brien, & Kleber, 2000). Further, unique stressors within the substance

abuse treatment profession (e.g., working in a methadone maintenance clinic) have been linked empirically to burnout (Shoptaw, Stein, & Rawson, 2000). Supervision in the human services fields can also allow for unique relationships in that it is intended to serve and support the worker (Cherniss, 1980). Thus, the present study uses a sample of substance abuse treatment counselors to examine the relationships between the study variables.

Health Promotion Literature

The workplace can be a very effective place for health education and promotion (Bennett, Cook, & Pelletier, 2003). Although some companies have provided health promotion opportunities for many years, worksite health promotion did not become a national trend until the late 1970's (Bellingham & Pelletier, 1995). Wellness or occupational health promotion programs shifted the focus of health from the prevention of injury or illness to the encouragement of good health (Ilgen, 1990). Terborg (1986) argued that it is important to distinguish health protection (protecting as many people as possible from health threats) from health promotion (influencing people to make informed choices to improve physical and mental health). Managers worry most about traditional safety and environment-related concerns about compliance and conservation rather than enhancement of employee wellbeing (Bellingham & Pelletier, 1995). However, Bellingham and Pelletier suggest managers may be beginning to recognize the connection between health and productivity and becoming more aware that health promotion is a critical business need. As these authors note, without management support, employees will be less likely to maintain any positive changes.

Lifestyle behavior relates to the three leading causes of death in the United States: tobacco, diet and activity, and alcohol. Health promotion programs (HPPs) emphasize primary prevention of health problems, whereas employee assistance programs (EAPs) are concerned

with identifying and assisting those employees who have already developed behavioral problems on the job (Roman & Blum, 1995). Both programs are growing increasingly commonplace in organizations (Roman & Blum, 1995). The premise behind HPPs is that when employees are encouraged to adopt healthy lifestyle behaviors, the occurrence of lifestyle-related illnesses will be reduced. However, despite the fact that smoking is the number one preventable cause of premature deaths in the United States, HPPs such as smoking cessation programs still remain largely ineffective (Heaney, 2003). Therefore, researchers must identify strategies beyond those provided by traditional health promotion programs and examine their impact on employee health outcomes. One reason traditional health promotion programs may sometimes be ineffective is that employees are required to attend and participate in structured programs. If health promotion was more readily available to employees on-the-job, more employees might benefit from its effects.

Burnout

Burnout is considered a consequence of exposure to chronic job stress (Cordes & Dougherty, 1993). Maslach and colleagues' (e.g., Maslach, 1993; Maslach & Jackson, 1981; Maslach & Leiter, 1997) three component conceptualization is the most commonly accepted definition of burnout (Cordes & Dougherty, 1993; Richman, 1998). These three components include emotional exhaustion, depersonalization, and personal accomplishment. Emotional exhaustion refers to feelings of being emotionally overextended and drained of resources and is typically considered the basic stress dimension of burnout and the first stage of the burnout process. Depersonalization is a defensive coping strategy that occurs as a result of emotional exhaustion and is characterized by feelings of interpersonal detachment and cynicism directed toward clients or other individuals with whom employees must interact at work. Reduced

personal accomplishment is a negative self evaluation of oneself characterized by a decline in feelings of competence and productivity at work. Although originally thought to occur sequentially after depersonalization in the burnout process, researchers now believe that a reduction in personal accomplishment develops separately from emotional exhaustion and depersonalization (Lee & Ashforth, 1996; Maslach & Goldberg, 1998). I include only the emotional exhaustion and depersonalization components of burnout in this study for two reasons. First, a reduction in personal accomplishment is thought to develop separately from emotional exhaustion and depersonalization in the burnout process (Maslach & Goldberg, 1998). In addition, compared to emotional exhaustion and depersonalization, personal accomplishment tends to have the weakest relationships with other studied variables (Lee & Ashforth, 1996).

Reviews of the literature reveal a number of negative consequences of burnout (e.g., Cordes & Dougherty, 1993). Cordes and Dougherty categorize these consequences as being either (a) physical and emotional (e.g., headaches, depression), (b) interpersonal (e.g., withdrawal from friends or clients), (c) attitudinal (e.g., low job satisfaction) or (d) behavioral (e.g., substance abuse) in nature. Some scholars have questioned whether burnout is unique from other psychological constructs. However, although burnout may overlap with other constructs such as depression, it demonstrates good construct validity (Meier & Davis, 1982) and overall, the existing evidence supports the notions that burnout, anxiety, and depression are conceptually distinct emotional reactions to stress (Shirom, 1995).

Surprisingly, the research empirically linking burnout to health outcomes is sparse. Even a special issue devoted to burnout and health failed to include any studies focusing on physical health and included only one study addressing the impact of burnout on mental health (Maslach, 2001). Maslach suggests that the lack of research addressing the link between burnout and health

may be due to the fact that researchers might consider it an obvious link. Alternatively, it may be that psychologists feel unequipped to study health outcomes. Therefore, the impact of burnout on outcomes such as depressed mood deserves more attention (Maslach, 2001), so I propose the following hypothesis:

Hypothesis 1. Burnout will relate positively to depressed mood.

Although few empirical studies have examined the link between burnout and health, researchers have found that burnout is related to self-report health outcomes such as headaches, gastrointestinal problems, high blood pressure, muscle tension, and chronic fatigue (Piko, 2006; Maslach & Leiter, 1997). Burnout is also related to objective physical indicators such as cortisol levels and leukocyte adhesiveness/aggression levels (Lerman et al., 1999; Melamed, et al., 1999). Adding to the limited research on burnout and physical health, the following hypothesis is proposed:

Hypothesis 2. Burnout will relate negatively to self-reported physical health.

Supervisor Social Support

The tendency to focus on the individual as the source of and solution to workplace stress is evidenced by the proliferation of research aimed at examining individual difference variables (e.g., type A behavior, personal hardiness) or coping methods (e.g., training in problem solving or time management) (Fusilier & Manning, 2005; MacLennan, 1992) as potential targets for change in the burnout literature. However, researchers have argued that it may be more beneficial for organizations to address issues other than those at the individual level that might be amenable to change (Offerman & Hellmann, 1996). In fact, training of workers *and* managers in recognizing psychological strain and underlying risk factors is a cornerstone of NIOSH's strategy for controlling stress in the workplace (Sauter, 1992).

Social support is often suggested as a way to prevent burnout (Richman, 1998), and leader support, in particular, could be especially useful in ameliorating the negative consequences of burnout. Individuals with whom employees interact at work, especially supervisors, can substantially affect employees' feelings about their work and themselves (House, 1981), and meta-analytic findings confirm the notion that perceived social support from one's leader is related to less perceived stress and burnout (Lee & Ashforth, 1996; Schaufeli & Enzmann, 1998).

House (1981) classifies social support into four categories of behaviors: (a) emotional support (e.g., concern, listening), (b) instrumental support (e.g., money, time), (c) informational support (e.g., advice, information), and (d) appraisal support (e.g., feedback, social comparison). House further describes support as being either general or problem-focused and suggests that the key to understanding social support is to “understand *who* gives *what* to *whom* about *which problems*” (p.28). Others agree that additional research examining this construct is needed in order to determine the specific aspects of support that make it useful (Ilgen, 1990; Offermann & Hellmann, 1996). That is, in order to determine how supervisor support is beneficial for reducing the impact of stressors on an employee, it is important to identify specific behaviors that are considered supportive under stress. Furthermore, in order for supervisors to develop more supportive relationships with their employees, they need to understand how specific acts or behaviors impact the relationships (House, 1981).

One area of research that highlights the importance of identifying specific types of supervisor behaviors is the work-family literature, which reveals family supportive supervision as one type of supervisor support that may help reduce work-family conflict (Allen, 2001; Thomas & Ganster, 1995; Shinn, et al, 1989). In fact, supportive environmental factors such as

practical support from managers and organizations may be more important for reducing conflict than the existence of formal family-friendly policies (Allen, 2001; O'Driscoll, et al, 2003).

Findings such as these demonstrate the importance of identifying additional situation-specific support behaviors supervisors may utilize in the workplace.

Perhaps because of the lack of clarity regarding what it is that supervisors do that causes subordinates to perceive them as supportive (House, 1981), strategies for increasing support have only been modestly successful (Heaney, 2003). Meta-analytic results also reveal mixed findings overall regarding the interrelationships of stressors, strains, and support (Viswesvaran, Sanchez, & Fisher, 1998). In fact, because of the complicated nature of the role of social support in the stress process, researchers have called specifically for studies identifying the specific aspects of support that reduce burnout (Cordes & Dougherty, 1993). Typical supervisor support items include general questions such as “how much can your immediate supervisor be relied on when things get tough at work” or “how much is your immediate supervisor willing to listen to your work-related problems” (e.g., House, 1981). Even occupation-specific supervision support questionnaires (e.g., Worthington, 1984; Worthington & Roehlke, 1979) that identify more specific behaviors than those found on general supervisor support surveys still fail to include items related to health and safety support. Rooney and Gottlieb (2007) sought to generate an inventory of supportive supervisor behaviors to address the problem of existing measures being outdated and lacking specificity. This study revealed eight dimensions of supportive supervisor behaviors (e.g., trustworthiness, recognition). However, again, while their work is important for updating existing conceptualizations of supervisor support, the authors' focus was on general supervisor support, without mention of health and safety-related support behaviors.

One reason that health and safety support has not been examined to date is that health-related conversations may be less common in typical supervisory relationships. Substance abuse counselors rely on their clinical supervisors for job-related training, feedback, and coaching, as well as for emotional support (Powell & Brodsky, 1993). Clinical supervision relationships are considered somewhat unique compared to most supervisory relationships (Cherniss, 1990), and due to counselors' heavy reliance on their clinical supervisors for case-related advice, they may spend more time with an immediate supervisor than would employees in other settings. Therefore, this particular profession may be well suited for examining the kinds of health-related issues that an employee *could* discuss with his or her supervisor. If discussing such issues does positively impact health, supervisors in other occupations could then be trained to provide more health and safety support to their own employees.

The three dimensions of health and safety support identified via pilot studies (to be described in detail below) were physical health support, psychological health support, and safety support. Each of these dimensions is described in detail below.

Supervisor Physical Health Support

Supervisors can provide physical health support by discussing issues such as subordinate's physical illnesses, including suggestions for preventing or avoiding illnesses. This could include such supportive behaviors as suggesting that the employee take vitamins or attempt to get more rest if the supervisor notices a deterioration in the subordinate's health. Such actions could serve to improve both the subordinate's psychological well-being and physical health. Previous research on social support in general suggests that social support can directly affect health and well-being by serving to meet individuals' needs for security, social contact, approval, belonging, and affection (House, 1981). Therefore, psychological outcomes such as

depressed mood could be lessened when an employee perceives his or her supervisor as being supportive in any way. In fact, general supervisor support has been linked to more favorable reports of stress, well-being, and psychological strain (e.g., O'Driscoll et al, 2003; Thompson & Prottas, 2005). In terms of situation-specific supervisor support, the work-family literature provides some indirect support that this may influence physical health, as family supportive supervision has been linked to somatic complaints and cholesterol levels (Thomas & Ganster, 2005). Furthermore, to the extent that the supervisor's physical health-specific suggestions lead the employee to take actions to improve his or her health, it should lead to more positive health outcomes. Therefore, I propose the following hypotheses:

Hypothesis 3. Supervisor physical health support relates negatively to depressed mood.

Hypothesis 4. Supervisor physical health support relates positively to self-reported physical health.

Supervisor Psychological Health Support

Supervisors can provide psychological health support to their employees by discussing the things that are bothering employees or causing them to feel upset. Other psychological support conversations might include ways to improve subordinates' psychological well-being or employee morale at work. As mentioned earlier, findings from studies of general supervisor support suggest that support can affect health and well-being simply by serving to meet certain employee needs (House, 1981), and empirical findings confirm the importance of general supervisor support and one type of situation-specific support on psychological and physical well-being (e.g., O'Driscoll et al, 2003; Thomas & Ganster, 2005; Thompson & Prottas, 2005). Likewise, following the logic presented for hypotheses 3 and 4, supervisors' psychological health-related discussions with employees could lead the employee to pursue changes that could

improve their own psychological well-being. Based on this logic and rationale, the following hypotheses are proposed:

Hypothesis 5. Supervisor psychological health support relates negatively to depressed mood.

Hypothesis 6. Supervisor psychological health support relates positively to self-reported physical health.

Supervisor Safety Support

Supervisors can engage in safety support by having conversations with employees about workplace safety issues such as how to maintain a safe environment or deal with threatening situations at work, as well as by encouraging employees to alert the supervisor of safety issues that need to be addressed at work. Again, following the logic and rationale presented above, safety support may affect depressed mood and physical health simply by being a form of general support that employees need to experience at work. The occupational health and safety literature provides some indirect evidence that situation-specific supervisor support could impact health, as safety climate, which may include supervisor support (Flin, Mearns, O'Connor, & Bryden, 2000) is a consistent predictor of injury and illnesses in the workplace (Clarke, 2006). Therefore, safety specific conversations are also likely to impact physical health, particularly when they increase employees' perceptions of safety and feelings of efficacy with regard to safety preparedness or serve to prevent actual injuries and illnesses. For example, employee physical outcomes could be improved if the safety-related conversations make an employees better prepared to avoid exposure to physical threats or illnesses. Similarly, having such conversations could improve psychological well-being by allowing for a greater sense of security in the workplace. Therefore, the following hypotheses are proposed:

Hypothesis 7. Supervisor safety support relates negatively to depressed mood.

Hypothesis 8. Supervisor safety support relates positively to self-reported physical health.

Health and Safety Conversations as Moderators of the Burnout-Health Relationship

Because there are sometimes limits to what employees in an organization can do to avoid stressors, sometimes the only option is to identify those mechanisms that may ameliorate or eliminate the negative impact of the stressors on health (House, 1981). Supervisor health and safety support may be one mechanism through which the negative impact of burnout on health and well-being is reduced. Confusion over the exact meaning of social support has complicated researchers' understanding of the role of the variable as a moderator of stressor-strain relationships (Beehr & O'Driscoll, 2002), and although the literature often supports the notion that social support acts as a buffer (e.g., Cohen & Wills, 1985; Frone, 1999; Viswesvaran, et al 1998), it is less clear who buffers whom under what circumstances (Greller, Parsons, & Mitchell, 1992). For example, Cohen and Wills' review of the literature provides support for the moderating effect of social support, but the studies included in their review were not limited to those that specifically examined supervisor support or workplace stressors. Subsequent meta-analytic results (Viswesvaran et al, 1989) confirm Cohen and Wills' findings, and included only studies examining workplace stressors. However, again, the authors' definition of social support included support from all sources and was not limited to general or situation-specific supervisor support.

Frese's (1999) longitudinal work also supports the notion that social support acts as a moderator of stressor-strain relationships. In fact, these results indicate that social support is particularly useful in buffering the effects of social stressors. Although not specifically examined in Frese's study, his findings imply that supervisor support may be useful in remedying the

harmful effects of burnout. One type of supervisor support that may serve as a buffer of the burnout-health relationship is supervisor physical health support. For example, employees whose supervisors provide more physical health support may be less affected by burnout than those whose supervisors provide less physical health support. That is, physical health support should serve to protect these employees so that burnout has less of a negative impact on their health.

Therefore, I propose the following hypotheses:

Hypothesis 9. Supervisor physical health support moderates the relationship between burnout and self-reported physical health such that this relationship is less negative when supervisor physical health support is high and more negative when supervisor physical health support is low.

Hypothesis 10. Supervisor physical health support moderates the relationship between burnout and depressed mood such that this relationship is less positive when supervisor physical health support is high and more positive when supervisor physical health support is low.

Supervisor psychological health support may also act as a moderator of the physical and psychological health outcomes. In this case, employees whose supervisors provide more psychological health support may be less affected by burnout than those whose supervisors provide less psychological health support. Therefore, psychological health support should serve to protect these employees so that burnout has less of a negative impact on their health, which leads to the following hypotheses:

Hypothesis 11. Supervisor psychological health support moderates the relationship between burnout and self-reported physical health such that this relationship is less

negative when supervisor psychological health support is high and more negative when supervisor psychological health support is low.

Hypothesis 12. Supervisor psychological health support moderates the relationship between burnout and depressed mood such that this relationship is less positive when supervisor psychological health support is high and more positive when supervisor psychological health support is low.

Finally, safety support may affect physical and psychological health outcomes by also serving to buffer the experience of burnout. When supervisors provide more safety support, their employees may be less affected by burnout than those employees whose supervisors provide less safety support. Safety support, then, should serve to protect these employees so that burnout has less of a negative impact on their health. Therefore, I propose the following hypotheses:

Hypothesis 13. Safety support moderates the relationship between burnout and self-reported physical health such that this relationship is less negative when supervisor safety support is high and more negative when supervisor safety support is low.

Hypothesis 14. Supervisor safety support moderates the relationship between burnout and depressed mood such that this relationship is less positive when supervisor safety support is high and more positive when supervisor safety support is low.

In order to examine the above hypotheses, I first conducted pilot studies that evolved in four phases in order to examine the nature of the supervisor health and safety support topics discussed between substance abuse counselors and their clinical supervisors and to develop measures of supervisor health and safety support. A detailed description of these studies and their results appears below.

CHAPTER 2
PILOT STUDIES
Method

Participants

The pilot studies evolved in four stages. Participants in the first stage were contacts from a clinical supervision course at a substance abuse conference in the southeast. During the course, those who were interested in being contacted to participate in research on clinical supervision provided their contact information. All 30 contacts who provided valid email addresses received an email explaining the study, 5 of whom expressed interest in participating. One individual withdrew from the study prior to participating due to scheduling conflicts. Counselors were chosen as participants, rather than supervisors, because regardless of whether a supervisor feels supportive, it will only be effective to the extent that the subordinate perceives his or her supervisor as supportive (House, 1981). The 4 participants who completed the telephone interviews each received \$45 for their time.

Participants in the second stage were 5 subject matter experts in the field of substance abuse treatment. Two of these participants were advisory board members for a larger study of mentoring and turnover in substance abuse treatment centers who have had experience as both clinical supervisors and counselors. The other three participants were researchers in the substance abuse field who are also affiliated with the larger study. Participants were compensated for their participation in the larger study, but did not receive any additional incentives for this particular aspect of their participation.

Participants in the third phase were 7 I-O psychology graduate students, faculty, and staff. These students did not receive any incentive for their participation.

Participants in the fourth phase were subscribers to a graduate student listserv at a southeastern university. Each week, students who subscribe to the listserv are notified via email by the Graduate Student Association of items for sale, announcements, etc. To solicit participation for this phase of the pilot study, the author posted an advertisement asking graduate students to take a moment to complete a 5-minute survey. One hundred twenty-seven individuals completed the survey. No incentive was provided for their participation.

Materials

In the first phase of the pilot study, participants received a solicitation email (Appendix A), filled out an interview interest indicator (Appendix B), and answered questions included on the interview protocol (Appendix C), which the author recorded using a tape recorder.

In the second phase, as part of ongoing communication with subject matter experts for the larger study, participants received an attachment in an email that included the initial survey items and instructions for the importance ratings of the items (Appendix D).

Participants in the third phase of the pilot study completed a survey that included the revised survey items and instructions for the category assignment task (Appendix E).

Participants in the fourth phase of the pilot study read the following advertisement posted on the graduate student listserv asking them to assist the researcher by visiting a website and completing a 5-minute survey. The website appeared as a link in the email. Upon visiting the website, participants answered the supervisor health and safety support items and provided demographic information (Appendix F).

Design and Procedure

The first phase of the pilot study involved conducting semi-structured telephone interviews, in order to determine the nature of the health-related topics discussed between clinical counselors and their supervisors. Interviews lasted approximately 30 minutes, and all participants provided consent for the conversations to be tape-recorded. The interview protocol asked specific questions about three initial dimensions of health and well-being (physical, psychological, and spiritual), along with prompts to solicit additional information. After completing all interviews, the author transcribed the tape-recorded interviews and examined the content for recurring themes among participants.

In the second phase of the pilot study, participants rated the importance of the items developed to measure the health and safety themes discussed by the telephone interview participants. The subject matter experts rated the importance of each item for reflecting the dimension of health it was designed to tap.

In the third phase, a group of graduate students reviewed and categorized items according to their belongingness in the categories the items were designed to represent. Participants completed a brief questionnaire asking them to rank order the appropriateness of each category (Psychological, Physical, and Safety) for describing each item.

In the fourth phase, participants were directed to an online survey where they provided their consent to participate and responded to the 12 health items and 3 demographic questions. Results of EFA and CFA provide information on initial factor structure.

Results

Results for the first phase of the pilot study revealed several themes regarding the health-related topics discussed in clinical supervision. Overall, participants did indicate that physical

and psychological health issues are discussed with clinical supervisors. However, participants did not indicate that spiritual health issues are discussed with their supervisors. Although not included on the interview protocol as one of the original three health-related categories, participants were in agreement that an additional dimension of health-related topics discussed with their clinical supervisor is that of safety issues. When asked what they would call these kinds of discussions, participants tended to agree that they would label the exchanges with their supervisor as “support.” Regarding the physical health topics discussed, participants mentioned a variety of topics, such as counselors’ illnesses and diseases. Some of the psychological health topics participants discussed were depression and stress. Safety support topics included such things as crisis management techniques and ability to identify threatening situations. Based on the results of the telephone interviews, an initial list of 15 items was created.

Assessments of content validity are often neglected in the scale development process (Schreishiem, Powers, Scandura, Gardiner, & Lankau, 1993). Therefore, results of the second and third phases of the pilot study were used to examine the content validity of the supervisor physical health support, supervisor psychological health support, and supervisor safety support items. In the second phase, subject matter experts rated each of the 15 items in terms of its importance for assessing the construct. Importance ratings could range from 0 (unimportant) to 3 (critical). Mean importance ratings for each item ranged from 1.3 to 3.0. All items with importance ratings of 2.5 or greater were retained. This criterion was chosen in order to retain only those items that were important or critical to the definition of the constructs. Some items were also revised or split into two questions to reflect the subject matter experts’ suggestions and one item was added, resulting in a revised list of 17 items.

Results of the third phase of pilot work provide additional assessment of content validity and helped to further refine the supervisor support and safety items. Participants rated the belongingness of each of the 17 items with each of the three *a priori* dimensions of support (physical health, psychological health, and safety). Responses ranged from 0 (none or hardly at all) to 4 (completely). Overall, participants rated items as highly belonging to the dimension they were designed to reflect and not belonging to the other dimensions. Two items were slightly reworded following participant suggestions and the 12 items with the highest agreement indices were retained.

I used the fourth phase of the pilot study to examine the factor structure of the 12 supervisor health and safety support items (see Table 1). Per suggestions for exploratory research in scale development (e.g., Tinsley & Tinsley, 1987), principal axis factoring with oblimen rotation was used to explore the dimensionality of the measure. In order to determine the appropriate number of factors to retain, I adopted Horn's parallel analysis and Cattell's scree test as criteria for determining the number of factors to retain, and three factors emerged from the data according to these criteria. The three-factor solution accounted for a substantial percentage of the variance of the initial solution (74.18%). Communalities, pattern matrix factor loadings, eigenvalues, and percentage of variance accounted for are provided in Table 1. As shown, the results supported the 3 *a priori* dimensions of supervisor health and safety support, as each of the items loaded on their appropriate factor. Factor 1 represents Supervisor Physical Health Support, factor 2 is defined as Supervisor Psychological Health Support, and factor 3 represents Supervisor Safety Support. Coefficients alpha for the three subscales were .85, .88, and .87, respectively.

Discussion

Results of the pilot study were used to develop the supervisor health and safety support measure. Pilot study results also provide some evidence of the scale's reliability. The primary study will be used to further examine the reliability and validity of this scale, which can then be used in hypothesis testing for the primary study.

Table 1.

Pilot Study Communalities, Factor Pattern Loadings, and Percentage of Variance Accounted for

Variable	Communalities		Factor pattern matrix		
	Initial	Extraction	1	2	3
Physical 1	0.470	0.484	0.040	0.343	<u>0.496</u>
Physical 2	0.677	0.809	0.055	0.002	<u>0.875</u>
Physical 3	0.533	0.589	0.050	0.062	<u>0.812</u>
Physical 4	0.597	0.617	0.179	0.030	<u>0.679</u>
Psychological 1	0.569	0.533	<u>0.764</u>	0.017	0.098
Psychological 2	0.660	0.693	<u>0.835</u>	0.008	0.011
Psychological 3	0.837	0.729	<u>0.802</u>	0.070	0.134
Psychological 4	0.836	0.707	<u>0.764</u>	0.008	0.149
Safety 1	0.519	0.526	0.349	<u>0.534</u>	0.054
Safety 2	0.692	0.713	0.020	<u>0.852</u>	0.010
Safety 3	0.628	0.592	0.090	<u>0.759</u>	0.059
Safety 4	0.802	0.953	0.010	<u>0.995</u>	0.052
Initial eigenvalues			5.140	2.385	1.376
Cumulative % variance accounted for			42.833	62.712	74.181
<u>Factor correlations</u>					
1			1.000	.201	.434
2			.201	1.000	.416
3			.434	.416	1.000

Note. Primary factor loadings are underlined.

CHAPTER 3
PRIMARY STUDY
Method

Participants

Participants were substance abuse counselors. Participants were contacted as part of a larger study of mentoring and turnover in substance abuse treatment centers supported by a grant through the National Institute of Drug Abuse, of the National Institute of Health. In order to be eligible to participate, counselors first had to be employed at a substance abuse treatment center. Eighty-six free-standing treatment centers, which were part of 28 different treatment organizations, participated in the study. The director of each of the treatment centers received a letter explaining the study and asking him/her to respond if interested in participating. Participating centers received \$1000 plus \$75 for every supervisor who participated (supervisor data was not used for the present study) and \$50 for every counselor who participated, though participation was completely voluntary. In addition, participants received refreshments, pens, koozies, and chip clips as incentives to participate. Substance abuse treatment center representatives assisted with scheduling site visits, so as to reach the greatest number of participants. Participants were notified about the upcoming data collection sessions by a recruitment email and through flyers posted at the centers one week prior to data collection.

A total of 749 participants completed surveys. Participants' average age was 43.1 ($SD=12.2$). The majority of participants were female (63.8%) and had completed a masters or professional degree (45.1%). The racial/ethnic makeup of the participants was 59.6% Caucasian, 19.8% African-American, 12.6% Hispanic/Latino(a), <1% American Indian, 1.0% Asian,

3.2% Multi-racial, and 3.6% Other. The percentage of the sample who reported being personally in recovery was 38.3%. Participants' average tenure in their organizations was 5.1 years ($SD=5.1$) and their average annual salary was \$34,704.8 ($SD=9837.9$).

Materials

Measures. A list of all measures appears in Appendix G. Table 2 provides a list of the variables, number of items, and coefficients alpha. Participants responded to all items on 5-point Likert scales ranging from strongly disagree (1) to strongly agree (5), with the exception of those noted below. *Burnout* was measured using depersonalization and emotional exhaustion subscales of the Maslach Burnout Inventory (Maslach & Jackson, 1981). Depersonalization items ask participants about the extent to which they feel a sense of detachment and cynicism and emotional exhaustion items measure the extent to which individuals are emotionally over-extended by their jobs. As discussed previously, only the emotional exhaustion and depersonalization components of burnout were used in this study. *Supervisor physical health support* was measured with items designed for the purpose of this study, which ask about the extent to which the supervisor discusses with the counselor issues related to his or her physical health. *Supervisor psychological health support* was measured with items designed for the purpose of this study, which ask participants about the extent to which the supervisor discusses with the counselor issues related to his or her psychological well-being. *Supervisor safety support* was measured with 3 items designed for the purpose of this study, which ask participants about the extent to which the supervisor discusses workplace safety issues with the counselor. *Depressed mood* was measured with Quinn and Shepard's (1974) measure, which was selected over clinical depression because depressed mood was considered to be a more widespread occurrence among these employees (only approximately 6.7% of adults in the U.S. suffer from a

major depressive disorder each year) (Kessler, Chiu, Demler, & Walters, 2005). *Self-reported physical health* was measured using a health subscale of the Retirement Descriptive Index (Smith, Kendall, & Hulin, 1969), which measures general health satisfaction. This measure is highly correlated with checklists of health conditions (Hanisch & Hulin, 1991) and was chosen in favor of a symptom checklist, which can be much longer and more time-consuming to complete.

Data Preparation

The patterns of missing data (excluding single item measures) were investigated, and surveys with 40% missing data per scale were removed from the sample. This resulted in a sample size of 719 that was used in hypothesis testing. After deleting cases with at least 40% missing data, the amount of missing data per scale ranged from .3 to .9%, suggesting the remaining data was missing at random. Missing data for each scale were then imputed with the expectation maximization algorithm (e.g., Little & Rubin, 1987) used by the multiple imputation feature in PRELIS 8.54 (Jöreskog & Sörbom, 1993).

Design and Procedure

Substance abuse treatment centers were contacted in the fall of 2007 to confirm their interest in participating in the study and, later, to arrange the date(s) and time(s) for data collection. Before administering the surveys, researchers explained the purpose of the study, ensured confidentiality, and asked participants if they had any questions about the study. After providing their informed consent, participants were given 1 hour to complete the survey. Participants completed surveys in small groups or individually, depending on the appropriateness for each center's needs. Since data collection occurred during normal business hours, which took employees away from their work activities, center representatives completed an honorarium form

in order to receive payment for their employees' participation, and payments were typically processed within one month of data collection. Participants were thanked individually for completing their surveys, and thank-you notes were sent to each center following data collection.

Results

Prior to examining hypotheses, psychological health support, physical health support, and safety items were subjected to a confirmatory factor analysis to confirm the factor structure of the supervisor health and safety support items. Lisrel 8.54 was used to examine the factor structure of the items, and multiple fit indices were used to evaluate the fit of the model data (Hu & Bentler, 1998, 1999). Specifically, I examined the χ^2 goodness-of-fit test, the standardized root mean squared residual (SRMSR), the Tucker-Lewis index (TLI), and the comparative fit index (CFI). Cut-off values used to evaluate fit indices were as follows: $\chi^2 p > .05$ indicative of excellent fit, CFI and TLI $\geq .95$ reflective of good fit, RMSEA $\leq .06$ indicative of reasonable fit, and SRMSR $< .08$ indicative of excellent fit (Hu & Bentler, 1998, 1999). These results are provided in Table 3. As shown, the 3-factor model met all criteria of model goodness-of-fit, with the exception of the χ^2 , which was significant and RMSEA, which was slightly higher (.11) than the recommended cutoff.

Next, I compared the proposed 3-factor model to a 1-factor model and to all possible 2-factor models. The significance of differences between nested models was assessed with a $\Delta\chi^2$ test (James, Mulaik, & Brett, 1982) (see Table 3). Each of the nested model comparisons resulted in a significant $\Delta\chi^2$. Therefore, these results also support the appropriateness of a 3-factor model of the supervisor health and safety support items.

Means, standard deviations, and correlations among study variables are presented in Table 4. Hypotheses were examined using hierarchical moderated regression to determine the

main effects of burnout and supervisor health and safety support on depressed mood and self-reported physical health as well as the interactive effects of the supervisor health and safety support variables on the relationships between burnout and health outcomes. Regression results for depressed mood and self-reported physical health appear in Tables 5 and 6, respectively. Age was controlled in the regressions for depressed mood but was uncorrelated with self-reported physical health, and therefore, not included as a control variable in those regressions. In order to control for the effect of age, each of the independent variables were regressed on age, and the saved residuals were used in subsequent analyses. Main effects were examined by regressing the dependent variables on depersonalization, emotional exhaustion, physical health support, psychological health support, and safety support. In the second steps, cross-product terms were created by multiplying depersonalization and emotional exhaustion by each of the independent variables (residualized predictors were used for depressed mood equations). In order to remove the linear effects of the independent variables, the cross-product terms were regressed on each of variables making up the cross-product terms (Lance, 1988). The saved residuals were then used to examine interactive effects for depressed mood and self-reported physical health (see Tables 5 and 6, respectively).

Hypothesis 1 was supported, as both the depersonalization ($\beta=.15, p<.01$) and emotional exhaustion ($\beta=.57, p<.01$) components of burnout relate positively to depressed mood. Hypothesis 2 received partial support, as results reveal a negative relationship between emotional exhaustion and self-reported physical health ($\beta=-.35, p<.01$) but the relationship between depersonalization and self-reported physical health was not significant.

Hypotheses 3-8 were not supported, as with the exception of physical health support, none of the supervisor health and safety support variables were significantly related to depressed

mood or self-reported physical health. Although physical health support was significantly related to self-reported physical health (Hypothesis 4), counter to prediction this relationship was negative ($\beta = -.11, p < .05$).

Hypotheses 9-14 proposed moderating effects for each of the supervisor health and safety support variables on the relationships between burnout and depressed mood and self-reported physical health. None of the predicted relationships were significant.

Several post-hoc analyses were also performed in order to determine which of the three supervisor health and safety support variables contributed most to depressed mood and self-reported physical health. Relative weights analysis is useful for determining the proportionate contribution of each predictor in the total amount of variance explained by a set of predictors by considering both its unique contribution and its contribution in the presence of other predictors (Johnson, 2000). This procedure involves first transforming the original predictors into set of orthogonal predictors. The criterion is then regressed onto the orthogonal predictors, and the resulting squared regression coefficients indicate the relative importance of the orthogonal predictors to the criterion. Finally, the original predictors are regressed on the orthogonal variables in order to determine the relative importance of the orthogonal predictors to the original predictors. Using information about the relative importance of the orthogonal predictors to the criterion and the orthogonal predictors to the original predictors, a relative weights index is computed, which indicates predictor's relative contribution in predicting the criterion. Residualized variables were used in the relative weights analysis for depressed mood by removing covariation between the control variables and predictors prior to conducting the relative weights analysis. Table 7 presents the results of the relative weights analysis for depressed mood and self-reported physical health. Of the 1% of variance explained by the

supervisor health and safety support variables, safety support contributes most to the prediction of depressed mood (70.1%), followed by psychological health support (18.4%) and physical health support (11.5%). The supervisor health and safety support variables accounted for 5% of the variance in self-reported physical health. The largest amount of variance was explained by physical health support (67.0%), followed by psychological health support (19.2%) and safety support (13.8%).

Table 2.

Study Variables, Sample Items, Numbers of Items, and Coefficients Alpha

Variable	Sample item	Number of items	Coefficient alpha
Burnout			
Depersonalization	“I feel I treat some clients as if they were impersonal objects.”	5	.75
Emotional exhaustion	“I worry that this job is hardening me emotionally.”	9	.91
Supervisor physical health support	“My supervisor encourages me to take steps to prevent personal physical illnesses.”	3	.91
Supervisor psychological health support	“My supervisor and I discuss things that are bothering me or causing me to feel upset.”	3	.91
Supervisor safety support	“My supervisor and I discuss ways to maintain a safe environment at work.”	3	.92
Depressed mood	“I often feel downhearted or blue.”	10	.87
Self-reported physical health	“I am in excellent health.”	9	.83

Table 3.

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

Model	χ^2	<i>df</i>	CFI	TLI	RMSEA	SRMSR	Model comparisons	$\Delta\chi^2$	Δdf
1. 3 factor	484.23**	51	.97	.97	.11	.05			
2. 2 factor A	1373.28**	53	.92	.90	.21	.07	2 vs. 1	889.05**	2
3. 2 factor B	1406.72**	53	.92	.89	.21	.07	3 vs. 1	922.49 **	2
4. 2 factor C	1509.28**	53	.91	.89	.23	.08	4 vs. 1	1025.05**	2
5. 1 factor	2163.68**	56	.87	.84	.26	.10	5 vs. 1	1679.45**	5
							5 vs. 2	790.40 **	3
							5 vs. 3	756.96 **	3
							5 vs. 4	654.40 **	3

Note. *df* = model degrees of freedom, CFI = Comparative Fit Index, TLI = Tucker-Lewis Index, RMSEA = root mean square error of approximation, SRMSR = standardized root mean square residual. 3 factor model = 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 = physical health support items loading on one factor and psychological health support and safety 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 4.

Means, Standard Deviations, and Correlations among Study Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Physical health support	3.07	1.06								
2. Psychological health support	3.33	1.03	.67**							
3. Safety health support	3.54	.98	.62**	.67**						
4. Burnout: Depersonalization	1.97	.73	-.12**	-.07	-.11**					
5. Burnout: Emotional exhaustion	2.58	.87	-.16**	-.14**	-.23**	.53**				
6. Depressed mood	2.22	.65	-.13**	-.15**	-.23**	.47**	.68**			
7. Self-reported physical health	3.46	.67	-.07	-.04	-.01	-.24**	-.36**	-.49**		
8. Age	43.14	12.19	.12**	.03	.05	-.20**	-.13**	-.11**	.02	

Note. * $p < .05$, ** $p < .01$. With the exception of age, responses to all items ranged from strongly disagree (1) to strongly agree (5).

Table 5.

Summary of Regression Analyses Completed on Depressed Mood

Independent Variable	Standardized regression weights	
	Step 1	Step 2
Depersonalization	.15**	
Emotional exhaustion	.57**	
Physical health support	.06	
Psychological health support	-.03	
Safety support	-.09	
Depersonalization X Physical health support		-.10
Depersonalization X Psychological health support		-.08
Depersonalization X Safety support		.10
Emotional exhaustion X Physical health support		.06
Emotional exhaustion X Psychological health support		-.05
Emotional exhaustion X Safety support		-.06
R ² at each step:	.46	.02
F at each step:	118.32**	1.85

Note. ** $p < .01$. Control variable age included in all regressions.

Table 6.

Summary of Regression Analyses Completed on Self-reported Physical Health

Independent Variable	Standardized regression weights	
	Step 1	Step 2
Depersonalization	-.07	
Emotional exhaustion	-.35**	
Physical health support	-.11*	
Psychological health support	.00	
Safety support	-.03	
Depersonalization X Physical health support		.10
Depersonalization X Psychological health support		-.01
Depersonalization X Safety support		-.08
Emotional exhaustion X Physical health support		.01
Emotional exhaustion X Psychological health support		-.07
Emotional exhaustion X Safety support		.08
R ² at each step:	.15	.01
F at each step:	25.55**	.98

Note. ** $p < .01$, * $p < .01$.

Table 7.

Relative Weights Analysis

	Depressed mood ($R^2=.01$)	Self-reported physical health ($R^2=.05$)
Physical health support	11.5%	67.0%
Psychological health support	18.4%	19.2%
Safety support	70.1%	13.8%

Note. R^2 = total percentage of variance accounted for in each regression. Percentages indicate percent of total variance accounted for by each type of support. Age included as control variable in regression on depressed mood.

CHAPTER 5

DISCUSSION

Overview

The results of this study revealed a number of important findings. First, this study introduces a measure of supervisor health and safety support, and results provide reliability and some initial validity evidence for this measure. Second, this study replicates findings that burnout is negatively related to health and extends these findings to the substance abuse profession. Third, findings reveal that physical health support relates significantly to self-reported physical health, albeit in a manner opposite to prediction. These findings and their implications are described in greater detail below, followed by a discussion of the limitations of this study.

Supervisor Health and Safety Support Scale

The development of a supervisor health and safety support scale answers a call in the support literature for the identification more situation-specific behaviors that supervisors use to support their employees (Ilgen, 1990; Offermann & Hellmann, 1996). Specifically, the participants in this study report three distinct types of supervisor health and safety support (physical health support, psychological health support, and safety support), and confirmatory factor analysis results support the dimensionality of the scale. However, as described in greater detail below, future research is needed to further explore the validity of this scale and the nomological network that surrounds it.

Another avenue for future research is to examine the occurrence and impact of health and safety-specific support behaviors from other employees in an individual's support network, such

as coworkers. Coworkers are often cited as an important source of workplace support (e.g., House, 1981) and may provide unique support functions at work. Coworker and supervisor support may differ with regard to ability to predict health outcomes, and coworker support may be important for health- and safety-type support behaviors for several reasons. For example, employees may have more daily interactions with coworkers than with supervisors and may feel more comfortable discussing personal problems with a coworker, especially if discussing health problems is believed to lead to negative employment consequences. If an employee has more frequent interactions with a certain coworker than with his or her supervisor at work or feels more comfortable discussing health- and safety-related problems with a coworker, the coworker could be in a better position to provide this type of support.

Burnout and Health

A large body of literature has been devoted to examining the impact of burnout in a number of human service occupations (see Cordes & Dougherty, 1990 for a review), and this study extends that work by examining the health outcomes of burnout in a sample of substance abuse counselors. The finding that depersonalization and emotional exhaustion are linked to higher self-reported depressed mood is consistent with findings from previous research examining the impact of burnout on psychological health outcomes (Maslach, 2001).

Interestingly, only the emotional exhaustion component of burnout was related to participants' self-reported physical health. This finding is consistent with the notion that emotional exhaustion is the driving force of burnout, in a process through which emotional exhaustion occurs first and leads to depersonalization. Although several process models of burnout proposed in previous research lack empirical support (Taris, Le Blanc, Schaufeli, & Schreurs, 2005), Taris et al.'s longitudinal work provides some initial evidence that

depersonalization follows emotional exhaustion in a causal process. The present study did not explore such a causal chain, but future research may benefit from doing so.

Another noteworthy finding regarding the causal order of the variables included in the present study concerns the pattern of correlations between the health and safety support variables and burnout. Each of the supervisor health and safety support variables were significantly negatively related to the emotional exhaustion component of burnout, and all but one of the health and safety support variables (psychological) were significantly negatively related to depersonalization. Although speculative, this pattern of correlations may indicate a misspecification of the model examined in this study. Specifically, rather than influencing health directly or by its interaction with burnout, supervisor health and safety support may occur first in the causal chain, affecting health through its influence on burnout. Some indirect evidence that supervisor health and safety support may predict burnout is also provided by the literature on general social support, which is often suggested as a way to prevent burnout (Richman, 1998). Future research may benefit by re-examining the relationships among the variables included in this study, specifying this alternative causal ordering.

In order to shed some light on this issue, a series of 4 models were tested and compared using Lisrel 8.54. The exploratory theoretical mediated model (model 1) specified full mediation of the relationships between the supervisor health and safety support variables and the health outcomes through burnout. Model 2 included all paths from model 1 and additional direct effects between the supervisor health and safety support variables and self-reported physical health. Model 3 included all paths from model 1 and additional direct effects between the supervisor health and safety support variables and depressed mood. Model 4 included all paths from model 1 and any significant direct effects from models 2 or 3. With the exception of the χ^2 , which were

significant for all models, and the SRMSR, which were slightly higher (SRMSR = .07) than the recommended cutoff for each of the models, model goodness of fit statistics indicated that each of the models fit the data well (Hu & Bentler, 1998, 1999). Nested model comparisons were made using the $\Delta\chi^2$ test (James, Mulaik, & Brett, 1982). Model 2 fit significantly better than model 1 but model 3 did not. Therefore, the significant direct path from model 2 (between physical health support and self-reported physical health) was retained in the final model (model 4). However, results of the final model did not indicate significant relationships between physical health support or psychological health support and the burnout measures. On the other hand, the model did support full mediation of the relationship between safety support and depersonalization via both dimensions of burnout. Full mediation of safety support on self-reported physical health was also supported, but only through the emotional exhaustion component of burnout. Therefore, results of these exploratory findings provide some preliminary evidence that supervisor safety support may impact health through burnout. However, given the exploratory nature of these findings, future research should continue to address this issue of causal ordering.

Supervisor Health and Safety Support and Health

In general, the supervisor health and safety support variables did not appear to play an important role in predicting employee health in this study. On one hand, this is not completely surprising given the wide range of environmental, behavioral, and genetic factors that can contribute to individual health. On the other hand, an examination of the zero-order correlations among the study variables reveals some interesting patterns of relationships. For example, each of the supervisor health and safety support variables were significantly negatively related to depressed mood but were not related to self-reported physical health. These findings offer some

evidence for the validity of the supervisor health and safety support scale. In addition, this finding is consistent with the amount of literature on general supervisor support that tends to focus more on psychological outcomes compared to physical outcomes (e.g., House, 1981) and may mean that supervisor health and safety support is more important for psychological outcomes than for physical outcomes.

It may also be the case that the inconsistent pattern of relationships between supervisor health and safety support and health described above indicate the presence of moderators. There are a number of potential moderators of the relationships examined in this study that future research could attempt to explore. For example, the relationships between the provision of health and safety support and employee health may depend on employee individual difference characteristics such as personality. Specifically, extraversion has been linked to greater use of emotion-focused coping strategies such as seeking out social support (Connor-Smith & Flachsbart, 2007). Likewise, women are more likely than men to use coping strategies involving verbal expressions to others, including seeking emotional support (Tamres, Janicki, & Helgeson, 2002). Therefore, women and more extraverted employees may be more likely to seek out health and safety support than those lower in extraversion. Another possibility is that the length of the relationship between the supervisor and subordinate could play an important role in the amount of health and safety support provided. For example, employees who have spent more time working under a certain supervisor may feel more comfortable seeking out this type of support and their supervisors may also feel more comfortable expressing health and safety support. Future research may also benefit by attempting to identify other important outcomes of supervisor health and safety support, such as productivity. This is important because even when

health problems are not severe enough to warrant taking time off from work, they may still lead to decreased productivity on the job (Truax & McDonald, 2002).

Although opposite prediction, results did reveal a significant negative relationship between physical health support and self-reported physical health. The finding that greater reports of supervisor physical health support was linked to less favorable reports of physical health may indicate either that employees seek out this type of support after their health begins to deteriorate or that supervisors provide more physical health support after they become aware of employee health problems. In the future, longitudinal studies would be useful in determining the causal direction of this relationship.

Implications for Theory and Practice

The results of this study have a number of theoretical implications. This study provides an important first step in identifying specific behaviors of supervisors that support employee health and safety. Workplace stress models often include supervisor support as an important variable in the stress process (see Viswesveran, et al., 1999) but future models should continue to explore situation-specific types of support such as those examined in the present study that may influence the stress process. The work-family literature has revealed the importance of family supportive supervision as one type of situation-specific supervisor support that may help reduce work-family conflict (Allen, 2001; Thomas & Ganster, 1995; Shinn, et al, 1989). The literature on diversity is just one example of another area of research that has already highlighted the importance of general support but that might benefit from a closer examination of the behaviors that constitute support. For example, managerial support has been revealed as an important indicator of the adoption and success of diversity training (e.g., Rynes & Rosen, 1995). However, in measuring this type of support, employees are asked to indicate the visibility of

management in supporting diversity management efforts, rather than indicate behaviors used to support diversity management. Such initiatives may be even more effective if researchers are able to identify specific behaviors that indicate support for diversity.

Results of the post-hoc analyses also have theoretical implications for supervisor support. These results provide some initial evidence that physical health support is most important for predicting self-reported physical health, whereas safety support is most predictive of depressed mood. Despite the general lack of findings with respect to the relationships between the health and safety support variables and health outcomes, as noted above, an examination of the correlation table reveals significant zero-order correlations among the study variables, which may still indicate some evidence for the validity of the scale. The differential patterns of findings in the relative weights analysis for self-reported physical health versus depressed mood may also be an indication of scale validity. Future research that examines the relationships explored in this study specifying a different causal order may also benefit by re-examining this issue of relative importance. Doing so will not only aid in theory development for each of the dimensions of supervisor health and safety support but may also have practical implications. That is, knowing which of the three dimensions of support is most important for predicting burnout or other outcomes of interest could be useful for developing supervisor support training programs by focusing on the most important dimension of health and safety support.

In terms of additional implications for practice, the costs of poor psychological and physical health continue to increase, so it is important to continue examining characteristics of employees' jobs that may be contributing to poor health. The finding that burnout relates to poor employee health suggests that employers should focus on ways to decrease the occurrence of burnout. Previous research offers a number of recommendations for reducing burnout. For

example, organizations may benefit by allowing for greater work-life balance or by providing training in interpersonal skills to improve employees' ability to cope with the interpersonal aspects of burnout (Maslach, 1982). An examination of counselor caseloads revealed that nearly a third of the participants in this sample reported having caseloads that were "too large." Therefore, reducing caseloads may be one way to reduce burnout. In addition, because many of the treatment facilities included in the study report employing psychologists as part of their staff, resources may already be in place for providing training in interpersonal skills to many substance abuse counselors.

Limitations and Concluding Remarks

Several limitations to these findings are noteworthy. First, although the results of the factor analysis supported the dimensionality of the supervisor health and safety support items, additional work is needed to further examine the validity of these measures. A second limitation concerns the sample. While the current study included a demographically diverse sample of employees from organizations across the U.S., all of the participants were substance abuse treatment counselors. Future research should attempt to replicate these findings in other samples prior to generalizing the findings from this study to all occupations, particularly those occupations outside of the realm of human services. Lastly, as noted earlier with respect to the finding that physical health support relates negatively to self-reported physical health, longitudinal work is needed to examine the causal influence of these variables.

Despite the limitations noted above, results of this study reveal the importance of supervisor health and safety support. More importantly, these findings highlight the need to continue examining specific supervisory behaviors that may benefit subordinates. Although a large body of research addresses the importance of general supervisory support at work,

researchers should continue to identify situation-specific support behaviors such as supervisor health and safety support.

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APPENDIX A

Solicitation Email for Interview Participants

Dear [Participant Name],

During the Clinical Supervision seminar that took place earlier this month at the Southeastern School on Alcohol and Other Drug Studies, you expressed interest in assisting with a National Institute on Drug Abuse (NIDA) funded study. This study, Project MERITS (Managing Effective Relationships in Treatment Services) is currently underway at The University of Georgia (UGA) and is designed to examine clinical supervision and turnover in substance abuse treatment centers. Additionally, the study will examine the impact of the relationship between counselors and clinical supervisors on various outcomes for both individuals. You may have received correspondence from us last month requesting participants for a focus group that was held in November and was extremely beneficial to our study.

We are writing today to request your participation in a one-hour telephone interview during the week of December 11, 2006 (see attachment to indicate preferred dates/times so that we may find a time that works well with your individual schedule). Your input is extremely valuable to us, and the information gathered during the interview will allow us to learn more about clinical supervisors and counselors in substance abuse treatment centers. Participants in the telephone interviews will receive an honorarium of \$45, to be mailed out following the interview.

In order to be eligible to participate in the telephone interview, the following must apply to you:

1. You have direct experience as a substance abuse counselor working under the supervision of a clinical supervisor.
2. You have *not* been employed by UGA in the past 4 years.

If you are eligible to participate, please complete the Interest Indicator that is attached to this email and return it to Carrie McCleese (mccleese@uga.edu) by Monday, December 11th. We realize that your time is very valuable and thank you in advance for your help with this important study.

Sincerely,

Lillian T. Eby, Ph.D.
Associate Professor of Psychology and Project MERITS Director
The University of Georgia

Carrie S. McCleese, M.S.
Doctoral Candidate of Applied Psychology and Project MERITS Researcher
The University of Georgia

APPENDIX B

Telephone Interview: Interest Indicator

Project MERITS

A Study in Partnership with The University of Georgia and NIDA

Background Information

Name:

Phone number:

Email address:

Street address:

(your check will be mailed to this address)

Affiliation/Employer:

Professional Experience

How long have you been working as a substance abuse counselor? ____ years ____ months

Are you currently employed as a substance abuse counselor? Yes No

If currently employed:

How long have you worked for this employer? ____ years ____ months

How long have you been supervised by your current clinical supervisor? ____ years ____ months

Please describe your current organization in terms of the type of clients that you serve:

Please indicate your availability for participating in a one-hour telephone interview for Project MERITS*:

Wednesday, December 13: _____

Thursday, December 14: _____

Friday, December 15: _____

* You will receive correspondence confirming the date and time of the telephone interview.

APPENDIX C

Pilot Study Telephone Interview Protocol

Before beginning, ask a few questions to confirm responses on Interest form, ensure confidentiality, and discuss how the data will be used. Get verbal confirmation to record the conversation, and ask if they would like to receive a typed transcript of the data via email. Also make sure address is accurate in order to mail check, and remind them that a Payment Receipt form will accompany the check and must be returned in order for us to process it.

1. Other than work-related issues, what other kinds of things have you talked about with your current or previous supervisor during your clinical supervision meetings?

Prompt - what about outside of the supervision meeting?

Now I'd like to ask several questions about the extent to which your supervisor talks to you or expresses concern about health-related issues.

2. **General:** Does your supervisor talk to you or express concern about your overall health/wellbeing (differentiate between physical and mental but maybe do so with the for examples...making sure to leave out drug/alcohol use examples)?

Prompt – (for example....) provide specific instances

Prompt – what areas of health do you discuss?

Prompt – has this happened in your relationships with other clinical supervisors?

Prompt – what would you call these kinds of conversations (e.g., health promotion, health concern, health support)?

3. **Physical:** Does your supervisor talk to you or express concern about your physical health/wellbeing?

Prompt – (for example....) provide specific instances

Prompt – has this happened in your relationships with other clinical supervisors?

Prompt – what would you call these kinds of conversations (e.g., physical health promotion, physical health concern, physical health support)?

4. **Mental:** Does your supervisor talk to you or express concern about your mental health/psychological wellbeing?

Prompt – (for example ...) provide specific instances

Prompt – has this happened in your relationships with other clinical supervisors?

Prompt – what would you call these kinds of conversations (e.g., psychological well-being mental health promotion, mental health concern, mental health support)?

5. **Spiritual:** Does your supervisor talk to you or express concern about your spiritual health/wellbeing?

Prompt – (for example....) provide specific instances

Prompt – has this happened in your relationships with other clinical supervisors?

Prompt – what would you call these kinds of conversations (e.g., spiritual health promotion, spiritual health concern, spiritual health support)?

6. Can you think of any other kinds of health-related topics you discuss with your clinical supervisor that we have not already covered?

7. How often do these kinds of conversations take place (for example, daily, weekly, monthly)?

8. If you have experience as a clinical supervisor, to what extent did you discuss these types of health-related issues with the counselors you supervised? Can you provide some specific examples of topics that you discussed?

APPENDIX D

Content Validity Pilot Test

Please review the following definitions and rate the importance of each item in terms of its appropriateness to the definition of health it represents. When rating the items, please keep in mind a typical clinical supervision experience in substance abuse treatment centers. Please use the following rating scale and type your importance ratings in the parentheses following each item:

- 3 = Critical
- 2 = Important
- 1 = Of Some Importance
- 0 = Unimportant

Physical: Discussions between clinical supervisors and their counselors related to the counselor's physical health or well-being.

1. My counselors and I discuss illnesses that affect their work. []
2. I encourage my counselors to take steps to prevent illnesses. []
3. My counselors and I discuss the health of their families. []
4. My counselors and I discuss diseases that affect their work. []

Psychological: Discussions between clinical supervisors and their counselors related to the counselor's psychological health or well-being.

1. My counselors and I discuss personal issues that cause them to experience stress. []
2. My counselors and I discuss personal issues that cause them to feel depressed. []
3. My counselors and I discuss ways to improve their morale at work. []
4. I encourage my counselors to take steps to prevent burnout. []
5. My counselors and I discuss things that are bothering them or causing them to feel upset. []
6. My counselors and I discuss ways to maintain healthy boundaries with their clients. []
7. My counselors and I discuss situations that cause them to feel exhausted or tired. []

Safety: Discussions between clinical supervisors and counselors related to the counselor's perceptions of safety at work.

1. My counselors and I discuss strategies for dealing with clients' violent behavior. []
2. I encourage my counselors to avoid threatening situations at work. []
3. My counselors and I discuss strategies for preventing exposure to illnesses or diseases at work. []
4. My counselors and I discuss crisis management techniques such as CPR or suicide prevention. []

Are there any other important issues related to physical and psychological health or safety that we have overlooked? If so, please describe:

APPENDIX E

Health Item Categories Pilot Test

Please review the following health and safety definitions. After reading the definitions, you will see a number of statements. Please read each statement and indicate the extent to which the statement fits into each of the health statements. When rating the statements, please keep in mind a typical clinical supervision experience in substance abuse treatment centers.

Physical: Discussions between clinical supervisors and their counselors related to the counselor's physical health or well-being.

Psychological: Discussions between clinical supervisors and their counselors related to the counselor's psychological health or well-being.

Safety: Discussions between clinical supervisors and counselors related to the counselor's perceptions of safety at work.

My counselors and I discuss ways to identify and respond to threatening situations at work.

To what extent does this statement refer to Physical?
 None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?
 None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?
 None or hardly at all
 Some
 Moderately
 Much
 Completely

I encourage my counselors to take steps to prevent burnout.

To what extent does this statement refer to Physical?
 None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?
 None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?
 None or hardly at all
 Some
 Moderately
 Much
 Completely

I encourage my counselors to take steps to prevent physical illnesses.

To what extent does this statement refer to Physical?
 None or hardly at all
 Some
 Moderately
 Much

To what extent does this statement refer to Psychological?
 None or hardly at all
 Some
 Moderately
 Much

To what extent does this statement refer to Safety?
 None or hardly at all
 Some
 Moderately
 Much

___ Completely

___ Completely

___ Completely

My counselors and I discuss crisis management techniques such as CPR or suicide prevention.

To what extent does this statement refer to Physical?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

To what extent does this statement refer to Psychological?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

To what extent does this statement refer to Safety?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

My counselors and I discuss diseases that might affect their work.

To what extent does this statement refer to Physical?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

To what extent does this statement refer to Psychological?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

To what extent does this statement refer to Safety?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

My counselors and I discuss illnesses that might affect their work.

To what extent does this statement refer to Physical?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

To what extent does this statement refer to Psychological?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

To what extent does this statement refer to Safety?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

If I notice a decrease in my counselors' emotional status, we discuss changes that may improve their psychological health or well-being.

To what extent does this statement refer to Physical?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

To what extent does this statement refer to Psychological?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

To what extent does this statement refer to Safety?

___ None or hardly at all
 ___ Some
 ___ Moderately
 ___ Much
 ___ Completely

If I notice a decrease in my counselors' physical health, we discuss changes that may improve their health.

To what extent does this

To what extent does this

To what extent does this

statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

My counselors and I discuss personal issues that cause them to experience stress.

To what extent does this statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

My counselors and I discuss personal issues that cause them to feel depressed.

To what extent does this statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

My counselors and I discuss situations that cause them to feel exhausted or tired.

To what extent does this statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

My counselors and I discuss strategies for dealing with clients' violent behavior.

To what extent does this statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

My counselors and I discuss strategies for preventing exposure to illnesses or diseases at work.

To what extent does this statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

My counselors and I discuss things that are bothering them or causing them to feel upset.

To what extent does this statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

My counselors and I discuss ways to improve their morale at work.

To what extent does this statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

My counselors and I discuss ways to maintain healthy boundaries with their clients.

To what extent does this statement refer to Physical?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

To what extent does this statement refer to Safety?

- None or hardly at all
 Some
 Moderately
 Much
 Completely

I encourage my counselors to engage in healthy behaviors (e.g., stop smoking, exercise, healthy diet).

To what extent does this statement refer to Physical?

- None or hardly at all
 Some

To what extent does this statement refer to Psychological?

- None or hardly at all
 Some

To what extent does this statement refer to Safety?

- None or hardly at all
 Some

___ Moderately
___ Much
___ Completely

___ Moderately
___ Much
___ Completely

___ Moderately
___ Much
___ Completely

APPENDIX F

Pilot Test for Factor Structure of Supervisor Health and Safety Support Items

Thank you for taking the time to assist with this research. Please be assured that responses to survey questions will remain confidential and be reported by us in summary form for research purposes. Study results may be published. Internet communications are insecure and there is a limit to the confidentiality that can be guaranteed due to the technology itself. However, once the completed survey is received by the investigator, standard confidentiality procedures will be employed. For example, any identifying information will be stored in a database separate from survey responses. If you prefer to receive a paper version of the survey or if you have any questions or comments now or in the future, please feel free to contact Carrie McCleese, Department of Psychology, University of Georgia, at 706-621-1173 or mccleese@uga.edu. Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, GA 30602-7411. Telephone (706) 542-3199; E-Mail Address IRB@uga.edu.

Your participation is voluntary and by completing this survey you are indicating your informed consent to participate in this research. No discomfort or risks are foreseen in participating in this study. You may skip any questions you are uncomfortable answering, and closing the survey window at any time will discard all responses to survey questions.

Please begin by clicking on the “Next” button below.

Physical

My supervisor encourages me to take steps to prevent personal physical illnesses.

My supervisor and I discuss ways to improve my physical health.

My supervisor encourages me to take better physical care of myself (e.g., stop smoking, healthy diet, exercise, rest).

My supervisor and I discuss my concerns about my physical health.

Psychological

My supervisor and I discuss things at work that I find stressful.

My supervisor and I discuss things that are bothering me or causing me to feel upset.

My supervisor and I discuss ways to improve my psychological well-being.

My supervisor and I discuss my concerns about my psychological well-being.

Safety

My supervisor and I discuss ways to identify and respond to threatening situations at work.

My supervisor and I discuss ways to maintain a safe environment at work.

My supervisor encourages me to alert him/her of safety issues that should be addressed at work.

My supervisor and I discuss my concerns about the safety of my work environment.

Demographic: Age, Gender, Hours/Wk

APPENDIX G

Survey Items

Burnout

(Depersonalization)

I feel I treat some clients as if they were impersonal objects.
 I've become more callous toward people since I took this job.
 I worry that this job is hardening me emotionally.
 I don't really care what happens to some clients.
 I feel clients blame me for some of their problems.

(Emotional Exhaustion)

I feel emotionally drained from my work.
 I feel used up at the end of the workday.
 I feel fatigued when I get up in the morning and have to face another day on the job.
 Working with people all day is really a strain for me.
 I feel burned out from my work.
 I feel frustrated by my job.
 I feel I'm working too hard on my job.
 Working with people directly puts too much stress on me.

Supervisor Physical Health Support

My supervisor encourages me to take steps to prevent personal physical illnesses.
 My supervisor and I discuss ways to improve my physical health.
 My supervisor encourages me to take better physical care of myself (e.g., stop smoking, healthy diet, exercise, rest).
 My supervisor and I discuss my concerns about my physical health.

Supervisor Psychological Health Support

My supervisor and I discuss things at work that I find stressful.
 My supervisor and I discuss things that are bothering me or causing me to feel upset.
 My supervisor and I discuss ways to improve my psychological well-being.
 My supervisor and I discuss my concerns about my psychological well-being.

Supervisor Safety Support

My supervisor and I discuss ways to identify and respond to threatening situations at work.
 My supervisor and I discuss ways to maintain a safe environment at work.
 My supervisor encourages me to alert him/her of safety issues that should be addressed at work.
 My supervisor and I discuss my concerns about the safety of my work environment.

Depressed Mood

I often feel downhearted or blue.
 I get tired for no reason.
 I find myself restless and can't keep still.
 My mind is not as clear as it used to be.
 I find it easy to do the things I used to do.

I feel hopeful about the future.
I find it easy to make decisions.
I am more irritable than usual.
I still enjoy the things I used to.
I feel that I am useful and needed.

Self-Reported Physical Health

I have a lot of minor ailments.
I need little or no medical care.
I feel tired all the time.
I must be careful what I do.
I am in excellent health.
My health is failing.
I never felt better.
I am in poor health.
I am in better condition than most people my age.