With a little help from my boss: Supervisors as resource-facilitators

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Abstract

Employee mental health problems are among the most costly issues facing employers in the developed world. In North America, mental health problems directly affect 1 in 5 people and are the leading cause of workplace disability. Recognizing this, many employers have introduced resources designed to help employees cope with stressors. Yet, these resources are remarkably underutilized. My research was designed to evaluate the role of organizational leaders in increasing employee resource-use. To do so, I took a three-phased approach. First, I conducted a qualitative study, whereby I interviewed managers about their experiences managing employees with mental illnesses. Second, I developed and validated an other-rated measure of strain to help leaders recognize the behavioral warning signs of a struggling employee—an employee who could benefit from resources. Third, a three-hour mental health awareness training (MHAT) for managers was delivered and evaluated using a longitudinal control group design. Compared to leaders who did not participate in the MHAT, leaders who participated in the training a) experienced improvements in their ability to recognize warning signs of deteriorating employee mental health, b) engaged in significantly more mental health promotion behaviors and activities in the workplace, and c) took more comprehensive action to direct employees towards available resources. Employees whose leaders attended the training also experienced increased willingness to seek out resources and reported using resources more frequently than their colleagues whose leaders did not attend the training. Thus, mental health training for managers can exert a positive impact on employee and leader outcomes up to three months post-training.

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With a little help from my boss: Leaders as resource facilitators

Mental health problems and mental illnesses are among the most costly issues facing organizations in the developed world. Each year, the United States loses between $150-$300 billion due to reduced productivity, lost work days, and disability related to depression and stress-related illnesses (American Institute of Stress, 2005; Sauter, Murphy, & Hurell, 1990). In Canada, 70% of disability costs are attributable to mental health issues, amounting to well over $20 billion in losses to the Canadian economy (Mental Health Commission of Canada [MHCC], 2012). Results are similar within the European Union, where 135 million Euros—just under 5% of the GDP—is lost due to the negative consequences of depression (McDaid, 2011). These significant financial losses are symbolic of the impact of untreated mental illnesses on individual employees and their employers. When left untreated, mental health problems and illnesses can lead to cognitive and affective impairments (World Health Organization [WHO], 2004), compromised job performance (U.S. Department of Health and Human Services, 1999; WHO, 2004), and degradations in interpersonal relationships at work (Caveen, Dewa, & Goering, 2006; Shain, Arnold, & GermAnn, 2012).

In response to the mounting psychosocial and financial burdens surrounding poor employee mental health, many organizations have introduced mental health policies, developed mental health promotion programs, and institutionalized national mental health strategies (Dimoff & Kelloway, 2013; Dimoff, Kelloway, & Burnstein, 2015; Goetzel Ozminkowski, Sederer, & Mark, 2002; Irvine, 2011; MHCC, 2012). For instance, many Canadian organizations have implemented the Mental Health Commission of Canada's

voluntary National Standard of Psychological Health and Safety (MHCC, 2012), which is designed to provide employers with guidelines on how to create and maintain psychologically safe work environments, in which employees have access to resources, such as Employee Assistance Programs (EAPs), extended benefit plans, and short-and-long-term disability leave for mental illness (Shain et al., 2012). Along with these formal resources or benefit packages, many employers also provide other health-bolstering opportunities for employees, such as discounted memberships for health and fitness facilities and flexible work schedules (Barham, Gottlieb, & Kelloway, 1998; Gottlieb, Kelloway & Barham, 1998). Some organizations are even turning to more alternative methods to help employees cope with and respond to stressors, such as the presence of onsite meditation rooms and complimentary mindfulness training or massage therapy (Day, Gillan, Francis, Kelloway, & Natarajan, 2009).

Despite the rise in available options, very few employees use these resources to their full potential (Linnan et al., 2008; Reynolds & Lehman, 2003). In fact, most employees fail to use any resources at all (Linnan et al., 2008; Reynolds & Lehman, 2003). For instance, according to a study published by the National Behavior Consortium in 2013, 98% of medium to large organizations in the United States provide EAPs to their employees, but utilization rates are less than 4% each year. Such low utilization rates might suggest that the service is not necessary. However, 20% of North Americans experience a mental health issue every year, suggesting that at least 1/5th of the population is struggling and in need of resources (American Institute of Stress, 2005; MHCC, 2012).

Why is resource utilization so low among a population that is clearly struggling with mental health issues?

In this dissertation, I address this question by a) drawing on resource theories to explain why resource utilization is low, b) exploring the role that leaders can play in improving employees' use of available resources, c) developing a tool that can be used to help leaders facilitate employee resource-use, and d) evaluating the efficacy of a training program designed to provide leaders with the skills to promote resources and assist employees who are struggling.

Chapter 1: Resource Utilization and Leaders

According to extant research, employees fail to use resources for three reasons. First, employees may not seek help or use resources because they fail to recognize that they need help (for review, see Hunt & Eisenberg, 2010). Individuals who are suffering from compromised health and wellbeing often have difficulty recognizing that they are in a state of impaired functioning. As a result, they may fail to recognize that they could benefit from external support (Dimoff, Collins, & Kelloway, in press; Hunt & Eisenberg, 2010; Lazarus & Folkman, 1984; 1987). Second, employees may not know about available resources or the effectiveness of resources. Consequently, ignorance or a lack of information about resources can prevent people from seeking out help (Hunt & Eisenberg, 2010). Third, employees may fail to seek out resources for mental health issues due to the relatively high level of stigma surrounding mental illness (Corrigan, 2004). Mental health stigma, or the negative stereotypes and/or prejudice about mental illness (Corrigan, 2004), can substantially reduce the likelihood that an individual will seek out resources (Cooper, Corrigan, & Watson, 2003). Shame or feelings of incompetence may also lead some individuals to try to cope on their own, rather than seek help (Lee, 1997). This may be especially true within organizations, where employees may fear that they will be perceived as incompetent or unprofessional if they seek out resources for a mental health issue.

Employees who underuse or do not use resources, especially when they are struggling, risk experiencing loss spirals and continued degradations in health and wellbeing (Hobfoll, 1989; 2001; Russel, Altmanier, & Van Velzen, 1987; Wells, Hobfoll,

& Lavin, 1999). Employees who continue to experience reductions in their mental health may be unable to cope or respond to future stressors, ultimately compromising their abilities to perform optimally at work (Hobfoll, 1989; 2001; Wells et al., 1999). To help reduce this possibility, organizations might be advised to turn to leaders, managers, and supervisors—the individuals who may serve as a gateway to all workplace resources. Managers can serve as a "front line of defense" by recognizing the warning signs of a struggling employee, and by helping employees to identify, mobilize, and use available resources (Craig et al., 2004). To better understand the role of leaders in this resource-facilitation process, I draw upon resource theories and use the framework proposed by the recently introduced resource utilization model (RUM; Dimoff & Kelloway, in press).

Conservation of Resources (COR) Theory

Conservation of Resources (COR) Theory posits that individuals are motivated to retain resources and that threats to resources can be damaging (Hobfoll, 1988; 1989; 2001). Resources are described as "objects, personal characteristics, conditions, or energies that are valued in their own right or that are valued because they act as conduits to the achievement or protection of valued resources" (Hobfoll, 2001, p. 339). Thus, resources are essential to protecting health and wellbeing (Schaufeli & Bakker, 2004).

Principles of COR theory. The first principle of COR theory revolves around resource losses (Hobfoll, 1988; 1989; 2011). According to COR, resource losses are disproportionately more salient than resource gains. Thus, individuals perceive resource losses as having more of an impact on their lives than resource gains (Hobfoll, 2011). For

example, a project leader with a strict budget would likely perceive a small budget increase as having less of an impact than if the already-strict budget was reduced. Although the resource itself (i.e., money) has not changed, the loss would be felt more strongly than the gain. According to Wells et al. (1999), while resource losses may be capable of increasing strain and perpetuating depression, resource gains are not equally capable of reducing strain or preventing depression. Consequently, while an increased budget limit may provide flexibility for the project leader, an unexpectedly reduced budget limit may create high levels of strain as the individual must make difficult decisions under pressure (Wells et al., 1999)—possibly leading to performance degradations, ill-advised actions (e.g., cutting corners), or other negative implications.

The second principle of COR theory surrounds resource investment. Accordingly, individuals must invest resources to prevent resource loss, replenish previous losses, and bolster against future losses (Hobfoll, 1988; 1989; 2011). Thus, Hobfoll (2001) contends that there is an opportunity cost associated with resource investment, whereby employees must deplete or use existing resources in order to gain other resources. This process may be stress-provoking, as it can initiate a resource-loss spiral (Hobfoll, 1988; 1989; 2001). For example, a project leader whose budget for next month has been reduced may try to reallocate any leftover funding he or she may have from this month's budget. By redistributing his or her monthly budget (i.e., resource investment), the leader is helping to stave off potential budget problems next month (i.e., prevention of resource loss). Of course, for this budget redistribution to be successful, the project leader must be under-budget in the current month. This illustrates a corollary of this COR principle—the more

resources one has, the less likely one will be to experience a loss spiral. Compared to individuals with few resources, individuals who are able to invest existing resources in order to gain additional resources (or more valuable resources) are at less of a risk of putting themselves into a resource-depleted state (Hobfoll, 2011). Thus, employees with abundant resources tend to be less vulnerable to resource loss than employees with fewer resources.

Finally, the third and fourth COR principles posit that resource availability can have its greatest impact when resource loss has been high or chronic (Hobfoll, 1988; 1989; 2011)—as is the case for employees who are experiencing a degradation in mental health. Although the first principle of COR contends that resource gain is less salient than resource loss, this might only hold true under normal circumstances. During times of strain, resource gain is likely to have a much more significant impact on individuals' health and wellbeing (Hobfoll, 1988; 1989; 2011). For instance, a project leader who has just lost 20% of his or her budget may be extraordinarily grateful for additional resources, such as more project team members and extra support from management. Under normal circumstances, the extra support and extended workforce may not have been perceived as necessary or valuable. By gaining other resources during times of strain, the project leader is able to stave off a resource loss and may even begin a resource gain spiral (Hobfoll, 2011). With the extra support, the project leader may actually experience a gain spiral if she is able to meet the challenge—whereby increasing her self-esteem to forge ahead to meet new challenges in a resource-neutral or resource-positive state (Hobfoll, 2011).

While these principles are integral to understanding why individuals conserve resources, they lend little insight into the processes by which employees protect and accumulate resources as a response to workplace stressors. Similarly, these principles, on their own, do not contextualize resource conservation to workplace mental health. Therefore, I strive to illustrate the resource-utilization process through the contextualization of workplace mental health.

Resource Utilization Model (RUM)

Individuals who fail to use available resources, or who do not have access to the appropriate resources, may struggle and reach the "point of no return," where they risk having to leave the workplace (e.g., quit, receive disability leave, or retire), or where they are forced to leave the workplace (e.g., fired or let go). Both scenarios are preventable through resource-use and appropriate manager involvement (e.g., Cohen & Wills, 1985). I argue that organizational leaders, managers, and supervisors may be able to help facilitate a resource-utilization process by informing employees about resources, encouraging resource-use, and engaging in supportive behaviors at work. The resource utilization model (RUM), first proposed by Dimoff and Kelloway (in press), explains the role of leaders in facilitating employee resource mobilization by drawing upon existing resource theories to explain patterns of resource-utilization relevant to employee mental health. More importantly, through its four propositions, RUM helps illustrate the critical role of leaders in facilitating employee resource-use.

Warning recognition. The first proposition of the RUM is that warning signs must be recognized before they can be addressed. According to the transactional model of stress (Lazarus & Folkman, 1984; 1987), before individuals can respond to stressors and engage in coping behaviors, they must first recognize that they are facing a challenge that requires resource-use. If employees fail to recognize that they need to invest resources to respond to demands, they may suffer losses in the future—hence the resource-loss spiral (Hobfoll, 2011; Lazarus & Folkman, 1984, 1987). This process is especially relevant to employee mental health issues, where early recognition is critical to swift and successful treatment (Goetzel et al., 2002; Hepburn, Kelloway, & Franche, 2010).

Unfortunately, early recognition may be difficult for employees who are struggling with a mental health issue. Many mental health issues are associated with compromises in cognitive and emotional processing (U.S. Department of Health and Human Services, 1999; World Health Organization, 2004)—ultimately limiting the extent to which individuals are capable of recognizing that they are losing resources or failing to invest in additional resources. According to the trans-theoretic model of change, the first step in behavior-change is "pre-contemplative," whereby individuals must be aware that a change in behavior is needed (Prochaska & DiClemente, 1984). During this pre-contemplative phase, employees who are struggling may fail to draw on resources simply because they don't realize that they are in a state of compromised health or wellbeing (Hunt & Eisenberg, 2010; Lazarus & Folkman, 1984, 1987; Prochaska & DiClemente, 1984). Fortunately, managers are in a good position to be able to a) recognize that their

employee is in a resource-loss spiral, and b) take action to prevent or lessen the downward spiral (Dimoff & Kelloway, 2013; Dimoff et al., 2015).

Resource identification. The second proposition of the RUM is that resources must be identifiable in order to be mobilized. To prevent a continued loss spiral, employees must be able to identify available resources that are likely to fit their situation best. Managers can play a critical role in resource identification through their knowledge of the organization and its policies, programs, and resources related to employee health and wellbeing. It is important to note that resource-identification does not require managers to diagnose employee problems or identify which resources will be best for a specific mental health problem. Instead, resource identification requires managers to get to know their organizational resources so that they are in a good position to communicate about resources, generally, and provide general suggestions about resources that are available through the workplace.

In alignment with Dimoff and Kelloway (in press), I propose that managers can help facilitate the identification of resources within the external environment, such as social support, tools or information, recognition, or pay. By openly discussing available resources, de-stigmatizing the use of resources, and engaging in emotionally-supportive behaviors, leaders can act as resource-champions (Edmondson, 2003; Milliken, Morrison, & Hewlin, 2003; Ryan & Oestreich, 1998; Saunders, Sheppard, Knight, & Roth, 1992). Moreover, by encouraging employees to use resources available through the organization, such as accommodation, managers may be able to help employees avoid maladaptive behaviors or poor coping strategies, such as procrastination and withdrawal. Both of

these coping strategies can have negative consequences on the employee, the employee's work group, and the organization (Mosley et al., 1994; Roth & Cohen, 1986; Tice & Baumeister, 1997). By putting off demands in an attempt to minimize resource loss, individuals may be setting themselves up for more significant resource losses over time (Mosley et al., 1994; Roth & Cohen, 1986). Instead, through supportive patterns of interaction and supportive behaviors, managers can improve employee willingness to seek out and actually mobilize resources during times of struggle (Ito & Brotheridge, 2003).

Resource mobilization. The third proposition of the RUM is that resource mobilization must occur in order for individuals to benefit from resources. During times of struggle or under conditions of high demands, employees must be able to mobilize identified resources. Mobilization of resources can help lessen or prevent strain, burnout, and/or severe mental illness (Hobfoll, 2011; Sonnentag, 2001). Leaders who have recognized the warning signs of an employee in distress and intervened accordingly by identifying available resources may be able to increase employee willingness to use resources. The willingness of an employee to move forward in the resource utilization process may largely be a function of the leader's behavior during the warning recognition and resource identification stages (Detert & Burris, 2007). Thus, leaders who are open, non-stigmatizing, supportive, and participative early in the process may be more likely to have employees willing to use resources (see Anderson & Williams, 1996; Detert & Burris, 2007; Edmondson, 1999).

Given that employees under stress may be less likely to take the time or energy to use resources due to the general motivation to conserve resources (e.g., Hobfoll, 1988; 1989), it is important for leaders to have a role in continuing to evaluate an employee's behavior and ensure that the employee has the opportunity to gain access to the best-suited resources available. The pool of available resources will help determine how well managers will be able to help employees access and mobilize resources (Hobfoll, 2011). As contended by Hobfoll (2011), resource-rich environments are characterized by strong employee-leader relationships and conditions that protect and foster the resources of individual employees.

This is especially critical for resources designed to help support employee mental health. While employees may be somewhat responsible for maintaining and developing their own resources to support their mental health, they are also somewhat dependent upon their organization and their leaders to ensure that the organizational environment supports employee mental health and provides resource pools that are accessible and easy to navigate (Hobfoll, 2011). Thus, it is largely the responsibility of organizations to create environments where resources are available and usable (Hobfoll, 2011). Despite many organizational efforts to create environments where resource pools are abundant, employees continue to underutilize resources (Linnan et al., 2008; Reynolds & Lehman, 2003). Much of the existing research on mental health stigma would suggest that resource-use related to mental health is low due to high levels of stigma and low levels of mental health literacy (Cooper et al., 2003; Corrigan, 2004; MHCC, 2012). In this case,

the resource pool may be present and plentiful, but is going untapped due to the psychosocial concerns of employees.

Ultimately, resource underutilization is one of the biggest challenges facing organizations and human resources departments in the developed world. With a high proportion of the workforce experiencing straining challenges and mental health problems, resources should be used widely and often. Yet, very few employees utilize available resources. The overarching goal of this dissertation is to better understand the role that leaders can play in facilitating employee resource-use.

The Current Research

Consistent with RUM, I posit that managers have a central role to play in the resource utilization process. The goal of my first study was to develop a deeper understanding of this role and managers' experiences in dealing with employees who may be experiencing mental health challenges.

One managerial role is to help individuals to recognize when they are struggling and might be in need of additional resources. To do so, managers need to understand how stress and mental ill-health manifest in the workplace, and how they can professionally and appropriately support an employee who may be experiencing mental health challenges. Therefore, the purposes of studies 2 and 3 were to develop and evaluate a tool that can help leaders recognize when employees are in distress.

A second role for managers is to facilitate resource utilization by providing social support and discussing resources with employees. To be effective, managers must have

the appropriate tools and skills to achieve these goals. Thus, the goal of study 4 was to evaluate the effectiveness of a training intervention designed to help managers develop the skills to a) recognize warning signs of struggle, b) take action to support the employee and encourage resource-use, and c) create an environment in which mental health stigma is low. Dimoff et al. (2015) showed the effectiveness of training managers in these areas with regard to managers' own knowledge and attitudes of mental health. In study 4, I extended this analysis to focus on the impact of training on managers' behaviors and employees' resource-use, and incorporated a behavioral checklist that could be used by leaders to help recognize the warning signs associated with deteriorating mental health. Both the training and the checklist tool were designed to be high in practical utility (i.e., easily usable and actionable) in order to enhance training effectiveness and transfer to everyday management experiences (Alliger, Tannenbaum, Bennett, Traver, & Shotland, 1997; Blume, Ford, Baldwin, & Huang, 2010).

Chapter 2: What Leaders are Saying (Study 1)

Mental health problems and mental illnesses continue to be the leading cause of disability and premature death within the developed world (Watson Wyatt Worldwide, 2007). Mental illnesses are also one of the most stigmatized health problems, with as many as two in three people failing to seek help or treatment due the fear of being stigmatized or discriminated against (Canadian Medical Association, 2013). Within workplace contexts, such fear of stigma is amplified, as employees worry about the implications of a mental health problem on their employment prospects and promotion potential. For instance, while many employees believe their employers are good resources for other problems, such as work-life balance issues and physical health limitations, many employees claim that they would not seek out support or resources from their employer if they were experiencing a mental health problem (Ipsos Reid, 2012). As a result, employees fail to seek support or utilize available resources—a failure that has individual and organizational consequences.

Although managers believe they could do their jobs more effectively if they had a better understanding of employee mental health (Ipsos Reid, 2012), many managers report feeling inexperienced or ill-equipped to deal with such sensitive issues in a professional and respectful manner (Thorpe & Chenier, 2011). Yet, there is very little understanding surrounding the reasons that managers feel ill-equipped or what specific tools and/or information managers need in order to be better equipped to support employees and facilitate employee resource-use. Thus, while recent policy and practice have advocated for improved mental health awareness among managers (i.e., Mental

Health Commission of Canada), and for managers to play a greater role in the recognition of employee mental health issues, little attention has been paid to the experiences of managers themselves. Very often, education and mental health training for managers are designed and developed by individuals without a management background—and even by individuals who have never worked in a typical organizational environment.

Training for management on workplace mental health, while gaining traction in the public and private sectors, is largely under-researched and under-developed. As a consequence, organizations seeking to implement management training designed to help leaders manage employees with mental health problems risk implementing programs that are not based on evidence-based principles and that may be largely ineffective. Thus, it is important to return to a "back to basics" approach to better understand what specific issues managers are encountering on a day-to-day basis when it comes to managing mental health at work. To do so, research must take both a quantitative approach—to gain insight into the perspectives of many—and a qualitative approach—to gain rich insight into the perspectives of those being asked to manage mental health at work.

Many of the existing mental health training programs for managers have been developed and delivered by clinical psychologists, social workers, and counseling professionals (e.g., Kitchener & Jorm, 2002; Pinfold, Stuart, Thornicroft, & Arboleda-Florez, 2005). While the best of these programs incorporate focus groups or interviews with key stakeholders, such as human resources professionals, occupational physicians, and employees with mental health issues, rarely are managers among these key stakeholders. Neglecting managers in the development of such programs has the

potential to result in content that is inappropriate, unrealistic, or poorly fitted to the management role (Dimoff & Kelloway, 2013). Thus, to better equip managers to deal with employee mental health issues in a workplace setting, I must first better understand leaders' experiences managing employees with mental health issues. In turn, I hope to gain better insight into what managers need in order to be more successful in their roles when it comes to employee mental health.

Therefore, the purpose of this study is to understand the complexity of managing employees with mental health issues from the perspective of managers. In particular, I was interested in how managers recognized when employees were experiencing mental health issues, how managers responded or took action, and the extent to which managers perceived responsibility for taking action.

Method

I took a qualitative approach to better understand managers' experiences with employee mental health issues. Qualitative research is defined as a method that "focuses on meaning in context [and] requires a data collection instrument that is sensitive to underlying meaning when gathering and interpreting data" (Merriam, 2014, p. 2). Qualitative approaches can help add depth, insight, and lead to deeper understanding (Mazzola, Schonfeld, & Spector, 2011) that is not always achievable through quantitative approaches (Breakwell, 2012). According to Willig (2003), qualitative research can help provide better understanding of "how people make sense of the world" (p. 9) and how they perceive and manage experiences or events, such as the management of employees

with mental health issues. The present study sought to explore the process of leader recognition of, and response to, employees who are struggling with a mental health issue. I hoped to gain a better understanding of the complex issues managers are facing when employees are struggling.

Qualitative research, in the area of mental health, is not uncommon. It is prevalent within areas of child, adolescent, and abnormal psychology, and is used as a means for better understanding the complex and multifaceted dimensions of human experience within these areas. Qualitative research has been used in relation to the experiences of employees with mental health issues or employees with chronic medical issues, but has been largely underutilized to understand the roles of others in the workplace—managers. This is a significant gap in the literature given the recent and widespread call to managers and leaders (e.g., Dimoff et al., 2015; MHCC, 2012) to begin recognizing and assisting employees with mental health issues. Thus, the purpose of this study was to address this gap through a qualitative interview approach targeted towards front-line, mid-level, and even senior-level managers.

Participants. Sixteen participants were recruited for this study using convenience sampling. Inclusion criteria required all participants to speak English, have at least five years of management experience, and have managed at least one employee with a diagnosed mental health issue at some point in their career. Participants referenced having experience managing employees with a wide-range of mental health issues (i.e., depression, generalized anxiety, acute anxiety attacks, bipolar disorder, substance addiction/dependency, and post-traumatic stress disorder). All managers were employed

full-time in Canada or the United States. At the beginning of the interview, a set of demographic questions were used to assess participants' age, gender, current employment role, management tenure, education, personal or family experience with mental health problems, their number of direct subordinates, and total number of subordinates managed throughout career. See Table 1 for more information about participants. Although the findings represent an analysis of all 16 transcripts, one manager requested that any of his/her quotations not be used for publication purposes. Participants were recruited through social media, such as LinkedIn, Facebook, and Reddit.

Procedure. A semi-structured interview was used for this study, as it provided the flexibility to evaluate participants' responses and probe appropriately to gain more detailed information (Fylan, 2005). This semi-structured interview method was well suited for this study given that the researcher (and interviewer) are knowledgeable about the areas of workplace mental health and management. This knowledge provided adequate background for the interview to frame the discussion in advance (Richards & Moise, 2013). Interviews were selected over focus groups because interviews provide participants the opportunity to express their honest opinions confidentially (Sussman, Burton, Dent, Stacy, & Flay, 1991). Given the sensitive nature of mental health issues and the stigma surrounding mental illness in the workplace, interviews lent themselves well to this study. Interviews were recorded using an Android mobile device and stored on a password-protected laptop computer. Microsoft Word© and Microsoft Excel© software were used for data transcription and analysis.

Interviews. Interviews were conducted over the phone for all but three interviews, which were conducted in-person within a private lab space within the psychology department at Saint Mary's University. Interview times ranged from 35 minutes to 52 minutes. Interview guides were used during interview sessions to ensure consistency in interviewee experience (McCracken, 1988; Appendix A). At the end of each interview session, participants were given feedback thanking them for their time and input.

The interviews with managers were designed to explore the process outlined in the resource utilization model. Prior to each interview, I provided the following preamble: "Think of an employee whom you've managed who had a known mental health problem develop during the time that you knew him/her. In this case, a known mental health problem is any diagnosable mental illness (e.g., depression, anxiety, addiction, bipolar disorder) that the employee told you about, either directly or through HR." After the preamble, I asked each participant the following four grand tour questions (McCracken, 1988): 1) "What changes in the employee's behavior, if any, did you observe while this employee was working for you?", 2) "How did this employee's behavior differ from that of other employees?", 3) "How did you respond when you observed these behavior changes?", and 4) "What was the outcome of your response?" Individual probes were used to stimulate discussion regarding the manager's experience throughout the process of managing the employee.

Qualitative analyses. Interview transcripts were hand-coded using thematic analysis. Such analysis is flexible, accessible, and does not limit the analysis to a particular theoretical standpoint (Braun & Clarke, 2006). The analysis focused on the

reality of the participant (i.e., a realist perspective), with the goal being to better understand how managers perceive the process of managing an employee with a mental health issue. This approach was chosen over a more discursive approach that would have been designed to better understand why managers perceive the process in a particular way. The steps of thematic analysis, as outlined by Braun and Clarke (2006), were followed.

Phase 1: Data familiarization. I read the interviews, in full, and checked for accuracy. Prior to coding, I annotated the transcripts for apparent patterns and themes throughout the text.

Phase 2: Generating initial codes. I generated an initial code list by examining the transcript for units of meaning (see Table 2). The code list was expanded and modified with each transcript. Following an inductive approach, text representing themes were coded and added to the code list.

Phase 3: Searching for themes. After examining the full list of codes, similar codes were grouped and given potential thematic titles. This process was repeated until the sorting of codes was exhausted and all codes had been sorted into common themes (i.e., a patterned response or meaning within the data set) and sub-themes.

Phase 4: Reviewing themes. Once the set of preliminary themes and subthemes were established, the preliminary theme table was sent to two SMEs for review. The SMEs were experienced with qualitative research and had backgrounds in occupational health psychology. As a result of these discussions, themes were further divided to better

represent post-intervention perceptions of managers. One additional theme, with subthemes, was generated: retroactive perceptions (guilt, responsibility, training). The primary three themes remained with slight modifications, leaving a total of four themes. Finally, the quotations within each theme were reviewed to ensure that they were relatively similar and consistent with each other (i.e., analogous to convergent validity) and relatively different from the quotations in other themes (i.e., analogous to discriminant validity; Patton, 2002). This step helps to ensure high quality themes.

Phase 5: Defining and naming themes. After finalizing the themes, summaries were created to describe each theme. The names and definitions of themes were reviewed to ensure that a coherent data that represented the data had been created (see Table 3 for themes, subthemes, and descriptions).

Data saturation. To ensure the sample resulted in conceptual data saturation (i.e., when no new themes, concepts, or findings emerge in the data), I followed principles outlined by Francis et al. (2010). The exploratory nature of this study, and the complexity of research and interview questions supported the initial use of a 10 participant sample. I reviewed the interview content and field notes after ten interviews, and concluded that saturation had likely been reached. Six more interviews were conducted and field notes from these additional interviews were compare to those of the first ten interviews to ensure no further themes, concepts, problems, or ideas had been brought up. At this point, saturation appeared to have been met using the 16 participant data sample.

Results

Overall, I found four themes in the narratives that encapsulated the following trajectory: recognition, decision-making, action, and outcomes. Participants all spoke of "signs" or "changes" that they observed within employees who were struggling with a mental illness. These signs were not diagnosis-specific, and in some instances, the manager did not necessarily know which mental health issue their employee had experienced (or was experiencing). However, all managers noticed some form of behavioral change that indicated that their employee was not behaving normally; several managers specifically used the word "struggling" to describe the employee's behavior. The second theme that emerged surrounded decision-making. All managers reported that, at some point, they had to make the decision to intervene when they observed warning signs or behavioral changes. Although managers did not make the same decisions, their decision-making processes were highly similar and influenced by similar factors, such as their pre-existing relationships with employees and the resources they had through their employers. I labeled a third theme, "action," which largely comprises the intervention behaviors of leaders—the actions that they took when they observed warning signs and made decisions about what should and could be done. Finally, a fourth theme emerged surrounding the outcomes of leaders' actions.

Theme 1: Recognition. All of my participants recognized changes in behavior that were concerning or abnormal for the employee. Without prompting, many managers used the phrases "out of character" or "not typical for them" when describing the

behavioral changes they observed in their employee. These behaviors were grouped into four themes: 1) emotional outbursts, 2) social withdrawal, 3) attendance, 4) performance.

Subtheme 1a: Emotional outbursts. All managers observed emotional changes within their employees with a known mental health problem. Managers described the emotional reactions they observed as being either passive or active. Active emotional reactions included angry outbursts, rudeness, deterioration in social skills or tact, and complaints about stress and one's job. For example, one manager (P5) described her employee's behavior as follows:

> "*You know, she would become quite erratic. There were times when she was very difficult to manage. She was rude and inconsiderate towards her coworkers and even towards customers sometimes. She usually had to leave work or be sent home at least once a month because she had lashed out or something like that…she would act out during times when she seemed to be struggling with stress or workload. Lashing out was always a sign that she was heading downhill."*

Similarly, another manager (P3) identified degradations in social skills as being a sign that her employee was doing poorly:

> *"The nature of the work, where he had to go to different [warehouses] to address workplace issues and safety, required professionalism and tact. Usually, he was professional and polite, but when he would go through a time period where he wasn't really himself, the workplace interactions he had with others differed from what was normal. He would bully others, even managers in higher authority. He*

would throw his weight around, metaphorically. It wasn't like him to behave this way and was a real problem. He'd kind of have these mood swings, where he'd react really strongly to something silly—he would yell at coworkers or others in the [warehouse] when he was upset about something."

Passive emotional reactions included crying, procrastination, and deteriorations in personal appearance, such as poor hygiene, wrinkled clothing, and a lack of grooming. While the focus of the study was to identify behavioral warning signs that managers observe, most managers attributed emotional meaning to certain behaviors. For instance, managers cited procrastination and deterioration in appearance as being representative of sadness, exhaustion, disconnectedness, and anguish. The following narrative from Participant P6 is an example of this attribution:

"I managed this employee for four years. Things would go along fine for a while, five or six months or so, and then suddenly he'd be different—he'd come in smelling like body odour, or he would ask to leave early, or I'd notice that he looked like he had been crying. You know—his eyes were red and puffy and he just looked sad. During these times when he appeared to be struggling with something, he'd mention how unhappy he was at home or even with work. Once, when I was a bit worried about him, I decided to pop by his office to see if he'd like to get a coffee with me. This is something we did about once or twice a week, regardless. However, this time, I knocked and he didn't say anything. So, I opened the door to find him crying. He said he felt like the walls were closing in on him. He truly seemed to be in despair."

Although all managers recognized that these behaviors indicated that their employees were struggling and acknowledged that these behaviors were not appropriate in a professional setting, several managers hesitated to respond or failed to respond altogether. Some managers admitted to ignoring or failing to recognize seemingly minor behavioral changes until a more serious change occurred, such as a major performance problem, a safety-related accident, or an event that disrupted the workplace. Participant P14, who recognized both passive and active behavioral changes, described what happened when she observed several behavioral changes over time, but failed to intervene.

> *"One morning, I came into work and saw [him] and said, 'hello, how are you?' or something like that. He replied really excitedly—he was laughing a lot and being really loud. It was strange and different from the way he usually was, but it seemed harmless enough so I didn't do anything. He continued to be more excitable than usual for 3 or 4 days or so, when he came to me and said "I can't do this anymore." He left work and was off for a while. I think for bipolar disorder, but at the time I didn't know. The next time this happened, I recognized the signs but didn't want to overstep bounds. The same types of things happened—he was loud, boisterous, overly gregarious, kind of inappropriately social, and then there was a crash. I work in a very safety-conscious environment, so as his behavior became more erratic, he ran the risk of hurting himself or someone else, even if unintentionally. He ended up having to be out of the workplace for a long time this time."*

The previous narrative illustrates why it is important for managers to pay attention to seemingly insignificant behavioral changes within their employees, especially when those changes have not yet reached the point at which they require serious disciplinary action or medical attention.

Subtheme 1b: Withdrawal. In several cases, managers reported observing withdrawal behaviors among their struggling employees. These withdrawal behaviors were both social and work-related. Nearly all participants mentioned that their employee changed his or her social patterns in and out of work. Such behavioral changes varied widely depending on the workplace culture and the employee. For instance, in one account, a manager (P11) mentioned that his employee was typically quite extroverted, but when she was experiencing poor mental health, she stopped eating her lunch in the community lunch room at work and would only stay for a few minutes at her team's weekly after-work happy hour. The manager noted that this behavior would not be atypical for the workplace or for most employees, but that it was decidedly abnormal for this employee, who would usually spend a few hours socializing with her team during happy hour and enjoyed conversing with colleagues at lunch.

Other managers noted that their struggling employees began to withdraw from activities at work where they used to excel or "go above and beyond" (P8). All but one manager mentioned that struggling employees tended to engage in fewer prosocial behaviors, such as assisting other employees, and tended to demonstrate less initiative—withdrawing from informal leadership roles, taking on fewer voluntary extra-role tasks.

The following narrative (P7) illustrates a withdrawal from extra-role tasks, but not a degradation in perceived performance:

> *"Honestly, one of the things I really noticed about [her] was that when she seemed to be going through something or struggling to cope with something, she would kind of retreat. She'd be less talkative, she wouldn't be as engaged with her [teammates], and she'd be more tight-lipped. She would still communicate about work, at least enough to get the job done, but you could just tell she was being more reserved or that there was something on her mind. She wouldn't do the types of things she normally considered fun, like once a month we get a group together to volunteer at [volunteer organization]. Normally, she'd be the one organizing the activity, but when she wasn't herself, she wanted no part of it."*

Managers did not categorize this behavior as being problematic for performance and largely made the point that these withdrawal behaviors did not impact their work quality, quantity, or overall job performance, but that their changes in behavior did impact the workplace. Managers mentioned that the employee's withdrawal behavior impacted the workplace to the extent that the employee's coworkers became concerned. The following account (P8) demonstrates the visibility of withdrawal behaviors to both managers and coworkers:

> *"This one employee was absolutely one of my best employees. One of those employees you really dream of having. [He] was extremely bright, self-educated, self-driven, and he really went above and beyond in his role and in all roles that*

he took on within the organization. What I noticed with him was not a change in performance or productivity necessarily, but a change in his other work behaviors not directly related to his job. So, he'd normally be the type to bring in pizza or donuts or something for his team on Fridays, but he sort of stopped doing that. When he seemed to be struggling, it wasn't really obvious. Nothing I could really put my finger on, other than to describe him as being less engaged. He was a different guy than he had been. I heard from his coworkers that he wasn't mentoring employees as much as he used to. We didn't have a formal mentoring program or anything, and mentoring wasn't really part of his job description, but that was just the type of guy that he was—the type to try to help others out of the goodness of his heart."

Subtheme 1c: Attendance. Managers reported some change in their employee's attendance. These changes ranged from repeatedly coming into work a few minutes late to missing full days, or even weeks, of work without contacting someone at the workplace. The severity of the behavioral change, as well as the manager's relationship with the employee, tended to dictate whether or not a manager recognized the behavior change or felt compelled to speak to the employee about the change. The following narratives, from two different managers, illustrate how the nature of the attendance and the relationship with the employee dictated whether or not, and the extent to which, the manager recognized the behavioral change.

"She would go through these periods of time where she would be out sick for a couple of days in a row. She'd call me to tell me why she was sick and how long

she'd probably be out for. She was a good employee and I didn't have issues with her performance. So what if she was a bit more sickly? At first it didn't seem that strange, but after about a year, I was looking back at the attendance records of all of my employees and realized that she had been out sick for a day or two almost 20 times, and almost all for different reasons. She was never out long enough to be required to see a doctor or get a sick note, and honestly, if I hadn't had the attendance record in front of me, I might not have realized this was abnormal behavior. It turned out that she was really run down and had had depression for over a year, but it was showing up in other ways, like back pains, headaches, migraines." (P15)

Unlike this previous account, the next manager recognized the behavioral changes early, and cites his relationship with the employee as the reason he was able to detect these changes:

"I noticed that he was absent more than usual, most notably on Mondays or Friday. There were other little signs, like she was quicker to anger than usual, and she seemed to be grooming less. She didn't seem to be showering or doing her hair, which was a little odd. Although the workplace had unions and was quite formal, as her manager I knew I needed to ask what was going on, if she needed help, if everything was alright at home. It was difficult for me to make a judgment about her state of mental health, so I didn't. Instead, I just asked myself, "what's different about [her]?" and "what can I do to help?" Those weren't easy

questions to ask, but they were easier to answer because I knew [her] fairly well." (P11)

Some managers cited attendance as being the easiest warning sign to recognize for two reasons. First, many managers reported that their employer used some sort of attendance tracking software that could be used to help them monitor employees' behaviors and patterns of behavior. Second, managers reported that absenteeism or schedule abnormalities were disruptive to the workplace and required intervention—be it a simple one-on-one discussion, or a larger reaction involving Human Resources. Some managers also cited that they had training related to managing absenteeism. For example, one manager (P1) stated the following:

"The organization had put in place an attendance management software that was really user-friendly, so it was easy for me to track my team's attendance, even though it is a big team. I also had received training on managing absences through an "attendance support program" that educated managers on various things, like recognizing patterns in absences, speaking with HR about patterns, helping understand why the employee is absent so frequently, and so on. Because I had the training and the software tool, I didn't have to make things up as I went along. Having the knowledge that I was doing the right thing was really reassuring at the time."

This narrative is noticeably different from the narratives related to withdrawal and emotion. This manager did not struggle to recognize whether there was a problem, nor

did he grapple with the decisions to intervene, to include Human Resources, or to offer resources to the employee. Instead, the manager used the tools available to him to recognize that there was an issue. Having a guideline for recognizing changes in behavior was important to the majority of managers.

Subtheme 1d: Performance. While all managers noted some sort of performance change within an employee whom they believed to be struggling, most managers reported that they observed performance changes last. Some managers recognized a series of other warning signs prior to observing performance changes, but it was the performance changes that seemed to "break the camel's back" (P9) and trigger intervention. For instance, one manager (P2) stated that he only noticed performance issues after months of noticing other behavioral changes, claiming that:

> *"It was only when I realized he was going to have to be put on a performance plan that I started piecing other things together; a few months prior, he'd been sick a lot, he was kind of grumpy, and his coworkers had been [complaining] about his bad attitude. So, I guess I noticed other issues first, like the attitude and absences, but it didn't hit home until I saw how badly he was doing his job."*

Similarly, other managers reported, almost universally, that they had noticed emotional, withdrawal, or attendance-related changes prior to observing performance degradations. These same managers reported that they had ignored or "explained away" these other behavioral changes, and only intervened after performance issues were present

and easily recognizable. Participant P9 describes the pattern of behavioral change that she observed:

> *"I knew he was struggling—that he wasn't himself in some way or another, but I didn't want to step in and say something because it wasn't really my place. I didn't want to cross any professional boundaries. Sure, he was being short with people, he seemed a bit disengaged, and he was behaving a bit impulsively, but he was still one of my best performers. He had a really high standard. He set a really high standard for himself, but that really pushed him to be one of the best. Unfortunately, sometimes that would create conflict between him and the weaker employees. When he was struggling he would have more conflict, I think because he didn't seem as able to filter himself. He'd just say what he thought, and I'm sure you can see why that could be a problem [laughs]. I guess this type of behavior had been going on for almost a year when I finally started to see gaps in performance. Little things like not responding to important emails or forgetting about meetings, but also big things like not meeting deadlines. This was when I knew he was in trouble."*

Just as several managers had noted that it was easier for them to intervene to attendance-related changes compared to emotional or withdrawal-related changes, most managers believed that performance changes required a swift management response. Thus, all managers intervened in some way after observing performance-related changes. Managers claimed that performance or safety issues were readily actionable because they "obviously fell within the responsibilities of someone in a management role" (P2). Some

managers expressed feeling safer in their approach of performance or safety-related issues because they knew that these were acceptable issues to discuss with an employee. Participant P1, who had recognized behavioral changes within all themes, noted:

> *"Obviously, consuming alcohol at work was a problem. No matter what type of organization it is, employees can't consume alcohol on the clock. When I learned that he was putting vodka in his coffee mug, I knew there was a problem. There had been other signs—body odour, frequent absences, complaints about stress—but this sign was the clearest. I had to involve HR right away, I had to talk to the employee very pointedly, and we had to figure out some way to help the employee."*

This narrative from P1 illustrates the relative-comfort level felt by managers when recognizing and responding to performance and attendance-related issues, compared to other behavioral changes.

Theme 2: Decision making. All managers reported making decisions about how to respond when they recognized warning signs. Managers' specific actions varied depending on the relationship they had with the employee, the warning signs they observed, and their general feeling of preparedness to handle the situation. Thus, two sub-themes that affected managers' decisions to take action were their existing relationship with the employee, and their feeling of preparedness to take action.

All managers seemed to make a conscious decision about taking some sort of action. Some managers wanted to intervene at the first signs that an employee's behavior

was changing, but did not want to cross a professional boundary. This apprehension was common among managers, especially when warning signs were not performance or attendance-related. Participant P4 informed us:

> *"As his manager, I knew I needed to ask him what was going on, but I didn't really know how to go about doing that without being insulting. I didn't know where my responsibility began, or where it should have ended. It's hard to know where it ends. I didn't know what to do when I saw the meltdowns and when I knew he needed help, I felt a little confused and conflicted about what my role should be—from a business perspective, but also as a human."*

Similarly, an account by Participant (P10) illustrates the apprehension experienced by many managers trying to decide whether or not behavioral changes are "enough to warrant concern or action."

> *"The second time I noticed some small changes, nothing major, but things like coming into work late or practically bouncing off the walls with energy. He just seemed off. At the time, I didn't really know what to do. I didn't say "it's none of my business", but I also didn't really intervene right away either. One of his coworkers approached me, to say "[He] is having trouble again." I asked "what kind of trouble?", and she responded, "you know, when he is too happy." How was I supposed to speak with an employee about being too happy? Well, of course I wasn't, but it was the other issues that I was seeing that I could have and should have brought up."*

Subtheme 2a: Management style. At least in part, the decision about intervening depended on the management style of the manager, with many managers revealing that decisions were easier or harder depending on "the relationship with the employee." Managers who intervened early tended to be those who perceived their management style as being "open," "understanding," or "supportive," and who felt that they knew their employees well enough to confidently detect changes in behavior and respond in a way that would be well-received. For example, Participant P6 explained his approach with one of this employees who he believed to be struggling:

> *"I tend to have a very open management style. I like to have an open-door policy and I like to check in with employees, not just about work, but about their lives. I try to be aware of my people—to be tuned in to their performance issues and productivity, but also to their more daily lives. I try to take time every day to talk to my people—to get out on the floor or on Skype, to listen to their concerns. I think listening and paying attention have saved me a lot of headaches. Since I know who my people are, and what they're like on a normal basis, it's easy for me to see when there is a change. By being involved when things are good and normal, it also makes it less intimidating, for everyone, when I need to talk with an employee when there is an issue"*

Other managers made the decision to intervene because of a self-proclaimed duty. Many manager suggested that it was not their openness or their management approach that made them decide to act. Instead, they believe they made the decision to act because of a sense of responsibility—either to the employee, to the workplace, or to both. For

example, they wanted to ensure that the employee was healthy and productive and that their behavior was not negatively affecting the organization or others in the workplace. As Participant P9 told us: "When a co-worker mentioned that he was worried about his colleague's behavior, I knew I had to take notice. The employee was starting to upset people." Participant P12 echoed these sentiments, "I knew I had to step in to say or do something. That's my job as a manager. To help my people." Many managers felt that intervening was "the right thing to do," but didn't make this decision easily. The following narrative from Participant P10 illustrates this desire to intervene accompanied with a feeling of ill-preparedness:

> *"I knew something probably needed to be done, and as his manager, I knew it was my responsibility to do something. It was the right thing to do, for sure, and it was my job. Still, it wasn't a decision I came to lightly. I didn't want to say or do something that was going to be out of line or that would just make things worse."*

Subtheme 2b: Available resources and experience. Managers' decisions to take action tended to be influenced by the resources that they had at their disposal. These resources could be considered both professional (i.e., available through the workplace or the employer) and personal (i.e., not directly related to the workplace or the employer). Managers with previous experience managing employees with mental health issues reported feeling more confident than their less-experienced peers. For instance, Participant P5, who had managed at least three other people with known mental health problems, stated that "I was very well trained on HR-type supervisory skills, so I wasn't just let to my own devices when encountering these types of issues."

On the other hand, Participant P7, who had no prior experience managing an employee with mental health problems stated that "I hadn't had any training or even a baseline education for this type of thing. Sure, I could reach out to HR, but as a manager, I should have had some skills of my own." Previous experience with close friends or family members who struggled with mental health problems also influenced some managers. For example, Participant P9 stated the following:

> *"Honestly, I have a bit more knowledge about it than others because I have some personal experiences. I can see how some people out there wouldn't pick up the signs, and in my industry, which is supposed to be a macho industry, most of the time managers just tell people to man up or stop being a sissy instead of recognizing that those behaviors may actually be a warning of something more, like depression."*

Subtheme 2c: Tools and training. Regardless of previous personal or professional experience with mental health, all managers reported that they would have taken action earlier had they known what warning signs to look for. Some managers mentioned that a tool or "cheat sheet" (P3) would help them to recognize when employees were acting differently or not behaving like they usually do. The following narrative, from Participant P8, illustrates how a tool might benefit the recognition process.

> *"I could have done a better job if I had had some sort of training with some kind of protocol. Just something that puts it out there a bit more clearly—you know, a*

guideline that says "here are the things to watch out for", and "this is when you need to step in". Just something simple and written-out would be very valuable. We have that sort of thing with our safety training, so I'm not sure why we wouldn't have this for mental health."

Other managers echoed these sentiments, declaring that "a list of things to look for" would have helped guide decision-making. These managers also expressed that having a tool would make them better managers, as it would improve their interactions with employees and make them more aware of warning signs. As noted by P4, "if I knew what to look for, I wouldn't have to go looking for the wrong things—things that might be too personal or not at all related to health." Similarly, all managers noted that some form of education or training would have been valuable.

The need for training on warning sign recognition and appropriate intervention techniques were universally mentioned by managers. All managers felt that they could have benefited from training that was designed to help guide them through the recognition, intervention, and follow-up stages. Managers also noted that such training could make their work-lives easier by helping to lessen some of the uncertainty related to taking action. For instance, Participant P12 stated,

"Training would be nice. I know that it can't be black and white with everything, but some good guidelines would really help. I notice that I probably spend more time thinking about what I should do in these situations—if I should say something, if I should do something, how I should do it, when I should do it—that,

in the end, I sometimes just end up doing nothing. And that's probably not the right thing to do. It's very inefficient to not have this kind of information."

Still, one manager (P2) mentioned that not just any training will be effective, "I know I could benefit from some education in this area, but the secret here is making sure that it's relevant to my work and usable." Recognizing that there may not be a "one-size-fits-all," many managers stated that some form of formal guidance would be beneficial, to "give managers some versatile tools that they can pull out of their leadership toolkit and use in their own way when times get tough."

Theme 3: Actions. Specific actions taken by managers were somewhat unique and involved individualized trajectories for each employee and situation. Recognizing that there may not be a "one-size-fits all" approach to the management of employees with mental health issues, Participant P15 stated that managers must adapt to individual employees and specific situations:

"Being a good manager is really about being aware of people and their strengths and weaknesses. This applies to everything, whether its performance or how well they're getting along with team members, or even how they're managing their schedules. So there probably isn't a one-size-fits-all set of procedures, and I bet a how-to guide on how to manage employee mental health situations would be really vague, but that's okay. That's how it should be."

***Subtheme 3a: Intervention formality*.** Managers' specific actions varied greatly, from highly informal intervention in the form of a "quick chat in a private hallway" to

highly formal action, such as "a policy-backed discussion with the presence of HR and the company's on-call doctor." While variability was present, most managers mentioned that their first step was to start a dialogue with the employee. For instance, one manager (P4) stated, "I needed to start somewhere, and having a chat is a pretty good place to start in almost all things in life." The goals of this type of dialogue were similar across managers, with almost all managers stating that, through dialogue, they could better understand what was going on and be able to help the employee. Participant P2 mentioned that he might be able to help the employee with work-related issues by starting a conversation.

> *"When I started to see things go downhill, I sure knew I wasn't going to be able to do much, but I knew I'd be able to at least have a kind of 'hey-how-are-ya' kind of a talk to check in. Maybe with the talk, I figured, I could point him in the right direction of someone who did know what the [explicit] they were talking about."*

Participant P9's motivation for intervention was to help point the employee in the direction of resources that might be able to help the employee cope with personal issues.

> *"When [he] started acting weird for a third time, I knew we were heading for trouble. I knew we had to figure out what was going on so this didn't have to happen to him again. I wanted to support him as best I could, but to do so, I needed to know what I was supporting. I needed to have some information about his limitations, what he was feeling, or what he was going through so that I could be in a better position to get him the accommodations or whatever he needed. Of*

course, I didn't need to know details or anything like that, but I needed to talk to him to find out what I could do, like get him in touch with [person's name] in our HR department or suggest he speak with his family doctor or something."

Although all managers mentioned that they couldn't or shouldn't necessarily know what was wrong with an employee, they mentioned that more information was helpful. For instance, multiple managers mentioned that although they didn't necessarily need or want to know what illness an employee had, they did need to know practical information, such as the employee's physical or psychological limitations.

***Subtheme 3b: Ongoing action*.** In several cases, managers did not take one-time action to help employees. More often than not, the situation involved ongoing action and intervention. This ongoing action included one-on-one discussion at regularly scheduled intervals, recommendations to use available resources (e.g., EAP), periodic updates to Human Resources and from Human Resources, and informal "check-ins" designed to keep the manager apprised of any issues that may have been affecting the employee. Sometimes, this ongoing action dissipated over time—beginning with early recognition. For example, Participant P15 stated

"Once we had the initial talk about what I was seeing, she got help pretty quickly. The talk was really uncomfortable—she cried, she was really afraid for her job, she had lots of concerns—but probably well worth it. I think I caught what was going on with her fairly early and she was pretty motivated to feel better. She told me she went to her doctor and started seeing a counselor regularly. We followed-

up a few times over the next year or so, but other than that initial, really long conversation, I was pretty hands-off."

Other times, this ongoing action escalated with time and required various forms of intervention. For example, Participant P6's experience persisted over the course of a two year time-period, during which he took multiple actions to help his struggling employee:

"His behavior changed gradually over time, but when I noticed it getting worse, I said something and offered my support. He seemed glad for the support and was one of those types who wanted to climb the ladder, be the best, to have it all. I had managed him for three years at that point. I think he tried to hide a lot of the things that he considered weaknesses and then it all just kind of came to a head where he couldn't cope anymore. The next two years were very difficult for him, and they weren't easy for me as his manager. He was down more often, even though his performance was still good. He just wasn't the same person. He required a lot more support, a lot more accommodation, and more coaching and mentoring. He ended up on disability leave a couple of times, which required a couple of work-return plans, and there were issues with those. So, the amount of work I had to do to manage that employee kind of went up over the years until he ended up quitting."

Theme 4: Outcomes. The outcomes of managers' actions were somewhat variable. Some managers reported that their employees were able to stay in the workplace with accommodations—either minor or more significant. For instance,

Participant P4's employee "just needed to have breaks from certain social aspects of his job from time to time, when he was experiencing some anxiety." Similarly, Participant P10 stated that "sometimes [the employee] just needed some tweaks to his schedule so he could get to doctor's appointments and things like that." Other managers reported that their employee ended up going on disability leave at some point during their employment relationship, with all employees being able to return to the workplace. Two of the managers relayed experiences where their employee left the workplace after years of attempts to rehabilitate (either through disability leave or accommodation at work) and ultimately committed suicide within one year. Both of these managers expressed feelings of guilt, suggesting that they could have done more or done something better or earlier. For example, Participant P13 stated the following:

> *"I actually feel quite responsible, even though I don't think that there was anything obvious that I could have done better. I did as much as I could with the tools that I had at my disposal. I could have asked about support and resources. I could have pushed those resources, but I didn't want to cross any professional boundaries. Toward the last year, I saw a lot of changes in him, but I wanted to err on the side of caution. Maybe that was wrong."*

Subtheme 4a: Post-outcome perceptions. This feeling of guilt expressed by Participant P13 is not atypical. Many managers feel that it is the responsibility of managers to recognize and help employees who are struggling. All managers agreed that it is (and should be) within a manager's responsibility to recognize warning signs and step in to direct the employee toward appropriate resources. Some managers also reported that

coworkers and employees themselves can share in this responsibility by helping each other, helping themselves, and reporting behavioral changes to managers. One manager (P8) described this shared responsibility as follows:

> *"It's everyone's responsibility to realize when someone is in a bad spot, when someone is really struggling or flailing. It could be a co-worker where they have the relationship—you know, human to human—being able to ask if everything is okay. It's also the manager's job. From a management perspective, I have a responsibility that is different from that of a peer or coworker. I need to ensure that the individual I oversee understands and sees the resources that are available. That's where it starts. I need to make sure they understand how the workplace can support them, and then I need to make sure that the organization actually follows through. Employees are also responsible. They need to engage in an honest dialogue, or at least, an open one. If I ask an employee what they need, and they tell me, I need to be prepared to deal with their answer. Where the responsibility ends for managers is a little trickier. I don't know where it ends."*

In accordance with this, managers also expressed that both managers and employees should have the skills to be able to share this responsibility. A number of managers mentioned training or education for peers or coworkers as being critical to improving recognition and action. Some managers equated this type of education to safety training, while others equated it to sensitivity training. One unifying feature of a proposed training was the extent to which it was actionable. Some managers also suggested that employees be educated on warning signs—on how to recognize warning

signs within themselves and their coworkers—and how to respond to these warning signs. Thus, some managers suggested the need for training directed towards peer support and self-care.

Discussion

This study explores the role that managers play in the recognition and assistance of employees who are struggling with mental health issues. Managing employees who are struggling with an invisible, unknown, or mental health issue requires decision-making that is not always straightforward (Dimoff & Kelloway, in press). While managers seem to be recognizing the warning signs associated with a developing mental health issue, many managers tend to experience a great deal of uncertainty surrounding what they should do when they observe these signs. As a result, managers tend to delay their action until more, or more severe, warning signs are present. Managers less likely to delay their actions seem to be those who have strong relationships with their employees that are categorized by open communication and strong individualized consideration. Managers who appreciate that a one-size-fits-all approach will not be effective seem to experience less uncertainty and higher levels of comfort related to assisting employees. Still, all managers reported that some guidelines would be helpful, suggesting that all managers, regardless of background or relationship, could benefit from training or education.

Results from this qualitative study suggest that managers are capable of recognizing when employees may be struggling. They observed changes in their

employees' emotional wellbeing, noticed signs of social and work-related withdrawal, and recognized when employees' attendance and performance habits were atypical. Leaders' abilities to recognize warning signs may be critical to employees' future resource-utilization and ultimate recovery (Dimoff & Kelloway, in press). According to the transactional model of stress (Lazarus & Folkman, 1984, 1987), before individuals can engage in coping behaviors, they must first recognize that they are facing a challenge. If employees do not recognize that they are struggling, they may not deploy resources or engage in adaptive or problem-focused coping (Hobfoll, 2011; Lazarus & Folkman, 1984; 1987).

This is especially relevant to employee mental health issues. Mental health issues are often associated with compromises in cognitive and emotional processing—making it difficult for individuals to have the insight to recognize that they are struggling (U.S. Department of Health and Human Services, 1999; World Health Organization, 2004). Ultimately, employees who are struggling psychologically or personally may not seek support or resources simply because they don't realize that they are in need (Hunt & Eisenberg, 2010; Lazarus & Folkman, 1984; 1987; Prochaska & DiClemente, 1984).

Fortunately, managers are in a good position to be able to recognize when employees are struggling (Dimoff & Kelloway, 2013; Dimoff et al., 2015), and according to this study's findings, managers may already be recognizing warning signs on their own. While managers have a good idea as to what behaviors are typical of each of their employees, managers are still hesitant to take action when they observe atypical behaviors or significant changes in behavior. Such hesitation suggests that leaders' lack

self-efficacy when it comes to their abilities to respond to mental health issues in the workplace (Bandura, 1993). Defined as the perceived ability to exert personal control over behaviors (Bandura, 1997; Maibach & Murphy, 1995), self-efficacy tends to be a precursor to action (Ajzen, 1991; Bandura, 1986). Accordingly, although it is critical for managers to be able to recognize the signs of deteriorating employee mental health, it is also essential for managers to feel confident in their abilities to approach the employee, manage the employee, and assist the employee within professional boundaries. Early recognition of deteriorating mental health is predictive of effective treatment (Bilsker, Gilbert, Myette, & Stewart-Patterson, 2005; Craig et al., 2004), but early recognition can only be effective when it is followed by early action (Bilsker et al., 2005).

Training content designed around knowledge and skill-building has demonstrated leader-related improvements, as well as organizational savings (Dimoff et al., 2015). Thus, if an employee begins to show signs of struggle, such as performance degradations, emotional outbursts, or frequent absences, managers can be taught to recognize these as warning signs of deteriorating mental health. Once they've recognized such warning signs, managers can be trained to respond compassionately, professionally, and with practical goals in mind. For instance, if a manager notices an employee crying at his/her desk, the manager may be able to provide immediate support by asking the employee if he/she is okay and inviting him/her to recover in a more private workspace. After the employee has had a chance to regain composure, the manager may be able to have a compassionate, yet professional, discussion with the employee about available resources or sources of support. Successful training can prepare managers for these types of

potentially uncomfortable situations by helping leaders learn what to say, what not to ask, how to address workplace problems, and how to provide appropriate support (e.g., Dimoff et al., 2015). Similarly, if a manager notices that an employee is coming in to work late repeatedly and becoming progressively less polite to coworkers, the manager may initiate a private conversation with the employee, where concerns can be addressed, but also where support and resources can be offered. Thus, for training to be most effective, it should help leaders to identify resources and become comfortable suggesting such resources to employees (Dimoff & Kelloway, in press).

While managers contended that employees share responsibility in maintaining their own mental health and recognizing when they are struggling, managers also recognized that employees are somewhat dependent upon those around them, the organization, and their leaders. Managers attributed much of this responsibility to themselves, with the expectation that they would create supportive organizational environments where resources are easy to access (Hobfoll, 2011). Managers can help foster this environment by destigmatizing mental health issues and openly discussing resources and their efficacy (Dimoff & Kelloway, in press).

One notable finding from this study was that managers must often provide ongoing support to employees with mental health issues. Thus, leaders are not merely the gatekeepers to resources and support, but they themselves are among the resources and may be a source of continual support. While a manager may not necessarily know a great deal about the specific resources an employee has used, or the specific actions an employee has taken, leaders are still in a position to evaluate whether or not the

employee's behaviors have changed, and the extent to which the initial warning signs have dissipated (Fleten & Johnsen, 2006; Nieuwenhuijsen, Verbeek, De Boer, Blonk, & Van Dijk, 2004). If a leader notices that an employee is still struggling, even after an initial discussion or even after the employee has tried to receive help (e.g., from HR or EAP), it is within the leader's responsibility to follow-up with the employee. If employees continue to struggle, then the employee and the workplace will continue to be negatively impacted. Thus, it is in the best interest of the employee and the organization for the manager to continue to monitor employee behavior and to step-in to provide support and access to resources, when needed.

Limitations and Future Directions

Although this qualitative investigation provided a deeper understanding of leaders' experiences when managing employees with mental health issues, the narrow participant sample may limit the generalizability of my findings. Findings may also be less generalizable due to the specific participant demographics of this study. While the sample consisted of managers from a wide range of occupations and management levels, all interviewed managers had at least five years of management experience, with most managers having more than 15 years of experience. Thus, the findings from this study may not apply to managers with less experience or in more entry-level management positions. This is especially relevant given the methodology used to select participants for this study. As part of the inclusion criteria, managers were required to have at least five years of management experience, and during this time, were required to have managed at least one employee with a known mental health problem. This inclusion

criteria was necessary to gain relevant information about managers' experiences managing employees with mental health issues, but may limit the conclusiveness and generalizability of my findings. For instance, my findings may only be generalizable to managers who a) have extensive management experience, and b) have managed at least one person with a known mental health illness. Thus, although this sample of participants reported having recognized behavioral changes within employees with known mental illnesses, it is possible that not all managers would be capable of recognizing such changes.

Similarly, the sample consisted almost entirely of middle-aged Caucasian North Americans, with work experience limited to Canada and/or the United States. As such, the findings may not be representative of management experiences in all countries or across cultures. The DSM-4 and DSM-5 acknowledge that cultural differences may impact what behaviors, beliefs, and experiences are perceived as being normal (Anxiety and Depression Association of America [ADAA], 2015). Cultural differences surrounding the perception of mental health can also impact the extent to which mental illnesses are stigmatized. As a result, cultural differences can impact how warning signs are expressed and the extent to which individuals within a community (e.g., leaders) feel comfortable providing assistance. For instance, in comparison to European American college students, Korean students tended to admit to, and seek help for, physical symptoms of emotional distress (i.e., somatization; Kanazawa, White, & Hampson, 2007), but were reluctant to admit to mental or emotional symptoms.

More traditionally collectivist cultures also tend to be based on "in-group/out-group" communities (McCarthy, 2005). In these communities, family members, close friends, and religious leaders are often found in the "in-group," while all other members of the community fall into the "out-group." If individuals in a collectivist culture were to struggle, they would likely seek the advice and support of members of their in-group, whether or not these individuals are best suited to provide mental health support. Alternatively, one's manager, leader, or supervisor may fall into the "out-group" and may be mistrusted or doubted. Thus, the employee-manager relationship may be inherently different in such cultures, ultimately putting employees in a position where they are unlikely to seek help at work and managers in a position where they are unlikely to feel comfortable providing help.

This hesitation or avoidance is especially compounded by the value that Eastern cultures tend to place on emotional self-control, avoidance of shame, and conformity to norms (Kim, 2007). If mental illness is perceived as weakness, it may also be considered shameful. As a result, individuals struggling with mental health problems may be less likely to express warning signs, especially at work or when among members of their out-group. Thus, the trajectory of findings from this study may not apply in a collectivist culture where managers may not recognize the same warning signs or take the same actions in response to these warning signs. As a result, future research should seek to better understand the transferability of these findings to a wide-range of workplace and cultural backgrounds.

Beyond the limitations associated with the specific participant sample are more methodological limitations. I limited the focus of this study to a single process model designed to better understand how managers recognize and respond to deteriorations in their employees. Grand tour questions (i.e., broad sweeping questions), followed by individual probes, were used to structure the interview approach. As such, participants had the opportunity to provide as much, or as little, detail as they preferred within a given contextual framework. This framework was largely limited by the contents of the four grand tour questions that participants were asked, and did not allow for exploration of other experiences managers may have had. For instance, although some participants volunteered this information without prompting, neither the grand tour questions nor the probes asked managers specifically about their management styles, their relationships with employees, or their personal experiences with mental health problems. Future studies might seek to delve more deeply into what managers can do to build better relationships with employees and take more proactive, pre-emptive actions with regard to employees' health and wellbeing.

A key finding from this study was that experienced managers recognized behavioral warning signs of deteriorating mental health. Yet, despite their experience and acknowledgment that they recognized warning signs, many managers may fail to act because of a lack of knowledge and self-efficacy. A lack of knowledge limits leaders' abilities to recognize certain behavioral changes for what they are—signs of deteriorating mental health. A lack of self-efficacy creates workplace environment where leaders do not feel empowered enough to respond to behavioral changes if and when they do

recognize them. As a result, managers feel helpless and employees often do not receive beneficial support and resources (Jané-Llope, Hosman, Jenkins, & Anderson, 2003; Vuori, Toppinen-Tanner, & Mutanen, 2012).

Managers are experiencing a great deal of uncertainty about what does, and does not, constitute a warning sign of a mental health problem. Similarly, managers fail to act because they are afraid of doing or saying the wrong thing, while others fail to act because they're uncertain about what type of help is professional and appropriate for a workplace context. Although this study was able to identify that recognition tools and training could help to alleviate this uncertainty, this study was limited in its capacity to actually develop or evaluate such options. Thus, future research should seek to develop tools that front-line managers can use to recognize when employees are struggling, and should investigate how these tools can be best introduced and utilized in organizational settings.

Chapter 3: Signs of Struggle (Study 2)

Findings from Study 1 suggest that managers experience a great deal of apprehension surrounding their approach and response to perceived warning signs of mental health issues. This finding is unsurprising, given the stigma surrounding mental illness and the general lack of management education related to employee mental health (Mental Health Commission of Canada, 2012). The stigma surrounding mental health contributes to low resource-utilization among employees, such as poor utilization of wellness initiatives and employee assistance program (EAP) services (Able Minded Solutions, 2010; Canadian Medical Association, 2013; Henderson, Andrews, & Hall, 2000). To improve resource-utilization among employees, managers must be able to first recognize the warning signs of an employee who is struggling or stressed. If managers are able to recognize the early warning signs of deteriorating mental health, they may be in a better position to address workplace concerns and point the employee in the direction of qualified help (e.g., Human Resources, EAP). While some managers seem capable of recognizing when employees are acting like themselves, many managers have expressed confusion about what warning signs warrant concern and which may merely be indicative of someone who is having a bad day. Thus, the purpose of this study is to develop a measurement tool that can be used by managers to help recognize critical warning signs of ill-health.

Although there are many existing scales designed to measure stress (e.g., Cohen, Kamarck, and Mermelstein's [1983] Perceived Stress Scale) and other mental health issues (e.g., Goldberg's (1978) General Health Questionnaire [GHQ]), very few of these

scales are other-rated or designed for the workplace. Similarly, the great majority of measurement tools designed to assess mental health tend to be diagnostic in nature, measuring specific illnesses, such as depression or anxiety. Given that most managers have not received clinical training (and the ones who have do not typically treat their employees), it would be inappropriate for managers to use a diagnostic tool to help them recognize when employees are experiencing difficulties. Therefore, managers need a tool that is not only other-rated, but that is non-diagnostic and behaviorally-focused.

The Signs of Struggle (SOS) Scale

A measurement tool for managers will likely have greatest practical value if it consists entirely of behavioral items, thereby limiting the extent to which managers are left to make judgments about employees' specific mental health problems, feelings, attitudes, or personality traits. In Study 1, multiple managers used the word "struggling" to explain the behaviors of their employees who were experiencing psychological distress. For the purpose of this study, struggle will be defined as "the behaviors that one exhibits when having difficulty coping or meeting demands." As such, the notion of "struggling" functions as a general, non-diagnostic description of someone who may be experiencing compromised mental health and wellbeing, such as strain. Thus, I have designed the signs of struggle (SOS) scale as a detection tool, rather than a diagnostic measure, that can help managers recognize the behavioral warning signs associated with deteriorations in wellbeing. Accordingly, the SOS will not provide managers with insight into what an employee is struggling with; rather, it will simply help managers to recognize that an employee is struggling.

My approach to the concept of "struggling" is guided by Cooper, Dewe, and O'Driscoll's (2001) suggestion to shift focus from detailed, contested descriptions and definitions of stress toward an explication of how related elements can be integrated. Thus, struggling, like stress, is unlikely to be a precise concept with a clear, universally accepted definition (e.g., Darr & Johns, 2008). Instead, it comprises several different constructs that, together, represent individuals' behaviors when they experience perceptual, physiological, or psychological compromise or impairment. The SOS tool will be designed specifically to capture the behavioral warning signs associated with mental health issues that commonly affect employed populations, such as strain.

Strain. According to Quick and Cooper (2003), strain occurs when one's ability to function normally and healthily is disrupted physiologically, psychologically, or behaviorally. Strain can also be described as an individual's response to long-term stress (Francis & Barling, 2005), or as an immediate or proximal response to frequent or intense stressors (Darr & Johns, 2008). Strain is a precursor to more serious health problems linked with high mortality rates, such as heart disease, stroke, and suicidal ideation, and has even been linked to other chronic diseases (Cooper & Marshall, 1976; Kuper & Marmot, 2003; Schneiderman, Ironson, & Siegel, 2005; Van der Doef & Maes, 1998). Diagnosable mental illnesses, such as anxiety and depression, often manifest as strain—or, at least, share some of their observable symptoms with strain (ADAA, 2015).

Although mental illnesses are often the products of a combination of neurological and biological factors (Canadian Mental Health Association [CMHA], 2016; Mayo Clinic, 2015), environmental factors (e.g., demands and resources) can profoundly

influence the development and progression of these illnesses (CMHA, 2016; Mayo Clinic, 2015; Schneiderman et al., 2005; Van der Doef & Maes, 1998). Over the last few decades, the prevalence of stress-related anxiety and depression have increased substantially (American Psychological Association [APA], 2011), perhaps suggesting that mounting stressors in individuals' environments (e.g., work-family imbalance, dependence on technology) may be contributing to increased rates of mental health diagnoses. For example, an employee with a genetic predisposition towards anxiety may function adaptively under normal or slightly challenging circumstances; however, if this individual's resources become depleted as the result of a family or work crisis, he or she may begin to exhibit signs of mental distress, such as reduced cognitive functioning, poor decision making, exhaustion, and maladaptive coping.

Anxiety and emotional exhaustion are two psychological strain variables that have behavioral warning signs (e.g., Lee & Ashforth, 1990; Spector, Chen, & O'Connell, 2000). Anxiety, a significant mental health problem categorized by the DSM-5, is characterized by apprehension, nervousness, and uncertainty (ADAA, 2013). Anxiety can manifest in the workplace through various behaviors, such as avoidance, social withdrawal, forgetfulness, and self-destructive behaviors (e.g., substance abuse; ADAA, 2015; MHCC, 2015). As a result, employees experiencing high levels of strain are considered to be in a state of impaired health, in which they are unable to perform at normal capacities. This impairment has the potential to lead to undesirable employee behaviors and outcomes, such as turnover, turnover intent, absenteeism, and presenteeism (Maslach & Leiter, 1997; Schaufeli & Bakker, 2004). Emotional exhaustion, while not

considered a mental illness, is a facet of burnout linked to stress (Maslach & Leiter, 1997). Employees experiencing emotional exhaustion often feel that their emotional, and therefore social, resources are depleted (Cordes & Doughtery, 1993). As a consequence, strain is likely to result in withdrawal behaviors (Cavanaugh, Boswell, Roehling, & Boudreau, 2000). When employees are strained, they are often in a resource-depleted state where they feel unable to cope with, and respond to, work-related demands (Hobfoll, 2001; Hobfoll, 2011).

Given that the behavioral signs associated with strain may function as warning signs of significant deteriorations in mental health in the future, leaders' recognition of such warning signs may help to prevent the progression of mental illness. If leaders are able to recognize the behavioral warning signs associated with strain, they may be able to help employees access resources before it is too late. By providing additional social support and facilitating the use of additional resources, such as EAP services, leaders may be able to help minimize the personal and professional consequences of struggling. Thus, the intention of the SOS tool is not to help leaders identify which mental health issue an employee may be experiencing; rather, it is to help leaders identify *that* an employee is not themselves, is functioning at a limited capacity, or is experiencing strain—a common precursor to more serious mental illnesses.

The purpose of Study 2 was threefold. The first purpose was to identify and categorize behavioral items that were representative of employee ill-health at work. The second purpose was to explore the factor structure of the SOS checklist using the findings from Study 1 as a framework. According to the first theme in Study 1, struggling

employees display behavioral warning signs that can be categorized into four groups—visible emotion, social withdrawal, reduced attendance, and performance degradation. Finally, the third purpose of Study 2 was to evaluate the content validity of the SOS using a large sample of employed Canadians. Thus, I hypothesized that:

> *H1: Behavioral warning signs will be represented in a four-factor structure (i.e., expressions of emotions, social withdrawal, reduced attendance, and performance degradation).*

Method

Study 2 was divided into two parts, with the first part being dedicated to better understanding the signs of mental health problems most likely to be present within a working population, and generating representative items. The second part of the study was designed to evaluate the efficacy of the items generated in part 1.

Procedure. In part 1 of Study 2, a literature review was performed (e.g., symptoms of strain, burnout, impairment at work, disability) and two focus groups with subject matter experts (e.g., occupational psychologists, workplace health and wellness personnel) were conducted. The first focus group was followed by item-writing, which produced 37 items. A second focus group participated in an item-sorting activity, where SMEs were asked to rate the extent to which "the content of each item is representative of the behaviors of an employee who is struggling or stressed at work." SMEs were asked to use a 6-point Likert-type scale for their ratings, with 1 being 'not at all representative' and 6 being 'very representative'. Items that received an average rating of less than 3

were removed. Items that were identified as being non-behavioral were also removed. In total, 7 items were removed—3 items had a mean of less than 3, and the remaining 4 items were considered too subjective (e.g., "the employee seemed sad"). In total, 30 items were retained for the SOS.

In part 2 of Study 2, a sample of 453 full-time employed adults was used to help confirm the content validity of the SOS. Both managers and employees were included in this sample to gain a better understanding of the full range of warning signs that may be presented in the workplace. It is likely that coworkers or peers typically interact with each other more frequently than most managers interact with each of their employees. Thus, for the purpose of this study (i.e., to develop a tool that can be used in a workplace context to detect the visible warning signs of deteriorating mental health), it was important that I gain information about the full range of warning signs that can be observed by others in a workplace context—not just the warning signs that managers typically observe without training, coaching, or specific instruction. For instance, compared to coworkers, leaders may be more likely to detect performance changes among employees who are struggling. However, compared to leaders, coworkers may be more likely to recognize signs of low job satisfaction or emotional turmoil. Thus, coworkers, as well as managers, were used to help identify such visible warning signs.

Participants were randomly assigned to three "prompt" conditions that instructed them to think of a co-worker or subordinate whom they've worked with who (A) has a known mental health problem and has gone on disability leave due to this problem in the last 12 months, or (B) has a known mental health problem and has not gone on disability

leave for it, or (C) is in good health (has no known mental or physical health problem) and has not gone on leave for any reason. 131 (28%) participants were assigned to condition 'a', 169 (37.3%) participants were assigned to condition 'b', and 153 (33.8%) participants were assigned to condition 'c'.

To confirm that participants within each condition had worked with someone relevant to their assigned prompt (i.e., known mental health problem without disability; known mental health problem with disability; healthy—no known mental or physical health problem), a series of three inclusion criteria questions were asked. The questions asked participants if a) they had worked with someone with a known mental illness, b) if that person had taken disability leave due to this illness, c) which mental illness the person had been diagnosed with, and d) how they knew of the diagnosis. If participants did not meet the criteria of the prompt, the Qualtrics panel removed them from the survey and directed them toward the survey's feedback form. Due to privacy constraints and the nature of Qualtrics panels, I do not know how many participants did not meet the specific prompt requirements and were excluded from the study.

A "known mental illness" was defined for participants as "a mental health diagnosis that an individual disclosed at work." All participants received a list of mental illnesses or possible diagnoses (e.g., clinical depression, generalized anxiety disorder, phobic disorder, obsessive compulsive disorder, bipolar disorder, schizophrenia) as well as a definition of "good health," along with a description of someone who is considered mentally healthy (e.g., "a state of complete physical, mental, and social wellbeing where

someone is able to maintain relationships, is able to learn, adapt, work, play, and rest, and feels confidence and a sense of contentment").

Participants assigned to condition 'A' were asked to think about their colleague's behavior during the 6-month time before he/she went on disability leave. Participants assigned to condition 'B' were asked to think about their colleague's behavior during any 6-month time period in the last 12 months. A six-month time period was used because symptoms present for a minimum of 6 months are considered to be characteristic of a mental illness, rather than a mental health problem (e.g., strain, burnout, adjustment disorder; Mayo Clinic, 2014). Participants assigned to condition 'C' were provided with the definition of good health and asked to think of someone they knew who represented this definition. They were asked to think about this colleague's behavior during any 6-month time period in the last 12 months. With one of these three prompts, participants were asked to respond to the 30 items on the SOS checklist. Participants were asked the frequency with which their colleague engaged in each behavior over a 6-month time period, with 1 = ("Never"), and 6 = ("Everyday").

Participants. Part 1 of Study 2 required participation from 13 SMEs who were asked to participate in focus groups and item-sorting activities. The SMEs had expertise in occupational health, occupational medicine, disability management, organizational psychology, and clinical psychology. There were 6 males and 7 females, with a mean age of 44.38 (*SD* = 12.06), and a mean of 15.77 (*SD* = 10.41) years of experience in the aforementioned areas.

Participants in part 2 of Study 2 (N = 453) consisted of 197 males and 255 females and 1 individual who did not disclose gender. All participants were employed full-time (40+ hours per week) in Canada. The mean number of coworkers that participants interacted with on a regular basis (i.e., daily or weekly) was 15.7 (SD = 6.45); approximately one-third of my sample were managers (32.5%), who reported having a mean of 15.70 (SD = 18.30) employees under management throughout their careers. Please see Table 4 for participant demographic information.

Measures. Demographic characteristics were assessed using standard survey questions that asked about participants' age, gender, occupation, and management experience. Experience with mental health was assessed using three questions: one that asked about participants' personal experiences with mental health ("Have you or a close friend or family member ever suffered from any type of mental health problem?"), and two that asked about participants' professional or management-related experiences with mental health ("Have you ever managed an employee with a diagnosed mental illness or mental health problem?"; "Have you ever worked with someone with a diagnosed mental health problem or illness?"). These two questions were followed-up by a question that asked the participant to report how many people they had managed or worked with who had a known mental health problem.

In addition to the demographic questions, participants were asked to respond to the 30-item SOS. Participants were asked to respond to the scale on a 1 to 6 Likert-type frequency scale, with 1 = ("Never") and 6 = ("Everyday"). An example item from the

SOS is as follows: “he/she cried at work.” All other items from the SOS can be found in Appendix B.

Analysis. Factor analysis was used to refine and consolidate the SOS. First, an exploratory factor analysis (EFA) was run on the SOS to further refine the scale and better understand its factor structure. Second, a follow-up confirmatory factor analysis (CFA) was performed to test the efficacy of the factor structure identified by the EFA. I began by splitting the full sample into exploratory (n = 230) and confirmatory (n = 223) subsamples, with individuals randomly assigned to each subsample. In order to maintain item variance in each of the subsamples, each subsample comprised the same proportion of respondents from each of the three health status groups (χ^2 (2) = 1.350, p =.509).

Results

To gain a better understanding of the data, an initial EFA was run on a sample of the data (n = 230), without a rotation. The SPSS Eigenvalue default (i.e., Kaiser method of extraction) was used as a preliminary method to evaluate the factor structure of the data. This initial EFA revealed a 1 factor model that explained 42.35% of the variance in the data.

EFA. Given the moderate level of variance explained by the 1-factor model, and the theoretical foundation for a multi-factor model, I forced a 4-factor solution with a Varimax rotation in order to produce the simplest and most interpretable factor structure. A 4-factor solution was evaluated given the findings from the first theme in study 1—

leaders identified warning signs that involved visible emotions at work, social withdrawal, absenteeism, and performance degradations.

Contrary to its theoretical basis, the 4-factor model was not easily interpretable, as approximately 1/3 of items cross-loaded between two or three factors. Items were considered cross-loading if their factor loadings were above .4 on the primary factor and within .1 of that loading value on another factor (e.g., if an item was .555 on Factor 1, but also .495 on Factor 2, the item was considered to be cross-loading). The 4-factor model explained 60.40% of variance in the data.

After examining the specific items that were cross-loading, I expanded the factor model to five factors. Cross-loading was still present for two items, "smelled of alcohol" and "was angry at work" —flagging these items for further review. I re-ran the 5-factor EFA without the first cross loading item (i.e., "smelled of alcohol"), but a second item (i.e., "was angry at work") continued to cross-load. I elected to delete this item and re-ran the EFA. The 5-factor model explained an additional 3.1% variance, when compared to the 4-factor model with the same items. Thus, the 5-factor model explained 63.49% of the total variance.

With all inappropriately or inadequately loaded items deleted, and the analysis repeated with the deletion of each item, a clear factor structure was present with the 5-factor model. All other items loaded above .49 and only minimal cross-loading was present (i.e., the two remaining "cross-loading" items loaded prominently onto the primary factor, at .48 or above, and loaded onto a second factor, at less than .30). Given

the theoretical importance of specific items, cross-loading of this nature was not considered sufficiently large enough to interfere with the factor delineation or interpretation. While less parsimonious than the hypothesized 4-factor model, the 5-factor model provided a more easily interpretable model.

After closer examination of the item loadings within each factor, a 5-factor model also makes practical sense. The items that I predicted would load as one "emotional" factor actually loaded into two factors—one factor was categorized by expressions of distress (e.g., mentioning being unhappy at work), and the other was categorized by more extreme behaviors (e.g., expressing the desire to hurt oneself or others, or neglecting personal hygiene). The remaining three factors were as expected, with one factor categorized by signs of social withdrawal (e.g., withdrew from coworkers at work), another factor categorized by absenteeism (e.g., was absent from work), and the final factor categorized by performance degradations (e.g., did not perform to his/her usual standards). Each of the five factors had a high degree of reliability, as measured by internal consistency, with Cronbach's alpha values ranging from .78 to .91 (see Table 5).

CFA. To further evaluate the factor structure of the scale, competing models were tested using confirmatory factor analysis (CFA) using the lavaan package in the statistical software program, R (see Table 6 for the fit indices of competing models). First, a 1-factor model was evaluated and yielded a relatively poor fit to the data (*CFI* = .698, *RMSEA* = .151, *SRMR* = .097), lending support for the hypothesis that 'struggling' is a more complex, multi-faceted construct. Second, to evaluate my original hypothesis of a 4-factor model (i.e., expressions of distress, social withdrawal, extreme behavior,

attendance, and performance), a 4-factor model was evaluated and yielded a significantly improved fit, in comparison to the 1-factor model (χ^2_{diff} (24, N = 223) = 352.25, p < .001). However, the 4-factor model still failed to meet minimum fit requirements (*CFI* = .800, *RMSEA* = .129, *SRMR* =.090; e.g., Bentler & Bonett, 1980; McCallum, Browne, & Sugawara, 1996). Thus, hypothesis 1 was not supported.

To test the 5-factor model that emerged from the EFA, I evaluated a 5-factor model (*CFI* = .865 *RMSEA* = .104, *SRMS* = .082), which provided a significantly better fit than the originally hypothesized 4-factor model (χ^2_{diff} (14, N = 223) = 136.59, p < .001). Given that the SOS is likely to be more consistent with a higher-order structure (i.e., multifactor structure, with struggle as an overarching construct), I used two approaches to evaluate the higher-order structure of the SOS: 1) a hierarchical CFA with multiple factors and a single order 'struggle' factor, and 2) a bifactor model with multiple substantive factors and an overall 'struggle' factor. Unlike a hierarchical 5-factor model (i.e., where 'struggle' is defined by the five subfactors, which are, in turn, defined by the individual items), a bifactor model allows individual items to be defined by the larger factor and for leftover variance among items to be defined by each of the five factors. With this approach, the five factors do not contribute to a "total score" the way that they would using a hierarchical modeling approach. Thus, the general factor of struggling influences all items, but each of the five factors in this model is influenced only by its specific items. In this case, each of the items from the SOS will be allowed to load onto the overall factor of struggle, but will also be able to load onto each of their respective

factors—the five factors that emerge over and above the general factor of struggling (Kryzstofiak, Cardy, & Newman, 1988; Reise et al., 2010).

The 5-factor hierarchical did not provide an improved fit (*CFI* = .856, *RMSEA* = .106; *SRMR* = .088). In fact, the 5-factor correlated model was a significantly better fit than the 5-factor hierarchical model (χ^2_{diff} (5, *N* = 223) = 30.94, *p* < .001). Finally, I evaluated a 5-factor bifactor model (*CFI* = .931, *RMSEA* = .075, *SRMS* = .055), which yielded a significantly better fit than the 5-factor model (χ^2_{diff} (10, *N* = 223) = 212.63, *p* < .001), with all items loading onto their respective factors in the hypothesized directions. However, one item ("did not perform to usual standards") behaved unusually in the smaller sample, independently accounting for nearly all of the variance in the fifth factor. Because of this, the 5-factor bifactor model was re-run using the full sample (*N* = 453) and parameter estimates became more stable, as expected. The larger sample demonstrates improved model fit (*CFI* = .944, *RMSEA* = .066, *SRMR* = .047), with all items loading significantly, and as expected (both at the factor level and at the general level; see Appendix C for item statistics). The model demonstrates that these items collectively describe the construct of "struggling" but additional variance in the items is explained by the five factors, further clarifying the dimensions that may contribute to struggling.

In recent years, there has been considerable debate surrounding the appropriate cut-off indices for determining model fit (Garrido, Abad, & Ponsoda, 2015; Jackson, Gillaspy, & Purc-Stephenson, 2009), and various guidelines exist surrounding the evaluation for model fit (Hu & Bentler, 1990; Jackson et al., 2009; McCallum et al.,

1996). For instance, McCallum et al (1996) contend than an RMSEA of .05 is a good fit, while .08 is a mediocre fit. Similarly, Bentler and Bonett (1980) and others (e.g., Marsh, Hau, & Wen, 2004; Yu, 2002) contend that a CFI greater than .90 is indicative of an acceptable or adequately fitting model. Thus, I adopted the criteria of RMSEA less than .08 and CFI greater than .90 as indicating an adequate fit with the proposed model. Given the slightly improved fit indices present for the 5-factor bifactor model (compared to the 5-factor hierarchical model), and the capacity for the bifactor model to maintain the unidimensional concept of struggle, but also capture its multidimensionality, a bifactor model is considered the superior representation of this data.

Bifactor models, in general, also help control for potential unwanted nuisance factors which may be contributing to the poorer fit in the 5-factor hierarchical model (Kryzstofiak et al., 1988; Reise, Moore, & Haviland, 2010). For instance, while a group factor, such as performance, partially reflects 'struggling', it may also have a specific component that is independent of struggling, such as cognitive ability or workload. The bifactor model takes this likelihood into account and enables a clearer assessment of the adequacy of the model than the 5-factor hierarchical model.

Group Differences. To determine if the factors were successfully differentiating between individuals who were perceived as being healthy and those who had a diagnosed mental health problem, I ran a MANOVA. Results suggest there were significant differences between the health status groups on all five factors (F (5, 447) = 29.46, $p <$ .001, $\eta^2_{partial} = .248$.). However, only one factor (Attendance) differentiated between all three health status groups (i.e., diagnosed mental health problem who went on disability

leave; diagnosed mental health problem who did not go on disability leave; healthy). All other factors only differentiated between the healthy group and the other two groups, combined. Please see Tables 7 and 8 for relevant descriptive statistics and post-hoc comparisons. Together, these findings lend support for the practical value of the 5-factor model.

Discussion

Findings from this scale development study suggest that the SOS, and each of its factors, can be reliably used to measure the behavioral signs of a struggling employee—someone who is experiencing compromised or degraded mental health and/or wellbeing. In this sample, the SOS was capable of differentiating between individuals with known mental health diagnoses and individuals considered to be psychologically healthy. The significant differences between all three groups (i.e., individuals with mental health issues who went on disability leave, individuals with mental health issues who did not go on disability leave, and health individuals), combined with the factor-level differences, provide both total-score and factor-level information about the behavioral warning signs of struggle.

Based on the findings from Study 1, the focus group, and the literature review, I hypothesized that the SOS would comprise four behavioral factors that would represent employees' emotional actions, withdrawal behaviors, attendance changes, and performance degradations. However, a five-factor model explained slightly more variance and, based on specific item loadings, provided clearer interpretation of the

overall construct of struggling. After careful examination of the factor structure and individual item-loadings, it would seem that what had been hypothesized to be one factor representing emotional behaviors was actually producing two separate factors—expressions of distress and extreme behavior.

Expressions of distress. The behaviors in this factor seem to be representative of distress and discontent, whereby employees are generally unhappy. The items loading onto the 'expressions of distress' factor were largely emotionally-focused coping behaviors, such as complaining, crying at work, or expressing the desire to quit or leave the workplace. These behaviors are likely related to psychological states of strain and emotional exhaustion (Lazarus & Folkman, 1984; Maslach & Leiter, 1997). Employees who engage in negative work-based responses to stressors, such as expressing low satisfaction and high turnover intent, may be experiencing high levels of strain. Similarly, negative emotions and emotional responses, such as anger, frustration, and anxiety, can be indicative of someone who is dissatisfied and responding to stressors poorly (Bhagat, Allie, & Ford, 1995; Cartwright & Cooper, 1997).

The items in this factor may be behavioral expressions of emotional exhaustion, compromised psychological wellbeing, and job dissatisfaction, which have been associated with myriad of negative outcomes, such as poor work-life balance, increased smoking behavior and alcohol consumption, and heart disease (Cartwright & Cooper, 1997; Cooper & Marshall, 1976; Kuper & Marmot, 2003; Schneiderman et al., 2005; Van der Doef & Maes, 1998). The variability in the item content (i.e., 'unhappy at *work*' versus 'problems at *home*') suggest that this factor is capturing behavioral manifestations

of dissatisfaction with multiple facets of one's life. Thus, expressions of distress may not only be warning signs of an employee's deteriorating health and wellbeing, but they may also be signs of an employee's deteriorating investment in work. Managers, coworkers, or others in the workplace who recognize these types of signs may be in a good position to intervene early and to prevent the escalation of these warning signs (Dimoff & Kelloway, in press).

Extreme behaviors. While the behavioral warning signs in the 'distress' factor are likely related to personal and professional stressors and their negative outcomes, the behavioral items in the 'extreme' factor of the SOS are far less innocuous than those loading onto the 'distress' factor. For instance, items in the extreme factor tended to be more severe and with more immediate negative consequences, such as the intent to do harm to oneself or others, the neglect of personal hygiene, or overt rudeness to others at work. These behaviours, if carried out, are likely to have marked impacts on the employee, their coworkers, and the overall workplace. Thus, if a manager or co-working is observing these behaviors, it may be a sign that the employee is struggling to an extreme extent—indicating that swift intervention is necessary.

The suicide trajectory provides a strong illustration of the need for swift response when extreme behavioral warning signs are observed. According to an extensive survey by Kessler, Borges, and Walters (1999), the vast majority of suicide attempts occur within one year of the onset of suicide ideation (i.e., thinking about suicide). Given that ideation is often considered the first step along the suicide trajectory, followed by planning, and

then attempt, it would seem important to recognize signs of suicidal ideation (e.g., express to hurt oneself, deteriorating in personal appearance) as early as possible.

Similarly, although counterproductive work behaviors (CWBs), such as theft, property damage, or workplace deviance (Fox & Spector, 1999; Sackett, Berry, Wiemann, & Laczo, 2006), may not be as acutely destructive as suicide, CWBs can also be harmful to employees and the workplace. CWBs can range from minor to severe and tend to be interpersonally-focused or organizationally-focused (Hershcovis, 2007). The CWBs captured in the 'extreme' factor tended to be more interpersonal in nature, such as behaving rudely towards colleagues or customers, or engaging in violence against others at work. According to my findings, rudeness and disrespect are perceived as extreme workplace behaviors. While more serious organizational CWBs, such as theft, violence, or equipment sabotage, were not captured in the SOS, minor organizational CWBs, such as lateness and absenteeism, were captured strongly by the 'attendance' factor of the SOS.

Attendance and work withdrawal. According to Hanisch and Hulin (1990), work withdrawal consists of "unfavorable job behaviors, lateness, and absenteeism" (p. 69). Lateness and absenteeism are also counterproductive to organizational goals and objectives. Lateness alone costs the U.S. economy more than $3 billion every year (DeLonzor, 2005), and the costs associated with absenteeism are estimated to be well over $40 billion in North America each year (Rhodes & Steers, 1990). Absenteeism is also a strong indication of an individual's health quality—with stress and poor quality mental health being strongly correlated with increased rates of absenteeism (Darr &

Johns, 2008; French & Zarkin, 1998; Johns, 1997). As early as the mid 1950's, absenteeism has been considered one of the outcomes of employee ill-health (Hill & Trist, 1955). Later work contended that absenteeism was the result of an individual's inability or unwillingness to work due to illness or compromised wellbeing (e.g., Johns, 1997).

However, very little research has been able to substantiate the direct causal relationship between mental health problems and absenteeism (for review, see Darr & Johns, 2008). A recent meta-analysis suggests that the relationship may not be direct at all—that, in fact, the relationship between strain and absenteeism may be mediated by symptoms of deteriorated physical and/or psychological health (Darr & Johns, 2008). While absenteeism has the potential to be viewed as a means for recovery or as an opportunity to avoid stressors and accumulate resources during times of strain, there is little support for the long-term restorative potential of absenteeism. As described by Darr and Johns (2008, p. 307), "early withdrawal in response to strain might temporarily benefit employees, [but] later withdrawal in response to weakened psychological and physical states might exacerbate an individual's condition." This highlights the short-lived benefits of absenteeism, and draws attention to the possibility that frequent absenteeism may be a sign of current and future strain, as an individual's condition worsens over time.

This is especially relevant given that the "attendance" factor was the only factor within the SOS to successfully distinguish between the two experimental groups and the control group. Thus, attendance was predictive of whether or not a struggling employee

would go on disability leave within a 12-month time period. According to their coworkers, employees who went on disability leave were absent more frequently than their peers who also had mental health issues, but did not go on disability leave. These findings are consistent with the short-term and long-term disability management literature (for review, see Koopmans, Roelen, & Groothoff, 2008) which suggests that frequent and/or prolonged absences or sicknesses can predicate formal disability leave.

Social withdrawal. Although attendance may be the ultimate withdrawal behavior, the withdrawal factor of the SOS consists entirely of items focused on social withdrawal, such as withdrawal from coworkers and withdrawal from normal workplace activities (e.g., committee involvement or engagement in organizational citizenship behaviors). Declines in interpersonal relationships and exchanges are often among the first signs that an employee is strained, burnt out, or otherwise experience a degradation in mental health and wellbeing (e.g., depression, anxiety; Chang, Johnson, & Yang, 2007). Employees who withdraw at work—be it from social activities or other types of involvement—may be experiencing workload difficulties, may not have enough energy to engage with others, or may no longer get enjoyment out of social exchanges with their coworkers for myriad of reasons. Yet, social relationships are integral to health and wellbeing and have been associated with heightened levels of job satisfaction and work engagement or "love of job"—passion for the work that one does, affective commitment towards the organization, and close relationships with others at work (for review, see Kelloway, Innes, Barling, Francis, & Turner, 2010).

Interpersonal relationships can suffer when employees are struggling with mental health issues, as they have fewer primary resources to draw upon. Primary resources are internal resources that are perceived as being readily available to employees, such as cognitive ability, self-esteem, and other personal characteristics (Dimoff & Kelloway, in press). Secondary resources are external resources that exist beyond the individual, such as social support, access to tools or information, time, or salary (Dimoff & Kelloway, in press). Employees who are struggling may be unable to conserve primary or secondary resources in order to respond to demands (Baltes & Baltes, 1990; Baltes, 1997; Hobfoll, 2011; Lazarus & Folkman, 1984, 1987). As a result, struggling employees may turn to maladaptive coping strategies that actually further deplete their resources, such as social withdrawal or procrastination. Both of these coping strategies can have negative consequences on the employee, the employee's work group, and the organization (Mosley et al., 1994; Roth & Cohen, 1986; Tice & Baumeister, 1997). By putting off demands (e.g., social activities at work or OCBs) in an attempt to minimize resource loss, individuals may be inadvertently setting themselves up for more significant resource losses over time (Mosley et al., 1994; Roth & Cohen, 1986).

Performance. The three items loading onto the performance factor were all directly related to performance or productivity within one's job. Compared to their healthy colleagues, employees with mental health problems experienced significantly greater performance degradations, such as missed deadlines or poorly executed job tasks. This finding suggests that there may be a negative relationship between employee mental health and performance—with mental health problems or illnesses being associated with

decreased performance. Cooper and Cartwright (1994) found that successful organizations are those that have employees who are psychologically healthy.

In a study designed to assess the relationship between depression and job performance, Adler, McLaughlin, Rogers, Chang, Lapitsky, and Lerner (2006) found that individuals with depression had weaker performance in managing time and completing tasks. While poor performance may or may not be the result to an underlying mental health issue, reduced performance may be a sign that an employee is struggling—with work related issues or non-work related issues. This is especially notable given the findings from Study 1, which suggest that performance degradations were among the last warning signs to be recognized by managers before employees had to go on disability leave or quit work altogether. In addition to addressing work-related performance concerns directly, managers and human resources professionals may also be advised to suggest available resources to employees who seem to be struggling.

Limitations and Future Directions

Ultimately, the results from Study 2 lend partial support for the thematic groupings of behavioral warning signs that managers identified in Study 1. This suggests that the SOS may be a useful tool for identifying the specific signs of deteriorating mental health within a workplace setting. However, there were limitations in the methods used to develop the scale.

First, participants' responses may have been biased by the background information provided at the onset of the study. To provide participants with a frame of

reference for the survey, participants were provided with definitions of mental health problems and illnesses, along with a description of "good health." While necessary, such information may have restricted participants' framing of what constitutes mental health and poor mental health.

Second, the use of questionnaires administered only to colleagues introduces the potential for error variance—common method variance. The better fit of the 5-bifactor model may be an indication that common method variance is impacting item loading patterns. The bifactor, by nature, is a common method factor—it is a factor that influences all behavior collected in administration of a survey (Johnson, Rosen, & Djurdjevic, 2011). Thus, the relationships between items and the general factor of struggling, as well as the relationships between items and each factor, may be mispresented (either deflated or inflated) due to the measurement tool. The estimation of a bifactor model involves allowing an item to be caused by both a general and a specific (i.e., substantive) factor of struggling. In doing so, the model may distort construct validity in that the parameters are based not on the original item variance but, rather, on partialled or residual variances and covariances. I note that this concern is endemic to all multivariate techniques that involved residualization (see for example Winne, 1983) and, despite the concern, researchers commonly interpret their results in light of the original, unresidualized variables

Third, I was only able to collect data from participants themselves, but not from the colleagues about whom they were responding. Although not 'self-report' data in the strictest sense, since participants were asked to rate their colleague's behaviors, there was

no access to data about their colleague's actual behaviors or even their colleague's self-reported behaviors or illnesses. Future studies should aim to minimize potentially biasing prompts and strive to collect matched data to ensure the SOS is measuring warning signs of deteriorating mental health. Addressing this limitation was the goal of my next study.

Chapter 4: The Relationship between Struggle and Strain (Study 3)

Although the findings surrounding the factor structure of the SOS are promising, further validation of the utility of the SOS was still needed. Given that the SOS was designed as a proxy measure for strain or distress, it was important for this study to explicitly evaluate the relationship between self-reported strain and observed behavioral warning signs of struggle. To my knowledge, no other-rated measure of strain has been evaluated for use in an organizational setting by non-clinicians. Thus, the purpose of this study was to use matched data to validate the SOS as an other-rated measure of strain. To achieve this goal, participants were asked to a) fill-out self-reported measures of strain, and b) send a separate survey to a colleague who was asked to use the SOS to rate the participant's behavior. Through this method, I hoped to be able to evaluate the utility of the SOS as a measure that captures the behavioral symptoms of an employee who is struggling, in distress, or otherwise in a state of compromised mental health. Therefore, I specifically hypothesized that:

> *H1: Employees' self-rated strain will be highly correlated with their colleague's other-rated assessment of their behavior (using the SOS).*

Method

A correlation was used to validate the SOS as a measure of strain—a mental health problem that is often considered a precursor to more serious mental illnesses, such as depression and anxiety.

Procedure. Self-report questionnaires were distributed to a convenience sample of full-time employed North Americans (n = 30) via social media networking sites (i.e., Facebook and LinkedIn). Questionnaires asked participants to respond to surveys that asked them to report their personal levels of stress and burnout. The survey also asked participants to disclose any existing clinical or medical diagnoses, (i.e., depressive disorders, anxiety disorders, high blood pressure or hypertension, and sleep disorders), any treatments they were receiving, and any medications they were taking to manage these diagnoses. Each participant was also asked to distribute a complementary survey to a colleague (i.e., co-worker, leader, subordinate). Surveys distributed to colleagues included the other-rated SOS, and prompted them to report on the behaviors of the person who had sent them the survey. Colleagues were asked to rate the participant's behavior over the course of the last 6 months. For clarity sake, the convenience sample of participants will be labeled as the study's "direct participants," while the sample of colleagues will be labeled as the study's "indirect participants."

Participants. In total, 30 dyads were available for analysis (N = 60; n direct participants = 30; n indirect participants = 30). All participants were employed full-time and spent at least 20 hours per week within the same office space. Occupation ranges were broad for this sample, with both direct participants and indirect participants working in seven different industries. All participants had some post-secondary education, with 23.33% reporting post-graduate or professional education. The average tenure for the entire sample was 9.75 years (SD = 8 years); The majority of dyads were co-workers (86.6%), with 4 manager-employee dyads (13.3%), where the employee was the "direct

participant" and the manager was the "indirect participant." There were no manager-employee dyads, where the employee was the "indirect participant." See Table 9 for more information on participant demographics.

Measures. Direct participants were asked to respond to a self-reported measure of strain. The SOS was distributed to all indirect participants, who were asked to report on the behaviors of their colleague (i.e., the direct participant) who sent them the survey. All participants were asked to respond to the same demographic items. Table 10 presents a correlation matrix, with reliabilities, for study variables.

Strain. The 10-item Perceived Stress Scale was used to measure direct participants' self-reported levels of strain (Cohen, Kamarck, & Mermelstein, 1983). Direct participants were asked to rate each item on an agreement scale, ranging from 1 = ("Strongly Disagree") to 5 = ("Strongly Agree"). An example item is, "How often have you felt unable to control the important things in your life?".

SOS. The 20-item SOS was distributed to all "indirect participants," who were asked to respond to each item on a frequency scale, ranging from 1 = ("Never"), to 6 = ("Everyday"). Indirect participants were instructed to rate how frequently their colleague (i.e., the direct participant) engaged in each of the behavioral items on the SOS over the course of the last 6 months. At the scale-level, the SOS had a reliability of $\alpha = .88$. Factor reliabilities ranged from $\alpha = .66$ (Attendance), to $\alpha = .83$ (Expressions of Distress).

Demographics. All participants were asked to provide basic demographic information, as well as background information on whether or not they have received a

formal mental health diagnosis within the last 10 years and whether or not they are currently receiving treatment (including medication) for a mental health diagnosis or mental health-related issues.

Results

Individuals' self-reported levels of strain were highly correlated with other-rated measures on the SOS (r (28) = .72, p < .01). Each factor of the SOS was also positively correlated with strain. At the factor level, 'social withdrawal' (r(2) = .713, p <.01), 'extreme behaviors' (r(2) = .686, p < .01), and 'performance' (r(2) = .668, p < .01) were all highly correlated with strain. 'Expressions of Distress' (r(2) = .590, p < .01) was also moderately correlated with strain, while 'attendance' shared a rather low correlation with strain (r(2) = .371, p = .044). These results provide support for hypothesis 1.

Discussion

Findings from Study 3 suggest that the SOS is an adequate other-rated measure of strain. High correlations between other-reported "signs of struggle" and self-reported measures of strain indicate that the SOS is successfully measuring warning signs of distress. By capturing early warning signs of deteriorating mental health, the SOS may be an effective tool that can be used by managers and/or coworkers to recognize when subordinates or colleagues may be struggling.

The factor-specific correlations associated with the SOS are also intriguing. Although the SOS, as a whole, was highly correlated with strain, some individual factors shared an even stronger relationship with strain. For instance, social withdrawal, extreme

behaviors, and performance degradations were all significantly and highly related to self-reported strain, suggesting that others in the workplace may be observing these warning signs within their peers who are strained or struggling. The items in these factors may be representative of the behaviors that struggling employees are most likely to exhibit in a workplace environment. Distressed behaviors, such as expressing the desire to quit, may be less prevalent in this sample because the large majority of participant dyads consisted of an employee and his or her manager. Interestingly, the attendance factor was the least correlated with strain.

In study 2, the attendance factor was the only factor within the SOS that successfully distinguished between employees with mental health problems who went on disability leave, employees with mental health problems who did not go on disability leave, and employees who were considered healthy. Perhaps this is an indication that the SOS is measuring strain more than it is measuring other constructs, such as burnout—where behaviors such as sickness, lateness, and absenteeism are more common (Darr & Johns, 2008). The inconsistency in the study 2 and study 3 findings related to the attendance factor may also be the result of a demand effect. Given the nature of the prompt conditions in study 2, some participants were asked to think of someone they worked with who had experienced a mental health issue and had gone on disability leave. It is possible that participants in this condition had difficulty differentiating between when their coworker may have been absent, if at all, and when their coworker was away from the workplace because they were on official disability leave.

Still, the results from the bifactor CFA, and the relatively high correlation between the scale-level SOS and strain, emphasize that the SOS should likely be used as an entire scale, rather than as a set of subscales. This is especially important given that some behaviors may be more salient than others, creating a bias for the detection of only extreme behaviors. For instance, if managers were only provided with the "Extreme" factor to use to recognize when employees are struggling, they might miss other warning signs that manifest earlier or less dramatically. If early recognition is critical, managers must be provided with an actionable list of behavioral warning signs to watch for—both those that are more extreme, and those that may seemingly appear more benign. Ultimately, the SOS is a measurement of the overarching factor of "struggling," making the sum of the parts greater than the parts alone.

As a relatively short checklist, the SOS is a tool that can be used by managers and coworkers to help recognize when others in the workplace may be struggling. Although developed in the context of mental health, the SOS does not specifically detect or diagnose mental health disorders or illnesses. Rather, the focus is on whether or not an employee is struggling and whether these struggles are manifested in workplace behaviors. This more general orientation is consistent with my intent in keeping the SOS focused on workplace behaviors and in not encouraging supervisors or managers to engage in diagnosis. Thus, the tool is not designed to be diagnostic—it provides no indication as to what an employee may be struggling with; rather, it simply helps leaders and coworkers to recognize *that* an employee is struggling. The diversity of the tool's factors will help guide managers and coworkers in recognizing various behavioral

warning signs that one might a) fail to recognize as signs of deteriorated wellbeing, and b) feel uncomfortable discussing without such a tool.

While performance and attendance-related issues are often flagged by managers as topics that will need to be discussed or passed on to HR, other behaviors in the workplace may go unnoticed and unaddressed. As a result, employees who are already struggling may continue to struggle—sometimes to a point of failure, where they become ill (e.g., depression, anxiety, addiction) and must go on disability leave or must leave the workplace (ADAA, 2015; CMHA, 2016; Koopmans et al., 2008; Mayo Clinic, 2015; Schneiderman et al., 2005; Van der Doef & Maes, 1998). Thus, the SOS will help leaders and coworkers recognize which warning signs are most important and will help to reduce confusion surrounding what behavioral changes are cause for concern. This type of tool can be adapted to a mobile technology platform so leaders and coworkers can use the tool on a daily, weekly, or other regular interval to help them monitor changes in employees' behaviors over time.

While the purpose of this study was not to identify which items were related to more severe levels of mental distress (e.g., generalized anxiety disorder vs. strain), some items within the SOS seem more severe than others. As a result, these items may warrant more immediate action than others. For example, if an employee mentions that he or she intends to "commit suicide" or "harm others" in the workplace, managers should take swift and immediate action to assist the employee and ensure the safety of others. More minor warning signs, such as "coming into work late" or "behaving rudely towards others," are still highly correlated with strain, but may not require the same level of

immediate attention. In fact, intervention may only be warranted after a manager observes a particular number of these warning signs, suggesting a pattern of deterioration.

In the late 1960's, Holmes and Rahe (1967) developed a stress scale that was designed to predict future illness. The premise of the scale was that certain life events were generally perceived as being more stressful than others. They quantified the 'stressfulness' of 43 life events, with the death of a spouse being considered most stressful (quantified at a "life change unit" of 100), and a minor violation of the law as being the least stressful (quantified at a "life change unit" of 11). The scale was designed to be additive, with higher scores being more predictive of future illness.

The SOS may function similarly, with some warning signs being more indicative of extreme distress or strain, and others only indicative of minor distress. For instance, the attendance factor may be indicative of severe struggling, as it was the only factor that distinguished between all three groups (i.e., employees with mental health problems who went on disability leave, employees with mental health problems who did not go on disability leave, and healthy employees). Similarly, extreme behaviors, such as intending to commit suicide, may be more predictive of acute levels of struggle. Although a Holmes and Rahe (1967) quantification approach may be somewhat outdated, the utility of the SOS may improve if leaders have guidelines on which warning signs require immediate attention and action. Similarly, Holmes and Rahe's (1967) approach may provide added justification for retaining a relatively longer scale, as mental health problems are complex and highly individualized—some people may cry at their desks

when strained and overwhelmed, while others may take repeated sick days or experience degradations in performance.

Limitations and Future Directions

Although the tool is relatively short, but still comprehensive, some may argue that it is too long for it to be realistically used by managers or coworkers, especially on a daily or weekly basis. Thus, it may be advantageous for future studies to attempt to shorten the scale to 10 items, making regular use more realistic. Future studies could also aim to re-evaluate the factor structure of the scale, given that it is being newly introduced to the literature and the sample size used for the EFA and CFA were relatively small. Fit indices with a smaller item set would be particularly important to evaluate, given the 'on-the-cusp' fit indices found for the SOS.

Given recent trends toward peer support programs in workplaces (e.g., MHCC, 2016), future studies might also seek to determine whether or not the tool has similar effectiveness for leaders and peers. For instance, while leaders and peers may recognize the same behavioral changes within others at work, most often it is only leaders who are in a position to formally step-in and provide specific feedback or suggestions on available resources, especially related to performance. Peers, on the other hand, may be in a better position to provide social support to their colleagues who are struggling. Thus, the efficacy of the SOS, when used by leaders and peers, may be important to evaluate.

While this tool was developed for leaders and coworkers in a workplace situation, I did not evaluate the utility of the SOS within these populations. Although the results

from study 1 suggest that leaders feel they would benefit from some sort of recognition tool or checklist, such as the SOS, the SOS has yet to be implemented within a real organizational setting. Thus, there is limited understanding of whether or not it will be perceived favorably by leaders, how frequently it will be used, and the extent to which it will help facilitate early recognition of developing mental health issues.

As one of the first other-rated measures of strain, the SOS has the potential for wide-spread use, if used properly and with adequate training. As the results from Study 1 suggest, leaders feel best able to address warning signs if they have a set of skills in place to help guide them through the recognition and action process. Thus, the SOS, on its own, may not be sufficient enough to facilitate the resource utilization process. The SOS provides a strong foundation to kick-start the recognition process, but provides little to no guidance on how a manager should intervene when observing such warning signs. I recommend that for maximal benefit, leaders also receive training on how to use the SOS, and also on how to approach and assist employees who are displaying warning signs.

Chapter 5: Leader Training and the Evaluation of the SOS (Study 4)

The findings from study 1 suggest that leaders believe they could benefit from some sort of recognition tool or checklist, and the findings from study 2 and 3 indicate that the SOS may be capable of filling this need by measuring other-rated strain within a working population. However, the practical utility of the tool was not explicitly explored in study 3, nor were leaders the primary focal sample. Thus, study 4 is designed to help evaluate the efficacy of the SOS as a tool that leaders can use to recognize warning signs of employees who are struggling. As some of the testimonials from study 1 revealed, many leaders feel that they would be better able to recognize and address warning signs if they had appropriate skills surrounding employee mental health. Through study 4, I hope to evaluate the impact of manager training that supplements the SOS by providing guidance on how managers should intervene when observing such warning signs.

Workplace mental health training, tailored specifically to managers and supervisors, has the potential to provide leaders with the skills and the confidence to actively support employees who are struggling (Dimoff et al., 2015). Developed in Canada in 2012, the Mental Health Awareness Training (MHAT) for workplace leaders was designed specifically to provide leaders with the knowledge and confidence to take supportive action when employees are struggling. Leader-related data suggested that the three-hour training program was capable of improving leaders' knowledge about mental health and their confidence with regard to managing employee mental health issues at work. This training also resulted in a significant return-on-investment 9-months after the training was delivered. The savings was largely attributable to a 19-day reduction in

disability claim duration. The authors reasoned that the reduction was likely attributable to early recognition and action on behalf of leaders.

According to this work, leaders must engage in a multi-step process, whereby they a) recognize warning signs that an employee is struggling, b) identify sources of support or ways that they can help, and c) provide support by helping the employee mobilize resources (Dimoff & Kelloway, in press; Dimoff et al., 2015). This work, along with the work of others (e.g., Kitchener & Jorm, 2002; Pinfold et al., 2005), suggests that providing support involves a set of skills that can be taught or trained. Unfortunately, few other workplace mental health interventions have been evaluated, nor is there much evidence surrounding their effectiveness over time (for review, see Dimoff & Kelloway, 2013).

Unlike earlier studies evaluating the MHAT (Dimoff et al., 2015), the purpose of Study 4 is to assess the behavioral impact of the training on both leaders and employees. The earlier MHAT studies did not explicitly evaluate the impact of the training on employee outcomes or on leader behaviors—two significant limitations that Study 4 seeks to address. Additionally, the original training did not include the SOS as a recognition aide for leaders, which resulted in practical limitations as leaders were uncertain about which behavioral changes were indicative of a mental health concern and/or an employee who was in need of support or resources. Without a better understanding of how the training impacts leaders' abilities to recognize warning signs, support employees, and encourage resource-use among employees, the practical utility of the MHAT and SOS are limited. Therefore, the goal of Study 4 was to evaluate the

impact of a leader-focused mental health awareness training on a) leaders' behaviors (as perceived by employees), b) leaders' abilities to recognize warning signs, c) employees' willingness to use resources, and. d) employees' actual resource-use. The efficacy of the SOS will be explored by evaluating its perceived utility (according to leaders), and the extent to which it aided leaders in recognizing and addressing warning signs.

Method

The MHAT program that was used to train leaders in Study 4 was highly similar to training program used in previous MHAT studies (i.e., Dimoff et al., 2015). In developing the mental health awareness training (MHAT), I followed the recommendations of the National Institute for Occupational Safety and Health (NIOSH) for intervention research (NIOSH, 1996). Thus, I began by conducting extensive literature reviews of mental health first aid and existing mental health interventions. I performed an additional literature review prior to making changes to the content and delivery of the MHAT for this study to confirm that training recommendations and findings had not changed substantially since the original development of the MHAT in 2012 and 2013. In accordance with the Mental Health Commission of Canada's (2012) recommendations regarding effective mental health interventions, the training content was designed primarily around three areas: a) early identification and recognition, b) early and appropriate engagement or action, and c) assessment, planning and monitoring.

Lecture-based modules (Saks, Haccoun, & Belcourt, 2004) were used to educate leaders about mental health, improve attitudes about mental health, and emphasize the

role of leaders as sources of social support for employees struggling with mental health problems. Through the use of realistic and highly interactive case studies and videos (Saks et al., 2004), participants were able to practice their newly developed skills, develop patterns of success, and observe their peers successfully recognizing signs of common mental health problems (e.g., stress, burnout, depression, anxiety, substance abuse, and self-harm). Participants' success was reinforced through social persuasion on behalf of the trainer, during which the trainer encouraged participants to engage with employees and reassured participants that they now had the appropriate skills to engage with employees demonstrating signs of a mental health problem. Please see Appendix D for an outline of the training curriculum.

Participants were also provided with a validated measurement tool, the Signs of Struggle (SOS) Checklist, designed to help facilitate warning-sign recognition. Leaders were informed of the purpose of the SOS, its intended use, and were provided background information about the tool's development and item utility (i.e., why this particular list of warning signs were included on the checklist). Leaders also participated in a series of short exercises that used the SOS as a precursor to resource identification and referral. Leaders were instructed to "use the SOS as a guiding checklist that can be used to help monitor employee behavior and recognize changes that may signal a deterioration in mental health." Leaders were told that if they observed any of the warning signs outlined on the SOS, they should use their best judgment to provide support and resources to the employee. Leaders were encouraged to provide support and resources if they noticed multiple warning signs or any single warning sign within the 'extreme' category (i.e.,

suicidal ideation). Through exercises and specific instruction, leaders were encouraged to use the SOS as a behavioral checklist—something that they could put in a visible location in their office and something that they could reference, in hard-copy or electronic format, to help them recognize warning signs.

Leaders in the control group were provided with the same informational binder that leaders in the experimental/training group received. These binders were distributed to all leaders (i.e., those in both the experimental and control groups) within 10 working days of the training date. Leaders in the control group did not receive the SOS. Given that the SOS is a new tool and is designed to help leaders recognize sensitive behavioral changes among employees, I did not want the leaders in the control group to receive the SOS until they had received adequate instruction and contextual training surrounding the use of the SOS. The goals of the current study were to assess the effectiveness of the MHAT, when combined with the SOS, in increasing a) leaders' recognition of warning signs, b) employees' willingness to seek out resources, and c) employees' actual resource-use.

Specifically, I hypothesized that:

> *H1: Compared to leaders who did not attend the MHAT, leaders who attended the training will report fewer stigmatizing attitudes towards mental health at Time 2 and Time 3.*

H2a: Compared to leaders who did not attend the MHAT, leaders who attended the training will report that they engage in significantly more behaviors to promote general mental health in the workplace at Time 2 and Time 3.

H2b: Compared to leaders who did not attend the MHAT, leaders who attended the training will report that they engage in significantly more personally supportive behaviors to assist struggling employees at Time 2 and Time 3.

H3: Compared to leaders who did not attend the MHAT, leaders who attended the MHAT will recognize more warning signs among their employees at Time 2 and Time 3.

H4: Compared to leaders who did not attend the MHAT, leaders who attended the training will be more likely to report making specific suggestions about resources to struggling employees at Time 2 and Time 3.

H5: Leaders who attend the mental health awareness training will report that the SOS is a tool high in practical utility (i.e., usability, relevance to everyday work life, frequency of use).

H6a: Compared to employees whose leaders did not attend the MHAT, employees whose leaders attended the training will report that their leaders engage in significantly more behaviors to promote general mental health in the workplace at Time 2 and Time 3.

H6b: Compared to employees whose leaders did not attend the MHAT, employees whose leaders attended the training will report that their leaders engage in

significantly more personally supportive behaviors to assist struggling employees at Time 2 and Time 3.

H7: Compared to employees whose leaders did not attend the MHAT, employees whose leaders attended the training will experience greater willingness to seek out resources at Time 2 and Time 3.

H8: Compared to employees whose leaders did not attend the MHAT, employees whose leaders attended the training will be more likely to use available resources at Time 2 and Time 3.

H9: Compared to employees whose leaders did not attend the MHAT, employees whose leaders attended the training will experience less strain at Time 2 and Time 3.

Procedure. To assess these hypotheses, I used a longitudinal wait-list control group design involving two separate organizations in Ontario, Canada. Both organizations were recruited through professional connections with the researcher. At both organizations, leaders were randomly assigned to either a training group or a control group. All leaders and employees at both organizations were asked to respond to the same set of surveys at three separate time points—one pre-test measure (T1), administered one week prior to the training, and two delayed post-test measures (one at 6-weeks post-test [T2] and one at 12 weeks post-test [T3]; see Figure 1). Leaders were asked to provide self-reported responses surrounding their own behavior, and employees were asked to provide both self-reported responses about their own behaviors, as well as

other-reported responses about their leaders' behaviors. Participation in the training and associated research study were not made mandatory by either organization, but in the weeks preceding the training sessions, I distributed information about the training and the study to all members of both organizations.

At each time point, leaders were asked to provide their email address (as means of identification), while employees were asked to provide their leader's email address (as a means of linking their data to their leader's responses). To ensure the anonymity of employees' responses, each employee was asked to generate their own identification code. Employees were asked to generate this same code at each time point. To participate in the research component of the training, leaders had to be managing at least three employees at the time of the training. Leaders were not informed of which employees did or did not participate in the study. Leader and employee email addresses were provided by the human resources department at the organization. Information about the study was sent out approximately 1-2 weeks in advance of each of the scheduled training sessions.

Participants. From Organization A (a small publishing company), 25 leaders were invited to participate in the MHAT and its associated research study. All of their employees (N = 60) were also invited to participate in the research study. From Organization B (a small property management company), 40 leaders were invited to participate in the MHAT and its associated research study. All of their employees (N = 100) were also invited to participate in the study.

***Leaders*.** All leaders were randomly assigned to either the training group (n = 40) or to the control group (n = 20). In total, 24 leaders from the training group and 13 leaders from the control group responded to the survey at all three time points, rendering a response rate of 61.67%. Overall, 7 (18.91%) leaders reported having personal or family experience with mental health problems or mental illnesses. Similarly, 7 (18.91%) leaders also reported having managed at least one employee with a known mental health problem at some point during their career. Please see Table 11 for additional leader demographics.

***Employees*.** In total, 82 (51.25% response rate) employees responded to the questionnaires at all three time points. Employees were asked to respond to questions about their leader. Employees were not told whether or not their leader was part of the experimental group or the control group. Overall, 6 employees (7.31%) reported having personal or family experience with mental health problems, and 15 (18.29%) reported having worked with a coworker who had a known mental health problem at some point in their career. Please see Table 12 for additional employee demographics.

Measures. Leaders and employees were prompted to use a 6-week time frame as their frame of reference for all behavioral measures (i.e., at Time 1, participants were asked to think of their behavior and/or their leader's behavior over the last 6 weeks; at Time 2, participants were asked to think of their behavior and/or their leader's behavior since the training—6 weeks prior; at Time 3, participants were asked to think of their behavior and/or their leader's behavior since Time 2—6 weeks prior).

Leader measures. Five measurement scales and a standard demographic survey were administered to leaders. For correlations and reliability estimates for leader measures, please see Table 13 for the experimental group and Table 14 for the control group.

Stigma. Stigma surrounding mental health problems was measured using the 9-item Personal Depression Stigma Scale (Griffiths, Christensen, Jorm, Evans, & Groves, 2004). The scale ranged from 1 ('Strongly Disagree') to 5 ('Strongly Agree'). An example item included "I would not employ someone if I knew they had a mental health problem."

SOS utility. Leaders were asked to respond to a set of three items that asked them about their perceived utility or efficacy of the SOS. The SOS efficacy questions were only asked at Time 2 and Time 3. The following questions were used to assess the utility and efficacy of the SOS. First, leaders were asked to use a frequency scale, ranging from 1 ('Never') to 6 ('Everyday') to respond to the question, "in the last 12 weeks, how frequently have you used the SOS?" Next, leaders were asked to use an agreement scale, ranging from 1 ('Strongly Disagree') to 6 ('Strongly Agree') to respond to the statement that "the SOS is easy to use" and "the SOS helps me with everyday management experiences or decisions."

Warning sign recognition. Using the SOS, leaders were asked to report how frequently they observed each of the warning signs on the newly developed checklist.

The frequency scale ranged from 1 (‘Never’) to 5 (‘Everyday’). All items from the SOS can be found in Appendix B.

Leaders’ mental health promotion behaviors. Leaders were asked to use a behavioral checklist to rate their behaviors surrounding the discussion of available resources and the de-stigmatization of mental health problems and mental illnesses. Items contained within this measure were developed based on findings from study 1 and literature reviews within the areas of mental health promotion, general health promotion, and behavior-focused leadership training. The full list of behaviors can be found in Appendix E. The frequency scale ranged from 1 (‘Never’) to 5 (‘Everyday’).

Leaders’ personal consideration of employees. Leaders were asked to use a behavioral checklist to rate their behaviors surrounding the individual support of employee wellbeing. Items contained within this measure were developed based on findings from study 1 and literature reviews within the areas of supportive supervision, and behavior-focused leadership training that emphasized individualized consideration. The full list of behaviors can be found in Appendix F. The frequency scale ranged from 1 (‘Never’) to 5 (‘Everyday’).

Action taken. Leaders were asked to respond to one item that asked them about the action that they took after recognizing warning signs within an employee. Leaders were asked the following question, “If you observed an employee who was struggling, what did you do?” and given the following response scale: 1 (I didn’t do anything—I let it pass), 2 (I spoke to the employee), 3 (I spoke to the employee and provided resources).

Demographics. Demographic characteristics were assessed using standard survey questions that asked about participants' age, gender, occupation, management experience, and personal and professional experiences with mental health.

Employee measures. Five measurement scales and a similar demographic survey were administered to employees. Correlations between measures and reliability estimates for employee measures can be found in Table 15 for the experimental group and Table 16 for the control group.

Leaders' mental health promotion behaviors. Employees received a behavioral change checklist that was complementary to the list of mental health promotion behaviors that leaders received (see Appendix E). Using this list, employees were asked to rate their leader's behaviors surrounding the general support of employee wellbeing, the discussion of available resources, and the de-stigmatization of mental health problems and illnesses. The frequency scale ranged from 1 ('Never') to 5 ('Everyday').

Leaders' personal consideration of employees. Employees received a behavioral change checklist that was complementary to the list of behaviors found on the 'leaders' personal consideration of employees' checklist (see Appendix F). Employees were asked to use this list to rate their employees' behaviors surrounding the personal support they received from their leader during a time when they were struggling. The frequency scale ranged from 1 ('Never') to 5 ('Everyday').

Willingness to use resources. Employees were asked to respond to a 3-item measure derived from the General Help-Seeking Questionnaire (GHSQ; Wilson, Deane,

Ciarrochi, & Rickwood, 2005) that asked about their willingness to seek social support and use resources. Each item had the following general structure: "In the next 6 months, if you were to experience some kind of struggle or set back, such as a mental health problem, how likely is it that you would seek help from the following resources?"). Each item asked employees to rate the extent to which they would be willing to seek out support or resources from a) their leader, b) EAP, or c) another resource offered by the organization.

Resource use. Employees were asked to respond to one item that asked them about whether or not they had used an available resource in the specified 6-week time period, and given the following response scale: 1 (I did not use any resources), 2 (I thought about using available resources, but didn't), 3 (I used at least one available resource).

Strain. The 10-item Perceived Stress Scale was used to measure employees' self-reported levels of strain (Cohen et al., 1983). Employees were asked to rate each item on an agreement scale, ranging from 1 = ("Strongly Disagree") to 5 = ("Strongly Agree"). An example item is, "How often have you felt unable to control the important things in your life?".

Demographics. Demographic characteristics were assessed using standard survey questions that asked about participants' age, gender, occupation, and personal and professional experiences with mental health.

Results

Using SPSS, two separate repeated measure multivariate analysis of variance (MANOVA) were used to test group differences on the dependent variables over three time points. The first repeated measures MANOVA was used to test group differences at the leader-level, using five dependent variables (i.e., stigma, general behaviors, personal behaviors, warning sign recognition, and action taken), and the second repeated measures MANOVA was used to test group differences at the employee-level, using five dependent variables (i.e., leaders' general behaviors, leaders' personal behaviors, willingness to use resources, actual resource-use, and strain). Given the importance of determining the causal effects of the training over time, scores were only maintained for leaders and employees who responded to all measures at all three time points. As a result, no data were missing. There were no univariate or multivariate outliers (at $\alpha = .05$ level), and all assumptions of MANOVA were satisfied.

Given that respondents came from two companies, I first checked for differences between respondents of the two separate organization. There were no differences between the companies at the employee-level at Time 1 (F (5, 76) = 1.420, p = .227). However, there were differences between organizations at the leader-level at Time 1 (F (5, 31) = 3.857, p = .008). Thus, I used company as a covariate in all future analyses involving leader-level data. There were no differences between the control and intervention groups on any of the variables measured at Time 1 at the leader-level (F (5, 31) = .547, p = .740) or at the employee-level (F (5, 76) = 1.117, p = .358). Finally, there were no differences between the control and intervention groups on any of the

demographic variables at the leader-level (F (8, 23) = .756, p = .643) or at the employee level (F (7, 67) =1.402, p = .219).

Leader-level results. A repeated measures MANOVA resulted in a significant group by time interaction at the leader-level (F (10, 134) = 6.005, p < .001). As demonstrated by the univariate effects (see Table 17), three of the five dependent variables were significantly affected by the training, providing partial support for the hypotheses. Significant increases over time were observed for general mental health promotion behaviors (support for hypothesis 3a), recognition of warning signs (support for hypothesis 2), and action taken to encourage resource use (support for hypothesis 7). No significant changes over time were observed for leaders' personal support behaviors towards struggling employees. Leaders' stigmatizing attitudes did not change significantly during the study. To better understand the significant univariate effects at the leader level, I plotted the cell means (see Figure 2) and conducted a series of post-hoc paired t-tests (see below).

***Leaders' stigmatizing attitudes towards mental health*.** No significant increases between leaders' self-reported stigma towards mental health issues were observed between any of the time increments for either the experimental group or the control group. These findings do not lend support for hypothesis 1.

***General workplace mental health promotion behaviors*.** Significant increases in leaders' self-reported workplace mental health promotion behaviors were observed from Time 1 (M = 1.55, SD = 0.56) to Time 2 (M = 2.57, SD = 0.75; t (23) = -7.163, p < .001)

and from Time 1 to Time 3 (M = 2.61, SD = 0.87; t (23) = -6.540, p < .001) for the experimental group. No significant changes in general workplace behavior were observed from Time 2 to Time 3 for the experimental group. No significant changes were observed between any time increments for the control group. These findings lend support for hypothesis 2a.

Personal mental health support behaviors. No significant increases between leaders' self-reported personal mental health support behaviors were observed between any of the time increments for either the experimental group or the control group. These findings do not provide support for hypothesis 2b.

Leaders' warning sign recognition. Significant increases in leaders' self-reported warning sign recognition were observed only from Time 1 (M = 1.52, SD = 0.42) to Time 3 (M = 1.83, SD = 0.44; t (23) = -7.187, p < .001), but not from Time 1 to Time 2 (M = 1.49, SD = 0.37), suggesting a delayed impact of the training. Warning sign recognition for leaders in the experimental group did not change significantly from Time 2 to Time 3. There were no significant increases in warning sign recognition between any increments for the control group. These findings lend partial support for hypothesis 3.

Leaders' actions. Significant increases in the self-reported actions that leaders took to facilitate employee resource-use were observed from Time 1 (M = 1.63, SD = .65) to Time 2 (M = 2.38, SD = .77; t (23) = -3.892, p = .001 and from Time 1 to Time 3 (M = 2.29, SD = .86; t (23) = -3.391, p = .003) for the experimental group. No significant changes in leaders' self-reported actions were observed from Time 2 to Time 3 for the

experimental group. No significant changes were observed between any time increments for the control group. These findings lend support for hypothesis 4.

Leaders' perceived utility of the SOS. Leaders who attended the MHAT and received the SOS reported that the SOS was a highly efficacious tool. At Time 3, 45.8% of leaders reported using the tool on a daily basis, 20.8% reported using the tool frequently (i.e., 2-4 days per week), 33.3% reported using the tool regularly (i.e., once a week). Almost all leaders (83.3%) found the SOS to be 'very easy to use', with the remaining 16.7% reporting that the SOS was 'moderately easy to use'. All leaders agreed that the SOS had helped to make them better leaders, and 29.2% found the SOS to be 'very useful' to their everyday management experiences (62.5% found the SOS 'useful', 8.3% found it 'moderately useful'). These findings lend support for hypothesis 5.

Employee-level results. At the employee-level, a repeated measures MANOVA also resulted in a significant group by time interaction (F (10, 310) = 3.789, $p < .001$). As shown in Table 18, all five of the employee-level dependent variables were significantly affected by the training. To better understand the significant univariate effects at the employee level, I plotted the cell means (see Figure 3) and conducted a series of post-hoc paired *t*-tests.

General workplace mental health promotion behaviors. Significant increases in employees' perceptions of leaders' general mental health promotion behaviors were also observed. According to employees, leaders' general workplace mental health promotion behaviors increased significantly from Time 1 (M = 2.26, SD = 1.11) to Time 2 (M =

2.77, *SD* = 1.03; *t* (59) = -4.484, *p* < .001), and from Time 1 to Time 3 (*M* = 2.91, *SD* = 1.05; t (59) = -5.326, *p* < .001) for the experimental group. No significant changes in employee-reported promotion behaviors were observed from Time 2 to Time 3 for the experimental group. No significant changes were observed between any time increments for the control group. These findings lend support for hypothesis 6a.

Personal mental health support behaviors. Significant increases in employees' perceptions of leaders personally supportive behaviors were also observed for the experimental group. According to employees, leaders' personally supportive behaviors increased significantly from Time 1 (*M* = 3.41, *SD* = 1.19) to Time 3 (*M* = 3.80, *SD* = .90; *t* (59) = -2.603, *p* = .010), but not from Time 1 to Time 2, suggesting a delayed impact of the training. No significant changes were observed from Time 2 to Time 3 for the experimental group. No significant changes were observed between any time increments for the control group. These findings lend partial support for hypothesis 6b.

***Employee willingness to use resources*.** Significant increases in employees' willingness to seek out resources for mental health issues were observed from Time 1 (*M* = 3.22, *SD* = 0.80) to Time 2 (*M* = 3.67, *SD* = 0.66, *t* (59) = -4.283, *p* < .001) and from Time 1 to Time 3 (*M* = 3.61, *SD* = 0.72; *t* (58) = -3.401, *p* = .001) for the experimental group. No significant changes in willingness to use resources were observed from Time 2 to Time 3 for the experimental group. No significant changes were observed between any increments for the control group. These findings lend support for hypothesis 7.

Employee resource-use. Significant increases in employees' self-reported resource-use were observed from Time 1 (M = 1.55, SD = 0.81) to Time 2 (M = 2.07, SD = 0.73; $t(59)$ = -3.504, p = .001) and from Time 1 to Time 3 (M = 2.20, SD = 0.68; t (59) = -4.506, p <.001) for the experimental group. No significant changes in resource use were observed from Time 2 to Time 3 for the experimental group. No significant changes were observed between any increments for the control group. These findings lend support for hypothesis 8.

Strain. No significant changes in employees' self-reported strain were observed between any of the time increments for either the experimental group or the control group. These findings do not support hypothesis 9.

Discussion

Previous intervention research on workplace mental health training has relied heavily upon self-reported evaluation methods (Dimoff et al., 2015; Kitchener & Jorm, 2002, 2004, 2008). Similarly, much existing research has focused on the reduction of stigma, with attitudes and beliefs being primary targets of change (Corrigan et al., 2002; Corrigan & Matthews, 2005; Dimoff et al., 2015; Pinfold et al., 2005). The current longitudinal study extends this existing workplace mental health literature by investigating the direct impact of training on leaders' behaviors and the indirect impact of training on employees' behaviors related to the use of resources designed to support health and wellbeing.

In the current study, I extended findings from Dimoff et al. (2015), demonstrating that workplace mental health training for leaders can significantly impact leaders' behaviors, not merely their attitudes or beliefs. Compared to leaders who did not participate in the mental health awareness training (MHAT), leaders who participated in the training a) experienced improvements in their ability to recognize warning signs of deteriorating employee mental health, b) engaged in significantly more mental health promotion behaviors and activities in the workplace, and c) took more comprehensive action to direct employees towards available resources. As a result, employees whose leaders attended the training experienced increased willingness to seek out resources and reported to have used workplace resources more frequently than their colleagues whose leaders had not attended the training.

These findings are consistent with the pattern of change proposed by the resource utilization model (RUM), whereby leaders who both recognize and address changes in their employees (proposition 1) are likely to direct employees towards potential resources (proposition 2; Dimoff & Kelloway, in press). In turn, employees whose leaders openly communicate about mental health and available resources were more likely to seek out and use resources (proposition 3), such as Human Resources EAPS. Recently, Dimoff (2013) conjectured that employees' mental health may be struggling because leaders do not possess "the appropriate knowledge of mental health and do not feel confident in their abilities to engage with employees or discuss mental health issues at work" (p. 23). Yet, findings from the present study suggest that leaders may no longer be held back by stigma or a lack of knowledge. Rather, they may lack the skills to be able to enact this

knowledge. The significant improvements in leaders workplace mental health promotion behaviors, combined with their increased likelihood of showing individualized concern for employee wellbeing, suggests that leaders can be trained or taught to apply their knowledge of mental health with observable outcomes.

In recent years, anti-stigma campaigns have dominated popular media (e.g., Bell Canada's 'Let's Talk' talk and text campaign) and have been the focal-point for many national and local mental health promotion programs (e.g., the Global Anti-Stigma Alliance, with members from the UK, Canada, the United States, Australia, New Zealand, and Denmark). The rather low levels of stigma among leaders at the onset of this study suggest that national and local efforts to reduce the stigma surrounding mental health may be proving fruitful. However, the significant change in behavior observed for leaders who attended the training, but the lack of change among leaders who did not attend the training, indicates that reductions in stigma may be insufficient for changing behavior within workplace settings.

For reductions in stigma to be most effective, leaders must also have the skills to recognize and assist employees with mental health concerns (Jané-Llope et al., 2003; Vuori et al., 2012). By providing leaders with information on the specific warning signs to watch for, leaders seem to be in a better position to be able to recognize when employees are struggling. Concurrently, by providing leaders with the skills to intervene once they have recognized these signs, leaders seem to be in a better position to help put employees in touch with support and mental health resources. My results suggest that a three-hour mental health awareness training is capable of significantly changing leaders'

behaviors over the course of a three-month time period. From a practical perspective, such findings are of marked interest. While previous research demonstrated that the MHAT could lead to significant changes in leaders' knowledge and attitudes up to two-months post-training, findings from the present study demonstrate the impact of the training on leaders' behaviors (as reported by employees) up to three-months post-training. This extension of previous findings indicates that a customized, three-hour training program designed for leaders may be adequate in changing leaders' behaviors substantially enough that employees are capable of observing such changes.

Interestingly, while employees and leaders reported significant changes in leaders' general mental health promotion behaviors, no changes were observed or reported for leaders' personal support behaviors (e.g., "intervened when I noticed one of my employees seemed stressed"). It is possible that these behaviors were not warranted or were very infrequent within the short time period of the study. For instance, although employees may have recognized that their leaders were putting forth greater effort to promote mental health and mental health resources, employees may not have personally experienced a situation that required their leader to take action and suggest resources. Thus, while the employees who responded to the surveys may have observed changes in their leaders more general behaviors surrounding mental health, they did not necessarily experience any changes in their personal interactions with their leaders.

The lack of change among employee-reported strain is notable. Neither the experimental group nor the control group experienced changes in their strain levels throughout the duration of the study. Despite leaders in the experimental group receiving

the SOS and reporting to have observed more warning signs of strain or mental distress, this recognition did not seem to significantly reduce employees' strain levels. Perhaps this lack of change is a function of the length of this study, where a 12-week time period may not be sufficient to capture reductions in strain.

Although I was unable to use the control group to evaluate leaders' perceived utility of the SOS, the leaders who received the SOS as part of the MHAT reported high levels of use and satisfaction with use. The perceived utility of the SOS is critical to its transferability to leaders' daily work lives (Alliger et al., 1997; Blume et al., 2010). Individuals who believe that a tool is useful, reliable, and applicable are a) more likely to use the tool, and b) more likely to believe it is effective. Almost all leaders who received the SOS reported using the tool on a daily basis and claimed that the SOS made their jobs easier. Such findings lend practical support for the SOS as a tool that can be used and valued by leaders. While it was not possible to evaluate the direct impact of the SOS on the recognition process, leaders who participated in the training and received the SOS experienced significantly more positive outcomes than leaders within the control group, who did not have access to the SOS. Those who received the SOS a) reported observing significantly more behavioral warning signs within their employees, b) engaged in significantly more mental health promotion and employee-supportive behaviors, and c) referred employees to resources more frequently.

Limitations and Future Directions

Although the results from this study are promising, there are several limitations that warrant consideration and future exploration. First, the limited sample size makes it difficult to generalize results beyond that of the sample population. Both organizations used in this study were small to medium-sized organizations with the majority of their employees working in Canada and the United States. Thus, it may be difficult to generalize the findings from this study to leaders and employees within other countries, cultures, or organizations of different sizes. The relatively small sample size used within this study may also somewhat skew the interpretability of findings. Future studies should strive to survey more leaders and employees, and ideally, to survey equal numbers of employees per leader. In doing so, the possibility of skewed findings or non-generalizable findings can be lessened.

Similarly, a second limitation of this study was my use of two separate organizations. While differences between employees at each company were non-existent at Time 1, the use of separate organizations introduces the potential for unidentified and uncontrolled group differences that impact the change in the variables over time. The negligible differences between leaders at each company at Time 1 also pose a risk to the interpretability of the data. Although I controlled for the group differences by using the organizations as a covariate within the analyses, it is difficult to know with certainty that the statistical difference does not make a practical difference. Future studies should aim to replicate and extend findings from this study by using larger sample sizes from within one organization to reduce this risk.

A third limitation of this study was the relatively short time period of investigation. Although other studies have used similar or shorter time periods to detect attitudinal and behavioral changes (Barling, Weber, & Kelloway, 1996; Mullen & Kelloway, 2010), little information is known about the longevity of behavioral changes following a short, one-time intervention. The practical constraints of this study limited the time period for post-intervention evaluation, but future studies should investigate the extent of the lasting impacts of the training. Better understanding of how long impacts can last will likely provide insight into the mechanisms of behavioral change and provide practical information about when leaders may benefit from training "boosters" or follow-up sessions.

A fourth limitation of this study was the relatively limited use of validated measures. Given the very specific goals of this study, as well as practical constraints, I did not survey managers and employees on relevant variables, such as perceived support or psychological safety. Such measures would add value to the overall findings from this study, as they would extend the literature within those areas and provide support for the impact of the training on leader variables. Similarly, future studies should seek to gain more other-rated data from employees, using validated measures and objective data, such as actual EAP-usage. In this study, such data was unable to be traced specifically to the control and experimental groups, limiting my ability to understand the full impact of the training and the SOS. Similarly, although all leaders received mental health promotion materials prior to the scheduled training, only individuals within the experimental group received the SOS. As a result, only leaders in the experimental group were asked about

the utility of the SOS. Without data from the control group, it is difficult to disentangle the impacts of the training in comparison to the impacts of the SOS. Thus, I suggest that future research aim to evaluate perceived utility of the SOS within all groups and investigate utility as a mediating variable in the training transfer process, such that it may explain the impact of the training on leader behaviors and employee outcomes.

General Discussion

Findings from this dissertation provide insight into the process by which leaders can help facilitate resource-use among employees who are struggling with a mental health issue. First, qualitative data informed my understanding of the decision making process that leaders must engage in when recognizing and responding to employees who are struggling. Second, based on this understanding, a checklist-style scale was developed to help leaders recognize when employees may be struggling with a mental health problem. Third, I evaluated the validity of the newly developed scale as an other-rated measure of strain. Finally, the scale was used in conjunction with a training program; evaluative results demonstrated that up to three months after receiving the tool and the training, leaders recognized significantly more signs of struggle and engaged in more behaviors designed to promote and support employee mental health.

Managing employees who are struggling with a mental health problem or mental illness requires leaders to recognize warning signs, make decisions to intervene, take action, and provide continued to support to employees. Overall, findings point to the need to develop managers' leadership skills, in general, and to provide leaders with tools and education or training related to employee mental health. Tools and/or education, such as the SOS and MHAT, may help leaders manage the recognition-assistance process associated with the resource-utilization model of workplace mental health.

The hierarchical manager-employee relationship puts managers in a good position to influence employee behaviors. Given that supervisors and managers play a central role

in providing organizational rewards, facilitating resources, and administering discipline, leaders can be perceived as organizational agents of support (Wayne, Shore, & Liden, 1997)—gatekeepers to resources that can help employees, both professionally and personally. Typically, leaders are in a position where they have the opportunity to work with, and interact with, employees on a regular or semi-regular basis. As a result, leaders have the opportunity to get to know their employees and learn about their employees' regular or typical behaviors. In doing so, leaders have the opportunity to demonstrate various forms of social support, such as emotional support, when making an effort to get to know individual employees as people—not just as workers. Indeed, many employees report that they would welcome support from their managers, especially during times of difficulty (Irvine, 2011). Unfortunately, many managers lack the knowledge, skills, and confidence to recognize and provide assistance to struggling employees (Ipsos Reid, 2012; Thorpe & Chenier, 2011).

An overarching purpose of this dissertation was to evaluate the efficacy of the hypothesized resource utilization model (RUM), which posits that leaders can help facilitate resource-use among employees by a) recognizing warning signs of deteriorating mental health, b) identifying available resources, and c) helping employees mobilize resources that may be most effective or appropriate (Dimoff & Kelloway, in press). Findings from this dissertation lend support for the RUM. Specifically, findings from study 2 and 3 support proposition 1 of the resource utilization model (RUM), and suggest that warning sign recognition is a critical first-step in the resource-mobilization process and that adequate tools and training can help provide leaders with the necessary

knowledge and skills to take action. If an employee's workplace behavior changes noticeably, such as missing deadlines, withdrawing socially, or being absent repeatedly, managers may be able to recognize these as warning signs of deteriorating mental health (Dimoff & Kelloway, in press). Recognizing changes in "normal" or "typical" behavior may be a first step towards helping an employee recognize that he/she is struggling and could benefit from additional resources. For example, if a manager notices that an employee is abnormally inattentive in meetings or seems to be neglecting personal hygiene, a manager may address these issues professionally and compassionately by bringing these issues to the employee's attention, asking the employee if he/she needs help, and making available resources more accessible (e.g., EAP information, workplace redistribution options, accommodation possibilities, etc.; Dimoff & Kelloway, in press). As a result, managers may be able to recognize when employees are struggling or engaging in maladaptive coping behaviors at work—even when the employees themselves are not able to recognize the warning signs in their own behaviors.

Findings from study 4 also lend support for the second and third propositions of RUM. In study 4, employees whose leaders attended training became more willing to seek out and actually use available resources. Managers will be best able to address mental health issues with employees if they are supportive, are perceived to value health and wellbeing, and demonstrate individualized consideration for employees (Anderson & Williams, 1996; Milliken, Morrison, & Hewlin, 2003; Saunders et al., 1992). Results from study 1 reveal that managers who have good relationships with their employees experience less uncertainty surrounding warning sign recognition and subsequent action.

This finding suggests that the management style leaders have prior to an employee developing a mental health issue may impact the success of warning sign recognition and action when an employee does develop a mental health issue. This finding is supported by results from study 3 that demonstrate when leaders engage in behaviors that show personal concern for their employees, employees are more likely to engage in resource-seeking behaviors.

Managers may be able to further facilitate the resource-utilization process by destigmatizing resources and by bringing awareness to resources that may be more appropriate under different circumstances. For instance, EAPs may be ideal for employees who are struggling with problems at home and would like additional support from a counselor or would appreciate referral to a psychologist. On the other hand, EAP may not be inappropriate for someone who is already diagnosed with a mental illness and requires temporary accommodation from the workplace. In this scenario, Human Resources may serve as a better resource for the employee. In both situations, managers are facilitating the opportunity for employees to access resources. As contended by Zellars, Hockwarter, Lanivich, Perrewe, and Ferris (2011), some individuals (e.g., managers) within organizations are endowed with more resources than others (e.g., employees), putting them in a position where they can support and account for those who are less resource endowed.

Ultimately, findings from this doctoral dissertation demonstrate that leaders can help combat low resource-utilization rates among employees by engaging in more supportive behaviors, by becoming more aware of the warning signs of deteriorating

mental health, and by suggesting available resources to struggling employees. In doing so, leaders help to initiate a resource utilization process whereby employees' resource-use increases substantially over time. Increased resource-use has the potential to lead to considerable cost-savings for organizations that are already investing millions of dollars in mental health related resources that almost go entirely unused. Despite the high prevalence rates of mental illness and the availability of resources, many employees fail to utilize mental health resources provided by their employers. As a result, organizations and their employees suffer.

Hopefully, with a little help from their leaders, employees will become more knowledgeable about resources, become more willing to seek out resources, and become able to use resources freely and without fear of negative repercussions.

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Table 1

Study 1 Demographics

	n	%	*M (SD)*
Sex			
Male	9	56.25	
Female	7	43.75	
Age			46.56 (10.68)
Industry employed in			
Education and health services	4	25	
Trade, transportation, and utilities	3	18.75	
Professional and business services	6	37.5	
Leisure and hospitality	3	18.75	
Education			
Diploma/certificate	3	18.75	
Undergraduate degree	5	31.25	
Graduate or professional degree	8	50	
Years in Management			16.19 (11.11)
5-10	7	43.75	
11-15	1	6.25	
16-20	4	25	
>20	4	25	
Number of Direct Reports (at present time)			14.65(13.06)
1-5	3	18.75	
6-10	6	37.5	
11-15	2	12.5	
16-20	2	12.5	
21-25	1	6.25	
>25	2	12.5	
Number of Direct Reports (total throughout career)			45.38 (45.49)
1-25	6	37.5	
26-50	4	25	
51-75	2	12.5	
76-100	1	6.25	
>100	3	18.75	

Table 2

Study 1 Coding framework

Framework	Code
Warning Recognition	Uncharacteristic or atypical behavior
	Patterns of uncharacteristic behavior
	Patterns of absenteeism around weekends
	Absenteeism
	Leaving early from work
	Coming into work at odd hours
	Repeatedly sick or complaining of being sick
	Physical health problems
	Performance problems
	Forgetfulness
	Lack of personal insight
	Erratic behaviors
	Emotional outbursts-both positive and negative
	Erratic or strange communication
	Expression of stress or exhaustion
	Turnover intentions
	Frequent accidents at work
	Rude and inconsiderate
	Stopped engaging with others
	Apathy towards work and others
	Withdrew from peers
	Workplace interactions deteriorated
	Gossip from coworkers or other employees
	Previous disability experience(s)
	Previous addiction issue(s)
	Expression of desire or intent to hurt self
	Personal hygiene issues
	Signs that were difficult to pinpoint
	Signs that were uncomfortable to address

Table 2 cont.

Study 1 Coding framework

Framework	Code
Decision Making	Formal health evaluation process
	Human Resources (HR)
	Existing policies and procedures
	On-site nurse or physician
	Managers
	Coworkers and peers
	Lack of resources
	Resources outside the workplace
	Programs inside the workplace
	Performance or disciplinary procedures
Action	Human resources support
	Administrative processes and support
	Written performance and disciplinary procedures
	Informal address of performance issues
	Advice from upper management and peers
	Referral to outside resources (e.g., doctor)
	Referral to internal resources (e.g., EAP)
	Provided accommodations
	Pointing individual in the right direction
	1-on-1 meetings with employee
	Checking in with employee
	Insurance or benefits
	Career counseling or coaching

Table 2 cont.

Study 1 Coding framework

Framework	Code
Outcomes	Temporary behavior change
	Received counselling
	Followed up with employee
	Monitored employee behavior
	Defensiveness on behalf of employee
	Over-formalization created disconnect
	Improved relationship long-term (e.g., trust)
	Future disability usage increased
	Help-seeking in the future
	Issue(s) did not escalate
	Less stigma about mental health in workplace
	Perceived conflict of interest with HR
Responsibility	Managers need to recognize changes
	Employees are responsible for themselves
	Managers need to have training to recognize
	Managers are in the right role to intervene
	Training and education is needed
	Human resources needs to communicate
	Human resources needs to provide guidance for action
	Organizational support must be present
	Higher-level management support must be vocal
	Anyone in direct or frequent contact with person is responsible
	Tools are needed for everyone to be responsible

Table 3

Study 1 Theme, subtheme, and code descriptions

Theme	Subtheme	Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Recognition																	
		Atypical behavior	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Behavior patterns		X			X	X	X		X	X			X	X	X
		"Struggling"	X		X	X		X	X		X	X			X		
	Emotional Outbursts				X	X	X	X				X	X	X	X	X	X
		Erratic behavior			X	X	X	X				X	X			X	
		Expressed stress				X		X					X	X	X		X
		Turnover intent						X					X	X	X		
		Intent to harm self						X							X		
		Hygiene issues				X	X	X					X				
	Withdrawal			X	X	X	X	X	X	X	X		X	X	X		
		Rudeness		X	X		X				X						
		Social withdrawal		X	X	X	X	X	X	X			X		X		
		OCB withdrawal					X		X	X				X	X		
	Attendance		X	X	X	X	X	X			X	X	X	X	X	X	X
		Absenteeism	X														X
		Leaving early				X	X	X				X	X	X		X	
		Arriving late				X	X					X		X			
		Odd hours			X	X											
		Sick	X	X							X				X	X	X
	Performance		X	X			X			X	X					X	
		Poor performance	X	X		X	X			X	X				X	X	
		Forgetful	X	X			X			X	X						

Table 3 cont.

Study 1 Theme, subtheme, and code descriptions

Theme	Subtheme	Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Decisions																	
	Management Style		X		X	X	X	X	X		X	X	X	X	X		X
	Resources		X		X	X	X		X	X	X	X	X	X		X	X
		Formal procedure	X		X					X	X					X	X
		Human Resources	X		X				X	X	X		X	X		X	X
		Existing policies	X		X								X			X	X
		On-site doctor							X		X	X				X	X
		Coworkers/peers					X				X	X		X			
		Personal resources					X										
	Tools and Training		X			X	X				X						
Actions																	
	Intervention Formality		X	X	X		X	X		X	X		X	X	X	X	
		HR support	X	X	X					X	X		X	X	X	X	
		Existing policies	X		X		X									X	
		Issue severity		X							X					X	
	Ongoing Action			X	X	X	X	X		X	X		X	X		X	X
		Resource referral			X			X								X	X
		Accommodation			X			X								X	X
		1-on-1 meeting		X	X	X	X	X		X	X	X	X	X		X	X

Table 3 cont.

Study 1 Theme, subtheme, and code descriptions

Theme	Subtheme	Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Outcomes																	
		Behavior change			X		X	X			X	X		X			X
		Resource-use						X				X				X	X
		Future problems		X	X		X								X		
		Better relationship						X		X		X	X				X
		Disability leave						X					X		X	X	
		Help-seeking								X		X	X	X			X
		Reduced stigma									X						
	Perceptions of Responsibility		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Manager duty	X	X		X	X	X	X	X	X	X	X	X		X	X
		Coworker duty				X	X	X	X	X	X	X	X			X	
		Employee duty				X	X	X	X	X			X			X	
		Training needed	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Employer duty	X	X				X	X	X		X					

Table 4

Study 2 Demographics

Study Variable	*n*	*%*	*M*	*SD*
Age			47.3	18.81
Sex				
Male	197	43.5		
Female	255	56.3		
Personal Experience with mental health problems				
Yes	38	8.4		
No	404	89.2		
Prefer not to disclose	11	2.4		
Education				
Less than Grade 12	8	1.8		
High School Diploma	74	16.3		
Trade Certificate	25	5.5		
College Diploma	120	26.5		
Bachelor's Degree	173	38.2		
Post-Graduate or Professional Degree	53	11.7		
Tenure			9.28	8.05
Management Position				
Yes	147	32.5		
No	306	67.5		

Table 5

Study 2 Exploratory Factor Analysis (EFA) item loadings

Item	Expressions of Distress (α = .87)	Withdrawal (α = .91)	Extreme Behaviors (α = .78)	Attendance (α = .80)	Performance (α = .84)
…expressed being unhappy at work	0.823				
…expressed wanting to quit	0.763				
…mentioned how stressed she/he was	0.654				
…cried at work	0.537				
…mentioned problems at home	0.525				
…went home from work early	0.585				
…withdrew from coworkers at work		0.759			
…withdrew from social activities		0.743			
…didn't engage in normal work activities		0.725			
…expressed desire to hurt self/others			0.696		
…expressed desire to commit suicide			0.683		
…acted out at work (e.g., theft, bullying)			0.598		
…neglected personal hygiene			0.558		
…was impaired or brought alcohol/drugs to work			0.523		
…was absent from work				0.827	
…was sick				0.667	
…was late to work				0.617	
…did not perform to his/her usual standards					0.734
…failed to meet goals or requirements (e.g., deadlines)					0.579
…was forgetful					0.495

Table 6
Study 2 Confirmatory Factor Analysis (CFA) fit indices

Model	CFI	RMSEA (90% CI)	SRMR	χ_2	df
1-Factor	.698	.151 (.143-.160)	.097	1035.22**	170
4-Factor	.800	.129 (.119-.139)	.090	682.97**	146
5-Factor	.865	.104 (.095-.114)	.082	546.38**	160
5-Factor, hierarchical	.856	.106 (.097-.116)	.088	577.32**	165
5-Factor, bifactor	.931	.075 (.064-.085)	.055	333.75**	150
5-Factor, bifactor, full sample	.944	.066 (.059-.073)	.047	446.67**	150

**p<.001

Table 7

Study 2 Descriptive statistics by health status group

Factor	Group	*M*	*SD*
Expressions of Distress	Disability Leave (*N* = 131)	2.18	0.97
	No Disability Leave (*N* = 169)	2.02	0.78
	Healthy (*N* = 153)	1.4	0.51
Withdrawal	Disability Leave (*N* = 131)	2.46	1.12
	No Disability Leave (*N* = 169)	2.25	0.98
	Healthy (*N* = 153)	1.34	0.64
Extreme Behavior	Disability Leave (*N* = 131)	1.32	0.57
	No Disability Leave (*N* = 169)	1.33	0.49
	Healthy (*N* = 153)	1.04	0.16
Attendance	Disability Leave (*N* = 131)	2.59	0.94
	No Disability Leave (*N* = 169)	2.32	0.78
	Healthy (*N* = 153)	1.77	0.61
Performance	Disability Leave (*N* = 131)	2.12	1.02
	No Disability Leave (*N* = 169)	1.91	0.83
	Healthy (*N* = 153)	1.27	0.45

Table 8

Study 2 Post-hoc comparisons between groups

Dependent Variable	Comparisons	Mean Difference	Std. Error	95% CI	
				Lower Bound	Upper Bound
Expressions of Distress	Disability vs. No Disability	0.162	0.089	-0.047	0.372
	Disability vs. Healthy	.7799*	0.091	0.566	0.994
	No Disability vs. Healthy	.6177*	0.085	0.417	0.818
Withdrawal	Disability vs. No Disability	0.206	0.108	-0.048	0.460
	Disability vs. Healthy	1.1185*	0.110	0.859	1.378
	No Disability vs. Healthy	.9124*	0.104	0.669	1.156
Extreme Behaviors	Disability vs. No Disability	-0.010	0.051	-0.130	0.109
	Disability vs. Healthy	.2816*	0.052	0.159	0.404
	No Disability vs. Healthy	.2920*	0.049	0.177	0.407
Attendance	Disability vs. No Disability	.2773*	0.091	0.064	0.491
	Disability vs. Healthy	.8238*	0.093	0.606	1.042
	No Disability vs. Healthy	.5465*	0.087	0.342	0.751
Performance	Disability vs. No Disability	0.212	0.092	-0.005	0.429
	Disability vs. Healthy	.8538*	0.094	0.632	1.076
	No Disability vs. Healthy	.6415*	0.088	0.434	0.849

*. The mean difference is significant at the .05 level.

Table 9

Study 3 Demographics

	Participant Group					
	Direct Participants (N = 30)			Indirect Participants (N = 30)		
Study Variable	*n*	*%*	*M (SD)*	*n*	*%*	*M (SD)*
Country						
Canada	27	90		27	90	
United States	3	10		3	10	
Age			36 (8.5)			32 (10.4)
Sex						
Male	15	50		12	40	
Female	15	50		18	60	
Education						
Less than Grade 12	0	0			0	
High School Diploma	1	3.3			0	
Trade Certificate	0	0			0	
College Diploma	5	16.7		6	20	
Bachelor's Degree	16	53.3		18	60	
Post-Graduate Degree	8	26.7		6	20	
Tenure (in years)			10 (7.3)			9.5 (8.7)
Management Position						
Yes	9	30		7	23.3	
No	21	70		23	76.7	
Industry						
Administrative Services	3	10		3	10	
Education	5	16.7		5	16.7	
Law Enforcement	4	13.3		4	13.3	
Business Consulting	5	16.7		5	16.7	
Healthcare	6	20		6	20	
Finances and Accounting	4	13.3		4	13.3	
Information Technology	3	10		3	10	

Table 10

Study 3 Correlations between study variables

Variables	*M(SD)*	1	2	3	4	5	6	7	8	9	10
1. Sex of DP	–	–									
2. Sex of IP	–	.408*	–								
3. Relationship	–	-0.233	.076	–							
4. Expressions of Distress	2.09 (.88)	0.115	-.112	.002	**(.83)**						
5. Social Withdrawal	1.92 (.87)	-0.22	-.153	.048	.556**	**(.79)**					
6. Extreme Behaviors	1.19 (.23)	-0.15	-.147	.136	.511**	.556**	**(.69)**				
7. Attendance	1.89 (.73)	0.123	-.157	-.057	.708**	.607**	.425**	**(.66)**			
8. Performance	2.01 (.76)	-0.015	.043	.151	.582**	.576**	.647**	.659**	**(.68)**		
9. SOS-20 Items	1.80 (.56)	0.009	-.125	-.016	.904**	.783**	.682**	.843**	.801**	**(.88)**	
10. Strain	2.65 (.64)	-0.042	0.058	-0.005	.590**	.713**	.686**	.371*	.668**	.718**	**(.88)**

Cronbach's alpha (α) scores are shown in parentheses on the diagonal; *p <.05; **p < .01

DP = direct participant; IP = indirect participation

Table 11

Study 4 Leader demographics

	Condition					
	Experimental Group (N = 24)			Control Group (N = 13)		
Study Variable	*n*	*%*	*M (SD)*	*n*	*%*	*M (SD)*
Age			42.58 (8.82)			44 (10.77)
Sex						
Male	15	62.5		9	69.2	
Female	9	33.3		4	30.8	
Personal experience						
Yes	4	16.7		3	23.1	
No	18	75		9	69.2	
I don't know	2	8.3		1	7.7	
Professional experience						
Yes	4	16.7		3	23.1	
No	11	45.8		6	46.1	
I don't know	9	37.5		4	30.8	
Tenure (years)			8.96 (7.46)			7.64 (7.80)
Tenure as Leader (years)			11.83 (8.23)			12.75(8.41)
Department						
Marketing and Sales	2	8.3		1	7.6	
Operations	9	37.5		3	23.1	
Human Resources	2	8.3		2	15.4	
Accounting and Finance	2	8.3		3	23.1	
R&D	6	25		2	15.4	
Other	3	12.5		2	15.4	

Note: Personal experience = personal experience with mental health problems; Professional experience = professional experience with mental health problems

Table 12
Study 4 Employee demographics

	Condition					
	Experimental Group (N = 60)			Control Group (N = 22)		
Study Variable	*n*	*%*	*M (SD)*	*n*	*%*	*M (SD)*
Age			40.74(11.18)			38.62(12.91)
Sex						
Male	19	31.7		8	36.4	
Female	41	68.3		14	63.6	
Personal experience						
Yes	5	8.3		1	4.5	
No	39	65		11	50	
I don't know	16	26.7		10	45.5	
Professional experience						
Yes	12	20		3	13.6	
No	41	68.3		15	68.2	
I don't know	7	11.7		4	18.2	
Tenure (years)			6.01(5.31)			3.55(4.22)
Time with Supervisor (years)			3.26(4.16)			3.19(3.75)
Department						
Marketing and Sales	10	16.6		4	18.2	
Operations	18	30		4	18.2	
Human Resources	6	10		4	18.2	
Accounting and Finance	7	11.7		3	13.6	
R&D	12	20		4	18.2	
Other	7	11.7		3	13.6	

Note: Personal experience = personal experience with mental health problems; Professional experience = professional experience with mental health problems

Table 13

Study 4 Correlations between leader variables (experimental group)

Variables	*M(SD)*	1	2	3	4	5	6	7	8	9
1. Sex	—	—								
2. Age	45.58 (8.82)	.182	—							
3. Tenure	8.96 (7.46)	.246	.228	—						
4. Tenure as Leader	11.83 (8.23)	-.212	.702**	.093	—					
5. Personal experience	—	.505*	.095	.314	-.048	—				
6. Professional experience	—	.226	.315	.144	.281	.410*	—			
7. Stigma-T1	1.89 (.33)	.182	.295	.256	.220	.390	.364	**(.68)**		
8. Stigma-T2	1.82 (.39)	.298	.425*	.177	.334	.323	.358	.675**	**(.76)**	
9. Stigma-T3	1.77 (.44)	.237	.554**	.069	.573**	.388	.356	.676**	.805**	**(.80)**
10. General Behaviors-T1	1.55 (.56)	.082	-.129	-.029	-.008	-.225	-.235	-.458*	-.371	-.241
11. General Behaviors-T2	2.57 (.75)	-.304	-.131	.311	.170	-.164	-.055	-.238	-.203	-.267
12. General Behaviors-T3	2.61 (.87)	-.012	.029	.298	.082	-.093	.233	-.132	-.257	-.223
13. Personal-T1	2.79 (.78)	.274	-.062	.039	-.028	-.073	-.074	-.384	-.161	-.124
14. Personal-T2	2.82 (.84)	-.112	-.013	.205	.128	.116	.046	-.044	-.162	-.069
15. Personal-T3	2.91 (.86)	-.015	-.110	.092	.089	.119	-.090	-.004	-.130	.002
16. Sign Recognition-T1	1.52 (.42)	.043	.022	.143	.164	.085	-.248	-.278	-.158	-.096
17. Sign Recognition-T2	1.49 (.37)	-.081	.015	.314	.155	.216	-.118	-.017	-.139	-.077
18. Sign Recognition-T3	1.83 (.44)	.046	-.071	.095	.104	-.049	-.277	-.217	-.175	-.115
19. Action-T1	1.63 (.65)	.291	.215	.044	.270	.211	-.012	.474*	.300	.473*
20. Action-T2	2.38 (.77)	-.088	.184	.199	.388	.266	.166	.228	.180	.394
21. Action-T3	2.29 (.86)	-.085	.126	-.055	.416*	-.185	-.243	-.136	-.142	.197

Table 13 cont.

Study 4 Correlations between leader variables (experimental group)

Variables	10	11	12	13	14	15	16	17	18	19	20	21
10. General Behaviors-T1	**(.85)**											
11. General Behaviors-T2	.478*	**(.80)**										
12. General Behaviors-T3	.454*	.772**	**(.88)**									
13. Personal-T1	.684**	.395	.456*	**(.81)**								
14. Personal-T2	.273	.682**	.664**	.333	**(.81)**							
15. Personal-T3	.252	.580**	.556**	.265	.900**	**(.86)**						
16. Sign Recognition-T1	.523**	.255	.118	.489*	.337	.380	**(.91)**					
17. Sign Recognition-T2	.470*	.284	.174	.376	.400	.334	.876**	**(.87)**				
18. Sign Recognition-T3	.494*	.253	.152	.567**	.369	.457*	.879**	.776**	**(.91)**			
19. Action-T1	.151	-.234	-.192	.140	.053	.149	.323	.263	.261	—		
20. Action-T2	.159	.465*	.504*	.245	.632**	.612**	.094	.301	.206	.120	—	
21. Action-T3	.460*	.387	.299	.387	.302	.464*	.381	.180	.429*	.205	.485*	—

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Note. Cronbach's alpha (α) scores are shown in parentheses on the diagonal; T1 = Time 1, baseline; T2 = Time 2, 6 week follow-up; T3 = Time 3, 12 week follow-up, *p < .05; **p < .01; Personal = leaders' behaviors towards individual employees

Table 14

Study 4 Correlations between leader study variables (control group)

Variables	*M(SD)*	1	2	3	4	5	6	7	8	9
1. Sex	—	—								
2. Age	44 (10.77)	.373	—							
3. Tenure	7.64 (7.80)	-.326	.531	—						
4. Tenure as Leader	8.41)	-.293	.929**	.586	—					
5. Personal experience	—	-.333	-.112	.030	.114	—				
6. Professional experience	—	.002	.377	-.395	-.395	.001	—			
7. Stigma-T1	1.88 (.41)	-.431	-.248	-.300	-.432	.144	.512	**(.80)**		
8. Stigma-T2	1.85 (.38)	-.524	-.150	-.054	-.237	.326	.469	.897**	**(.79)**	
9. Stigma-T3	1.90 (.36)	-.467	-.281	-.198	-.393	.196	.443	.859**	.937**	**(.72)**
10. General Behaviors-T1	1.54 (.55)	-.008	-.655*	-.031	-.618*	.363	.061	.137	.131	.319
11. General Behaviors-T2	1.56 (.58)	-.048	-.669*	-.373	-.615*	.431	.088	.127	.112	.268
12. General Behaviors-T3	1.60 (.54)	-.088	-.560	-.273	-.451	.518	.046	.037	.148	.294
13. Personal Behaviors-T1	2.42 (.87)	.174	-.736**	-.271	-.665*	.232	.373	.356	.476	.640*
14. Personal Behaviors-T2	2.52 (.81)	.176	-.705**	-.324	-.714**	-.016	.430	.385	.421	.645*
15. Personal Behaviors-T3	2.54 (.89)	.086	-.745**	-.249	-.714**	.143	.369	.388	.460	.658*
16. Sign Recognition-T1	1.45 (.32)	.239	.017	.266	.153	-.112	.176	-.221	-.135	-.072
17. Sign Recognition-T2	1.44 (.34)	.173	.113	.317	.270	-.038	.147	-.249	-.144	-.125
18. Sign Recognition-T3	1.52 (.34)	.016	.266	.278	.386	.047	.010	-.127	-.047	-.035
19. Action-T1	1.69 (.75)	-.333	.112	.005	.276	.467	-.245	-.277	-.050	-.024
20. Action-T2	1.54 (.78)	-.444	.362	.040	.392	.317	.155	.044	.210	.213
21. Action-T3	1.46 (.52)	-.577	.145	-.143	.176	.577*	.001	.235	.249	.274

Table 14 cont.

Study 4 Correlations between leader variables (control group)

Variables	10	11	12	13	14	15	16	17	18	19	20	21
10. General Behaviors-T1	**(.86)**											
11. General Behaviors-T2	.986**	**(.85)**										
12. General Behaviors-T3	.940**	.945**	**(.84)**									
13. Personal Behaviors-T1	.671*	.637*	.668*	**(.81)**								
14. Personal Behaviors-T2	.623*	.547	.563*	.925**	**(.81)**							
15. Personal Behaviors-T3	.718**	.654*	.675*	.963**	.973**	**(.86)**						
16. Sign Recognition-T1	-.146	-.237	-.102	.130	.333	.241	**(.85)**					
17. Sign Recognition-T2	.215	-.295	-.145	.037	.218	.143	.987**	**(.90)**				
18. Sign Recognition-T3	-.234	-.316	-.162	-.019	.168	.100	.906**	.937**	**(.89)**			
19. Action-T1	.317	.294	.434	.056	.010	.050	.134	.155	.189	—		
20. Action-T2	.156	.121	.321	.066	.147	.148	.362	.416	.543	.451	—	
21. Action-T3	.389	.377	.447	.085	.125	1.83	.112	.165	.395	.395	.780	—

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Note. Cronbach's alpha (α) scores are shown in parentheses on the diagonal; T1 = Time 1, baseline; T2 = Time 2, 6 week follow-up; T3 = Time 3, 12 week follow-up, *p < .05; **p < .01

Table 15

Study 4 Correlations between the employee variables (experimental group)

Variables	*M(SD)*	1	2	3	4	5	6	7	8	9
1. Sex	–	–								
2. Age	40.74 (11.80)	-.329	–							
3. Tenure	6.01 (5.31)	-.183	.216	–						
4. Tenure with Supervisor	3.26 (4.16)	-.164	.318*	.519**	–					
5. Personal experience	–	-.420**	.263*	.038	-.077	–				
6. Professional experience	–	-.295*	.161	-.061	-.065	.276*	–			
7. Resource Use-T1	1.55 (.81)	.243	-.003	.031	-.068	-.197	.028	–		
8. Resource Use-T2	2.07 (.73)	.210	-.141	-.014	-.067	-.038	-.151	-.091	–	
9. Resource Use-T3	2.20 (.68)	-.011	-.082	-.039	-.147	-.067	.132	-.110	.480**	–
10. Willingness-T1	3.22 (.80)	.191	.102	-.345**	-.315*	-.045	.219	.384**	-.229	-.093
11. Willingness-T2	3.67 (.66)	.115	.096	-.084	-.082	.042	.123	-.059	.233	.010
12. Willigness-T3	3.61 (.72)	.148	.121	-.250	-.279*	.011	.030	.142	.415**	.207
13. General Behaviors-T1	2.26 (1.11)	.101	-.260*	-.304*	-.352*	.003	.306*	.400**	.088	.118
14. General Behaviors-T2	2.77 (1.03)	-.004	-.176	-.129	-.225	-.066	.079	.237	.469**	.315*
15. General Behaviors-T3	2.91 (1.05)	.124	-.196	-.226	-.313*	-.071	.167	.122	.369**	.255*
16. Personal Behaviors-T1	3.41 (1.19)	.147	-.195	-.261*	-.173	-.077	.154	.490**	-.212	-.009
17. Personal Behaviors-T2	3.62 (.88)	.298*	-.229	-.301*	-.230	-.242	-.178	.230	.357**	.172
18. Personal Behaviors-T3	3.80 (.90)	.139	-.197	-.318*	-.129	-.167	.067	.252	.214	.046
19. Strain-T1	2.66 (.59)	.041	-.309*	.111	-.257*	-.257*	-.162	.006	-.208	-.160
20. Strain-T2	2.74 (.67)	-.173	-.228	.186	.017	.017	-.064	-.051	-.101	-.126
21. Strain-T3	2.75 (.61)	-.184	-.194	.298*	.037	.047	.003	.024	-.189	-.041

Table 15 cont.

Study 4 Correlations between employee variables (experimental group)

Variables	10	11	12	13	14	15	16	17	18	19	20	21
10. Willingness-T1	**(.68)**											
11. Willingness-T2	.388**	**(.64)**										
12. Willigness-T3	.389**	.615**	**(.63)**									
13. General Behaviors-T1	.481**	.265*	.235	**(.94)**								
14. General Behaviors-T2	.151	.281*	.277*	.671**	**(.91)**							
15. General Behaviors-T3	.239	.433**	.377*	.629**	.843**	**(.87)**						
16. Personal Behaviors-T1	.473**	.024	.039	.681**	.267*	.245	**(.87)**					
17. Personal Behaviors-T2	.316*	.304*	.392**	.598**	.710**	.642**	.452**	**(.68)**				
18. Personal Behaviors-T3	.262*	.283*	.327*	.555**	.526**	.591**	.417**	.700**	**(.80)**			
19. Strain-T1	-.287*	-.323*	-.400**	-.238	-.213	-.242	-.102	-.170	-.215	**(.73)**		
20. Strain-T2	-.237	-.211	-.287*	.005	.048	-.060	.039	.027	-.084	.659**	**(.80)**	
21. Strain-T3	-.167	-.320	-.308*	-.084	-.062	-.131	.019	-.178	-.205	.556**	.826**	**(.68)**

Note. Cronbach's alpha (α) scores are shown in parentheses on the diagonal; T1 = Time 1, baseline; T2 = Time 2, 6 week follow-up; T3 = Time 3, 12 week follow-up, *p < .05; **p < .01

Table 16

Study 4 Correlations between employee variables (control group)

Variables	*M(SD)*	1	2	3	4	5	6	7	8	9
1. Sex	–	–								
2. Age	38.62 (12.91)	-.266	–							
3. Tenure	3.55 (4.22)	-.285	.659**	–						
4. Tenure with Supervisor	3.19 (3.75)	-.258	.680**	.983**	–					
5. Personal experience	–	-.122	.565**	.341	.407	–				
6. Professional experience	–	-.370	.436*	.341	.335	.584**	–			
7. Resource Use-T1	1.73 (.83)	.061	.080	.046	.160	.215	.327	–		
8. Resource Use-T2	1.36 (.58)	.524*	.065	-.243	-.192	.030	.091	.117	–	
9. Resource Use-T3	1.32 (.57)	.518*	.064	-.218	-.170	-.057	.099	.092	.931**	–
10. Willingness-T1	3.05 (.71)	.301	-.035	.037	.146	-.041	-.237	.264	.149	.197
11. Willingness-T2	2.92 (.54)	.140	.082	.128	.203	.110	-.039	.199	.041	.030
12. Willigness-T3	3.15 (.87)	.082	.380	.416	.478*	.209	.176	.258	-.051	.090
13. General Behavior-T1	1.96 (1.23)	.383	-.357	-.262	-.223	.182	.099	.197	.145	.126
14. General Behavior-T2	1.95 (1.19)	.338	-.405	-.321	-.299	-.013	.192	.295	.215	.277
15. General Behavior-T3	2.04 (1.21)	.286	-.481	-.403	-.374	-.049	.163	.265	.237	.305
16. Personal Behavior-T1	3.56 (1.07)	.116	-.336	-.299	-.260	.158	.034	.045	.252	.164
17. Personal Behavior-T2	3.13 (1.30)	.366	-.524	-.466	-.410	-.060	.040	.144	.521*	.509*
18. Personal Behavior-T3	3.11 (1.29)	.236	-.439*	-.393	-.344	-.106	.153	.153	.418	.516*
19. Strain-T1	2.70 (.57)	.148	.075	.045	-.012	-.143	.058	-.284	.462*	.443*
20. Strain-T2	2.54 (.49)	.142	-.353	-.174	-.204	-.540**	-.343	-.021	.018	-.026
21. Strain-T3	2.46 (.37)	0.370	-.092	.037	.002	-.304	-.351	.009	.050	-.049

Table 16 cont.
Study 4 Correlations between employee variables (control group)

Variables	10	11	12	13	14	15	16	17	18	19	20	21
10. Willingness-T1	**(.64)**											
11. Willingness-T2	.608**	**(.58)**										
12. Willigness-T3	.532**	.774**	**(.63)**									
13. General Behavior-T1	.235	.427*	.246	**(.95)**								
14. General Behavior-T2	.256	.459*	.342	.881**	**(.95)**							
15. General Behavior-T3	.229	.424*	.312	.834**	.968**	**(.94)**						
16. Personal Behavior-T1	.235	.376	.152	.536*	.549**	.580**	**(.73)**					
17. Personal Behavior-T2	.327	.369	.053	.592**	.737**	.784**	.594**	**(.75)**				
18. Personal Behavior-T3	.351	.335	.171	.521*	.758**	.806**	.502*	.937**	**(.81)**			
19. Strain-T1	-.376	-.437*	-.270	-.369	-.346	-.231	-.196	-.095	-.122	**(.70)**		
20. Strain-T2	-.258	-.025	-.069	.022	.122	.197	.039	.112	.048	.277	**(.63)**	
21. Strain-T3	-.132	-.048	-.044	-.060	-.070	-.060	.124	-.229	-.358	.324	.499*	**(.65)**

Note. Cronbach's alpha (α) scores are shown in parentheses on the diagonal; T1 = Time 1, baseline; T2 = Time 2, 6 week follow-up; T3 = Time 3, 12 week follow-up, *p < .05; **p < .01

Table 17

Study 4 Univariate effects for repeated measures MANOVA (leaders)

	Experimental Group Mean (SD)			Control Group Mean (SD)				
Variable	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3	*F*	η^2
Stigma	1.89 (.33)	1.82 (.39)	1.77 (.44)	1.88 (.41)	1.85 (.38)	1.90 (.36)	1.20	.03
General Behaviors	1.55 (.56)	2.57 (.75)	2.61 (.87)	1.54 (.55)	1.56 (.58)	1.60 (.54)	17.26**	.33
Personal Behaviors	2.79 (.78)	2.82 (.84)	2.91 (.86)	2.42 (.87)	2.52 (.81)	2.54 (.89)	0.05	.00
Sign Recognition	1.52 (.42)	1.49 (.37)	1.83 (.44)	1.45 (.32)	1.44 (.34)	1.52 (.34)	8.76**	.20
Action	1.63 (.65)	2.38 (.77)	2.29 (.86)	1.69 (.75)	1.54 (.78)	1.46 (.52)	6.42**	.15

Note: All F's with 2, 158 degrees of freedom. ** $p < .01$; *$p < .05$

Table 18

Study 4 Univariate effects for repeated measures MANOVA (employees)

	Experimental Group Mean (SD)			Control Group Mean (SD)				
Variable	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3	*F*	η^2
Leaders' General Behaviors	2.26 (1.11)	2.77 (1.03)	2.91 (1.05)	1.96 (1.23)	1.95 (1.19)	2.04 (1.21)	5.70**	0.07
Leaders' Personal Behaviors	3.41 (1.19)	3.62 (.88)	3.80 (.90)	3.56 (1.07)	3.13 (1.30)	3.11 (1.29)	5.92**	0.07
Willingness	3.22 (.80)	3.67 (.66)	3.61 (.72)	3.05 (.71)	2.92 (.54)	3.15 (.87)	4.88**	0.06
Resource Utilization	1.55 (.81)	2.07 (.73)	2.20 (.68)	1.73 (.83)	1.36 (.58)	1.32 (.57)	10.92**	0.12
Strain	2.66 (.59)	2.74 (.67)	2.75 (.61)	2.70 (.57)	2.54 (.49)	2.46 (.37)	3.64*	0.04

Note: All F's with 2, 158 degrees of freedom. ** $p < .01$; *$p < .05$;
Willingness = employees' willingness to use available resources

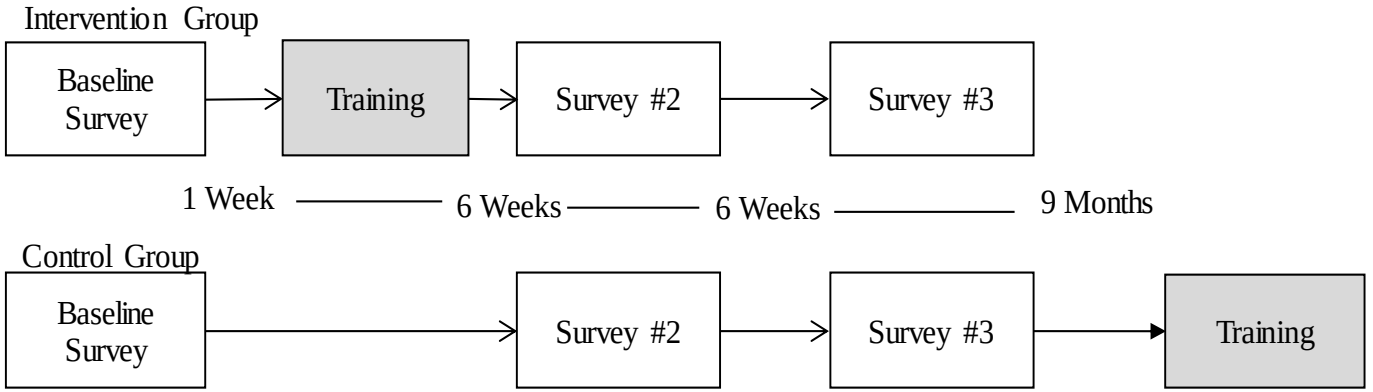

Figure 1. Study 4 experimental design

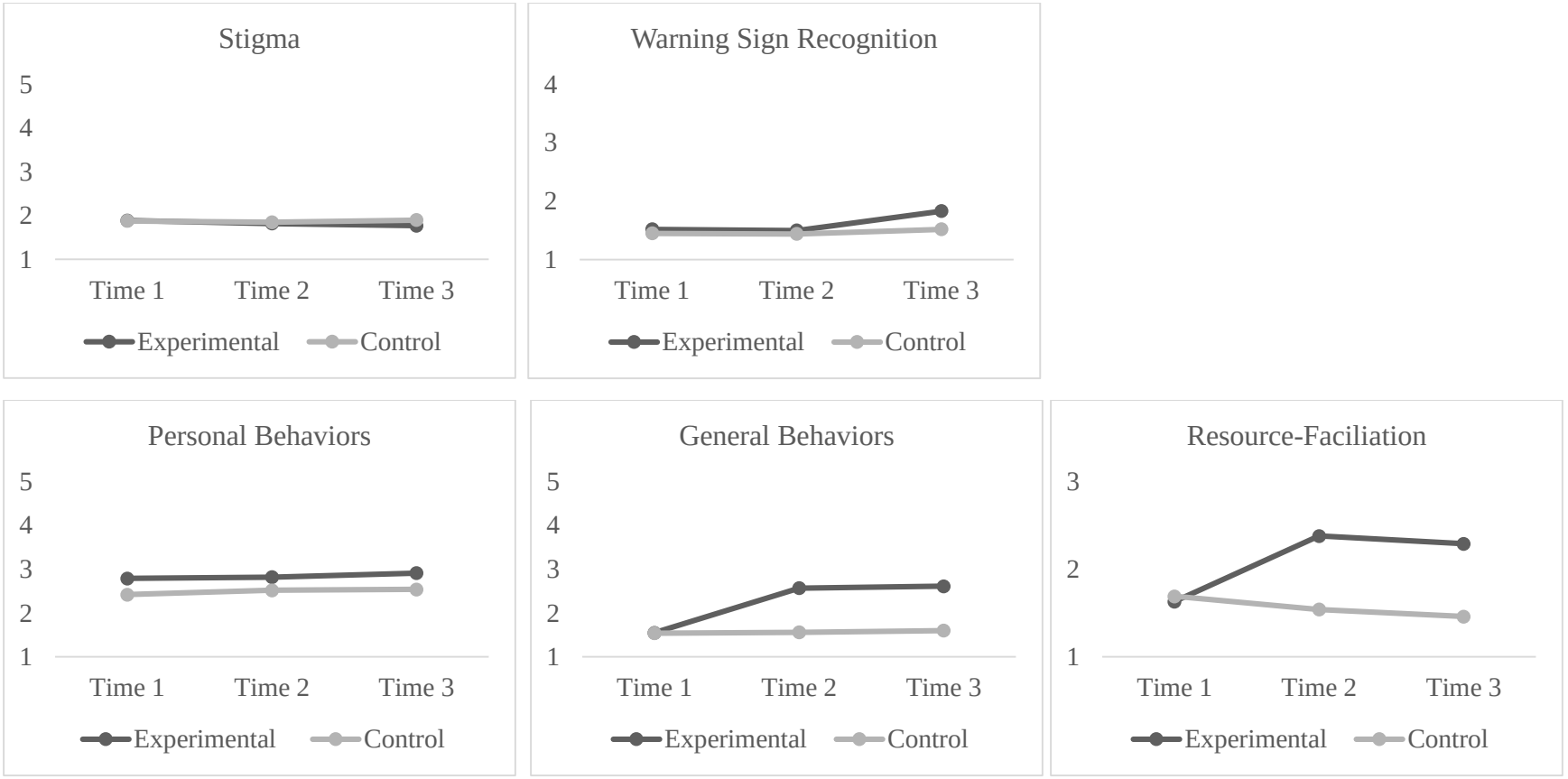

Figure 2. Changes in leader variables over time

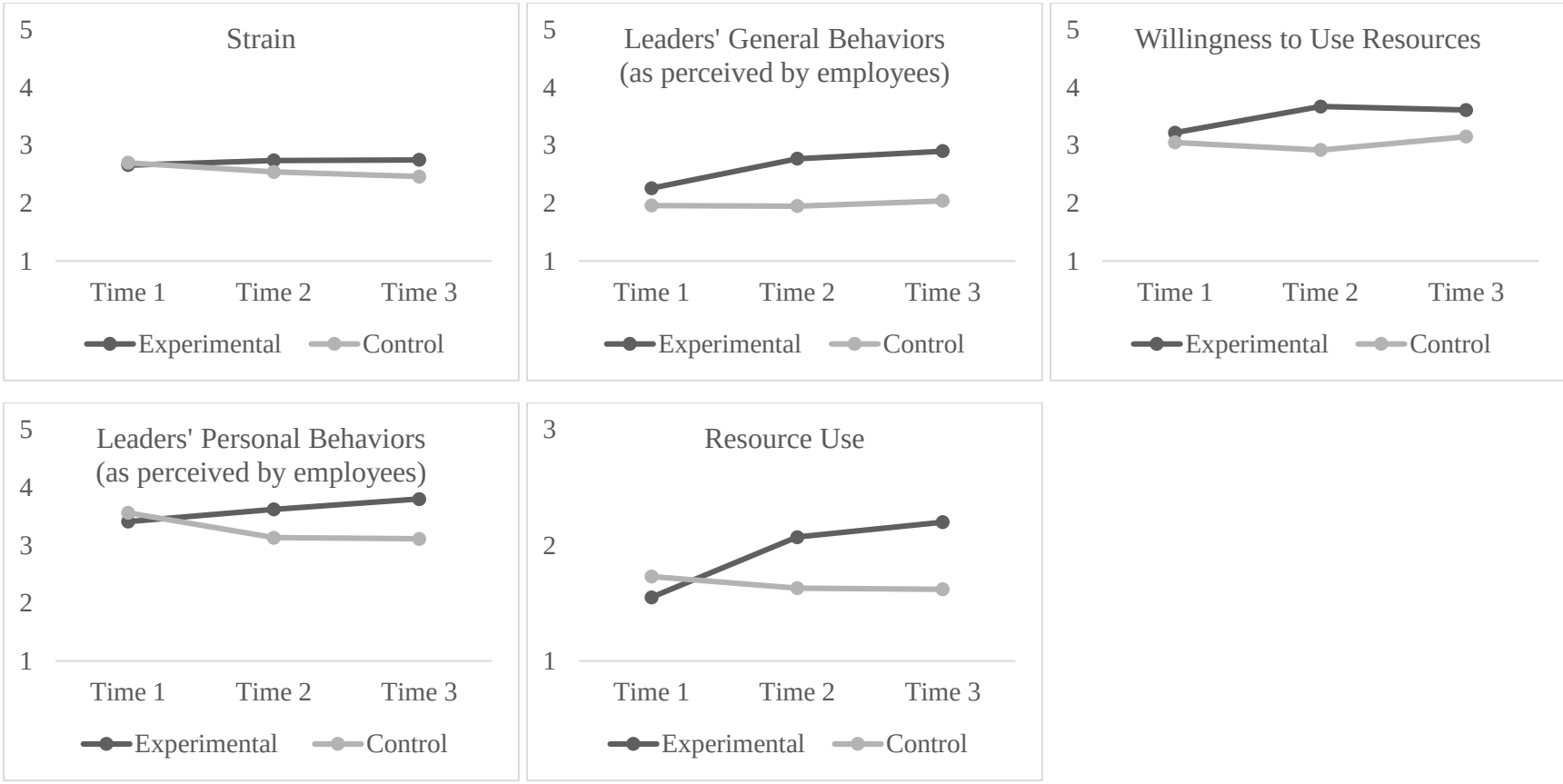

Figure 3. Changes in employee variables over time

Appendix A

Study 1 Interview Guide: Grand Tour Questions with Prompts

1. What changes in the employee's behavior, if any, did you observe while this employee was working for you?

   Prompt 1 (if needed): Can you describe the employee's behavior during a typical week before you noticed his/her behavior change?

   Prompt 2 (if needed): Can you describe the employee's behavior during a typical week after you noticed his/her behavior change?

2. How did this employee's behavior differ from that of other employees?

   Prompt 1 (if needed): Can you describe how the employee differed from someone in a similar position after you noticed the behavior changes?

3. How did you respond when you observed these behavior changes?

   Prompt 1 (if needed): Why did you take this action?

   Prompt 2 (if needed): Did you receive help or guidance from your employer or others in the organization? If so, from whom or what? How did you feel about the help or guidance? If not, how did you feel about not needing or receiving help or guidance?

   Prompt 3 (if needed): What, if anything, could you have done differently?

   Prompt 4 (if needed): What, if anything, could the organization have done differently?

4. What was the outcome of your response?

   Prompt 1 (if needed): How did your action impact the employee?

   Prompt 2 (if needed): How did your action impact you?

   Prompt 3 (if needed): How did your action impact your relationship with the employee?

   Prompt 4 (if needed): How did your action impact the workplace?

Appendix B

Signs of Struggle (SOS) 20-Item Scale

1. Expressed being unhappy at work
2. Expressed wanting to quit
3. Mentioned how stressed he or she was
4. Cried at work
5. Mentioned problems at home
6. Went home from work early
7. Withdrew from coworkers at work
8. Withdrew from social activities
9. Didn’t engage in normal work activities
10. Expressed desire to hurt self or others
11. Expressed thoughts about suicide
12. Acted out at work (e.g., theft, bullying)
13. Neglected personal hygiene
14. Was impaired or brought alcohol or drugs to work
15. Was absent from work
16. Was sick
17. Was late to work
18. Did not perform to usual standards
19. Failed to reach goals or requirements (e.g., deadlines)
20. Was forgetful

Appendix C

CFA Item Statistics

	Estimate					
Item	Bifactor	Expressed Distress	Withdrawal	Extreme Behavior	Attendance	Performance
…expressed being unhappy at work	0.595**	0.732**				
…expressed wanting to quit	0.591**	0.628**				
…mentioned how stressed she/he was	0.676**	0.295**				
…cried at work	0.557**	0.228**				
…mentioned problems at home	0.579**	0.217**				
…went home from work early	0.711**	0.133*				
…withdrew from coworkers at work	0.669**		0.553**			
…withdrew from social activities	0.754**		0.488**			
…didn't engage in normal work activities	0.779**		0.384**			
…expressed desire to hurt self/others	0.339**			0.706**		
…expressed desire to commit suicide	0.359**			0.651**		
…acted out at work (e.g., theft, bullying)	0.461**			0.445**		
…neglected personal hygiene	0.582**			0.363**		
…was impaired or brought alcohol or drugs to work	0.297**			0.462**		
…was absent from work	0.571**				0.829**	
…was sick	0.681**				0.404**	
…was late to work	0.648**				0.166*	
…did not perform to his/her usual standards	0.734**					0.596**
…failed to meet goals or requirements	0.734**					0.285**
…was forgetful	0.735**					0.171 [a]

Note: ** p < .001; *p = .001; [a]p = .002

Appendix D

Training Curriculum: 3-Hour MHAT for Leaders

Training Part 1: "What do you know?"

The first hour of the training revolves around "starting the conversation" about workplace mental health and presents a brief overview of the warning signs that managers/leaders should be recognizing. This section is highly interactive, starting with a 30 minute case study and follow-up discussion. The remaining 30 minutes of this section build upon the case study by using condensed brainstorming sessions, with the goals of:

1) Improving leaders' existing knowledge-base
2) Encouraging leaders to use existing knowledge and experience

The typical content of Part 1 focuses on five mental health issues that are most likely to affect the workplace: stress, burnout, depression, anxiety, and substance abuse. Suicide is also addressed.

Training Part 2: “Where do you go?”

The remaining part of the training focuses on "taking action". This part of the training is designed to empower leaders, build new skills, and help them tailor their existing skills to fit the context of employee mental health. To achieve this, the trainer uses interactive case studies and videos. Discussion among participants is also strongly encouraged. This provides the opportunity for active learning, skill building, and practice. The content of Part 2 surrounds three areas:

1. Assisting employees demonstrating warning signs (e.g., what to say to an employee; how to support the employee at work)
2. Accommodating and managing employees (e.g., accommodations to help the employee; available resources, such as EAP and disability leave)
3. Managing transitions (e.g., how to manage the return-to-work transition in the event that an employee has had to take disability leave)

Throughout Training

At all times throughout the training, the trainer encourages interaction, discussion, and questions. To remain within the scope of their role as a workplace leader/manager (i.e., rather than as a confidante/counsellor), the trainer emphasizes that leaders focus on warning signs that impact a) *the workplace* (e.g., angry outbursts, substance abuse, personal hygiene), or b) *performance* (e.g., missed deadlines, excessive absences, reduced quality of work). The training focus on these areas because leaders typically address these concerns already, but need to develop the skills and confidence to extend the conversation to workplace mental health and well-being.

Appendix E

General Mental Health Promotion Behaviors (Exhibited by Leaders)

Employee Wording	Leader Wording
1. Talked to employees about resources available within or beyond the company. 2. Talked to employees about the importance of mental health. 3. Openly discussed the importance of mental health. 4. Shared information about mental health resources. 5. Kept information about mental health visible at work. 6. Kept resources available to employees.	1. Talked to employees about resources available within or beyond the company. 2. Talked to employees about the importance of mental health. 3. Openly discussed the importance of mental health. 4. Shared information about mental health resources. 5. Kept information about mental health visible at work. 6. Kept resources available to employees.

Appendix F

Personally Directed Mental Health Support Behaviors (Exhibited by Leaders)

Employee Wording	Leader Wording
1. Took the time to talk to me when I was upset. 2. Recognized when I was not acting like myself. 3. Told me about resources that can or could help me. 4. Talked to me when I wasn't behaving like myself at work.	1. Took the time to talk to him/her when I noticed he/she was upset. 2. Recognized that he/she was not acting like him/herself. 3. Told him/her about resources that can or could help him/her. 4. Talked to him/her when I noticed that he/she wasn't behaving as he/she normally does at work.