

Examining the Impact of Mindfulness on Burnout

Matthew C. Watkins, MS

Author Note

Correspondence concerning this article should be emailed to mwatkins@saybrook.edu

Abstract

Burnout is a wide-ranging problem that has a profound impact on employee well-being and organizational wellness and profitability. Mindfulness is a topic that has quickly grown popular and this popularity has seen investigations expand into the effects of mindfulness and mindfulness-based investigations on burnout. This paper seeks to examine the literature surrounding the impact of mindfulness and mindfulness-based interventions (MBIs) on the impact and incidence of burnout. The relationship between mindfulness and burnout will be examined through the lens of self-determination theory. The paper addresses the question “Is mindfulness an efficacious treatment intervention to reduce the impact and incidence of burnout and, if so, what are the implications and theoretical active mechanisms through which the reported efficacy is occurring?”

Keywords: mindfulness, burnout, self-determination theory

Examining the Impact of Mindfulness on Burnout

Overview

Over the past several decades mindfulness has become an increasingly popular practice, with a wide range of individuals counting themselves amongst the approximately 20 million seeking to begin a mindfulness practice to realize any number of benefits in their lives (Davidson & Kaszniak, 2015; Shapiro & Carlson, 2017a). These benefits include an increase in their levels of happiness, a decrease in their stress levels, an increase in relaxation, and a reduction in chronic pain (Davidson & Kaszniak, 2015). Simultaneously there has been an increasing awareness and correlating body of literature around burnout and workplace-related stress, which impacts up to one million people annually, with an economic impact of between \$150 and \$300 billion each year occurring due to increased healthcare costs, decreased competency alongside inefficient & lost productivity and absenteeism (Schultz, Ryan, Niemiec, Legate, & Williams, 2015; “Workplace Stress,” n.d.).

Impacts to employee well-being are often conditions typically related to chronic stress which include various forms of cardiovascular, musculoskeletal, and gastrointestinal diseases, extended periods of fatigue, cholesterol regulation issues, diabetes, headaches, and an increased likelihood of severe injuries and an increased mortality rate (Salvagioni et al., 2017). In addition, employees that are experiencing burnout have been found to display an avoidant style of decision making with an associated diminished capacity for rational decision making, an impairment of their cognitive functioning which includes a reduction in their capacities for attention and memory, an overall reduction of their affective stability, and an impaired ability to be flexible when experiencing unique or fluctuating tasks (Michailidis & Banks, 2016).

Given the profound personal, organizational, and economic impacts of burnout and the rapidly increasing interest in the benefits and efficacy of mindfulness, researchers in these fields have started to generate research investigating the potential benefits that mindfulness practices might have on decreasing the impact and incidence of burnout. The purpose of this paper is to examine the relationship between mindfulness and burnout through the theoretical lens of self-determination theory and seeks to address the question “Is mindfulness an efficacious treatment intervention to reduce the impact and incidence of burnout and if so, what are the theoretical active mechanisms through which the reported efficacy is occurring?”

Theoretical Framework

Self-Determination Theory (SDT)

Self-Determination Theory (SDT) is an overarching macrotheory of human motivation comprised of 6 different subtheories (Brown, Creswell, & Ryan, 2016). SDT has been developed to create an understanding of how the fulfillment of an individual’s basic psychological human needs, understood here to be *autonomy*, *competence*, and *relatedness*, are either supported or thwarted based on the manner in which they experience their social contexts (Brown et al., 2016; Ryan & Deci, 2018). Ongoing research conducted through the lens of SDT has discovered that the motivational style an individual is exhibiting in the workplace will have an impact on their overall need satisfaction, development of autonomy and autonomous motivation, job performance, their well-being (Deci, Olafsen, & Ryan, 2017).

Burnout

The concept of burnout has been developed over the past several decades to bring an understanding to the process that occurs when an individual whose enthusiasm for, connection

to, and ability to competently perform their job has diminished over a period of time (Fernet, Guay, & Senécal, 2004; Maslach, Schaufeli, & Leiter, 2001). Contrary to the colloquial use of the term, burnout is a chronic and not acute condition, and it is comprised of three distinct dimensions: emotional exhaustion, detachment/cynicism, and a developing lowered job performance and sense of self-efficacy/competence (Fernet, Austin, Trépanier, & Dussault, 2013; Maslach et al., 2001). Ongoing research has found that these three dimensions have a consistent onset pattern, with emotional exhaustion developing first to be followed by detachment and diminished competency (Maslach et al., 2001).

Literature Review

Defining Mindfulness

Mindfulness, as a concept, has transformed over the course of the past 30 years from a tradition grounded in Buddhist philosophy into a concept grounded in academic thought and research (Brown et al., 2016). During this period of transition from a concept rooted in Buddhist philosophy to a concept grounded in Western academic psychological research, mindfulness has proven difficult to cohesively define (Chiesa, 2013). Over time, modern psychological researchers have conceptually defined mindfulness as a state of consciousness where an open and non-judgmental attention is intentionally placed on present, moment-to-moment experience with a sense of curiosity (Brown et al., 2016; Brown & Ryan, 2003; Reb, Narayanan, & Chaturvedi, 2014; Schuh, Zheng, Xin, & Fernandez, 2017; Schultz et al., 2015; Shapiro & Carlson, 2017b). In reviewing the literature, several themes have emerged involving the intersection of mindfulness and burnout seen through the lens of self-determination theory. These themes include the impact of mindfulness on both trait and state mindfulness on burnout,

on the development of autonomy, on the balance between job demands and job resources, and how mindful leadership effects burnout.

Trait and State Mindfulness

Similar to the difficulties faced in attempting to create a cohesive definition of mindfulness, research involving mindfulness has, at times, been difficult to interpret due to a lack of shared language around what is meant when the term “mindfulness” is invoked (Chiesa, 2013; Davidson & Kaszniak, 2015). Part of this confusion around defining and researching mindfulness is that mindfulness is both a process and the outcome of a process (Shapiro & Carlson, 2017b). To address this problem, several operational definitions have been developed to better clarify the concepts which fall under the umbrella term “mindfulness,” which include state, trait, and procedural mindfulness (Davidson & Kaszniak, 2015; Schuh et al., 2017). State mindfulness refers to the changes that occur within an individual while actively participating in mindfulness practices or as a capacity developed via practice (Davidson & Kaszniak, 2015; Schultz et al., 2015). This can be contrasted with the long-term longitudinal effects of a mindfulness practice on an individual or as an innate tendency or capacity similar to that of a personality trait and varies from individual to individual, which is referred to as trait mindfulness (Davidson & Kaszniak, 2015; Olafsen, 2017; Schultz et al., 2015). Finally, a third manner in which mindfulness is referred to within the literature is that of the participatory process or set of instructions an individual engages in to bring about a specific result, known as procedural mindfulness (Davidson & Kaszniak, 2015). Mindfulness, regardless of whether it was developed as a state or as a component of an individual’s traits has been linked to enhanced well-being and the ability to thrive (Schultz et al., 2015). Considering this, researchers have noted that both

state and trait mindfulness are considered equally valid and complementary to each other and, consequently, it is considered important to study both facets of mindfulness in order to fully understand the effects of mindfulness (Olafsen, 2017; Schuh et al., 2017).

Recent research into trait mindfulness has largely been facilitated by the development and subsequent availability of self-report scales allowing for the convenient, low-cost, and expedient measurement of trait mindfulness (Reb et al., 2014). Within the field of organizational studies research has focused on the manner in which employee trait mindfulness impacts various work outcomes and has found trait mindfulness to be associated with improved employee physical and psychological well-being (Olafsen, 2017; Reb et al., 2014). In a study that examined the effects of supervisor trait mindfulness on subordinate employees, trait mindfulness was found to be positively associated to desired occupational outcomes including task performance, which was partially mediated by lower levels of emotional exhaustion measured in more highly-mindful employees (Reb et al., 2014). Researchers have sought to expand upon the foundation developed from trait mindfulness studies in order to understand the potential impact of organizational design and workplace conditions on state mindfulness (Olafsen, 2017).

This research into the promotion of state mindfulness in the workplace has revealed a positive relationship to exist between work environments that promote the satisfaction of SDT's basic psychological needs and state mindfulness development, with this development in turn positively correlated to well-being and goal attainment while also exhibiting an inverse relationship with burnout (Olafsen, 2017). This is consistent with other findings on the relation to need satisfaction and burnout (Fernet et al., 2013; Olafsen, 2017). Specifically, it was found that state mindfulness is developed through need satisfaction by way of allowing

cognitive/psychological flexibility to aid employees in developing novel responses in place of automatic habits (Bond, Hayes, & Barnes-Holmes, 2006; Olafsen, 2017; Schultz et al., 2015).

The development of this psychological flexibility was resultant from the non-judgmental awareness and openness to momentary experience that exists at the core of mindfulness practices and increases the likelihood that employees will react to their environment objectively without adding in negative perceptions or developing rumination on their perceptions (Schultz et al., 2015). This resultant objectivity provides employees with additional resources to aid in tackling demands with competence (Olafsen, 2017). Additionally, the increase in awareness resultant from mindfulness facilitates the ease in which goals are perceived to be achieved with autonomy and competence through increasing goal clarity and reducing mistakes made (Olafsen, 2017). This research suggests that the development of need satisfying work environments, which includes managerial need support, can serve as a powerful antecedent in the development of state mindfulness and a valuable addition to explicit mindfulness-based interventions (Olafsen, 2017).

Autonomy

Shapiro and Carlson (2017a) defined the core cognitive process from which the salutary effects of mindfulness practices are derived as the “reperceiving process” (p. 100). The reperceiving process enhances the individual’s capacity to bring objectivity to their internal and external experiences (Shapiro & Carlson, 2017a). Reperceiving has been described to be, in many ways, an ongoing human development process in that it continues the natural growth of an individual’s capacity to experience their internal and external experiences with objectivity that innately comes with age and which is accelerated through the adoption of an ongoing mindfulness practice (Shapiro & Carlson, 2017a). It is this process of developing the capacity

for experiential objectivity that is considered to be the signature of mindfulness and mindfulness practice (Shapiro & Carlson, 2017a). Contained within the re-perceiving process are four distinct psychological operations which include “self-regulation, values clarification, cognitive, emotional, and behavioral flexibility, and exposure” (p. 100). In this way re-perceiving can be considered to be an analogous term to that of “awareness” in self-determination theory literature, which is defined as an individual’s capacity to accept internal and external experience non-judgmentally and is a key component of an individual’s ability to self-regulate and develop autonomy and autonomous regulation (Brown et al., 2016; Deci et al., 2017).

Autonomy support has been found to have a direct relationship to measures of employee workplace well-being (Schultz et al., 2015). Autonomy and the development of autonomous motivation are deeply influenced by the individual’s perception of their environment and how their environment either supports or thwarts the satisfaction of SDT’s basic psychological needs (Brown et al., 2016; Deci et al., 2017; Olafsen, 2017). Need support is a precursor to need satisfaction, with need satisfaction providing the ability to be mindfully present in moment-to-moment experience; when the fulfillment of needs is thwarted there is a tendency to wander to the past and future to discover why fulfillment is being thwarted or how thwarting may continue to occur (Olafsen, 2017). Need fulfillment can be thought of as a resource from which individuals can derive a state of equanimity that allows for the present moment awareness that is characteristic of mindfulness to develop, which also facilitates the satisfaction of autonomy, the creation of autonomous motivation, and the further fulfillment of basic psychological needs including the remaining needs for competence and relatedness (Brown et al., 2016; Deci et al., 2017; Olafsen, 2017; Schultz et al., 2015). The autonomous motivation

developed as a result of increasing mindful awareness also leads to higher levels of work satisfaction and a reduction of the emotional exhaustion dimension of burnout, which decreases both turnover intentions and actual employee departures (Deci et al., 2017).

Beyond being supportive of autonomy and the development of autonomous motivation, mindfulness has also been found to be a protective factor in non-autonomous or controlled environments (Schultz et al., 2015). Mindfulness was found to have a moderating effect on work environment and need thwarting, such that employees that measured higher in mindfulness experienced less need fulfillment frustration than those measuring lower in mindfulness, while also buffering the effects of need thwarting on employee well-being and various measures of job performance in non-autonomous environments (Schultz & Ryan, 2015; Schultz et al., 2015).

Importantly, Schultz et al. (2015) noted that more mindful individuals were only more resistant to the effects of need frustration when compared to those that measured less mindfully. These individuals did not perceive their situation as being any better than it was, in that mindfulness did not moderate the relationship between work climate and need satisfaction as it did between work climate and need frustration (Schultz et al., 2015). Rather, their capacity for mindfulness aided in their ability to face overwhelming demands with a greater sense of resourcefulness and resilience while displaying higher levels of well-being (Schultz et al., 2015).

Job Demands and Job Resources

The Job Demands-Resources (JD-R) model of burnout developed out of an effort to create a model of burnout explaining burnout as a characteristic of all professions rather than just service-based field of employment (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Fernet et al., 2004). Research into the JD-R model has found individuals that measure high in mindfulness

are better able to separate an objective account of an event from any potential negative emotional content associated with an event via the re-perceiving process and consequently are more likely to experience any stressful occurrences as less demanding (Schultz et al., 2015).

The increase in equanimity experienced as a result of mindfulness decreases the length of time that an individual experiences stress as a result of the experience and therefore reduces the likelihood of experiencing the chronic stress that activates the core health impairment process proposed by the JD-R model (Bakker & Demerouti, 2007; Schultz et al., 2015). In this way, need satisfaction and the resultant increase in state mindfulness can also be considered to be a resource within the JD-R model, as it allows for the development of balance and equanimity that enables an individual the ability to focus on the present moment and handle the demands of the moment resourcefully by removing mental constraints that preclude the individual from engaging all of the resources at their disposal mindfully and appropriately (Reb et al., 2014; Wasylkiw, Holton, Azar, & Cook, 2015). Finally, when considering this in the context of the trait and state research aforementioned, mindfulness can be considered as a state that provides resources which allow individuals to cope with demanding situations as well as a trait that can be factored into the JD-R model (Olafsen, 2017; Taylor & Millier, 2016). An important caveat to this was found in research into care-based professions, as it was discovered that these employees are reluctant to voice concerns regarding their needs relative to the occupational demands they are facing, given that they tend to experience cultural norms around the inappropriateness of these actions as a care provider, with self-sacrificing actions being expected as the norm (Wasylkiw et al., 2015).

Mindful Leadership

Mindfulness researchers have recently acknowledged that research to date has almost exclusively examined the intra-individual effects of mindfulness while neglecting the examination of the trailing interpersonal effects that increasing mindfulness in leaders might have on both their employees and overall organizational performance (Beekun, 2015; Reb et al., 2014; Schuh et al., 2017; Wasylkiw et al., 2015). Given the crucial role of leadership in effecting change, influencing organizational culture, and managing the balance between resources available and the demands of goal achievement, researchers' efforts to understand how mindfulness impacts leaders and their effectiveness have increased in recent years (Beekun, 2015; Schuh et al., 2017). Beekun (2015) has stated that the level of the organizational chart at which the leader resides has a relationship to the potential benefit of mindfulness implementation, while other researchers have noted that leadership and benefits stemming from mindfulness can occur at any level of the organization (Reb et al., 2014).

Mindful leadership researchers have uncovered the existence of a relationship between leaders' trait mindfulness and employees' need satisfaction, job performance, well-being, and the display of organizational citizenship behaviors (Reb et al., 2014). Additionally, need-supportive work environments were found to have an indirect relationship to increasing state mindfulness, with concurrent increases in both employee well-being and goal attainment with a negative relationship to burnout (Olafsen, 2017). Leaders that have participated in a mindfulness retreat measured higher in mindfulness and more effective in their leadership behaviors while reducing their stress levels through increased adaptability to change, with their employees corroborating these changes (Wasylkiw et al., 2015). These leaders were found to seek input from their employees more often than before, which is considered to be an autonomy-supportive,

need-fulfilling behavior, with this autonomy support leading to an increase in work satisfaction and a decrease in the emotional exhaustion dimension of burnout (Deci et al., 2017). Finally, recent research has found there to exist a relationship between leader mindfulness, leader procedural justice, and increased employee performance, which is mediated by procedural justice enactment and decreased levels of emotional exhaustion (Schuh et al., 2017). This increase in procedural justice and the resultant decrease in emotional exhaustion can potentially be explained through the manner in which leaders manage the utilization of job resources in response to job demands, though this has not been explicitly studied to date.

Researchers have also discovered a number of potential caveats and challenges to the integration of mindfulness into leadership practices and philosophies. Schuh et al. (2017) noted that employees must perceive mindfulness to be unconditional and not merely a means to an end in order to be effective; if it were to be perceived as conditional a divide between leaders and employees can be created and/or widen and undermine the salutary effects of mindfulness practices. Additionally, the core non-judgmental awareness component of mindfulness has the potential to be detrimental to a leader's ability to be decisive (Schuh et al., 2017). Finally, it was found that the same job resource/demand imbalances likely to facilitate the development of burnout and recommend the implementation of mindfulness practices are also likely to create a challenge for the adoption of mindfulness practices, with specific challenges mentioned regarding creating the time and focus required to properly develop a practice (Wasylikiw et al., 2015). Research into mindfulness retreats for leaders has shown promising longitudinal results and might provide an avenue in which the seeds of mindfulness practices can be planted and then nurtured after returning to work (Wasylikiw et al., 2015). This is a particularly promising

recommendation when considering previous SDT-based research which found basic need satisfaction, specifically seen here via the need for competence, to aid in providing the conditions required for the generation of mindful awareness and an increase in state mindfulness, potentially creating a positive feedback loop that can aid in the development of mindfulness practices (Olafsen, 2017).

Conclusion

Abraham Maslow once considered the workplace to be one of the most highly-leveraged places in which a transformation of society could begin to take place, especially given that some recent estimates claim that working adults spend a third of their waking lives at the workplace on average (Maslow, 1998; Schultz et al., 2015). Wasylkiw et al. (2015) shared a similar perspective, stating that “work is a fundamental aspect of human endeavor that should support and contribute to individual well-being” (p. 907). While research into the topic is still in its early stages, research efforts to date have found mindfulness and mindfulness-based interventions to be an effective method to reduce the occurrence and severity of burnout and increase employee productivity, satisfaction, and well-being through supporting the basic psychological needs of relatedness, competence, and autonomy as proposed by Self-Determination Theory. Ongoing research efforts into mindfulness and burnout can likely be expanded to examine the impact that mindfulness has on the promotion of leadership and overall leadership behaviors, as well as how this impact on leadership changes the cultural norms within organizations that lead to need thwarting and the generation of burnout. Finally, ongoing research should consider examining the potential for mindfulness to promote self-actualization in career choices.

References

- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology, 22*(3), 309–328.
<https://doi.org/10.1108/02683940710733115>
- Beekun, S. V. (2015). Mindfulness and leadership: A critical reflection. *Business and Management Studies, 2*(1), 44–50. <https://doi.org/10.11114/bms.v2i1.1190>
- Bond, F. W., Hayes, S. C., & Barnes-Holmes, D. (2006). Psychological flexibility, ACT, and organizational behavior. *Journal of Organizational Behavior Management, 26*(1–2), 25–54.
https://doi.org/10.1300/J075v26n01_02
- Brown, K. W., Creswell, J. D., & Ryan, R. M. (Eds.). (2016). *Handbook of Mindfulness: Theory, Research, and Practice*. Guilford Publications.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822–848.
<https://doi.org/10.1037/0022-3514.84.4.822>
- Chiesa, A. (2013). The difficulty of defining mindfulness: current thought and critical issues. *Mindfulness, 4*(3), 255–268. <https://doi.org/10.1007/s12671-012-0123-4>
- Davidson, R. J., & Kaszniak, A. W. (2015). Conceptual and methodological issues in research on mindfulness and meditation. *The American Psychologist, 70*(7), 581–592.
<https://doi.org/10.1037/a0039512>
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-Determination Theory in Work Organizations: The State of a Science. *Annual Review of Organizational Psychology and Organizational Behavior, 4*(1), 19–43.

<https://doi.org/10.1146/annurev-orgpsych-032516-113108>

- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Fernet, C., Austin, S., Trépanier, S.-G., & Dussault, M. (2013). How do job characteristics contribute to burnout? Exploring the distinct mediating roles of perceived autonomy, competence, and relatedness. *European Journal of Work and Organizational Psychology, 22*(2), 123–137. <https://doi.org/10.1080/1359432X.2011.632161>
- Fernet, C., Guay, F., & Senécal, C. (2004). Adjusting to job demands: The role of work self-determination and job control in predicting burnout. *Journal of Vocational Behavior, 65*(1), 39–56. [https://doi.org/10.1016/S0001-8791\(03\)00098-8](https://doi.org/10.1016/S0001-8791(03)00098-8)
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- Maslow, A. H. (1998). *Maslow on Management* (revised). John Wiley & Sons.
- Michailidis, E., & Banks, A. P. (2016). The relationship between burnout and risk-taking in workplace decision-making and decision-making style. *Work & Stress, 30*(3), 278–292. <https://doi.org/10.1080/02678373.2016.1213773>
- Olafsen, A. H. (2017). The implications of need-satisfying work climates on state mindfulness in a longitudinal analysis of work outcomes. *Motivation and Emotion, 41*(1), 22–37. <https://doi.org/10.1007/s11031-016-9592-4>
- Reb, J., Narayanan, J., & Chaturvedi, S. (2014). Leading Mindfully: Two Studies on the Influence of Supervisor Trait Mindfulness on Employee Well-Being and Performance.

Mindfulness, 5(1), 36–45. <https://doi.org/10.1007/s12671-012-0144-z>

Ryan, R. M., & Deci, E. L. (2018). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. Guilford Publications.

Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & Andrade, S. M. de. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *Plos One*, 12(10), e0185781.

<https://doi.org/10.1371/journal.pone.0185781>

Schuh, S. C., Zheng, M. X., Xin, K. R., & Fernandez, J. A. (2017). The interpersonal benefits of leader mindfulness: A serial mediation model linking leader mindfulness, leader procedural justice enactment, and employee exhaustion and performance. *Journal of Business Ethics : JBE*, 156(4), 1–19. <https://doi.org/10.1007/s10551-017-3610-7>

Schultz, P. P., & Ryan, R. M. (2015). The “Why,” “What,” and “How” of Healthy Self-Regulation: Mindfulness and Well-Being from a Self-Determination Theory Perspective. In B. D. Ostafin, M. D. Robinson, & B. P. Meier (Eds.), *Handbook of Mindfulness and Self-Regulation* (pp. 81–94). New York, NY: Springer New York. https://doi.org/10.1007/978-1-4939-2263-5_7

Schultz, P. P., Ryan, R. M., Niemiec, C. P., Legate, N., & Williams, G. C. (2015). Mindfulness, Work Climate, and Psychological Need Satisfaction in Employee Well-being. *Mindfulness*, 6(5), 971–985. <https://doi.org/10.1007/s12671-014-0338-7>

Shapiro, S. L., & Carlson, L. E. (2017a). How is mindfulness helpful? Mechanisms of mindfulness. In *The art and science of mindfulness: Integrating mindfulness into psychology and the helping professions*. (pp. 99–112). Washington: American Psychological

Association. <https://doi.org/10.1037/0000022-008>

Shapiro, S. L., & Carlson, L. E. (2017b). What is mindfulness? In *The art and science of mindfulness: Integrating mindfulness into psychology and the helping professions*. (pp. 9–20). Washington: American Psychological Association.

<https://doi.org/10.1037/0000022-002>

Taylor, N. Z., & Milllear, P. M. R. (2016). The contribution of mindfulness to predicting burnout in the workplace. *Personality and Individual Differences, 89*, 123–128.

<https://doi.org/10.1016/j.paid.2015.10.005>

Wasylikiw, L., Holton, J., Azar, R., & Cook, W. (2015). The impact of mindfulness on leadership effectiveness in a health care setting: a pilot study. *Journal of Health Organization and Management, 29*(7), 893–911. <https://doi.org/10.1108/JHOM-06-2014-0099>

Workplace Stress. (n.d.). Retrieved November 4, 2018, from

<https://www.stress.org/workplace-stress/>