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TRAUMA OR TRAPPED: CONCEPTUALIZING MORAL SUFFERING
AND THE IMPACT OF OCCUPATIONAL STIGMA

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Industrial-Organizational Psychology

by
Chloë A. Wilson
May 2021

Accepted by:
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ABSTRACT

Moral suffering occurs when employees feel constrained by organizational factors that are perceived as conflicting with their values. Moral suffering has been conceptualized through moral distress and moral injury, and while both terms have conceptually similar definitions, no study to date has empirically examined the distinction between the constructs. Thus, the current study examined the distinction between moral injury and moral distress, and whether perceived occupational stigma was a moderator of the relationship between moral suffering and mental health symptoms, meaningful work, and counterproductive work behaviors. Participants were 479 adults from 20 industries, who were recruited from Mturk to participate in the study at two time points. Results from the measurement model indicated a two-factor structure of witness- and perpetration-based moral suffering. The structural equation models indicated that witness-based moral suffering uniquely predicted higher mental health symptoms and lower meaningful work, while perpetration-based moral suffering predicted higher counterproductive work behaviors. The interactions between moral suffering and perceived occupational stigma predicting the outcomes exhibited evidence of suppression. The findings demonstrate that prior research may not be capturing the full domain of moral suffering by examining moral injury and moral distress separately. Results showed that both witness- and perpetration-based moral suffering predicted different factors that contribute to an individual's wellbeing.

Key words: Moral suffering, moral injury, moral distress, occupational stigma, wellbeing, mental health symptoms, meaningful work, counterproductive work behaviors

ACKNOWLEDGEMENTS

The inspiration, methods, and writing of this paper would not have been feasible without the support of my mentors and colleagues. It is with great pleasure that I acknowledge the individuals who contributed their active guidance and encouragement to make this manuscript and my degree possible.

I would like to express my deepest appreciation to my advisor Dr. Thomas Britt. His motivation, support and immense knowledge has guided me throughout the pursuit of my degree. I am incredibly grateful for all of the opportunities and challenges he has offered me. I could not have imagined having a better advisor and mentor.

In addition to my advisor, my dissertation would not have been possible without the support of my committee members, Dr. Robert Sinclair, Dr. Patrick Rosopa, and Dr. Cynthia Pury. Each member brought invaluable insight into assisting me evaluate the literature and provided many practical suggestions to help develop the paper.

I would also like to extend my sincere thanks to my past and present lab mates, Dr. Zachary Klinefelter, Alexxa Bessey, Dr. Anton Sytine, and Dr. Kristen Jennings Black, for the stimulating discussions, encouragement, and endless laughs that echoed from our office over the years. It has been a great pleasure working with each of them.

I would also like to extend my sincere thanks to my undergraduate research team, Hanna Jiang, Christine Lu, and Elise Kent for being the most motivated and enthusiastic students that were willing to learn and tackle any request I had. Finally, I gratefully acknowledge the assistance of Clemson University's Creative Inquiry Research funds for providing the financial assistance to complete this project.

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TRAUMA OR TRAPPED: CONCEPTUALIZING MORAL SUFFERING AND THE IMPACT OF OCCUPATIONAL STIGMA

CHAPTER ONE: INTRODUCTION

A doctor who is constrained to stand by as a result of a Do Not Resuscitate (DNR) protocol, a journalist who must capture raw footage of war time events as a bystander, a television producer who receives emails from family members begging them not to air a show about their loved one's murder, or a zoo keeper whose love of animals is conflicted with the regulation to put them in a small cage, all have one thing in common: moral suffering. When employees believe that the right course of action has not been taken or has been ignored by supervisors, coworkers, or organizational protocols, they may be at odds with their moral compass. While an employee is exposed to many stressors throughout a workday, stressors that contradict an employee's sense of right and wrong can have detrimental effects on an employee's emotional and cognitive wellbeing, especially when the distress is compounded over time.

Moral Suffering refers to the emotional conflict that results from actions or exposure as part of one's work obligations that violate their sense of right and wrong (Shay, 2011). "Morals" refer to the ethical principles or values held by individuals that are used to guide their behavior ("Morals," 2021). Moral suffering has been investigated in prior research in two forms, moral injury and moral distress. Moral injury occurs as the "lasting psychological, biological, spiritual, behavioral, and social impact of...perpetrating, failing to prevent, or bearing witness to acts that transgress deeply held moral beliefs and expectations" (Litz et al., 2009, p. 700). These acts are often associated

with violence or death-related incidents (Litz et al., 2009). For example, Papazoglou and Chopko (2017) described a police officer who is bound by protocols to enforce harsh crowd management. While officers are instructed to do their job, they may not feel right about enforcing such harsh standards when it comes to a young child who is resisting. The officer may be bound by organizational constraints to act in a certain way, or alternatively, observe a coworker being forceful and hurting a child. These circumstances, whether acted upon themselves or by observing others, can make an officer question the justification of their required work duties.

While moral injury has primarily been described through circumstances that involve exposure to violence or death-related incidents, moral distress has been referred to as the emotional experience that results from individuals making judgements or decisions about the right course of action but are unable to take them due to internal or external constraints (Corley, 2002; Jameton, 1984). These decisions that are made are judged as wrong, but work policy requires it to occur. For example, child welfare service employees pursue a career with the mindset of keeping children safe, however, employees have to make decisions about splitting families apart (Kahn, 2019). The employee may be required by regulations and state law to remove a child from a home, despite circumstances that the employee may feel is an exception, thus causing a conflict of decision making.

The mismatch between one's core beliefs and events that occur can create a threat to an individual's internal moral schema (Dombo et al., 2013). The lack in meaning behind the individual's experience can result in guilt and shame being associated with

situation and often manifests in rage, anxiety and depression (Currier, Holland, & Malott, 2015; Dombo et al., 2013; Kruger, 2014). The conceptualization of both moral suffering components incorporate an appraisal in which many situations have the opportunity to cause moral suffering to occur, however, it is an individual's evaluation of the event as being against their belief of what is right that causes moral suffering.

Prior research has investigated the experience of moral suffering in regard to a variety of outcomes. Moral suffering has been linked to individual outcomes such as helplessness and pessimism (Bryan et al., 2016; Elpern et al., 2005), anger (Bryan et al., 2016; Gutierrez, 2005; Haight et al., 2017; Stein et al., 2012), compassion fatigue (Austin et al., 2017; Maiden et al., 2011; Morley, 2003; Papazoglou et al., 2019), job satisfaction (Ando & Kawano, 2018; Elpern et al., 2005; Evans et al., 2018; Hatamizadeh et al., 2019; Joseph & Deshpande, 1997), burnout (Austin et al., 2017; Meltzer & Huckabay, 2004; Ohnishi et al., 2010; Piers et al., 2012; Sundin-Huard & Fahy, 1999), and turnover intentions (Austin et al., 2017; Haight et al., 2016; Hart, 2005; Piers et al., 2012). The impact of moral suffering goes beyond individual outcomes and can extend to the organization as well. Research has shown moral suffering can impact performance (Gutierrez, 2005; McAndrew et al., 2011; Piers et al., 2012; Radzvin, 2011), perceived quality of care of patients (Ganz & Berkovitz, 2012; Ludwick & Silva, 2003; Meltzer & Huckabay, 2004) and the professional environment (Berlinger & Berlinger, 2017; McAndrew et al., 2011). However, the majority of research has been primarily conducted with the military and healthcare professions, which presents a gap in knowledge of whether other occupations experience moral suffering and its consequences.

Purpose of the Current Study

Despite the reference to conflict of moral values being at the core of moral injury and moral distress, research has not examined the constructs consistently. Some researchers have examined one of the constructs while ignoring the other, whereas other researchers refer to the constructs interchangeably as a single entity (Backholm & Idås, 2015; Sugrue, 2019). No study to date has empirically examined the two constructs concurrently with the goal of assessing the shared and unique variability between the constructs. Additional research is needed to examine the uniqueness of the constructs and to understand the impact of moral suffering on the workforce. Research has shown the impact of moral suffering on many key organizational outcomes; therefore, organizations should be aware of the circumstances that may be causing their employees to leave the organization or industry. Knowledge of the presence and impact of moral suffering can provide a foundation for improvement for organizational change. To date, only two articles have suggested differing outcomes as a result of moral injury and moral distress, however, both were theoretical papers recommending research into the domain of moral suffering in helping professions (Papazoglou & Chopko, 2017; Sugrue, 2019). The current study extends the literature by proposing a model, demonstrated in Figure 1, that illustrates the proposed relationships between both moral suffering constructs and work outcomes; with the aim to investigate the unique variance that is explained by each factor.

Additionally, the majority of research investigating moral injury has been conducted within the military context (Haight et al., 2016). Haight et al. (2016)

conducted a systematic review of the literature and found that within the 15% of research that was not with a military sample, only one study was focused on work. Similarly, moral distress has primarily been researched within the healthcare field (Oh & Gastmans, 2015; Sugrue, 2019; Weinberg, 2009). Authors have suggested the need for additional research into the area of moral suffering on diverse professions, however few occupations have been examined beyond healthcare and the military (Williamson et al., 2018; 2020). While moral suffering may be more obvious in military and healthcare contexts, research is lacking in the understanding of other work environments that could contribute to the psychological distress that moral suffering creates. Without the knowledge of how moral suffering may occur in one's industry, organizations may be proposing changes that are inadequate to addressing the moral conflicts that employees are experiencing. Time, effort and money may be wasted on interventions that are not addressing the key issues at hand. The present study aims to address these gaps.

While the purpose of the current research was to examine the generalization of moral suffering to all occupational fields, it is unlikely that all occupations are affected equally. Individuals with a greater perception that they work in a stigmatized occupation may be more affected by events that transgress against their beliefs than individuals with a lesser perception of stigma. For example, garbage truck workers, a stigmatized occupation, is proposed to have stronger reactions to events that transgress their beliefs in comparison to employees who perceive low occupational stigma. The shame and guilt that results from the belief that a violation of ethical behavior has occurred, in

combination with perceived negative appraisal from outsiders may compound the dysfunctional outcomes individuals experience.

Many individuals gain a sense of purpose from their work, and thus work serves a major part of their identity (Dik & Duffy, 2009). However, humans are not siloed creatures; individuals seek validation and approval from their peers, which contributes to their personal evaluation of their worth (Ashforth, 2001; Banaji & Prentice, 1994; Leary, 2007). Evaluations of worth can be derived from the perceptions of oneself, perceptions of social groups, and perceptions of society. While an employee may believe in the greater good that their job plays in society, others may not have the same perspective, and these differential perspectives can influence an individual's perception of worth.

Many researchers have conducted qualitative research demonstrating the awareness employees have regarding the perception of stigma that is associated with their work (Davis, 1984; Gold, 1964; Levin & Arluke, 1987; McIntyre, 1987; Ouellet, 2010; Palmer, 1978; Perry, 1978; Petrillo, 1990; Rollins, 1985; Stephens, 1974; Thompson, 1991). Whether outsiders actually believe the stated perception, individuals experience 'paranoid social cognition,' where they tend to ruminate on false perceptions from others, which can cause suspicion and distrust regarding others' intentions (Kramer, 1998). Benjamin et al. (2011) found that members of stigmatized occupations, specifically cleaners in their study, preferred to hide who they worked for in order to avoid the social criticism. In order to overcome the perceptions of the public, many individuals who work in stigmatized occupations tend to rely on the support of coworkers and the justification of the purpose of their work (Ashforth & Kreiner, 2014). However, when actions of

ingroup members or organizational factors contradict one's sense of right and wrong, such as in moral suffering, individuals are more likely to feel disidentified with their work (Ashforth & Kreiner, 2014; Kreiner et al., 2006; Lai et al., 2013). Figure 1 illustrates the proposed relationships between moral suffering and mental health symptoms, meaningful work, and counterproductive work behaviors, moderated by perceived occupational stigma.

Based on the lack of consensus on the conceptual definition, measurement, and occupations impacted by moral suffering, the current study aimed to address three goals. The first aim was to extend the literature on moral suffering to examine the frequency and intensity of moral injury and distress in a wide range of professions. Secondly, the current study examined the distinction between moral injury and moral distress, both conceptually and statistically, and whether the constructs predicted different outcomes uniquely. Finally, the third aim was to examine the role of perceived occupational stigma on the proposed relationships. The extent to which an individual perceives their occupation is stigmatized may magnify the effects of moral suffering on mental health symptoms, meaningful work, and counterproductive work behaviors.

CHAPTER TWO: MORAL SUFFERING LITERATURE REVIEW

Moral suffering occurs when an individual's moral integrity is perceived to be at stake (Kelly, 1998). Moral integrity has been described as "living up to one's personal moral code, so that one can sleep at night, or live with oneself, having demonstrated courage, patience, and perseverance in the face of conflict" (Laabs, 2011, p. 431).

Human's seek validation and perceive their sense of self-worth comes from clear values that are congruent with one's actions and perceptions (Hardingham, 2004). Value system theory states that an individual's values and value system motivate their behavior (Rokeach, 1973). When individuals perceive that they must go against their value system, conflict occurs. Corley et al. (2001) suggested that conflict stems from the need for autonomy, where individuals seek "the power to do what one recognizes should be done", but can not follow through with that decision or action (p. 251). When the situation hinders an individual's ability to act in accordance with their value system, they gain a sense of powerlessness, and moral suffering may occur.

In the workplace, many stakeholders play a role in organizational decision making. Therefore, decisions made and actions taken by employees do not occur in a silo; internal and external constraints can form a barrier that impedes an individual's ability to act in accordance with their values. When an individual holds internal beliefs about the way work should be conducted, and they or those around them act in an opposing manner, the tension that arises puts in question one's sense of moral integrity. Internal constraints can include perceived power to influence the outcome such as lack of knowledge, fear of losing one's job, self-doubt, or conflict aversion (Hamric et al., 2006;

Haug, 2018; Weinberg, 2009). External constraints that promote conflict can be team member power imbalances, poor communication, pressure to reduce costs, fear of legal action, and policies that conflict with patient/student needs (Haug, 2018; Jameton, 1993).

Consistent with many stressor-strain theories propose, moral suffering is a result of an individual's particular appraisal of the stressor. Moral suffering is a specific example of the Transactional Theory of Stress (Lazarus & Folkman, 1984) applied to individuals considering the implications of situations as going against their beliefs. The Transactional Theory of Stress (Lazarus & Folkman, 1984) states that individuals appraise the situation first, determining whether they perceive the stressor as challenge or a threat to their wellbeing. Not every individual will appraise the same situation the same way. An event that may conflict with one individual's values or perceived obligations may be interpreted differently by another, and therefore the second individual may not interpret a threat to their moral integrity and internal conflict will not occur (Epstein & Delgado, 2010). Thus, moral suffering is a result of the interaction between the situation and the individual's evaluation of the transgression. Two different types of transgressions have been examined to a great extent, moral distress and moral injury.

Moral Distress

Philosopher Andrew Jameton (1984) first conceptualized the experience of moral distress in the clinical ethics literature. He described moral distress as "when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (Jameton, 1984, p. 6). Jameton (1984) suggested that individuals feel a sense of responsibility by participating in the event and are unable to influence the

outcomes based on the restricted circumstances, which leads to internal conflict.

Wilkinson (1987) refined the definition to a “psychological disequilibrium and negative feeling state experienced when a person makes a moral decision but does not follow through by performing the moral behavior indicated by that decision” (p. 16). Wilkinson (1987) noted that the failure to follow through or fight against the perceived immoral event is not based on an individual’s irresponsibility but on institutional constraints limiting their ability to do so, and thus includes the aspect of moral judgement, as well as decision making, since most of the time individuals were unable to act on their judgements (Jameton, 1984).

Based on Wilkinson’s (1987) critiques and development of knowledge on moral distress, Jameton (1993) developed his conceptualization further. Jameton (1993) suggested that there were two underlying processes that both he and Wilkinson were referring to. Jameton (1984) stated his early conceptualization referred to the initial conflict that an individual experiences, which he referred to as ‘initial’ stress. Jameton (1993) stated that initial stress occurs when an individual “feels frustration, anger, and anxiety when faced with the institutional obstacles that conflicts with their values” (p. 544). The immediate frustration and sense of conflict with personal values that the individual experiences, is initial distress. The employee believes they know the correct action to take but are unable to due to the risk involved in speaking up, possible unpleasantness, extra work, and cooperation of higher management to overturn the decision. Individuals feel a moral responsibility in the situation, however, often cannot handle the additional burden of fighting the system (Jameton, 1993).

After the initial stress occurs, Jameton (1984) clarified that Wilkinson's (1989) definition was referring to the aftermath of the event, 'reactive distress'. Reactive distress is the compounded distress that results from not acting or changing the results of the initial distressing event, causing guilt, anxiety and shame (Jameton, 1993). Wilkinson (1989) had described crying, depression, nightmares, feelings of worthlessness, heart palpitations, diarrhea and headaches as some of the effects of morally distressing events (Wilkinson, 1987, p. 23). Reactive stress involves thoughts, feelings, and behaviors that occur as a result of the initial stress event.

Since its first conceptualization, researchers have continued to refine the definition of moral distress. Corley et al. (2005) described the "painful feelings and/or psychological disequilibrium that occurs when nurses are conscious of the morally appropriate action a situation requires but cannot carry out that action because of institutionalized obstacles" such as institutional policies, lack of time, and professional protocols (p. 382). Crane et al. (2013) suggested an expansion of the current definitions to "distress that occurs as a consequence of the transgression of one's personal moral and ethical frameworks, irrespective of how such transgressions emerge" (p.2). Webster and Baylis (2000) broadened the definition to include failing to pursue a course of action, "when one fails to pursue what one believes is the right course of action (or fails to do so to one's satisfaction)" (p.15). As the discrepancies between these definitions shows, Hamric (2012) and Lützén and Kvist (2012) have critiqued the literature on moral distress as having a lack of agreement in numerous definitions across studies.

Moral Residue

Evidence has suggested that repeated exposure to moral distress can increase the adverse impact of distress over the course of time. Jameton (1993) originated the concept of the ‘lingering’ effects of moral distress as reactive distress, however researchers have investigated and recognized the unique adverse effects of reactive distress and moral residue differ (Epstein & Hamric, 2009). Whereas reactive distress is the emotional toll that the morally distressing event takes on an individual’s wellbeing, moral residue is the rise in moral sensitivity as a result of repeated moral distress. Webster and Bayliss (2000) conceptualized the term ‘moral residue’ as the lasting psychological impact of moral distress from repeated exposure. Webster and Bayliss (2000) stated that moral residue is what “each of us carries with us from those times in our lives when in the face of moral distress we have seriously compromised ourselves or allowed ourselves to be compromised” (p. 208). The more morally distressing events an individual experiences at work, an increased “moral wound of having had to act against one’s values remains” (Epstein & Delgado, 2010).

Epstein and Hamric (2009) progressed the knowledge of moral residue further by describing the ‘Crescendo Effect.’ Each time an individual experiences a morally distressing event, the individual experiences a ‘moral distress crescendo’ where the emotional experience of moral distress builds up, perhaps starting as frustration but then progressing into symptoms of trauma such as anxiety or nightmares. Even when the distressing situation has resolved or over time the specific situation may have faded in perceived importance or relevance, the emotional toll does not go back to baseline. Instead, moral residue forms a new baseline for when the individual experiences a

morally distressing event and the impact of moral distress is increased through increased level of residual moral distress (Epstein & Delgado, 2010). Epstein and Delgado (2010) state that moral residue rises gradually having a cumulative effect as morally distressing events that occur in particular settings where individuals work, tend to be similar over time. Thomas and McCollough (2014) stated that “while each episode may seem manageable, their cumulative effect may not be” (p. 115). Epstein and Hamric (2009) described the consequences of moral residue as emotional numbing to the ethically challenging situations, conscientious objecting, and burnout.

Moral Distress Distinctions

While there exists a considerable amount of research on moral distress, key distinctions between components of moral distress have been ignored. One important distinction to make within the moral distress framework is between the frequency and intensity of moral distress. Prior researchers have inconsistently defined and measured moral distress by adapting existing measures to suit the correct audience, and this inconsistent use of measurement tools likely contributes to the differing effect sizes in outcomes (Hamric, 2012). Epstein and Delgado (2010) stated “because values and obligations are perceived differently by various members of the healthcare team, moral distress is an experience of the individual rather than an experience of the situation” (p. 4). Therefore, the frequency of moral distress refers to the amount of exposure an individual has to various situations that are likely to conflict with one’s morals. In contrast, the intensity of moral distress is referred to as the degree to which the morally distressing situation has inflicted distress, or a troubled conscience (Glasberg et al.,

2006). While the frequency of morally distressing events can increase moral distress, the degree to which an individual appraises the event as being against their beliefs is what causes a stress response to occur. It is important to acknowledge the differences between the two components of moral distress, as researchers have found that the events that occur most frequently are not always the situations that cause the greatest level of distress (Corley, 1995; Corley et al., 2001; McAndrew et al., 2011).

Past research has demonstrated how these two perspectives can differ in the prediction of outcomes (Corley, 2002; Ganz & Berkovitz, 2012; Mobley et al., 2007; Ohnishi et al., 2010). Ohnishi and colleagues (2010) measured both the frequency and intensity of moral distress and found that although psychiatric nurses reported a high frequency of morally distressing situations, they reported low levels of intensity of moral distress. Their findings indicate that the frequency of moral distressing events did not always determine the intensity of moral distress and the findings suggest that differing underlying factors may increase the intensity felt. In order to be clear and consistent, the current study will refer and measure the frequency of exposure as the occurrence of *morally distressing events*, and the disequilibrium felt as an outcome to those events will be referred to as *moral distress*.

The second key distinction that is not often clarified within the moral distress literature is the referent of cause. Research has defined moral distress as being an event where the individual is either forced to make a decision or constrained out of a decision based on external factors. The occurrence of moral distress then is a result of either individuals themselves perceiving that they must act in a way that is against their moral

beliefs or standby and observe others, such coworkers or management, act in a way that conflicts with their beliefs. Researchers vary on the extent to which they incorporate both types of referent in their measurements, but research suggests key differences in outcomes due to the referent in the situation.

For example, prior work has suggested that one of the leading causes of moral distress for nurses is being required to carry out unnecessary tests and treatments (Corley, 1995). Researchers have suggested that nurses feel conflicted as they perceived themselves as being in a better position to understand the patients' needs as they typically spend more time by the bedside, which may conflict with the physician's treatment plan (Hamric & Blackhall, 2007). In these situations, nurses do not have the power to influence a decision but are bound by authority or protocol to act in a way that is against their beliefs. Similarly, nurses report moral distress as a result of the provision of aggressive care that is not seen as beneficial to the patient (Corley et al., 2005). The nurses describe observing physicians or other nurses treating the patient in a way they do not agree with but cannot intervene as a result of team cohesion, lack of confidence, or organizationally stated procedures. Jameton (1993) described how moral distress is most often a result of an individual's sense of moral responsibility to the situation. He stated that whether the individual was making the decision themselves, or having to witness others, they feel an obligation to do what's right as a participant in the situation. It is this conflict between what they perceive as right and what is actually done that leads to feelings of guilt and shame.

The concept of moral distress resembles constructs such as ethical dilemmas and role conflict, however, researchers have stated there are differences among each conceptual framework. Jameton (1993) distinguished the concept of moral distress from moral or ethical dilemmas, stating that moral dilemmas occur when two ‘different and important values conflict, but no choice presents itself that preserves both’ (Jameton, 1993, p. 542). Moral or ethical dilemmas can have two opposing decisions, where neither option is more beneficial than the other but each “can be defended as viable and appropriate” (Weinberg, 2009, p. 144). In contrast, moral distress occurs when an individual makes a moral judgment about a case in which he or she is involved and the institution or co-workers make it difficult or impossible for the [individual] to act on that judgement” (Jameton, 1993, p. 542). Moral distress occurs as the individual feels responsible for making or complying with an unethical decision because they feel as though they are restricted by circumstance (Corley, 2002; Weinberg, 2009). Jameton (1993) stated that medical schools often discuss the concepts of moral dilemmas, and not moral distress, as dilemmas can teach students the choice making system. However, moral distress implies ‘wrongdoing’ and questioning the bureaucracy, social issues and leadership within the healthcare system (Epstein & Delgado, 2010; Jameton, 1993).

Researchers have also clarified the difference between moral distress and role conflict. House and Rizzo (1972) defined role conflict as the stress that results from multiple competing or conflicting expectations. Where role conflict deals with the competing demands directed by different authorities, an individual may be conflicted about who to respond to or what tasks have priority, but the situation does not involve a

decision in which the employee believes wrong or against their value system. Moral distress involves the internal conflict of what they are required to do, versus what they feel they should do.

Previous Research on Moral Distress

The moral distress literature has incorporated various definitions, referents, and related constructs. However, one aspect that has remained consistent is the focus on the healthcare industry. In a review of the literature from 1987 to 2018, over 750 published articles discuss moral distress, however, all but four were published in medical journals (Sugrue, 2019). Research has been conducted within many healthcare professions such as physicians (Austin et al., 2017; W. Austin et al., 2005; Hamric & Blackhall, 2007), nurses (Austin et al., 2017; Corley et al., 2005; Hamric & Blackhall, 2007; Hatamizadeh et al., 2019; Ludwick & Silva, 2003), including psychiatric nurses (Ando & Kawano, 2018; Ohnishi et al., 2010), critical care nurses (Asgari et al., 2019; Corley, 1995; Elpern et al., 2005; Haghighinezhad et al., 2019; Maiden et al., 2011; McAndrew et al., 2011; Meltzer & Huckabay, 2004; Mobley et al., 2007), correctional nurses (Sasso et al., 2018), geriatric nurses (Piers et al., 2012), surgical nurses (Ganz & Berkovitz, 2012), nurse educators (Duarte et al., 2017), neonatal intensive care units (Cavaliere et al., 2010), humanitarian workers in a healthcare setting (Hunt, 2008), occupational therapists (Penny et al., 2016), pharmacists (Sporrong et al., 2005), respiratory therapists (Schwenzer & Wang, 2006), and anesthetists (Radzvin, 2011). See Sugrue (2020) and Hanna (2004) for a full review.

Studies have reported that some of the highest predictors of moral distress were feeling compelled to provide care that seems ineffective (Austin et al., 2017), lack of resources (Kälvemark et al., 2004), perceived organizational justice (Haghighinezhad et al., 2019), unwarranted aggressive treatment (Hamric & Blackhall, 2007), high security protocols providing a lack of perceived autonomy (Hunt, 2008; Sasso et al., 2018), conflicts of interest (Kälvemark et al., 2004), and issues with perceived distrust in the employee's competence (Hunt, 2008; Pergert et al., 2019; Sasso et al., 2018). Self-criticism and self-blame are major factors in how the individuals judged their actions against "their moral convictions and their standards of what a good nurse would do" (Kelly, 1998, p. 1134).

In much of the literature, nurses are the primary sample of interest. Researchers have found that nurses are often portrayed as victims, being bound by the decisions and authority of higher physicians who are seen as instigating 'aggressive care' (Hamric & Blackhall, 2007; Prentice et al., 2016). However, other researchers have found that nurses who had more authority are exposed to more demands and thus may be more likely to be morally sensitive and increase their likelihood for moral distress in comparison with nurses with less authority (Ohnishi et al., 2010).

Despite the wide variety of healthcare professions represented within the moral distress literature, very few have explored the impact of moral distress outside of the healthcare profession (Hanna, 2004; Sugrue, 2019). Researchers have theorized and requested a call to action to investigate fields such as social work (Weinberg, 2009) and police officers (Papazoglou & Chopko, 2017), however they did not empirically test their

theory. Other samples that have been assessed include social workers (Kuip, 2016; Lev & Ayalon, 2018), teachers (Meierstein Ford, 2006; Vehviläinen et al., 2018), and student affairs personnel (Haug, 2018). However, these studies were bound by small samples sizes and cross-sectional analyses.

Interestingly, some empirical research exists beyond the scope of healthcare, but researchers have failed to specifically define the domain of research as ‘moral distress.’ Instead, research has examined ‘moral challenges’ with veterinarians (Crane et al., 2015; Moses et al., 2018), ‘paradoxical psychological demands’ experienced among child welfare agency workers (Kahn, 2019), and moral identity with teachers (Santoro, 2013). While Jameton (1984) originally theorized the construct of moral distress within the healthcare domain, it is unlikely that the internal conflict between personal and professional values would be limited to only the healthcare professions. Weinburg (2009) suggested the rationale for the predominance of research being conducted in healthcare could be a result of the dramatic and concrete consequences of moral distress, such as patient pain and death, which are more clear than outcomes faced by other professions.

However, employees in many professions are bound by professional and legal factors that may not always serve the best interests of their clients, customers, or the outcomes of the work. For example, marketing agents who must develop content for products they believe are unsafe, bank tellers who must enforce discriminatory loan agreements, or sales workers who are encouraged to deceive their clients may also experience moral distress. Popular press articles have featured examples of moral distress such as, “Roger Boisjoly, 73, Dies; Warned of Shuttle Danger” (Martin, 2012). Roger

Boisjoly was an engineer who adamantly warned leadership about the dangers of launching the Challenger shuttle, however, his warnings were ignored, and the shuttle exploded. Roger Boisjoly experienced moral distress from his inability to influence the launch decision despite having the knowledge he thought was necessary. The findings from previous work within the healthcare field could be applied more broadly with other industries, replacing 'patient' with the audience an employee serves. The fact that moral distress has not been looked at past the healthcare field is a concern for organizational science. Employees may be experiencing these moral stressors regularly and not be provided the resources and aid that they require, increasing the risk to poor organizational outcomes.

Outcomes of Moral Distress

Researchers have been interested in outcomes of moral distress ever since Jameton's (1984) book, *'Nursing Practice: The Ethical Issues'* suggested that when individuals feel opposition between their personal and professional values, engagement would be disrupted. Kuip (2016) and other researchers have supported this claim, finding that social workers who experienced high moral distress showed less enthusiasm, inspiration and vigor towards their role (Lawrence, 2011; Mason et al., 2014). Other research has found direct links from increased moral distress to lower job, career and income satisfaction (Ando & Kawano, 2018; Hamric & Blackhall, 2007; Hatamizadeh et al., 2019; Schluter et al., 2008; Schwenzer & Wang, 2006).

High levels of moral distress have also been significantly related to secondary traumatic stress and burnout in physicians and nurses (Austin et al., 2017; Maiden et al.,

2011). Meltzer and Huckabay (2004) found that moral distress accounted for 10% of the variance in emotional exhaustion but was not related to the depersonalization or personal accomplishment dimensions of burnout. Interestingly, the researchers only found this significant relationship between moral distress frequency but not intensity. However, in contradiction to these results, Ohnishi et al. (2010) found that nurses with high frequency and intensity of moral distress experienced higher levels of both emotional exhaustion and cynicism. In another qualitative study of child welfare agency workers, researchers found that employees attempted to protect themselves from the impact of moral distress by avoiding thoughts about the event, resulting in reduced emotional availability to their clients and coworkers, emotional exhaustion and isolation (Kahn, 2019).

While moral distress begins as an internal struggle, consequences outside of the individual have also been examined. Researchers have found nurses with higher moral distress had lower satisfaction with quality of care (Hamric & Blackhall, 2007), poor respect for patient rights (Hatamizadeh et al., 2019), and increased perception of medical errors (Maiden et al., 2011) and quality of care (Fogel, 2007; McAndrew et al., 2011). Additionally, McClendon and Buckner (2007) found that nurses reported that their experience of moral distress influenced their professional practice due to burnout, difficulty focusing, having little patience, and feeling ineffective as a nurse. However, one study found that nurses reported that moral distress did not affect the care they provided, but the majority of participants admitted they were less involved with the patient's family (Gutierrez, 2005).

Moral distress has also been associated with team dynamics. Research has demonstrated that moral distress can have an impact on a work team due to lower perception of collaboration (Hamric & Blackhall, 2007) and increased distrust of coworker competency for care (Cronqvist & Nyström, 2007; Fogel, 2007). Specifically, one study found that the intensity of moral distress was significantly related to physician-nurse relationship quality and the frequency of moral distress was predictive of perceived leadership and support, participation in hospital affairs, collegial relationships, and staffing adequacy (McAndrew et al., 2011). Implications of these studies are evident, as internal conflict that an individual feels influences outcomes beyond just the individual.

One of the most common outcomes investigated by researchers has been the association between moral distress and the intentions to leave one's position (Austin et al., 2017; Corley, 1995; Fernandez-Parsons et al., 2013; Hamric & Blackhall, 2007; Hatamizadeh et al., 2019; Kuip, 2016; Penny et al., 2014; Piers et al., 2012; Sasso et al., 2018; Schwenzer & Wang, 2006, 2006). In one study, researchers found that 45% of participants reported having left or considered leaving their position because of the moral distress that they had experienced (Hamric & Blackhall, 2007). These results have been supported in a sample of emergency nurses, finding that 6.6% of the nurses attributed moral distress as the reason for leaving a previous position, 20% said that they had considered leaving a position but did not, and 13.3% stated that they are currently considering leaving their position (Fernandez-Parsons et al., 2013).

Summary of Moral Distress

The moral distress literature has exponentially increased over recent years, expanding knowledge and application cross culturally from the United States to Australia (Crane et al., 2015), Belgium (Piers et al., 2012), Japan (Ohnishi et al., 2010), Israel (Ganz & Berkovitz, 2012), Sweden (Pergert et al., 2019; Sporrang et al., 2005), Finland (Mänttari-van der Kuip, 2016), and Iran (Hatamizadeh et al., 2019). However, despite being seen across the globe, research on moral distress has not been unified.

Researchers continue to argue for new and developed definitions and models of moral distress, with not much agreement on a single model to move forward with. Researchers argue that definitions are missing important components and there is lack of consistency across the conceptual frameworks, however it may be that some authors are incorporating aspects of similar constructs like moral injury which potentially contaminates findings and implications. Thus, the present study used, Corley's (2002) definition of "the psychological disequilibrium that occurs when [individuals] are conscious of the morally appropriate action a situation requires, but cannot carry out that action because of institutionalized obstacles" (p. 382). Previous work examining moral distress has limited scope outside of the healthcare industry (Kahn, 2019; Kuip, 2016; Papazoglou & Chopko, 2017). As a result, much of what is known about moral distress may have limited transferability to external professional roles. However, many occupations experience similar situations of institutional constraints that question the bureaucracy, leadership, and social issues beyond health care. A similar trend of limited empirical knowledge outside of one industry has also been found with the research of moral injury within the military domain.

Moral Injury

Similar to moral distress, moral injury describes the experience of when an individual is faced with a situation that transgresses against their deeply held beliefs. However, in contrast to moral distress, moral injury involves situations of actions or violence that lead to harm of other individuals, rather than judgement of decision making. In the books ‘Achilles in Vietnam: Combat trauma and the undoing of character’ (Shay, 1994) and ‘Odysseus in America: Combat trauma and the trials of homecoming’ (Shay, 2003), Jonathon Shay described moral injury as one of the adverse effects of war. Shay (2003) portrayed moral injury as situations where “there has been a betrayal of what’s right, by someone who holds legitimate authority, in a high-stakes situation” (Shay, 2003, p. 240). Moral injury was said to occur as a result of individuals receiving and obeying “authorized yet immoral orders” and observing horrors of war (Hodgson & Carey, 2017).

Many researchers have proposed similar conceptualizations that expand on Shay’s (2003) original definition to varying degrees. Drescher et al. (2011) described moral injury as the “disruption in an individual’s confidence and expectations about one’s own or others’ motivations or capacity to behave in a just and ethical manner” (p. 9). Other researchers have similarly defined moral injury as, “the damage done to our moral fiber...[which] sacrifice[s] our moral integrity” (Boudreau, 2011, p. 749), “a wound in the soul” (Brock & Lettini, 2011, p. 1), which “overwhelm[s] one’s sense of goodness and humanity” (Sherman, 2015, p. 8). The major theme that exists throughout the proposed definitions is how moral injury harms the person’s sense of other people and how the world operates. The events that transgress their beliefs, cause the individual to

lose faith in humanity and their beliefs in a just-world (Drescher et al., 2011).

Researchers have found that rumination of the event and lack of self-forgiveness for one's involvement, leads to moral injury (Litz et al., 2009).

One of the most cited adopted definitions has been provided by Litz et al. (2009), who defined moral injury as “the lasting psychological, biological, spiritual, behavioral, and social impact of perpetrating, failing to prevent, or bearing witness to acts that transgress deeply held moral beliefs and expectations” (p. 695). The authors refined the original definition to be applicable more broadly and specifically to situations that transgress one's beliefs. The authors state that actively participating in or witnessing cruel actions and failing to prevent those cruel acts can conflict with one's moral values. Litz et al. (2009) suggested that moral transgressions interfere with an individual's personal expectations about the way in which individuals should behave. As a result, individuals question themselves, and those around them, as to why a situation was able to occur, resulting in guilt and shame from participating in the event. When individuals are unable to integrate events into their mental schemas (views of the world), they will experience “guilt, shame, and anxiety about potential direct personal consequences” (p. 698).

Since its first conceptualization, numerous authors have continued to develop and refine the concept of moral injury (see Hodgson & Carey, 2017). In their review of the literature, Hodgson and Carey (2017) compared researchers' definitions and concluded that research has refocused from Shay's (2003) original description of the target of distress being those in 'legitimate authority' to “focusing specifically upon the behavior

of the individual - who may or may not be impacted by leadership or organizational decisions” (p. 1214). Where Shay (2003) emphasized the perceived betrayal in the failure of leadership (‘authority’), researchers have since adapted the definition to focus on the perceived failure of the individual as a result of leadership, where an act that the individual engaged in or failed to prevent (as directed by leadership), is perceived as morally ‘wrong.’ One of the core concepts of moral injury inherent in many of the definitions is the perceived betrayal that an individual feels. Betrayal stems from the individual feeling forced to act in a way that is against their beliefs, resulting in perceptions of disloyalty and distrust from the person, protocol or power that enforced the order. As a result, many researchers have suggested the conceptual framework includes differences in moral injury that includes actions by self, actions by others, and betrayal.

Moral Injury Residue

While moral injury has been heavily investigated within the military, no empirical data has been examined on the residue that may occur from moral injury. Unlike the moral distress literature, where researchers have conceptually defined moral residue as a result of accumulated moral distress and the crescendo effect (see prior section), the moral injury literature has not specifically addressed the increased likelihood of being effected by moral transgressions. However, studies have suggested similar phenomena may occur. In their findings from police officers who were exposed to chronic trauma, McCormack and Riley (2016) described a domino effect in the officer’s reports of diminishing self-worth and described the occurrence as the ‘eroded identity’ over time.

Further, Litz et al. (2009) described how poor integration of events and one's moral schema leads to lingering psychological distress. The researchers discussed that over time, individuals convince themselves that their actions are unforgiveable, leading to rumination about one's participation in the event. Failing to avoid these thoughts, individuals tend to engage in withdrawal and self-condemnation behaviors, replicating symptoms of PTSD (reexperiencing, avoidance, and emotional numbing). Therefore, it is likely that as individuals experience moral injury over time, moral residue and the crescendo effect may still occur.

Moral Injury Distinctions

Similar to the literature on moral distress, prior researchers have distinguished between the outcomes that results from the frequency and intensity of transgressions that occur. The term 'potentially morally injurious experiences (PMIES)' has been used by many researchers to refer to the event that precedes the appraisal process (Bryan et al., 2016; Currier, Holland, Drescher, et al., 2015; Drescher et al., 2011). Many researchers have measured moral injury with the assumption that specific events are tied to adverse outcomes (Currier, Holland, Drescher, et al., 2015; Nash et al., 2013). However, exposure to questionable events does not necessarily lead to adverse outcomes for every individual. For example, two employees may be restricted from helping a coworker in a dangerous situation, however only one may feel guilt from not intervening and aiding the coworker. In their review of the literature, Griffin et al. (2019) concluded that "exposure to potentially morally injurious events should not be equated with morally injurious outcomes, per se" (p. 356). Research findings have shown that the appraisal of the event

is a key determinant of whether the individual will experience morally injurious outcomes. Preliminary evidence has suggested that measures of exposure to PMIEs are less strongly associated with mental and behavioral health problems than instruments designed to assess morally injurious outcomes, such as guilt associated with the event (Currier et al., 2018; Koenig et al., 2018).

The second distinction that researchers have made within the literature is the referent of who engaged in the morally injurious action. Inherent in almost all of the moral injury definitions is the idea that individuals either witness or perpetrate acts that transgress deeply held beliefs (Carey et al., 2016; Litz et al., 2009). Researchers have continuously stressed the importance of other versus self-engaged morally injurious events, stating that while both lead to moral injury, unique underlying processes may occur for the two sources (Drescher et al., 2011; Jordan et al., 2017; Litz et al., 2009). For example, Stein et al. (2012) found that ‘moral injury by self’ was the best predictor of severity of reexperiencing symptoms and two out of three dimensions of guilt (hindsight bias/responsibility, and wrong doing), however, ‘moral injury by others’ only predicted state anger. Additionally, Papazoglou et al. (2019) found that perpetrating morally injurious events uniquely predicted compassion fatigue and PTSD symptoms, whereas witnessing morally injurious events was not a significant predictor in their sample. However, other researchers have found conflicting results. Bryan et al. (2016) found that witnessing morally injurious was most strongly associated with posttraumatic stress and perpetrating morally injurious events was most strongly associated with hopelessness, pessimism, and anger. Nonetheless, while research has found conflicting results of which

morally injurious dimension is the strongest predictor of outcomes, evidence is clear that unique effects occur for witnessing verses perpetrating the event themselves.

The final key distinction that is important to note within the moral injury literature is the conceptual similarities with constructs such as post-traumatic stress disorder (PTSD). While there are similarities in the concepts, researchers have theoretically and empirically distinguished the two (Dennis et al., 2017; Farnsworth et al., 2019; Griffin et al., 2019; Litz et al., 2009). The Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 2013) recognizes that PTSD is a “syndrome of emotional, behavioral, and cognitive symptoms including intense anxiety, nightmares, hyperarousal, and flashbacks that are triggered by exposure to traumatic external events”. The DSM (American Psychiatric Association, 2013) holds that the “essential feature” of the disorder is “exposure to an extreme traumatic stressor” which is limited to an event where death or serious physical injury is threatened (American Psychiatric Association, 2013, p. 463).

While PTSD can result from experiencing natural disasters (e.g., forest fires or hurricanes), or manmade crises (e.g., war), moral injury predominately results from manmade crises as interpersonal violence is volitional behavior that can be evaluated as transgressing moral beliefs. Moral injury occurs to the extent that humans are responsible for the bad actions that occur. During a natural disaster, moral injury would only result from human action that was perceived as morally wrong following the event, such as intentionally failing to help others who have been harmed; whereas interpersonal violence always involves human action from the start. For example, individuals who

experience wartime violence may experience PTSD symptoms due to witnessing and/or engaging in violent behavior, however violence and killing are ‘expected’ in war as a normative part of the soldier experience. When the violence involves questioning ethically correct actions, such as those involving children or innocent bystanders, can lead to moral injury. It is the subjective interpretation of the meaning that is attributed to actions and observations, that contributes to the result of moral injury (Litz et al., 2009). Furthermore, Litz et al. (2009) summarized that when traumatic events occur, an individual who experiences PTSD feels dissonance about threats to their wellbeing. Whereas moral injury occurs when the individuals are faced with trauma but cannot comprehend the justification behind the action as being the ‘right course of action.’

Other researchers, such as Dennis et al. (2017), described how outcomes of moral injury are predictive of PTSD symptoms; thus, moral injury may be a precursor to PTSD. Research has shown that associations between morally injurious experiences and PTSD have ranged from small to moderate (Currier, Holland, Drescher, et al., 2015; Currier, Holland, Rojas-Flores, et al., 2015; Nash et al., 2013). Dennis et al. (2017) stated that when individuals experienced war time atrocities that they believed violated their standards of what was acceptable, they felt increased guilt associated with the event. However, it was when individuals were unable to come to terms with their guilt that they experienced the PTSD symptoms of reexperiencing the event, avoidance and hyperarousal (Dennis et al., 2017).

Litz et al. (2009) provided an in-depth examination of the construct distinctions and stated that a possible reason for the limited amount of research in the area of moral

injury (at that time) was due mental health professionals associating military members with the focus on life-threatening trauma typical of war, and failing to pay sufficient attention to the impact of events with moral and ethical implications. Litz et al. (2009) also stated that clinicians who sense moral conflict in their client may associate moral violations as being outside the realm of their expertise, recommending religious counseling instead. However, as research developed in the area of moral injury, it is clear psychologists should be aware of the impact both on the individual and organizational outcomes. In summary, moral injury is not a syndrome or disorder in itself, however, it can be viewed as accompanying or a precursor to PTSD symptomology.

Morally Injurious Events

The development of knowledge of the impact of moral injury has primarily been conducted within the military setting. Researchers have assessed war veterans (Currier, Holland, & Malott, 2015; Currier, McCormick, & Drescher, 2015; Dennis et al., 2017; Evans et al., 2018; Ferrajão & Aragão Oliveira, 2016, 2016; Ferrajão & Oliveira, 2014; Vargas et al., 2013; Worthen & Ahern, 2014), active duty military (Bryan et al., 2014; Bryan et al., 2013, 2016; Stein et al., 2012), armed forces intelligence personnel (Ogle et al., 2018), deployed nurses and physicians (Conway, 2013; Gibbons et al., 2013), deployed healthcare and religious professionals such as chaplains, academic researchers, and policymakers (Drescher et al., 2011). Within the military, soldiers are frequently exposed to morally injurious events due to the nature of work. Moral injury occurs as violence extends outside of what is perceived as ‘normal wartime behaviors,’ and individuals develop negative self-appraisals which can influence their self-identity and

cause emotional withdrawal and poor mental wellbeing (Dombo et al., 2013). Moral injury stems from feeling remorse about one's own behavior or feeling guilty for being associated with the actions of others (Litz et al., 2009). Qualitative studies with clergy, mental health providers, and Vietnam veterans have shed light on the sources of moral injury. In one study, clergy and mental health providers described acts of betrayal; acts of disproportionate violence inflicted on others; incidents involving death or harm to civilians; and within ranks violence (Drescher et al., 2011; Gibbons et al., 2013; Vargas et al., 2013). The researchers also found that moral injury was linked to increased social problems such as isolation or aggression; trust issues such as problems with intimacy; spiritual changes including loss of faith; existential issues such as fatalism or sorrow; and negative views of self (Drescher et al., 2011; Gibbons et al., 2013; Vargas et al., 2013).

Currier, McCormick and Drescher (2015) have suggested four clusters reflecting different circumstances within which morally injurious events may occur: organizational circumstances, such as when leadership is perceived as out of touch with work; environmental circumstances, such as having difficulty identifying threats or civilians; cultural and social circumstances, such as dehumanizing the enemy, and psychological circumstances, such as having a revenge mindset, contribute to how an individual develops moral injury.

Despite the widespread examination of moral injury research amongst the military, few researchers have established justification for moral injury outside of the military domain. Studies have included nonmilitary samples of teachers (Currier, Holland, Rojas-Flores, et al., 2015; Sugrue, 2020), police officers (Komarovskaya et al.,

2011; Papazoglou et al., 2019), child protective system personnel (Haight et al., 2017), and journalists (Backholm & Idås, 2015; Browne et al., 2012). Other researchers have suggested that moral injury is relevant to first responders (Benedek et al., 2007), teachers (Keefe-Perry, 2018; Levinson, 2015), prison staff, supermarket personnel and delivery drivers and frontline workers of the Coronavirus pandemic (Williamson et al., 2020). However, empirical data has not yet been provided to support these claims.

Many authors have critiqued the limited settings that moral injury research has been conducted. Authors have argued that “moral injury may be applied beyond the battlefield to nonmilitary clients who also experience the emotional effects of their own actions that violate the dictates of their moral compass” (Dombo et al., 2013, p. 198; Griffin et al., 2019; Williamson et al., 2018, 2020). Empirical evidence supports these claims that moral injury may be found in other occupations. In one study of child protective service workers, employees had increased rates of moral injury due to under-resourced systems, problematic professionals, unfair laws and policies, abusive parents, an adversarial system, systemic biases, harm to children by the system and poor-quality services. In their systematic review, Williamson et al. (2018) found that there were no significant differences in outcomes associated with moral injury between military and nonmilitary professions. In other words, combat exposure was not necessary in order for individuals to experience moral injury. The studies involving veterinarians, journalists and teachers were just as likely to experience moral injury as those in the military. Therefore, while the majority of what is known about moral injury stems from the military, research suggests this is only one occupation in which moral injury may occur.

Further research is needed to examine the widespread application of moral injury beyond the battlefield and whether all occupations experience moral injury universally.

One of the rationales for why moral injury is commonly researched in the military is that violence is evident within the context of war and thus moral injury should be easier to acknowledge and recognize. However, Neria and Pickover (2019) suggested that although civilian workers may not experience morally injurious experiences to the same degree as military personnel, betrayal and violence can occur in any human interaction at work, and should be examined to understand the clinical applications to the general working public. Other professions may not explicitly have violence and killing within their job descriptions; however, many jobs involve aggressive behaviors. For example, police officers, corrections officers, and the secret service all engage in behaviors with protection, at whatever cost, of their workplace. These professions may be exposed to situations where an employee must engage in physical violence that they do not necessarily agree with, however, they may be held accountable, pulled from their position, or hurt themselves if they do not act in a physical manner.

Previous Research on Morally Injurious Events

Past research has examined the impact that perceived betrayal and conflict cause for individuals. The main outcomes of morally injurious experiences are guilt and shame for participation in the event (Currier et al., 2018; Litz et al., 2009). Researchers have described that guilt stems from internal conflict resulting from a misalignment of one's behavior and values, whereas shame is a social construct where behaviors are perceived as violating others' sense of right and wrong (Litz et al., 2009). Currier et al. (2018;

2015) and others have suggested that a central process for how morally injurious experiences contribute to problems is through meaning making (Koenig et al., 2018). When individuals cannot justify the rationale for their actions or those of others, dysfunctional outcomes are more likely. Most commonly, and as a result of the predominance in military samples, researchers have found strong associations between morally injurious experiences and depression (Currier, Holland, & Malott, 2015; Currier, Holland, Rojas-Flores, et al., 2015; Ferrajão & Oliveira, 2014; Komarovskaya et al., 2011), PTSD (Backholm & Idås, 2015; Barnes et al., 2019; Browne et al., 2012; Bryan et al., 2016; Ferrajão & Oliveira, 2014; Komarovskaya et al., 2011; McCormack & Riley, 2016; Ogle et al., 2018; Papazoglou et al., 2019; Worthen & Ahern, 2014). suicidal idealization and attempts (Bryan et al., 2014; Bryan et al., 2013; Maguen et al., 2011; Wisco et al., 2017).

Feelings of guilt and demoralization have had much stronger associations with PTSD than combat exposure and abusive violence (Laufer et al., 1985). Henning and Frueh (1997) found that guilt accounted for 30% of the unique variance in a composite of reexperiencing and avoidance symptoms and 8% of the unique variance in overall PTSD severity. In their meta-analysis, Williamson et al. (2018) found that within thirteen studies conducted on moral injury, moral injurious experiences accounted for 9.4% of the variance in PTSD, 5.2% of the variance in depression and 2.0% of the variance in suicidality.

Moral injury can also affect trust between coworkers. Jinkerson (2016) stated that betrayal of trust was one of the core symptoms of moral injury and that trust contributes

to loss of trust in oneself, others, existential dread and demoralization (Koenig et al., 2018; McCormack & Ell, 2017). Koenig et al. (2018) and Currier et al. (2018) also found a moderate negative relationship between moral injury and social support, as assessed through the perceived quality of relationships and involvement in community activities. Further, McCormack and Riley (2016) found that all participants in their study ($N=7$) disconnected from their family and friends to varying degrees to avoid the shame associated with morally injurious events. Evidence has shown that shame has caused military and police samples to resort to self-destructive behaviors such as substance abuse (Currier et al., 2018; Maguen et al., 2011; McCormack & Riley, 2016; Tripp et al., 2016), and social isolation (Currier et al., 2018; McCormack & Riley, 2016; Pasillas et al., 2006). The association with morally injurious events causes military personnel to push away their family and friends as a result of resentment to feeling misunderstood in their experiences (Ferrajão & Aragão Oliveira, 2016; Ferrajão & Oliveira, 2014; Worthen & Ahern, 2014). Others have also demonstrated the impact of moral injury on ruptured social bonds (Currier et al., 2018; Nash & Litz, 2013). Specially, Nash and Litz (2013) found a moderately strong negative correlation between exposure to potentially morally injurious events and social support.

Bryan (2016) found that individuals expressed hopelessness, pessimism, and emotional numbing due to increased moral injury. These emotions have been applied to the workplace, where morally injurious experiences have been associated with compassion fatigue (Papazoglou et al., 2019), burnout (Sugrue, 2020) and intentions to leave one's job (Sugrue, 2020). In two studies involving social workers and teachers,

nearly a third of all professionals described themselves or colleagues as actively seeking employment elsewhere (Haight et al., 2017; Sugrue, 2020). Evidence is mixed as to whether exposure to morally injurious events is associated with aggressive behaviors at work (Currier et al., 2018; Maguen et al., 2009; Worthen & Ahern, 2014). However, evidence suggests that impulsive or counterproductive behaviors may occur as a result of self-contempt in participating in a morally injurious event (Currier et al., 2018; Maguen et al., 2009). In their study of veterans, Maguen et al. (2009) found that 13% of the variance in functional impairment was predicted by killing noncombatants, even after controlling for general war combat. Specifically, Haight et al. (2017) described in their study a sample of CPS personnel who struggled to behave in an ethical and moral manner within the system that they viewed as deeply flawed. Morally injurious experiences should be a concern for organizations based on these outcomes.

Summary of Moral Injury

Prior research has demonstrated the adverse effects of individual wellbeing as a result of morally injurious experiences. However, with the lack of knowledge coming from the workplaces of the general public, research is limited in the implications to organizationally relevant behavior. The implications of moral injury are clear as the construct has been observed globally in samples from El Salvador (Currier, Holland, Rojas-Flores, et al., 2015), Finland (Papazoglou et al., 2019), Britain (Browne et al., 2012), Australia (McCormack & Riley, 2016), Norway (Backholm & Idås, 2015), Portugal (Ferreira & Aragão Oliveira, 2016), and Israel (Levi-Belz et al., 2020). However, research is needed within other domains, beyond the battlefield.

Researchers have suggested that other professions are likely to experience guilt, shame, and betrayal of trust as a result of morally injurious experiences in the workplace. Understanding that moral values can conflict with work requirements and influence an individual's sense of self, others, and the world around them will allow researchers and practitioners to understand employee reactions. As Litz et al. (2009) summarized, shame is fundamentally experienced through the anticipated negative evaluation by others, therefore, it is not surprising that individuals who feel ashamed being exposed to morally injurious events have the desire to hide or withdraw.

Summary of Moral Suffering

The existence of moral suffering is evident. Researchers have attributed the internal conflict of moral values of judgements and actions frequently to the military and healthcare domains. Many researchers have debated the definitions and measurement of moral distress and injury independently, however no research to date has acknowledged the similar moral appraisal of situations as being in the same nomological network of moral suffering (Papazoglou & Chopko, 2017; Sugrue, 2019). Both components involve the cognitive and emotional processes that an individual experiences when a conflict relates to a violation of moral expectations in the way matters should occur at work (Jameton, 1984; Litz et al., 2009).

It is clear that both components of moral suffering involve the conflict between one's beliefs of the right course of action but are unable to influence the circumstance. However, where moral distress is a result of individuals feeling 'trapped' by individual or organizational constraints, moral injury involves trauma and atrocities that violate one's

beliefs of what actions are necessary (Jinkerson, 2016; Papazoglou & Chopko, 2017; Sugrue, 2019). Additionally, while moral distress occurs from the feeling of being forced to do something at work that one finds morally wrong, the result is a sense of helplessness in the specific situation but one's world view remains intact. An individual feels guilt and shame from being pressured into decisions that are made and thus would contribute to a negative evaluation of oneself. Whereas the resulting effect of experiencing moral injury causes an individual to question their sense of a just world and the other people in it. An individual perceives that harmful events occurred at work as a result of themselves or others allowing harm to occur, and thus result in external negative attributions.

Papazoglou and Chopko (2017) and Sugrue (2019) have begun to illustrate the overarching construct of moral suffering in the helping professions, describing the various situations where moral injury and moral distress uniquely occur. Some occupations may be exposed to more of one component of moral suffering than another, however researchers need a clear and consistent conceptualization of the constructs in order to adequately address the implications. While some outcomes associated with moral injury and distress may be similar, such as guilt and shame, other outcomes may be unique as a result of the key differences between the constructs. Actions relating harm and violence may resonate more in reexperiencing and rumination in the events resulting in PTSD and counterproductive work behaviors, whereas situations that comprise of morally wrong judgements may be associated more with outcomes such as hopelessness, compassion fatigue and loss of meaningful work.

The current study contends that moral suffering is the overarching term for moral injury and distress using empirical support. Researchers have examined both constructs but have failed to assess the unique influences each construct may have on outcomes of interest (Papazoglou & Chopko, 2017; Sugrue, 2019). Additionally, researchers have cross contaminated measures by including components of injury in distress measures and distress in injury measures. For example, in Currier et al.'s (2015) measure of moral injury, the authors state the questions cover five broad domains including “ethical and moral conflicts” (p. 56). Additionally, in Lev and Ayalon's (2018) measure of moral distress, the researchers include numerous questions describing abuse and physical harm. In order to understand whether workplace hinderances and trauma that transgresses against one's core beliefs are distinct underlying constructs, the current study examined the unique variance that both constructs contribute to key outcomes.

CHAPTER THREE: PERCEIVED OCCUPATIONAL STIGMA

People naturally categorize themselves and others into groups, as classifications provide information about others, and contribute to an individual's sense of belonging, self-esteem and pride (Tajfel & Turner, 1985). Individuals can classify themselves through identification with their job, organization, or industry. Social Identity Theory suggests that individuals develop an identity based on their group memberships that contributes to an 'us' vs 'them' mindset (Tajfel & Turner, 1985). This mindset explains various reactions and behaviors that individuals engage in, based on their perceived social standing. The perception about one's classification within a group can lead to perceived occupational stigma. No matter whether outsiders of the group actually believe in the stereotypes associated with the group, individuals who perceive negative evaluations made by others may experience adverse effects on their wellbeing. The current study assesses the relationship between perceived occupational stigma and dysfunctional outcomes and investigates how perceived occupational stigma may magnify the relationship between moral suffering and those outcomes.

Researchers have defined perceived occupational stigma as the perception that outsiders of the organization perceive their work as physically, psychologically, or morally tainted and of lesser value (Ashforth & Kreiner, 1999; E. C. Hughes, 1951; 1958). Individuals generally seek to maintain a positive image of the social groups to which they belong (Abrams & Hogg, 1990; Tajfel & Turner, 1985), including their occupation. As a result, individuals may engage in paranoid social cognition, where they are hyperaware of their professions 'status' or the public's stereotypes of their work and

will seek to counter those stereotypes. Paranoid social cognition triggers hypervigilance and rumination of social misperceptions and misjudgments and thus could lead to enhanced negative outcomes for the individual (Kramer, 1998). This can be problematic as individuals are challenged with maintaining their self-esteem while being associated with the stigmatized occupational status (Bentein et al., 2017).

According to Affective Events Theory (Weiss & Cropanzano, 1996), when individuals associate negative emotions with their work, these emotions can interfere with an individual's health and work behaviors. Research has demonstrated the impact that stigma can have on depression (Benoit et al., 2015; Carlson et al., 2017; McCoy & Major, 2003), emotional exhaustion (Bentein et al., 2017), maladjustment (Kamise, 2013), self-esteem (Boyce et al., 2007; McCoy & Major, 2003), engagement (Bentein et al., 2017; Kamise, 2013), and occupational identification (Schaubroeck et al., 2018; Shantz & Booth, 2014).

Researchers have also suggested that negative emotions held towards work may increase the likelihood of withdrawal and counterproductive work behaviors (Boyce et al., 2007; Fox et al., 2001; Schaubroeck et al., 2018; Shantz & Booth, 2014; Urick et al., 2018). Counterproductive work behaviors are actions that employees engage in that are harmful to organizational stakeholders and counter to organizational goals (Robinson & Bennett, 1995). In one study comparing housekeepers (a stigmatized profession), to non-housekeepers, the researchers found strong evidence linking the housekeeper's perceptions of stigma was associated with engaging in counterproductive work behaviors (Urick et al., 2018). However, in contrast to previous authors who have suggested that

negative emotions lead to engaging in counterproductive work behaviors (Fox et al., 2001), Urick et al. (2018) found that their sample of housekeepers had ‘limited emotions’ (neither high nor low affect), which caused the housekeepers to emotionally disconnect from their job duties and perform deviant behaviors. Interestingly, the authors suggested that different stigmatized occupations may engage in different types of counterproductive work behaviors based on the impact the actions have on the worker.

Alternatively, other researchers have found that individuals attempt to counteract the ‘taint’ they perceive through developing occupational ideologies and social buffers (Ashforth et al., 2007). Research has suggested that perceived occupational stigma leads to negative outcomes because it causes the individual to question their self-views and their relationship to the marginalized group (Shantz & Booth, 2014). Self-views are an important process in how individuals understand their purpose in society and experience meaningful work. When an employee has an increased sense of meaning in their work, they can minimize the negative effects of perceived occupational stigma by rationalizing what they do as having a purpose in society. Researchers have suggested that all workers are capable of fostering a sense of meaning from work, regardless of their occupational status (Bailey & Madden, 2017; Lips-Wiersma et al., 2016; Shim, 2016). However, the sense of meaningfulness is typically described as occurring as ‘episodes’ rather than general perceptions about work for stigmatized groups (Bailey & Madden, 2017; Mercurio, 2020; Shim, 2016). This has important implications, as individuals may find meaning in some of their work duties, some of the time, however, individuals may not associate their work in general as being meaningful. These findings contribute to the

various outcomes that are associated with perceived occupational stigma; individuals who do not perceive meaning at a given time may be more likely to experience dysfunctional outcomes. In a sample of custodial workers, Mercurio (2020) found that experiencing meaninglessness at work amplified stigma's negative influence on perceptions of oneself and the work that they do.

In addition to finding meaning in work tasks, social buffers have been reported as coping mechanisms to counteract the taint associated with the stigma. Social buffers are a form of a social network where an individual's form a 'clique' of workers in their profession that insulates the worker from the effects of the public's view (Ashforth et al., 2007). Individuals use this group as a form of validation of their work; gaining a sense that they are not alone. Ashforth et al. (2007; 2014) suggested that this group membership encourages individuals to rely more on fellow occupational members as sources of social validation than other professions, as stigmatized workers are less able to receive support outside of their occupation.

However, researchers have also noted a concern for individuals who lack the social wall and occupational ideology that buffers the taint from affecting an individual. Ashforth et al. (2007) stated that individuals who lack a social buffer "would likely find it more difficult to maintain their occupational esteem...trigger[ing] various negative individual and organizational outcomes" (p. 160). Therefore, troubling events that take place at work, such as moral suffering, that cause an individual to feel ashamed or betrayed by occupational group members, break down the meaning associated with one's work and the social buffer to which they rely on. This breakdown of coping mechanisms

is likely to increase the risk of moral suffering to an individual's wellbeing and contribute to the likelihood of retaliation behaviors. The present study addressed the link between moral suffering and perceived occupational stigma on outcomes with the belief that the interaction between violations made at work and a heightened perception of stigma will negatively affect an individual's mental health, sense of meaningful work, and may lead to adverse performance behaviors.

CHAPTER FOUR: PROPOSED HYPOTHESES

As previous researchers have suggested, knowledge is needed on the clarification of moral injury and moral distress as being separate but related constructs. Past researchers have used the terms interchangeably or inaccurately and assessed the constructs inconsistently. While there is a general agreement that not every individual will perceive moral suffering from an event, researchers have measured the constructs by confounding the frequency of experiences with the intensity of emotional turmoil in many measures of moral suffering. Additionally, the referent to which the moral event results from, whether an individual is either a witness to someone else's immoral actions or a perpetrator in which they felt obligated to act in such a way, could shed light on the way in which outcomes occur. The current study aimed to address the inconsistencies in the assessment of outcomes and clarify the concept of moral suffering. Based on the moral suffering measurement model, the factors that were extracted served as the dimensions of moral suffering in subsequent analyses.

Further, with minimal research conducted on moral suffering in occupations other than healthcare and the military, organizations may be unaware of the internal struggle employees may be facing (Haight et al., 2017; Williamson et al., 2018). Many professions and industries must abide by legal, professional, and organizational standards in which morally threatening events can arise. As most participants in military research are male, and the majority of participants within the healthcare domain are female, understanding of the constructs may be limited by the gender representation within the professions (Williamson et al., 2018). Therefore, the current study extends the moral

suffering literature by studying a sample that is diverse, both with regard to gender and occupation.

Additionally, a review of the literature demonstrated a need for an in-depth examination of the construct of moral suffering without a reliance on cross-sectional design inferences. Williamson and colleagues (2018) reported that within their meta-analytic review of the literature on moral injury, 12/13 articles were cross sectional. The research investigating moral distress has followed a similar pattern (Ando & Kawano, 2018; Asgari et al., 2019; Elpern et al., 2005; Haghighinezhad et al., 2019). Past researchers have also called for an assessment of other risk factors and instrumental moderator variables that may affect mental health outcomes over time. Much of the literature is limited to medical and war related outcomes, providing a gap in knowledge of outcomes that may occur in the general workforce. While concepts such as PTSD and turnover are relevant to the general workplace, other outcomes are needed to broaden the understanding of moral suffering.

The present study documented the experience of moral injury and moral distress in a broad range of occupations in the United States. Thus, the current study proposed three goals; (a) Extend the literature on moral suffering to examine the frequency and intensity of moral injury and distress in a wide range of professions; (b) Examine the distinction between moral injury and moral distress, both conceptually and statistically, and examine whether the constructs predict different outcomes uniquely; and (c) Examine the role of occupational stigma, and the association of an individual to a stigmatized occupation may magnify the effects of moral suffering.

Through the Conservation of Resources Theory, the relationships of moral suffering on outcomes can be theoretically explained. According to Conservation of Resources Theory, individuals are motivated to preserve and maintain personal resources (Hobfoll, 1989). Personal beliefs and values such as honesty, integrity, and ethics can be considered personal resources and when those resources are threatened, distress can occur. Research has supported the notion that moral suffering is associated with the loss of personal and professional integrity (Carpenter, 2010; Hardingham, 2004; Kelly, 1998). Further, in their conceptualization of moral residue, Webster and Baylis (2000) suggested that with continuous violation of deeply held beliefs, values and principles, individuals continue to experience distress even when the situation is no longer occurring. Moral residue is an exemplar of conservation of resources theory's loss spirals which contribute to the continuous loss of resources and leads to further loss (Hobfoll, 1989).

Research has shown the impact that stress can have over time. If individuals are continuously exposed to situations that make them question their belief system, this can create uncertainty and fear in their global perceptions of the world. The shame and guilt associated with moral suffering can affect perceptions of oneself and the emotional processing of the event (Kruger, 2014). Challenging one's belief system and a perceived inability to overcome the obstacle can lead depression and anxiety. Research has continuously investigated the symptoms of moral injury and moral distress on depression and anxiety (e.g., Colville et al., 2019; Dombo et al., 2013; Lamiani et al., 2018; Litz et al., 2009; Wolf et al., 2016), however, no study has examined the unique variance that moral distress and injury that may contribute to the onset of mental health symptoms.

Mental health has been the main area of concern in the moral suffering literature, so to uncover whether the constructs are examining unique features of the work environment, the following hypotheses are proposed:

H1(a-b): Moral suffering assessed at Time 1 will be associated with increased mental health symptoms at Time 2; Both (a) Moral injury and (b) moral distress will predict unique variance in mental health symptoms.

Kopacz et al. (2019) described moral suffering as the “psychological wound” as a result of meaning making from stressful events. Research has examined the difficulties in meaning making as a mediator of how events increase the risk of psychological symptoms (Currier, Holland, & Malott, 2015; Kopacz et al., 2019). Individuals construct meaning through interpretation of events in ways that are congruent with ones pre-existing beliefs, when those events conflict, an individual takes on responsibility or blame for the event (Kopacz et al., 2019). Thus, when employees observe actions or decision making that appears to contradict with the purpose they believed in, an employee can lose their sense of meaning in work. Moral distress can uniquely impact the meaning an individual derives from work as an individual who is drawn to a certain profession may experience circumstances where they are prohibited from achieving that goal. Similarly, moral injury is a result of exposure to violence and harm, which can alter beliefs about a just world which causes a “breakdown in global meaning” (Currier, Holland, & Malott, 2015). While moral distress may cause an individual to experience a decrease in meaningful work due to restriction in the ability to serve their ‘purpose’, moral injury exposes individuals to violence that leads to questioning own’s confidence and

expectations about their own's and other's actions (Dombo et al., 2013). Thus, the following hypotheses are proposed:

H2(a-b): Moral suffering assessed at Time 1 will be associated with decreased meaningful work at Time 2; Both (a) Moral injury and (b) moral distress will predict unique variance in meaningful work.

Additionally, organizational justice research has shown that when individuals disagree with work processes or believe that decisions made were unfair, the individual can react by 'getting even' with the organization by engaging in counterproductive work behaviors (CWB; Ahmed & Khan, 2016). Individuals perceiving that judgements or decisions are against what is right, may interpret the event as unfair. Antecedents of counterproductive work behaviors are similar to the outcomes associated with morally distressing events; individuals who feel violated by decisions decrease the trust relationship between the individual and the organization and decreases their sense of control. Research suggests that individuals who feel disrespected, not heard, or undervalued are more likely to retaliate. Behaviors such as coming in late, misusing resources, and being disobedient can signal that the employee is not satisfied with the way work is currently conducted (Dalal, 2005). The disruption of perceived morality in events can cause individuals to question their confidence in the system and diminishes "their capacity or behave in a just and ethical manner" (Drescher et al., 2011, p. 9).

Research has begun to investigate the extent to which those suffering from PTSD may resort to unethical behavior (Blumberg et al., 2018; LaMotte & Murphy, 2017). Prior work provides justification as research has suggested moral injury as a precursor to

PTSD. One of the few distinctions between morally distressing and injurious experiences is that moral injury seems to capture the sense of betrayal by others at work. Feelings of betrayal encourage individuals to engage in CWBs in sabotage, theft, or aggressive behavior (Fisher & Baron, 1982; Greenberg, 1990; Robinson & Bennett, 1995). Morally injurious experiences may evoke stronger feelings of anger and betrayal to retaliate against individuals within the organization and engage in CWBs. Thus, the following hypotheses are proposed:

H3(a-b): Moral suffering assessed at Time 1 will be associated with increased counterproductive work behaviors at Time 2; Both (a) Moral injury and (b) moral distress will predict unique variance in counterproductive work behaviors.

While many professions are exposed to morally questionable events, some professions may be more at risk for suffering than others. Researchers have suggested that shame is intensified when an individual experiences moral suffering and it may be due to the social standing of one's job role. While guilt causes an individual to question the justification of an event, shame encourages an individual to escape and hide due to social norms (Kubany & Manke, 1995). Researchers have suggested that individuals who perceive they work in stigmatized occupations are often negatively impacted by the perceptions of society (Ashforth & Kreiner, 1999; Kreiner et al., 2006). Individuals who perceive they work in stigmatized occupations may experience worse outcomes of moral suffering than other occupations.

Researchers have demonstrated that individuals who perceive they work in a stigmatized occupation are often concerned with their relationships with outsiders

(Bolton, 2005; Ghidina, 1992; Tracy, 2004). Social Identity Theory (Abrams & Hogg, 1990; Tajfel & Turner, 1985) and research on paranoid social cognition suggest that individuals are aware of their categorization within society (e.g., their profession or industry) and perceived stigma associated with that categorization can lead individuals to have increased sensitivity to how they are evaluated by others (Dutton et al., 1996; Kramer, 1998). Haug (2018) found that the public perception and pressures surrounding student affairs personnel increased their moral distress. Additionally, Mak and Cheung (2012) found that caregivers of individuals with mental illness who had a strong face concern (the desire to preserve social image and social worth associated with one's job role) internalized the perceived stigma, which increased psychological distress and subjective burden. In addition, Litz et al. (2009) stated that individuals who experience moral suffering may be more reluctant to utilize social supports, and it is possible that they may be actually shunned in light of the moral violation.

When employees experience paranoid social cognition and simultaneously feel they have been wronged by someone inside the organization, they may not feel that there is anyone they can turn to for support. Employees who do not believe in the decisions and actions made by themselves (or others) in their organization as being morally 'right' may feel as though they are less able to express their concerns to friends and family in fear of worsening outsiders' perceptions of their occupation. For example, a police officer who is hyperaware of the public's perception of racial issues, may be less likely to confide in outsiders about perceived moral conflicts they experienced at work, in order to avoid confirming the stereotype. With no felt social support and questioning the beliefs of their

own work, the experience of moral suffering while working in a stigmatized occupation can deeply affect mental wellbeing.

Previous research has identified the changes in emotions, relationships, and personal identity of morally injured participants as a result of perceived or actual rejection by family or friends leading to increased psychological and social problems (Ferrajão & Aragão Oliveira, 2016; Ferrajão & Oliveira, 2014; Purcell et al., 2016; Vargas et al., 2013; Worthen & Ahern, 2014). Researchers have found that military members felt resentment due to feeling misunderstood by civilians based on their job duties and this resentment led to increased moral suffering (Ferrajão & Aragão Oliveira, 2016; Ferrajão & Oliveira, 2014; Nash & Litz, 2013). Participants reported the inability to express themselves and their experiences to outsiders who would not understand the requirements of war (Drescher et al., 2011; McCormack & Ell, 2017). One participant reported “civility is meaningless” in war and outsiders would not comprehend their cognitive and emotional states during the events that occurred (McCormack & Ell, 2017, p. 17). Other military participants believed they had to remain silent about their experiences to maintain healthy relationships in society (McCormack & Ell, 2017; Purcell et al., 2016). Similar results have been found within the healthcare field, where healthcare providers cited alienation from fellow providers and occupational networks after exposure to work-related morally injurious experiences (Gibbons et al., 2013; Haight et al., 2017).

Litz et al. (2009) stated that the intensity of moral suffering may depend on outsiders’ reactions and opinions on those events which can explain differences in

experiences outcomes. The interaction of occupational stigma from one's job duties and the perceived moral transgressions that occur at work can lead individuals to resort to self-destructive behaviors such as alcohol abuse, social isolation, and disconnecting from others (McCormack & Riley, 2016). These behaviors may be a consequence of individuals questioning the purpose of their work as a result of the moral transgression and allowing the stigma surrounding one's work to harm their identity (Roca, 2010). Therefore, perceived occupational stigma may magnify the effects of moral suffering on the proposed outcomes. Thus, the following hypotheses are presented:

H4-6: High levels of perceived occupational stigma at Time 1 will moderate the relationships between moral suffering at Time 1 and (4) mental health symptoms, (5) meaningful work, and (6) counterproductive work behaviors assessed at Time 2; the relationship between moral suffering and the outcomes will be stronger for those who report feeling stigma from their work.

CHAPTER FIVE: METHOD

Participants and Procedure

In order to assess complex structural equation models (SEM), large sample sizes are needed to test the proposed relationships. Barret (2007) and Kline (2005) have suggested a sample of 200 as a minimum for complex structural models. Additionally, with the aim of establishing the presence of moral suffering within a variety of workplaces, participants were recruited through an online data collection service, Amazon's Mechanical Turk (Mturk; see Huff & Tingley, 2015). Mturk is an established survey software providing valid and reliable measurement methods (Buhrmester et al., 2011; Pittman & Sheehan, 2016). Researchers have stated that Mturk is a representative sample of occupations in the US for occupational health research (Michel, 2018).

Participants were eligible to participate in the study if they were a United States Citizen, 18 years old, and work at least 30 hours per week (at a job other than Mturk). A total of 699 participants responded to the Time 1 survey, and after the completion of the initial survey, participants were asked to participate in a follow up survey 3 months later. 479 participants responded at Time 2 resulting in the final matched sample used in the analyses (69% response rate). Participants received compensation for completing the survey and passing all necessary attention checks.

On average, participants were 41 years old ($SD = 10.98$), ranging from 20 years old to 71 years old. The gender of the participants was evenly split with 51% of participants identified themselves as male, 48% identified female, and .5% identified as nonbinary or transgender. The majority of participants were white (76%), followed by

Asian (9%), Black or African American (7%), Hispanic, Latino or Spanish origin (6%), and Other (2%). Most participants had earned a Bachelors degree (43%), followed by 18% of participants holding a Masters degree, 12% Associates Degree, 12% had some college, 7% had a high school degree, 5% had a Doctoral Degree, and 2% had some graduate school experience.

On average, participants worked at their current job for 8 years ($SD = 7.28$); with 63% of participants reported working 30-40 hours a week and 37% reported working more than 40 hours a week. Participants were asked “On average, how many people (management, coworkers, employees, customers) do you interact with on a daily basis at work?” Most participants worked with 1-10 individuals on a daily basis (40%), with 30% working with 11-20 other individuals, 9% worked with 21-30 people on a regular basis and 15% worked with more than 30 people. Only 6% of participants reported most often working alone. Participants reported working in a variety of industries, with the most common industries being Educational Services (16%), Professional, Scientific, and Technical Services (15%), Finance and Insurance (11%), Health Care and Social Assistance (11%). The majority of participants earned a yearly salary (58%) while 42% earned an hourly wage. Most participants earned \$25,000-\$49,000 (33%), followed by 29% earning \$50,000-\$74,000, 19% earning \$75,000-\$99,000, 8% earning less than \$25,000, and 10% earning over \$100,000 in yearly salary.

In order to test for response bias of differences between participants who responded to both time points in comparison to participants who only responded at Time 1, independent samples t-tests and chi-square tests were computed. There were no

significant differences between the two groups in terms of gender, $\chi^2(3) = 0.83$, *n.s.*, income, $\chi^2(5) = 10.48$, *n.s.*, salary/hourly employment, $\chi^2(1) = .033$, *n.s.*, and education, $\chi^2(7) = 10.39$, *n.s.* However, there were significant differences between the groups in ethnicity, $\chi^2(5) = 18.52$, $p < .01$, the frequency of white participants whom responded to both Time periods increased from 67% at Time 1 to 76% at Time 2, while participants who identified as Black or African American decreased from Time 1 (16%) to Time 2 (7%). Participants who responded to both Time periods were also older ($M = 40.6$, $SD = 11.00$) compared to those who only responded to Time 1 ($M = 38.0$, $SD = 10.50$), $t(700) = 94.85$, $p < .01$. Additionally, participants who responded to both time periods worked at their current position longer ($M = 7.71$, $SD = 7.28$) compared to those who only responded to Time 1 ($M = 6.17$, $SD = 5.75$), $t(704) = 25.10$, $p < .01$.

Additional analyses were conducted on the key measures utilized in the study. There were no significant differences between the groups in terms of meaningful work, $t(472) = 1.63$, *n.s.* However, there were significant differences between the two groups in the frequency ($t(319) = 4.09$, $p < .01$) and the experience ($t(396) = 2.38$, $p < .05$) of moral suffering, where participants who responded to only the first survey had higher frequency of exposure ($M = 2.24$, $SD = 1.51$) and experienced more moral suffering ($M = 2.60$, $SD = 1.72$) than participants who responded to both time periods ($M = 1.78$, $SD = 1.05$; $M = 2.28$, $SD = 1.59$, respectively). Additionally, participants who responded to both time points experienced less perceived occupational stigma ($M = 2.41$, $SD = 1.64$) than those who responded to Time 1 ($M = 2.92$, $SD = 1.92$), $t(373) = 3.46$, $p < .05$. Participants who responded to both time periods also had slightly less mental health symptoms, $t(382) = 3.38$, $p < .05$ ($M = 1.66$, $SD = 0.83$) and committed less counterproductive work behaviors, $t(266) = 5.61$, $p < .05$, ($M =$

1.25, $SD = 0.69$) than those who responded only to the first survey ($M = 1.91$, $SD = 0.95$; $M = 1.83$, $SD = 1.44$, respectively). Overall, while the differences were statistically significant, the mean differences and effect sizes were relatively small, suggesting that the differences will not contribute to problematic patterns of attrition.

Measures

All study measures were collected at both time periods. The complete list of measures, instructions, and their respective items can be found in Appendices A-F. The Time 1 survey included demographic variables such as age, race, gender, industry, professional title, and tenure. Moral suffering was assessed through four scales targeting moral suffering frequency (frequency of morally injurious experiences and morally distressing events) and moral suffering intensity (perceived moral injury and moral distress; Glasberg et al., 2006; Hamric & Blackhall, 2007; Lev & Ayalon, 2018).

Morally Injurious Experiences. The frequency of exposure to morally injurious experiences was assessed using a modified version of the Morally Injurious Experiences Scale (Currier, Holland, Rojas-Flores, et al., 2015). The original scale was intended for a sample of teachers in El-Salvador with references to educational leaders, students, and teaching personnel, thus the scale was adapted to refer to management, coworkers, and people at work. Additionally, the original 12 item scale was contaminated with 4 items referring to feelings associated with an event and thus all emotional components were removed from the scale to ensure only the frequency of morally injurious events was captured in this section. The items were “things I saw/experienced things that left me feeling betrayed or let-down by educational leaders” (item 1), “I feel guilt over failing to

protect a student” (item 3), “I feel guilt for being able to return to safety at the end of the work day when many students cannot” (item 5) and “I felt betrayed or let-down by my colleagues” (item 7). The four items were modified to remove the emotional component and rephrased to focus on the event, such as “I saw a coworker engage in actions that I did not agree with” (modified item 7). Two items referred to the emotional outcomes of moral injury and thus were removed from the questionnaire as they did not specifically reference a situation that has the potential to cause moral injury (“Seeing people suffer in the workplace has changed me” (item 9) and “I came to realize that I am no longer affected by violence I have seen at work” (item 11)). See Appendix A for the original and modified versions of the scale.

Participants were instructed to select the choice that indicates how often they have experienced each of the situations over the past 3 months. The instructions also clarified referents as being ‘anyone you are in contact with at work’ as moral injurious events can involve oneself, coworkers, management, or clients/patients/customers. Participants responded to 10 items, 5 referring to witness-based events (e.g., “I have seen someone unnecessarily harmed at work”) and 5 items referring to perpetration-based events (e.g., “I failed to take action in helping someone at work”). The items were assessed with a 6-point Likert scale ranging from 1 (never, have no experience) to 6 (always, everyday). Internal consistency was not calculated in the initial study, as the authors stated that the measure contained reflective items (Currier, Holland, Rojas-Flores, et al., 2015). However, the authors provided evidence that the measure contained face validity and construct validity through its correlation with related constructs such PTSD and Burnout.

Morally Distressing Events. The frequency of exposure to morally distressing events was assessed with adapted versions of two Moral Distress Questionnaires (Eizenberg et al., 2009; Lev & Ayalon, 2018). Similar to the morally injurious experiences measure, this scale was intended to assess only the frequency of events. Two scales were combined in order to ensure that both perpetration-based and witness-based morally distressing events were included. The Eizenberg et al. (2009) measure contained only perpetration-based items and thus witness-based morally distressing events from the Lev and Ayalon (2018) measure were added. Additionally, the two scales were modified for the present study for a few reasons. First, the original measures were tailored to healthcare or social work practices, so the referents were adjusted to apply more broadly modifying original items from residents, patients, physicians, and institution to management, coworkers, and people at work. Secondly, Eizenberg et al.'s (2009) original measure was cross contaminated with other related constructs, such as role conflict, role overload, and role ambiguity (e.g., item 6, "I was forced to provide an incomplete treatment to the patient owing to work overload") as a result, 5 items were removed from the adapted measure. Additionally, one item was specific to the healthcare industry and would not be generalizable to a wide variety of occupations (item 12, "I was forced to ignore the clients/customer/ patient's family questions because my supervisor the physician was supposed to address them") and thus was cut from the adapted measure. After the removal of these items, 5 items were retained from the Eizenberg et al. (2009) measure.

In addition to the items from Eizenberg et al. (2009), 5 items were taken from the Lev and Ayalon (2018) measure to supplement the missing ‘witness’ component from the previous measure. However, 4 out of the 5 items contained emotional referents (e.g., item 6, “There were situations in which I felt that the interest of the institution’s management was in contradiction with the interest of the residents”), thus, feelings were adapted to reflect on the actual situation that occurred (e.g., “There have been situations where I believed management's interests were in contradiction with the purpose of my work”). See Appendix A for the original scale and modified measure.

Participants were instructed to select the choice that indicates how often they have experienced each of the situations over the past 3 months. The instructions also clarified referents as being ‘anyone you are in contact with at work’ as moral injurious events can involve oneself, coworkers, management, or clients/patients/customers. Participants responded to 10 items, with 4 items referring to the witness-based events such as, “I have been forced to do my job according to my organization’s protocols, which were against my professional opinion” and 6 items referred to the perpetration-based events such as, “I have seen a colleague behave in an inappropriate way at work that I did not have the ability to prevent.” All items were rated on a 6-point Likert scale ranging from 1 (never, have no experience) to 6 (always, everyday). Eizenberg et al.’s (2009) original measure demonstrated test-retest reliability and had an internal consistency of .81 for the full measure in the initial study. Both scales established content validity through qualitative data (focus groups and interviews) and expert review and evaluation of the measures.

Moral Suffering Intensity. As previous authors have suggested, moral suffering is an appraisal-based construct in which many situations have the potential to cause the psychological and emotional response to occur, but it is an individual's appraisal of the event as being against their belief of what is right that causes moral suffering. In order to assess the degree to which a reaction occurred, each morally injurious and morally distressing event was followed by "to what extent did this situation upset you?" The item was based off the troubled conscience item from the Stress of Conscience Questionnaire (Glasberg et al., 2006). The original scale utilized a similar format to the current study, as each question involved a two-part response where participants reported (A) how often a stressful event occurred and then responded to (B) "to what extent did this situation give you a troubled conscience?" Responses ranged from 1 (not at all) to 6 (extremely). The original measure was pilot tested on two samples (faculty and healthcare workers), had high test-retest reliability and internal consistency when included in the overall scale and thus provided rationale for indexing the intensity from the single item.

Mental Health Symptoms. Participants indicated their current mental health symptoms by responding to a combined measure of the Generalized Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006) and the Patient Health Questionnaire (PHQ; Spitzer et al., 1999). Participants were instructed to reflect on the past 3 months and report how often they were bothered by 7 items referring to anxiety symptoms such as, "not being able to stop or control worrying" and 9 items referring to depressive symptoms such as, "feeling down, depressed, or hopeless." Participants responded to the items using a 4-point response scale ranging from (1) not at all to (4) nearly every day. Prior authors have

demonstrated the reliability and validity of the measures through test-retest reliability and reporting an internal consistency of .92 for GAD-7 and .86 for the PHQ in the original studies (Spitzer et al., 1999; 2006). The original authors established criterion validity through strong agreement with mental health professional diagnoses and construct validity by measuring the association of both measures to self-reported disability days, clinic visits, and the general amount of difficulty patients attribute to their symptoms (Spitzer et al., 1999; 2006). Additionally, the GAD-7 had convergent validity with two other anxiety scales: The Beck Anxiety Inventory and the anxiety subscale of the Symptom Checklist-90 (Spitzer et al., 2006).

Meaningful Work. To assess meaningful work, the Work and Meaning Inventory (Steger et al., 2012) was used. The original scale was derived from the multidimensional model of work as a subjectively meaningful experience consisting of experiencing positive meaning in work, sensing that work is a key avenue for making meaning, and perceiving one's work to benefit some greater good (Steger et al., 2012). Participants were instructed to respond to 10 items, referring to positive meaning ("I understand how my work contributes to my life's meaning"), meaning making ("I view my work as contributing to my personal growth") and greater good motivations ("My work helps me make sense of the world around me"). Participants responded to the items on a 5-point Likert scale ranging from 1 (absolutely untrue) to 5 (absolutely true). The authors reported high reliability for the scale in the original study, with a Cronbach's alpha of .93 (Steger et al., 2012). The authors established convergent validity through high correlations with other meaningful work measures such as the Brief Calling Scale (Dik et

al., 2012) and Work Orientation scale (Wrzesniewski, 1999). The scale was also shown to have high criterion validity as it was positively related to desirable work variables (e.g., organizational citizenship behaviors, organizational commitment, job satisfaction) and negatively related to undesirable work variables (e.g., days reported absent, withdrawal intentions).

Perceived Occupational Stigma. In order to assess how individuals perceive outsiders' perception of their work, participants responded to the Occupational Stigma Perception Questionnaire (Schaubroeck et al., 2018). Participants were instructed to consider the extent that the items applied to their job in general. Participants responded to 5 items such as, "Most people would not want to associate themselves with a job like mine" on a 1 (strongly disagree) to 7 (strongly agree) Likert scale. The original study cited a Cronbach's alpha of .84 establishing good reliability of the scale (Schaubroeck et al., 2018). The authors offered evidence of convergent validity of the scale in relation to constructs such as occupational disidentification, withdrawal behavior and occupational prestige.

Counterproductive Work Behaviors. Participants reported the frequency that they engaged in counterproductive work behaviors with the Workplace Deviance Scale (Bennett & Robinson, 2000). The scale reflects both interpersonal deviance and organizationally directed deviance. Participants were instructed to reflect on the previous 3 months and report the frequency they engaged 19 items such as "Taken property from work without permission" (organizational deviance) and "played a mean prank on someone at work" (interpersonal deviance). Participants responded to the items using a 6-

point Likert scale ranging from 1 (never, have no experience) to 6 (always, everyday). Internal consistency was .81 for the organizationally deviance scale and .78 for the interpersonal deviance scale in the original study (Bennett & Robinson, 2000). The authors established convergent validity with production and property deviance (Hollinger & Clark, 1982) and withdrawal behaviors (Lehman & Simpson, 1992). The authors also provided evidence of discriminant validity with measures such as voice and loyalty (Farrell & Rusbult, 1986).

Attention Check. In order to ensure participants were paying attention and providing high quality data, there was one attention check item included in each survey. The item was embedded within a scale chosen at random, such as “please select agree for this item.” If a participant answered the item incorrectly, the participant was warned and then had to start the survey from the beginning. A second failure of the attention check item excluded them from participation, and they did not receive pay for their survey responses. This attention check system was outlined in the initial page of the survey within the informed consent page so that participants were aware.

Analytical Plan

The proposed analyses were conducted in R Studio using the *lavaan* (Rosseel, 2012), *dplyr* (Wickham, 2020), and *semPlot* (Epskamp, 2015) packages. Descriptive analyses were first conducted assessing the quality of item characteristics. The means, standard deviations and Cronbach’s alpha for each measurement scale have been reported in Table 6.

As multiple measures were adapted and modified, the appropriate validation strategies were conducted to establish the measurement model components before testing the direct hypotheses. First, in order to assess the measurement structure of moral suffering, an Exploratory Factor Analysis (EFA) was conducted on one half of the sample, using the moral injury and moral distress items as indicators for the latent constructs. The frequency items were not included into the initial factor analyses as they are formative measures, and thus an observed score is used in the hypothesized models. Following the suggested model factors from the EFA, the items were included in a Confirmatory Factor Analyses (CFA) using robust maximum likelihood estimation (ML) and the second half of the sample. The CFA was conducted with an emphasis on the distinction between (1) moral injury and moral distress and (2) perpetration-based verses witness-based moral suffering. Previous work has assessed the differences in these distinctions and the current study will provide additional support for the validity for each distinction. If the model fit was improved ($\chi^2 p > .05$, RMSEA $< .08$, CFI $\geq .90$, and SRMR $< .08$) when accounting for a given distinction, then the subscales were treated as different measures through the remainder of the study (Kline, 2005).

In order to provide a comprehensive measure of moral suffering, a product score that accounted for both the frequency and the intensity of each moral suffering experience was also calculated. The measurement model of the product scores will also be assessed. Given the need for clarification of the measurement model of moral suffering, the measurement components of the analyses, item loading characteristics, and fit indices of each measurement model were reported. Following the assessment of the

moral suffering model indices, a second CFA was conducted on all study variables to demonstrate the uniqueness of each scale. Model fit indices were also specified.

In order to assess the relationship between constructs, the regression estimates between moral suffering distinctions and mental health symptoms (H1), meaningful work (H2), and counterproductive work behaviors (H3) were analyzed with a structural equation model (SEM; see Figure 2). SEM allows multiple measurement models to be compared with the paths among the variables estimated and adjusted as necessary. Similar to the CFA analyses, all items were indicators of the latent variables (except the frequency scores). For each hypothesis, a model that regressed the moral suffering components on the outcomes was compared to a second model that constrained the path between each component on the outcomes. Constraining the parameters to be equal forced the model to make both moral suffering dimensions have equal loadings on the outcomes and determined whether the variables contributed equally to the outcomes. Thus, the study's proposition that moral injury and moral distress are unique constructs will be supported if the model that allows the paths to be freely estimated has improved model fit. Further, the semipartial correlation (sr^2) of each relationship was assessed. The sr^2 removes the effect of one IV relative to another without removing the relationship to Y, therefore demonstrating the unique contribution of moral distress and moral injury on the dependent variables.

Next, perceived occupational stigma was examined as a moderator between the relationships of moral suffering and outcomes (H4-6). Age and tenure were used as control variables. Past research has suggested that novice workers (due to age and

experience) in a profession that is typically associated with a stigma increases the likelihood of negative outcomes due to new employees lacking the experience of coping with the stereotypes associated with work (Ghidina, 1992). Thus, the proposed analyses were assessed first without the control variables and compared to a second model with the control variables.

To examine perceived occupational stigma as a moderator of the proposed relationships, the interaction terms were calculated by the double-mean centering approach (Lin et al., 2010). Researchers have stated that the double-mean centering approach is superior to estimating latent interaction effects over other methods, especially when normality assumptions have been violated (Lin et al., 2010). For each latent predictor variable, the indicators were ranked in terms of their relative factor loading, and then were mean centered. Next, the indicator item with the highest factor loading for the moral suffering latent variable was multiplied by the indicator item with the highest factor loading for the perceived occupational stigma latent variable. Each indicator item of the moral suffering dimension was multiplied by the corresponding indicator item of the perceived occupational stigma variable, resulting in 5 product terms. The product items were mean centered again. The SEM interaction model contained the main effects, control variables and interaction terms (see Figures 3-5). The model fit indices for the causal model were examined and reported ($\chi^2 p > .05$, RMSEA $< .08$, CFI $\geq .90$, and SRMR $< .08$). If the specific interactions between moral suffering and perceived stigma were significant, tests of simple slopes between moral suffering and the outcomes were conducted at low ($-1 SD$), medium (M), and high levels of stigma ($+1 SD$).

CHAPTER SIX: RESULTS

Prevalence of Moral Suffering

In order to understand how often participants were exposed to events that had the potential to cause moral suffering, a preliminary analysis examined the rate of endorsement for each item ($N = 699$). The items were recoded as (0) never experienced or (1) experienced at least once over the course of the three months (see Table 1). The top three most frequently experienced events were “I saw a coworker engage in actions that I did not agree with (MI7; 74%)”, “I have seen coworkers behave in contradiction with the best interests of our clients/patients/customers (MD7; 61%)”, and “I have seen a colleague behave in an inappropriate way at work that I did not have the ability to prevent (MD9; 55%)”. Interestingly, the top three situations that caused the most moral suffering was also MI7 (71%), MD7 (60%), and MD9(53%). No items were reported as ‘never experienced’ by all participants. Overall, about half of the participants had experienced each moral suffering item at least once over the past three months.

Moral suffering was also examined at the industry level. Due to small sample sizes ($N < 10$), wholesale trade, real estate, agriculture, utilities, mining/oil, and gas extraction, self-employed, and those who reported other services were excluded from this preliminary analysis. All industries reported experiencing moral suffering to some degree. Thirteen out of the eighteen industries reported experiencing moral suffering regularly at work; where 7.4% of administrative and support services, 5.6% of finance and insurance, 5.4% of manufacturing, 5.3% of government, 4% of accommodation and food services, 4% of education services, 2% of healthcare and 1.4% of

professional/scientific participants reported experiencing moral suffering “every week” or “everyday”. The industries that had over half of their participants endorse experiencing moral suffering (more often than not) were construction (75%), other (73%), administration and support services (56%), finance and insurance (52%) and education services (50%).

Moral Suffering Measurement Model

Descriptive analyses indicated that the multivariate normality assumptions (e.g., skewness, kurtosis) were violated by all study variables, meaning that overall, participants tended to respond on the extreme ends of the response scale. For example, many individuals reported that they had never or rarely experienced the moral suffering items, or rarely engaged in counterproductive work behaviors. This finding is not surprising, as the variables assessed in this study are not expected to occur for every individual to a high degree. While multivariate nonnormality can influence the outcomes of statistical analyses, researchers have provided strategies to incorporate in SEM analyses to overcome influences of skewness.

Fabrigar (1998) recommended using principal axis factor methods when conducting EFA and CFA when multivariate normality is ‘severely violated’. When data are more frequently occurring along one part of the measurement scale, the skew can affect the variance-covariance among variables. As a result, researchers suggest using maximum likelihood parameter estimates with standard errors and a mean-adjusted chi-square test statistic that are robust to non-normality (“MLM”; Hu, Bentler, & Kano, 1992; Curran, West, & Finch, 1996). The chi-square test statistic is also referred to as the

Satorra-Bentler chi-square (Satorra & Bentler 1988; 1994). Adjustments are made to the chi-square, relative fit indices, and standard errors based on a weight matrix derived from an estimate of multivariate kurtosis.

In order to assess the measurement model of moral suffering, the dataset was split into two random halves ($N=349$), using one half to develop the model (EFA) and the other half to validate the solution (CFA; Anderson & Gerbing, 1988, p. 421). First, all moral suffering intensity indicator items were entered in the EFA model. The parallel analysis suggested that the items loaded on an estimated 3 factors. In order to be thorough, the EFA was conducted three times, extracting 2, 3, and 4 factors from the model in order to compare which best fit the data. Upon inspection of the 2-factor loadings, the factors seemed to represent witness-based moral suffering and perpetration-based moral suffering, with no items cross-loading onto both factors.

The 3-factor model replicated the 2-factor witness – perpetration distinction, with the items that loaded on a third factor representing safety-related items such as experiences involving witnessing harm induced by a coworker or the inability to act and protect someone. However, the safety variable included both witness- and perpetration-based items. The 3-factor model included 5 items with cross-loadings on two factors. The 4-factor model reproduced the same findings from the 3-factor model except two items loaded on their own final fourth factor and included a total of 4-items cross loading on two factors. Comparing the models in terms of theoretically sound factors, minimal cross loadings, and parsimony, the 2-factor model was deemed most appropriate. The 2-factor model contained two items (MI2 and MI4) that loaded onto the ‘incorrect’ factor, as both

items were worded as witnessing an event (“I have seen...”) but loaded onto the perpetration-based factor, conflicting with the remainder of the other items in the factor (see Table 2 for factor loadings). Therefore, these two items were removed from the next step of the validation model.

Following the suggested model factor structure from the EFA, the moral suffering items were included in a series of Confirmatory Factor Analyses (CFA) using the second half of the split dataset ($N=349$). The initial CFA assessing the 2-factor structure revealed adequate fit with the data ($\chi^2 (134) = 373.428, p < .05$, RMSEA = .088, TLI = .894, CFI = .907, and SRMR = .055). However, after examining the factor loadings, it appeared that two items had low loadings compared to the other items in the scale. The items were “I have been able to leave my work psychologically or physically safe when I know others at work cannot (MI5; $\beta = .53$)” and “I failed to take action in helping someone at work (MI6; $\beta = .55$). After removing these two items, the model fit indices improved, ($\chi^2 (103) = 279.174, p < .05$, RMSEA = .086, TLI = .913, CFI = .926, and SRMR = .051).

Next, a Lagrange-Multiplier test (LM test) was conducted to suggest potential modifications to the measurement structure. The test provided a logical suggestion to add a residual covariance between MI9 (“I have seen people at work suffer because of actions involving other employees at my organization”) and MI10 (“I saw mistakes made by my coworkers or other employees that led to other people suffering at work”). Both items referred to seeing people at work suffer due to other employees, and thus adding this modification was deemed a logical improvement to the model. The residual covariance

was added to the model and improved the overall model χ^2 by 37.21, (χ^2 (102) = 256.38, $p < .05$, RMSEA = .081, TLI = .924, CFI = .935, and SRMR = .049). The LM test suggested adding another residual covariance between MI7 (“I saw a coworker engage in actions that I did not agree with”) and MD9 (“I have seen a colleague behave in an inappropriate way...”). Both items refer to disagreeing with coworker actions and was deemed appropriate. After adding the covariance between the two items, the model fit improved by $\chi^2 = 29.80$, (χ^2 (101) = 236.134, $p < .05$, RMSEA = .076, TLI = .933, CFI = .943, and SRMR = .048).

Following this modification, the LM test did not provide compelling rationale to add any other covariances. Within the final moral suffering model, the item loadings ranged from .62 to .86 (see Table 3). One of the primary research questions in the current study was to assess whether moral injury and moral distress are separate distinct constructs under the same second-order factor of moral suffering. The measurement model suggested that moral injury and moral distress do not appear to be distinct constructs in the present study. Instead, another two-factor structure was found, witnessing an event that causes moral suffering or perpetrating the event oneself. The remainder of the hypotheses assessed the proposed relationships using this updated 2-factor model.

Moral Suffering as a Product Score

In addition to examining the frequency and intensity of moral suffering, a product score of the two variables was created in order to provide a comprehensive measure of the moral suffering experience. Following the work of Corley (1995), the moral suffering

frequency items were multiplied by their corresponding intensity (B) item and again assessed for their model fit. The same 2-factor structure was used as stated previously, resulting in adequate model fit, ($\chi^2 (103) = 230.883, p < .05$, RMSEA = .092, TLI = .925, CFI = .935, and SRMR = .044). Similar to the main model, the LM test suggested adding a residual covariance between MI9 and MI10 improving the model fit by $\chi^2 = 61.53$ ($\chi^2 (102) = 208.332, p < .05$, RMSEA = .084, TLI = .938, CFI = .947, and SRMR = .043).

The LM test suggested one more logical addition to the model. Modification indices suggested adding a covariance between MI3 (“I have failed to protect someone at work from unnecessary harm”) and MI8 (“I have not had access to the resources or materials I needed to do my job in a way that protected other people at work”) where both items refer to protecting others at work. After the modification was added, the model fit was improved, ($\chi^2 (101) = 195.218, p < .05$, RMSEA = .079, TLI = .945, CFI = .954, and SRMR = .041). Following the prior modifications, there were no other logical suggestions provided by the LM test. Within the final model, items loadings ranged from .68 to .90 (see Table 4). Given the good fit to the data, the product terms were used to represent moral suffering when testing the remaining hypotheses, as opposed to the less parsimonious approach of using separate frequency and intensity assessments.

Other Construct Measurement Models

In order to ensure that all other study variables were assessing their unique constructs, a second set of CFAs’ was conducted on the established study measures. In comparison to the first set of factor analyses, the CFA for the remainder of the study variables only included the matched sample ($N = 479$) for validation, as the Time 2

outcomes were used in the structural models. The fit statistics for all measurement models can be found in Table 5.

Perceived Occupational Stigma

The CFA for the perceived occupational stigma measure showed adequate fit to the data except for the RMSEA statistic, ($\chi^2 (5) = 44.80, p < .05$, RMSEA = .189, TLI = .883, CFI = .942, and SRMR = .055). Item loadings ranged from .64 to .93. There were no compelling adjustments made by the LM test that would theoretically make sense. Therefore, no adjustments were made to the perceived occupational stigma measure.

Mental Health symptoms

The initial CFA that established the measurement model for mental health symptoms did not fit well to the data, ($\chi^2 (104) = 616.11, p < .05$, RMSEA = .139, TLI = .817, CFI = .841, and SRMR = .068). The mental health symptom measure was developed by combining the depression and anxiety indicators into one construct, thus there was conceptual rationale for splitting the two constructs into two latent constructs. As a result, the model fit was improved, ($\chi^2 (103) = 415.62, p < .05$, RMSEA = .105, TLI = .894, CFI = .909, and SRMR = .060). One item, DEP8 (“Moving or speaking so slowly that other people have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual”) had a low factor loading compared to the other items ($\beta = .54$), and thus was dropped from the model. Once DEP8 was removed, the model fit was significantly improved, ($\chi^2 (89) = 299.96, p < .05$, RMSEA = .092, TLI = .925, CFI = .937, and SRMR = .049).

However, the LM test suggested further improvements. The most logical modification with the highest predicted improvement suggested adding a residual covariance between DEP3 (“Trouble falling or staying asleep or sleeping too much”) and DEP4 (“Feeling tired or having little energy”), as both items refer to feeling extremely tired. After the residual covariance was added between the two items, model fit improved by $\chi^2 = 77.49$ and was deemed satisfactory, ($\chi^2 (88) = 253.32, p < .05$, RMSEA = .082, TLI = .941, CFI = .950, and SRMR = .048). Item loadings ranged from .61 to .90. There were no other compelling suggestions made by the LM test that would theoretically make sense. Therefore, no more adjustments were made to the mental health symptoms measure.

Meaningful Work

The initial meaningful work measurement CFA showed adequate fit to the data, except for the RMSEA statistic ($\chi^2 (35) = 339.029, p < .05$, RMSEA = .168, TLI = .883, CFI = .909, and SRMR = .042). However, the meaningful work assessment included three subdimensions (positive meaning, meaning making through work, and greater good motivations), so in order to improve model fit, the three subdimensions were accounted for. The second CFA, including the three subdimension for meaningful work, demonstrated much better fit to the data, $\chi^2 (32) = 117.33, p < .05$, RMSEA = .089, TLI = .967, CFI = .977, and SRMR = .022). Upon examining the item loadings, MW8 had a lower factor loading than the other items (“My work really makes no difference to the world (r)”; $\beta = .49$), therefore, this item was dropped from the model. After the item was dropped, model fit improved by $\chi^2 = 19.62$ resulting in satisfactory model fit, except for

the RMSEA statistic, $\chi^2 (24) = 97.71, p < .05$, RMSEA = .101, TLI = .965, CFI = .977, and SRMR = .022). There were no other compelling suggestions made by the LM test that would theoretically make sense. Therefore, no other adjustments were made to the meaningful work measure.

All Study Variables CFA

The final CFA, which included the 5 latent variables (witness- and perpetration-based moral suffering product scores, perceived occupational stigma, meaningful work, and mental health symptoms) with their adjusted measurement models as described above, demonstrated adequate model fit ($\chi^2 (914) = 1714.426, p < .05$, RMSEA = .049, TLI = .933, CFI = .938, and SRMR = .050). Modification indices did not suggest any rational changes and thus no further modifications were made.

Correlations with Outcomes

In order to assess the strength of relationships among study variables, bivariate correlation analyses were conducted among the study variables. The correlations used a mean composite score based on the measurement model at each time point. The correlation table, along with Cronbach's alphas on the diagonal, can be seen in Table 6.

Past research has suggested that novice workers (due to age and experience) in a profession that is typically associated with a stigma increases the likelihood of negative outcomes due to new employees lacking the experience of coping with the stereotypes associated with work (Ghidina, 1992). Thus, age and tenure were added to the correlation table to assess whether the proposed analyses would require including control variables. Age was correlated with perpetration-based moral suffering, such that the older the

participant the less likely they endorsed experiencing perpetration-based moral suffering ($r = -.11, p < .05$). Age was also related to Time 2 mental health symptoms, such that the older the participant, the less likely they experienced depression or anxiety symptoms ($r = -.10, p < .05$). Tenure was correlated with meaningful work at both time points, such that the longer a participant had worked at their current job the more meaningful work they experienced (r 's = .16 - .18, p 's < .01). As a result of these findings, age and tenure were used as control variables in the remainder of the study hypotheses.

As expected, witness- and perpetration-based moral suffering were positively related. However, this relationship was only moderate ($r = .34, p < .01$). In general, participants reported having low perceived occupational stigma, high meaningful work, rarely engaged in counterproductive work behaviors, and had low mental health symptoms. Additionally, witness- and perpetration-based moral suffering had moderate positive relationships with perceived occupational stigma (r 's = .40, .27, p 's < .01, respectively), mental health symptoms (r 's = .34, .22, p 's < .01, respectively) and counterproductive work behaviors (r 's = .21, .41, p 's < .01, respectively). Interestingly, there was a moderate negative relationship between witnessed-based moral suffering and meaningful work ($r = -.28, p < .01$), while there was no significant relationship between perpetration-based moral suffering and meaningful work. In general, all study variables showed high test-retest correlations across the two time points in the study (r 's = .60 to .80, $p < .01$).

Structural Models of Moral Suffering Predicting Outcomes (H1 – 3)

The hypotheses examining whether moral suffering at Time 1 predicted mental health symptoms (H1), meaningful work (H2), and counterproductive work behaviors (H3) at Time 2 were analyzed with a series of structural equation models (SEM). SEM allows multiple measurement models to be compared with the paths among the variables estimated and adjusted as necessary. Similar to the CFA analyses, all items served as indicators of the latent variables (except the frequency of engaging in CWBs which were treated as an observed score). However, finding significant effects in complex SEM can be difficult to obtain (Deng, Yang, & Marcoulides, 2018), and given the proposed hypotheses required testing many different paths among the 4 latent variables (witness, perpetration, frequency and intensity of moral suffering) and 3 latent outcomes, along with the control variables, model convergence was unlikely if all outcome measures were estimated at once. Therefore, each outcome variable was included in its own SEM, and the moral suffering product terms were used as the latent predictors. The standardized regression estimates (β) for each model can be found in Table 7. The initial model was compared to a second model with the control variables of age, tenure, and Time 1 outcomes.

In order to provide additional insight into the unique contributions of the moral suffering dimensions, two additional analyses were conducted. First, the models were replicated with equality constraints between the moral suffering paths and the proposed outcome. Constraining the parameters to be equal forced the models to make both moral suffering latent variables to have equal loadings on the outcomes. The effects of the

constrained model were compared by a Wald test using standardized regression coefficients using the *lavaan* package (Klopp, 2020). Secondly, the semipartial correlations were calculated for each model. The semipartial correlations were calculated using the *ppcor* package (Kim, 2015). The semipartial correlation (sr^2) removes the effect of one predictor variable relative to another without removing the initial variables relationship to the dependent variable (Cohen, Cohen, West, & Aiken, 2013). Thus, the semipartial correlations represent the ‘unique’ contribution of the moral suffering dimension (e.g., witness-based moral suffering) in relation to the outcome, above and beyond the other dimension (e.g., perpetration-based moral suffering).

Mental Health Symptoms

Hypothesis 1, which stated that the moral suffering dimensions assessed at Time 1 would uniquely predict increased mental health symptoms at Time 2, was partially supported. Witness- and perpetration-based moral suffering product terms were entered in an SEM predicting mental health symptoms. The full model demonstrated good fit with the data ($\chi^2(427) = 944.199, p < .05$, RMSEA = .065, TLI = .910, CFI = .917, and SRMR = .053). The predictors explained 18% of the variance in mental health symptoms ($f^2 = .22$). Although both predictors displayed significant positive bivariate correlations with mental health symptoms, only witness-based moral suffering was a significant predictor of Time 2 mental health symptoms in the structural model ($\beta = .38, p < .01$). The results remained significant even after controlling for age and tenure, however, the relationship was no longer significant after controlling for Time 1 mental health symptoms.

The model was refit to the data using equality constraints. The paths between witness-based moral suffering and perpetration-based moral suffering were constrained to be equal in predicting mental health symptoms. The constrained model decreased witness-based moral suffering from $\beta = .38$ in the unconstrained model to $\beta = .22$ in the constrained model. However, the Wald test suggested that there was not a significant difference among the standardized regression coefficients ($W = 1.83, n.s.$). Thus, according to the Wald test, the relative effects of the constrained and unconstrained paths between the moral suffering predictors on mental health symptoms were not statistically different from one another. In contrast, the semipartial correlations indicated that witness-based moral suffering at Time 1 uniquely accounted for 8% of the variance in mental health symptoms at Time 2 ($p < .01$), while perpetration-based moral suffering uniquely accounted for 1% of the variance in mental health symptoms at Time 2 ($p < .05$). In summary, the results provided two pieces of evidence to support Hypothesis 1a.

Meaningful Work

Hypothesis 2, which stated that the moral suffering dimensions assessed at Time 1 would uniquely predict decreased meaningful work at Time 2, was also partially supported. The Time 1 moral suffering product terms were entered into the model predicting meaningful work at Time 2. The model fit the data adequately ($\chi^2 (267) = 563.316, p < .05$, RMSEA = .063, TLI = .942, CFI = .948, and SRMR = .047) and explained 6% of the variance in meaningful work ($f^2 = .07$). Similar to the bivariate correlation estimates, the SEM regression estimates indicated that witness-based moral suffering was the only predictor of meaningful work ($\beta = -.36, p < .01$). Witness-based

moral suffering had a moderate negative relationship with meaningful work at Time 2, such that increased witness-based moral suffering experiences predicted lower meaningful work over time. The relationship was still significant after controlling for age and tenure, and marginally significant after controlling for Time 1 meaningful work ($p = .059$). Interestingly, when Time 1 meaningful work was added to the model, perpetration-based moral suffering appeared as a significant predictor ($\beta = .51, p < .01$). Due to the initial non-significant finding and consequent reciprocal sign change, this finding is likely due to suppression. Statistical suppression occurs when at least one predictor has a standardized regression estimate (β) or semi-partial correlation (sr) that is larger in magnitude or has a reverse sign than its respective raw correlation with the outcome (Lubin, 1957; Velicer, 1978). Perpetration-based moral suffering had a standardized regression of $\beta = .21$ and $sr = -.27$, whereas its raw correlation with meaningful work was $r = -.05$, satisfying both conditions of suppression.

The model was refit to the data using equality constraints. The paths between witness-based moral suffering and perpetration-based moral suffering were constrained to be equal in predicting meaningful work. The results of the Wald test suggested that there was a significant difference among the standardized regression coefficients ($W = 4.04, p < .05$). According to the Wald test, the relative effects of the moral suffering predictors on meaningful work were not equivalent. The constrained model decreased witness-based moral suffering from $\beta = -.36$ in the unconstrained model to $\beta = -.11$ in the constrained model. Further, the semipartial correlations indicated that witness-based moral suffering at Time 1 uniquely accounted for 8% of the variance in meaningful work at Time 2 ($p <$

.01) while perpetration-based moral suffering did not uniquely account for any of the variance in meaningful work at Time 2 ($sr^2 = .002$, *n.s.*). Therefore, only Hypothesis 2a was supported; witness-based moral suffering was the only predictor to consistently contribute unique variance in predicting meaningful work.

Counterproductive Work Behaviors

Hypothesis 3, which stated that the moral suffering dimensions assessed at Time 1 would uniquely predict increased counterproductive work behaviors (CWBs) at Time 2, was partially supported. The Time 1 moral suffering product terms were entered into the model predicting CWBs at Time 2. The model fit the data adequately ($\chi^2(115) = 306.172$, $p < .05$, RMSEA = .088, TLI = .893, CFI = .910, and SRMR = .056) and explained 9% of the variance in counterproductive work behaviors ($f^2 = .10$). Regression estimates showed that perpetration-based moral suffering had a statistically significant relationship with engaging in CWBs ($\beta = .38$, $p < .01$). The results were still significant even after controlling for age and tenure, however, were no longer significant when controlling for Time 1 CWBs.

The model was refit to the data using equality constraints. The paths between witness-based moral suffering and perpetration-based moral suffering were constrained to be equal in predicting counterproductive work behaviors. The results of the Wald test suggest that there was a significant difference among the standardized regression coefficients ($W = 5.03$, $p < .05$). According to the Wald test, the relative effects of the moral suffering predictors on counterproductive work behaviors were not equivalent. The constrained model decreased perpetration-based moral suffering from $\beta = .38$ in the

unconstrained model to $\beta = .14$ in the constrained model. Further, the semipartial correlations indicated that perpetration-based moral suffering at Time 1 uniquely accounted for 13% of the variance in counterproductive work behaviors at Time 2 ($p < .01$), while witness-based moral suffering did not uniquely account any of the variance in counterproductive work behaviors at Time 2 ($sr^2 = .006$, *n.s.*). Therefore, only Hypothesis 3b was supported.

Structural Models of Perceived Occupational Stigma Moderating the Relationships Between Moral Suffering and Outcomes (H4 - 6)

The second set of SEMs examined perceived occupational stigma as a moderator of the relationships between moral suffering and the three outcomes (H4-6). The interaction terms were created through the double-mean centering technique (Lin et al., 2010) using the 'indProd' function of the *semTools* package (Jorgensen, Pornprasertmanit, Schoemann, & Rosseel, 2021). The predictor and moderator indicators were mean centered, then ranked in terms of relative factor loading. The indicator item with the highest factor loading on each moral suffering factor was multiplied by the indicator variable with the highest factor loading for the perceived occupational stigma items, resulting in 5 product variables. These final cross products were mean centered again. Each SEM interaction model was first assessed using just the main effects (witness-based and perpetration-based moral suffering, perceived occupational stigma) and the interaction terms, then a second model which included the control variables, age and tenure, as well as the Time 1 outcomes, were added to the model. If the interactions between the moral suffering dimensions and perceived occupational stigma were

significant, tests of simple slopes were conducted at low ($-1\ SD$), medium (M), and high levels of stigma ($+1\ SD$). Regression estimates are displayed in Table 8.

Mental Health Symptoms

Hypothesis 4 proposed that high levels of perceived occupational stigma at Time 1 would moderate the relationship between moral suffering at Time 1 and mental health symptoms at Time 2. Due to the high number of parameters that were needed to be estimated, the model did not fit the data well, ($\chi^2(969) = 3389.08, p < .05$, RMSEA = .106, TLI = .734, CFI = .751, and SRMR = .06). The predictors explained 35% of the variance in mental health symptoms ($f^2 = .54$). Regression estimates showed that there were main effects for both witness-based moral suffering ($\beta = .58$) and perpetration-based moral suffering ($\beta = .84, p < .01$), as well as a main effect for perceived occupational stigma ($\beta = .79, p < .01$), predicting Time 2 mental health symptoms.

There was also a significant interaction between witness-based moral suffering and perceived occupational stigma predicting mental health symptoms at Time 2 ($\beta = -.68, p < .05$). The simple slopes were significant at low ($-1\ SD$) and medium (M) levels of perceived occupational stigma (p 's $< .05$), but not at high levels. Therefore, the relationship between witness-based moral suffering and mental health symptoms primarily occurred if employees perceived that they worked in a less stigmatized occupation. Similarly, the interaction between perpetration-based moral suffering and perceived occupational stigma was also a significant predictor of mental health symptoms. The simple slopes were significant at low ($-1\ SD$) and medium (M) levels of perceived occupational stigma (p 's $< .05$), but not at high levels. Therefore, the

relationship between perpetration-based moral suffering and mental health symptoms primarily occurred if employees perceived that they worked in a less stigmatized occupation ($\beta = -.76, p < .01$). The relationship was not significant after controlling for age, tenure, and Time 1 mental health symptoms.

It is important to note that the standardized regression estimates for the interaction terms were negative, whereas all of the main effects had positive regression estimates, suggesting initial evidence of suppression. Statistical suppression occurs when at least one predictor has a standardized regression estimate (β) that is larger in magnitude or has a reverse sign than its respective raw correlation with the outcome (Lubin, 1957; Velicer, 1978). Witness-based moral suffering had a main effect of $\beta = .58$ and perpetration-based moral suffering had a main effect of $\beta = .84$ in predicting mental health symptoms, whereas the raw correlations were much lower ($r = .34, r = .22$, respectively). Additionally, when the witness- and perpetration-based moral suffering variables were entered into separate models with perceived occupational stigma and the respective interaction term, there was no significant main effects or interactions found predicting mental health symptoms. In summary, the interactions were considered statistical artifacts and not meaningful in interpretation, thus Hypothesis 4 was not supported.

Meaningful Work

Hypothesis 5 suggested that high levels of perceived occupational stigma at Time 1 would moderate the relationship between moral suffering at Time 1 and meaningful work at Time 2. Due to the high number of parameters that were needed to be estimated, the model did not fit the data well, ($\chi^2 (720) = 2795.89, p < .05$, RMSEA = .120, TLI =

.736, CFI = .756 and SRMR = .056) with the predictors explaining 20.3% of the variance in meaningful work ($f^2 = .25$). Within the full model, there was a main effect for perpetration-based moral suffering ($\beta = -.51, p < .05$) and perceived occupational stigma ($\beta = -.66, p < .01$). There was also a significant interaction between perpetration-based moral suffering and perceived occupational stigma predicting meaningful work at Time 2 ($\beta = .65, p < .01$). The simple slopes were significant at low ($-1\ SD$) and medium (M) levels of perceived occupational stigma, but not at high levels. Therefore, the relationship between perpetration-based moral suffering and meaningful work primarily occurred if employees perceived that they worked in a less stigmatized occupation. The relationship was still significant even after controlling for age and tenure, but not when controlling for Time 1 meaningful work.

However, similar to the previous model's interactions, there appears to be evidence of suppression (Lubin, 1957; Velicer, 1978). The standardized regression estimate for perpetration-based moral suffering predicting meaningful work transformed from a negative relationship in the main effects, to a positive relationship for the interaction term with perceived occupational stigma. Additionally, the bivariate correlation between perpetration-based moral suffering and meaningful work was not significant. Further, when perpetration-based moral suffering and its respective interaction term were entered into a separate model on their own (without witness-based moral suffering predictors) there was not a significant main effect for perpetration-based moral suffering or a significant interaction predicting meaningful work. In summary, the interaction was considered a statistical artifact and not meaningful to interpret.

Counterproductive Work Behaviors

Hypothesis 6 suggested that high levels of perceived occupational stigma at Time 1 would moderate the relationships between moral suffering at Time 1 and counterproductive work behaviors assessed at Time 2. Similar to the previous models, due to the increased set of parameters estimated, the model did not fit the data well, ($\chi^2(448) = 2051.143$ $p < .05$, RMSEA = .150, TLI = .648, CFI = .682, and SRMR = .066). There was a main effect between perceived occupational stigma at Time 1 on CWBs at Time 2 ($\beta = .44$, $p < .05$). However, there were no main effects found for the moral suffering components and no significant interactions within the full model. Thus, Hypothesis 6 was not supported.

Although each model was assessed in terms of its fit indices, it is important to acknowledge that the interaction models had ‘poor fit’ according to standard cutoffs. While poor fit indices indicate that the model does not strongly fit the data, this does not mean that the models do not represent the general trends in the data. Additionally, SEM literature typically relies on cut off scores that were created by Hu and Bentler (1999; $\chi^2 p > .05$, RMSEA $< .08$, CFI $\geq .90$, and SRMR $< .08$). However recent research has noted that these standard cut offs are not necessarily generalizable to all models and data types (McNeish, An, & Hancock, 2018). McNeish and colleagues (2018) have coined the term ‘reliability paradox’ noting that model fit cutoffs penalize models that contain high factor loadings. The authors state that “although [Hu and Bentler] manipulated many conditions when deriving their cutoff values, the strength of the standardized factor loadings was kept constant throughout their entire study... [where] all of these conditions were tested

with factor loadings that were always near 0.70” (p. 44). The authors found that when factor loadings are low (.40) or high (.90) the model fit indices varied significantly in what would be consider ‘good model fit’ and thus researchers should be worry when making conclusions about model fit when the loadings are not equivalent to .70. Instead, McNeish et al. (2018) suggest that poor fit does not matter as much as the loadings do, model fit indices should be interpreted in the context of your average standardized loading. Within the current study, the average standardized factor loadings for witness-based moral suffering, perpetration-based moral suffering, and perceived occupational stigma were greater than .70 and thus the model fit indices were liked to be penalized.

The Implications of COVID19

During the time of this study, the COVID19 pandemic was infecting the world and interfering with individuals work lives. Participants were asked some follow-up questions to ensure that the study variables were not influenced by these changes. The majority of participants responded that their work has not changed due to the pandemic (67%), followed by 38% were working from home, 20% worked some days in office while others were at home, 2% reported working at a different location (that is not their home), 11% were working reduced hours, 9% were working increased hours, and .5% of participants reported that they were not currently working due to the pandemic. Additionally, after participants responded to the moral suffering items, they were asked “To what extent did your responses to the previous questions refer to situations that were caused by COVID19? (ie. If the pandemic did not exist, would these issues still occur at work?)”. Participants reported that the pandemic had no effect at all on their responses

(40%), a little (27%), a moderate amount (20%), a lot (8%), and a great deal (5%) in regard to the moral injury section of questions. Similar results were found following the moral distress questionnaire, participants reported that the pandemic had no effect at all on their responses (48%), a little (25%), a moderate amount (13%), a lot (8%), and a great deal (6%).

CHAPTER SEVEN: DISCUSSION AND IMPLICATIONS

While the present study did not provide empirical support for all of the proposed hypotheses, the findings from the moral suffering measurement model expand the knowledge of the construct of moral suffering within the literature. Prior research has utilized the terms moral injury and moral distress in inconsistent ways (Sugrue, 2019). There is clear need for clarification within the moral suffering literature to distinguish how these terms are related and whether they are assessing unique constructs. The present study is one of the first to compare the experiences of moral injury and moral distress in one large sample. The findings demonstrate the factor structure of moral suffering, relationships with mental health symptoms, meaningful work and counterproductive work behaviors and some initial evidence for interaction effects with perceived occupational stigma.

The Measurement of Moral Suffering

In the first set of analyses, the measurement model of moral suffering was thoroughly examined. While the main research question of the current study was to investigate the dimensionality of moral injury and moral distress as single or separate entities, the results indicated that moral injury and moral distress are not distinct constructs. Instead, there was a different two-factor structure present within the moral suffering model. Whereas previous research has separated the constructs by the content of the suffering (harm versus judgement), the current study provides evidence that the items are assessing the same construct. Instead, employees appear to differentiate moral suffering involving circumstances where an individual *witnesses* others at work engaging

in decisions or actions that violate their personal sense of right and wrong, versus feeling forced to *engage in* those actions themselves and being a *perpetrator* in the event.

The findings support previous research that has suggested that outcomes may differ depending on the nature of one's involvement in an event (Jameton, 1993; Drescher et al., 2011; Jordan et al., 2017; Litz et al., 2009, Stein, et al., 2016). Within his conceptualization of moral distress, Jameton (1993) described how moral distress is most often a result of an individual's sense of moral responsibility for the situation, despite whether the individual was directly responsible for the event. He stated that whether the individual was making the decision themselves or having to witness others engage in acts they disagree with, the individual perceives an obligation to do what's right as a participant in the situation. Although Jameton (1984; 1993) proposed the distinction between perpetrating and witnessing events in his original work, the moral distress literature has not prioritized this distinction.

Although both witness- and perpetration-based actions are embedded within the common definition of moral injury (see Hodgson & Carey, 2017 for a table of definitions), assessments vary in the factorial separation of witness- and perpetration-based moral injury. The measurement models underlying moral injury measures vary between one (MIQ-M, Currier et al., 2013; MIQ-T; Currier et al., 2015), two (Jordan et al., 2017; Litz et al., 2018; MIES, Nash et al., 2013; Yeterian et al., 2019), or three factor structures (Braitman et al., 2018; Bryan et al., 2014; 2016), with inconsistent factor labels amongst studies. For example, the Morally Injurious Events Scale (MIES; Nash et al., 2013) includes two factors describing perceived transgressions and perceived

betrayals where both witness- and perpetration-based moral injury were collapsed into the transgression factor, whereas Jordan et al. (2017) utilized the same measure but removed the witness-based items.

The findings of the current study support the measurement structure by Litz et al. (2018) and Yeterian et al. (2019), who conceptualized the two-factor structure of moral injury as Moral Injury-Self (reflecting perpetration-based items in the current study) and Moral Injury-Other (reflecting witness-based items in the current study). There is inconsistent research supporting the factor structure of moral injury and thus future research is needed to clarify the measurement model of moral injury that does not confound with other constructs. Results could differ due to various referents and should be considered in further analyses or scale development. The person that a participant witnesses engaging in moral suffering (coworker verses a supervisor) or the target to which the action effects (other coworkers, clients, or oneself) may influence the impact on outcomes. For example, moral suffering may result from just one individual at work or many individuals reflecting on the organizational culture. Future research should investigate the context to which circumstances arise and the impact on individual wellbeing and retaliation behaviors.

As previously stated by Williamson et al. (2018) “some existing measures do not include exposure to a variety of [potentially morally injurious experiences] or confound [potentially morally injurious experiences] exposure with the psychological effects of exposure” (p. 345). One of the most often utilized scales is the Moral Injury Questionnaire (MIQ; Currier et al, 2013; 2015) where both the frequency of events and

the effects of exposure are combined into one measure. As previous research has demonstrated the differing effects of frequency and intensity items, measures that include both elements may be misrepresenting the construct. Additionally, many measures include a factor of perceived betrayal (e.g., Bryan et al., 2014; 2016; Joran et al., 2017; Nash et al., 2013). However, it is hard to conceptually distinguish between perceived betrayal and witness- and perpetration-based moral injury. Perceived betrayal has been defined as “perceived deception or treachery by others,” which could result from witnessing another individual engaging in a ‘treacherous’ action or feeling deceived and forced to engage in actions. The perceived betrayal items may load on their own factor solely due to having the same stem in the three items (e.g., “I feel betrayed by (leaders/coworkers)”).

The measurement problem may also be due to the separation of the moral injury and moral distress domains. The current study provided evidence for a single moral suffering construct that includes both the domains of moral injury and moral distress. The inconsistent factor structure findings within the moral injury literature may be due to some measures incorporating aspects of distress while others do not. Future research should aim to develop a comprehensive scale that encompasses the entire domain of moral suffering while accounting for self- and other-orientated actions.

Moral Suffering Predicting the Three Outcomes

Due to the complexity of the structural equation models, the moral suffering components were examined as product scores of the frequency and the degree to which the situation caused suffering. Previous researchers have examined the implications of

assessing the frequency and degree to which moral suffering differs in how they impact psychological outcomes (Corley, 2002; Currier et al., 2018; Ganz & Berkovitz, 2012; Griffin et al., 2019; Koenig et al., 2018; Mobley et al., 2007; Ohnishi et al., 2010). Therefore, the evaluation of how often an individual is exposed to an event in combination with the degree of distress experienced provides a comprehensive measure of the moral suffering experience. Following the work of Corley (1995), the product terms were developed by multiplying the frequency item with its respective intensity item. Preliminary results assessed the frequency and intensity scores as separate variables within the model, however the models were under-identified and produced very poor model fit indices. The relationships that were found within the preliminary assessment of these separated variables were replicated with the product terms.

The first set of hypotheses proposed that an individual's mental health symptoms, meaningful work and counterproductive work behaviors will be predicted by moral suffering. Despite significant bivariate correlations between both the moral suffering dimensions and outcomes, the SEM analyses indicated that only one dimension contributed unique variance to the outcomes in each model. The results demonstrate that when accounting for one moral suffering dimension, the other does not provide additional predictive value. The findings suggest that future research should continue to evaluate the dimensionality of moral suffering and attempt to parcel out the unique contributions of each dimension.

Furthermore, Hypotheses 1a, 2a, and 3b were supported. Specifically, individuals who witnessed others at work engaging in behaviors that conflicted with their moral

values reported higher mental health symptoms (H1a) and lower meaningful work (H2a). Past research has demonstrated the relationship between moral suffering and mental health (Backholm & Idås, 2015; Colville et al., 2019; Lamiani et al., 2018). Individuals have reported increased guilt from knowing the right course of action was not taken and shame for being associated with the event or organization. The conflict of believing the right course of action and observing the opposite occur, can interfere with employee's trust in others causing doubt in other's intentions. The current study contributes to the literature by replicating previous findings that indicated witness-based moral suffering uniquely predicts increased mental health symptoms in the broader working population. Previous research found that witnessing others engage in events that caused moral suffering contributed more to PTSD symptoms than when the individual was involved in the event themselves (Bryan et al., 2016; Fitzpatrick & Wilson, 1999).

Similarly, the results of Hypothesis 2a found that higher witness-based moral suffering predicted lower meaningful work. The findings suggest that moral suffering can influence how an individual perceives their occupational purpose. Prior research has found that moral suffering can increase an individual's doubts about oneself and how they make sense of the world (Currier, Holland, & Malott, 2015). Through witnessing events that conflict with one's moral values, an individual loses faith in others to act in an appropriate 'just' manner. The findings were not significant for perpetration-based moral suffering. When individuals feel forced to engage in behaviors they do not agree with, the individual has the ability to rationalize the action or inability to act as they are aware of the constraints. The individual acknowledges that there are protocols or rules set in place

that are forcing them to perpetrate in the behavior, and thus rationalizing the event may not diminish one's perception of self-worth in their role.

If an individual observes others acting in ways that conflict with their own personal values, they may not be fully aware of the circumstance that the other person is limited to. The Fundamental Attribution Error (Ross, 1977) describes how individuals tend to over emphasize a person's dispositional traits and underestimate the situational circumstances when observing other's behaviors. One study assessing the attribution in moral responsibility found that individuals were more likely to assign responsibility to an observed actor, the more the actor identified with the situation, "even when the action was performed under constraints so powerful that no other behavioral option was available" (Woolfolk, et al., 2006, p. 283). Assignment of responsibility based on witnessing others engage in actions that are against one's beliefs can affect one's meaning making system.

Interestingly, perpetration-based moral suffering was only a unique predictor of organizationally deviant behaviors. CWBs involve personal acts of withdrawal that contribute to organization inefficiency such as coming in late and taking longer breaks. Litz et al. (2009) described that when individuals experience continued conflict between events that occur and their moral schema, individuals tend to ruminate on their actions, and due to self-unforgiveness, exhibit withdrawal behaviors. Alternatively, CWBs also involve stealing and misuse of company resources. Bryan et al. (2016) found that perpetration-based moral suffering was most strongly predictive of pessimism and anger. Individuals may seek to engage in retaliation behaviors in order to 'get back at' the

organization for putting them in a position where they have to act against what they believed was right (Ahmed & Khan, 2016). An individual may steal resources in order to balance the field. The nonsignificant findings for witness-based moral suffering may be due to witnessing the acts of others as organizationally deviant, and thus the individual is less likely to engage in additional CWBs themselves in order to avoid continuing the problem. Witnessing based moral suffering serves as a deterrent for engaging in CWBs oneself.

Although CWBs are typically defined as employee deviance, this negative connotation may not hold true in the context of moral suffering. When individuals act out against the organization, the refusal to endorse actions that violate their morals could be seen as a form of moral courage, standing up for one's beliefs (Sekerka, Bagozzi & Charnigo, 2009). Some CWB items such as item 7, "Neglected to follow your boss's instructions" may be deviant in an ambiguous circumstance, however when considering a situation where the individual feels the action as being 'wrong', the individual is refusing to endorse violating their value system. Similarly, an individual could seek support as in item 9 "discussed confidential company information with an unauthorized person" in order to reduce the guilt from engaging in those actions. Future research should continue to investigate the interplay between moral suffering and CWBs with the consideration of individuals refusing to conduct work tasks due to the moral conflict experienced.

The Moderating Effect of Perceived Occupational Stigma

The second set of hypotheses asserted that perceived occupational stigma would magnify the effects of moral suffering on the outcomes. While Hypotheses 4a, 4b, and 5b

were statistically supported, the results indicated suppression effects had occurred based on the inflated standardized regression coefficients in comparison to their raw correlations. Suppression occurs when there is an increase in the prediction of a criterion by including another predictor, which increases the variance explained due to accounting for residual errors (Lubin, 1957; Velicer, 1978). Researchers have also demonstrated that the probability of suppression is increased with latent variables, two wave models, and when the latent variables are corrected for measurement errors (Maassen & Bakker, 2001). Thus, the current study utilized indicators to represent the latent variables, with two time points, and using the Satorra-Bentler corrections for nonnormally.

In order to provide additional evidence of suppression, witness- and perpetration-based moral suffering were entered into separate models with perceived occupational stigma and the respective interaction term, resulting in no significant main effects or interactions found. Thus, the interactions were classified as statistical artifacts and not meaningful. It is evident that the moral suffering variables acted as suppressors due to their moderate relationship, inflating the variance explained by the predictors. Perceived occupational stigma had moderate correlations with all study variables and thus future research should aim to replicate the study's hypotheses with different temporal separation between waves of data collection and attempt to capture the incremental validity of each moral suffering dimension by reducing the overlap in the prediction on outcomes.

Another reason the suppression effect may have occurred is the multifaceted nature of perceived occupational stigma. Researchers have suggested that perceived occupational stigma is a multidimensional construct involving physical, social, and moral

‘taint’ (Ashforth & Kreiner, 1999; Hughes, 1951). Workers within each of these categories may experience moral suffering to differing degrees and may be impacted differently due to their classification. Additionally, Ashforth and Kreiner (1999) described how occupational prestige can form as a buffer to perceived stigma. Occupational prestige is a composite of status, power, quality of work, education, and income that forms a ‘status shield’ (Stenross & Kleinman, 1989; Treiman, 1977). For example, a lawyer is considered to have a ‘moral’ stigma in that their work may involve defending a violent murderer, however, a lawyer also has high occupational prestige due to the education needed for the position and wealth that results. The suppression results of the current study may have been influenced due to the broad classification of perceived occupational stigma without piecing apart the unique influences that each type of stigma may involve and whether the occupation has prestige. Future research should consider the dynamic relationships of perceived occupational stigma’s impact on moral suffering.

Implications of Findings

The present study contributes to the literature in several ways. As previously noted by other researchers (Sugrue, 2019; Williamson et al., 2018; 2020), there is a lack of research examining moral suffering in a variety of industries. The majority of published studies have been conducted in military and healthcare settings. The current study obtained a matched sample of 479 participants from 20 different industries in a variety of occupational settings that acknowledged experiencing some degree of moral suffering. With findings demonstrating the prevalence of moral suffering occurring across industries, future research should continue to assess moral suffering outside of the

military and healthcare domains in order to understand other occupational health outcomes that these industries may be facing due to moral suffering. Occupations that have differing degrees of power, agency, and status could impact the occurrence of moral suffering and the extent to which outcomes are affected. Future research should consider ways to break down job types further and examine what job factors may increase the likelihood of moral suffering to occur. Other constructs such as organizational culture would provide a deeper understanding of the larger organizational outcomes that are due to moral suffering. The current study provided evidence that moral suffering exists in the broader population and future research should continue to investigate the various ways moral suffering impacts specific occupational industries.

Additionally, the large sample size contributes to the strength of the SEMs that are required to detect and appropriately interpret effects increases (Barrett, 2007; Kline, 2015). Prior research has relied on cross-sectional designs, limiting the knowledge of causal outcomes of moral suffering (Sugrue, 2019). The current study assessed all study outcomes three months following the initial intake of exposure and effects of moral suffering.

This study also adds to previous research in that the measurement of moral suffering was examined more in depth than previous studies. The current study is one of the first and only to assess moral injury and moral distress in one model, providing evidence of the overall measurement structure of moral suffering. The current study utilized a random split half sample method for examining the two-factor structure of witness- and perpetration-based moral suffering with adequate model fit indices. The

findings provide evidence for the future assessment of moral suffering to consider the inclusion of both domains of distress and injury and with the focus on the act of the individual rather than the context to which the event occurred. Additionally, future research should consider using a single term such as moral suffering when referring to work obligations that conflict with one's values, in order to minimize the confusion within the literature that suggests moral injury and moral distress are separate constructs.

Another strength of the current study was all of the findings remained significant even after controlling for age and tenure. The outcomes could have been more salient as individuals increase in age and the longer an individual works within their career and thus could have influenced the hypothesized relationships. Over time, individuals may gradually become 'numb' to the organizational regulations and thus no longer be affected by moral suffering. Age and tenure did not affect the findings within the current study. However, the findings were no longer significant when controlling for Time 1 outcomes. Because individual strain measures are typically stable over time, a large proportion of the variance of the dependent variable is already explained. Thus, there was little variance left to be explained after controlling for Time 1 outcomes. It is not surprising that when controlling for mental health symptoms, meaningful work, and counterproductive work behaviors at Time 1, there was not enough variance to account for at Time 2. The Time 1 and Time 2 predictors were highly correlated with one another and the time frame between the two assessment periods may have been too small to notice a change.

Limitations

While the current study has expanded the knowledge of moral suffering, there are a few limitations that are important to note and highlight areas for future research. First, although the diversity of the sample is seen as a strength of the current study, the participant pool was collected through an online data source, Mturk. Mturk has been established as a credible source of information for occupational health research (Michel et al., 2018) and representative of the US working population (Casler, Bickel, & Hackett, 2013; Michel, O'Neill, Hartman, & Lorys, 2018). However, researchers have warned against convenience sampling issues that the site may provide (Paolacci & Chandler, 2014). Future research should aim to replicate the findings of the current study with a true random sample of the population.

Additionally, although the measurement model of moral suffering was examined in depth through inclusion of previously established measurement components (injury, distress, witnessing, perpetrating, frequency and intensity), the model still relied on initial construct validity of the original measures. The moral injury and distress measures were obtained from three previously validated scales but were developed for a specific sample and a limited definition. Based on the findings of the current study, future researchers should aim to develop a measure of moral suffering that encompasses the full domain of moral violations that may occur at work. Researchers are encouraged to conduct an extensive review of the literature, informing the development of structured interviews with individuals in a wide range of occupations, and develop a comprehensive measure that increases the content validity of the scale. A high-quality assessment of moral

suffering is needed that has the ability to assess the construct in a variety of occupations. Future research should seek to clarify the definition and measurement of moral suffering in order to understand the experience employees are facing rather than continued adaption of potentially flawed existing measures.

Another consideration of the current study is based on the language used for the intensity scale. While there is a clear need to distinguish the frequency of events occurring and the degree to which the event caused moral suffering, the language used to target the intensity may not have fully captured the experience of moral suffering. Following the guidance of previous researchers (e.g., Braitman et al., 2018; Glasberg et al., 2006), each situation was followed by an item that read, “to what degree did this situation upset you?” however, moral suffering involves feelings of guilt, shame, and helplessness that may not have been captured within the term “upset”. Future research should assess moral suffering with the technique conducted by Braitman et al. (2018). The authors utilized a modified version of the MIQ-M (Currier, Holland, Drescher, & Foy, 2015) but followed each situation with five questions that assessed the degree to which each situation caused them to: 1) “feel guilt”, 2) “feel shame”, 3) “have difficulties with forgiving myself”, 4) “have difficulties forgiving others”, and 5) “become withdrawn” for each experience. Future research should incorporate this methodology to ensure that the full domain of moral suffering is captured.

Another limitation of this study was due to influences outside of the study’s control. During the time of this study, a global pandemic was infecting the world, interfering with individuals lives inside and outside of the work domain. Researchers

have described the implications that COVID19 has had on daily work hours, work role expectations, work-life balance and new safety protocols (Borges et al., 2020; Cacchione, 2020). One potential impact of the pandemic on the present study is related to work from home regulations. While individuals work from home, they are less likely to experience witness-based moral suffering as the circumstances are not as visibly present with individuals working in separate locations. Additionally, the impact of perpetration-based moral suffering may have been intensified as individuals were working alone and could have felt more compelled to engage in decision making that violated their morals without the support of their coworkers. In some industries where employees were able to continue work in person, extreme safety protocols and restrictions were in place that could have also increased the likelihood of moral suffering for both dimensions. However, data was collected on the impact of COVID19 on the study variables (see Results) and participants generally reported that the situations were not unique to the pandemic. While the additional information collected on COVID19 changes were helpful to understand how work has changed during the data collection period it is likely that the pandemic may have increased the strength of the relationships between moral suffering and mental health symptoms, meaningful work and counterproductive work behaviors. Future research is needed to investigate these relationships when life returns to ‘normal.’

Conclusion

The current study has significant theoretical and practical applications to the field of Industrial-Organizational Psychology. First, the diversity of professions that were represented within the present study has expanded upon the literature of moral suffering

by demonstrating the frequency and intensity of distress experienced in the workplace beyond healthcare and military contexts. In addition, the current study has clarified the dimensionality of moral suffering to include witness- and perpetration-based moral suffering rather than the traditional terms of moral injury and moral distress. The current study has provided researchers with a broader understanding of the impact of moral suffering on mental health symptoms, meaningful work, and counterproductive work behaviors.

Numerous authors have discussed strategies for addressing moral distress and moral injury (see Epstein, 2010 and Litz et al., 2009 for a review). Furthermore, researchers have begun to identify ‘missing’ components of interventions aimed to treat PTSD in military samples (Gray et al., 2012; Litz et al., 2009), it may also be that other interventions conducted in the workplace aimed at reducing stress may be overlooking the intense experience of moral suffering. The practical value of the findings is evident as they can provide an understanding of the impact of moral wrongdoing conducted in the workplace.

Within her review of moral distress, Epstein (2010) suggested that intervening on outcomes associated with moral suffering achieves several goals such as raising awareness to the ‘silent harm’ that individuals face and reduces the threat to individuals personal and professional integrity which contributes to their sense of meaning. While not every stressor can be removed from the workplace, organizations that acknowledge the circumstances that surround a moral dissonance, can provide support and resources to their employees to flatten the incremental effects of moral suffering. Organizations can

minimize the perceived powerlessness and helplessness that surrounds moral suffering, through giving a voice to those experiencing dissonance regardless of the industry (Epstein & Delgado, 2010). Research has demonstrated the impact of employee voice on reporting ethical issues leading to turnover intentions (Burnett, 2019). Organizations should ensure that there are procedures in place for employees to express their concerns when moral suffering occurs and that the appropriate attention is placed on addressing these concerns. Considering work is a socially rich environment where individuals identify and represent the career to outsiders, organizations should be aware of the internal struggle employees may be facing and what changes can be made to reduce the burden of these encounters.

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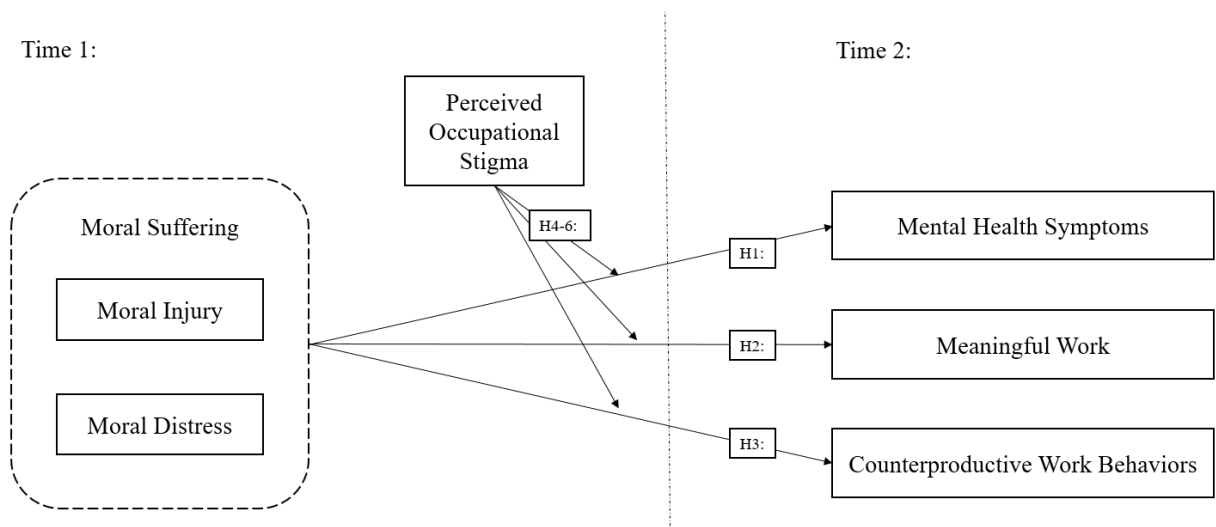


Figure 1. Proposed model showing hypothesized relationships

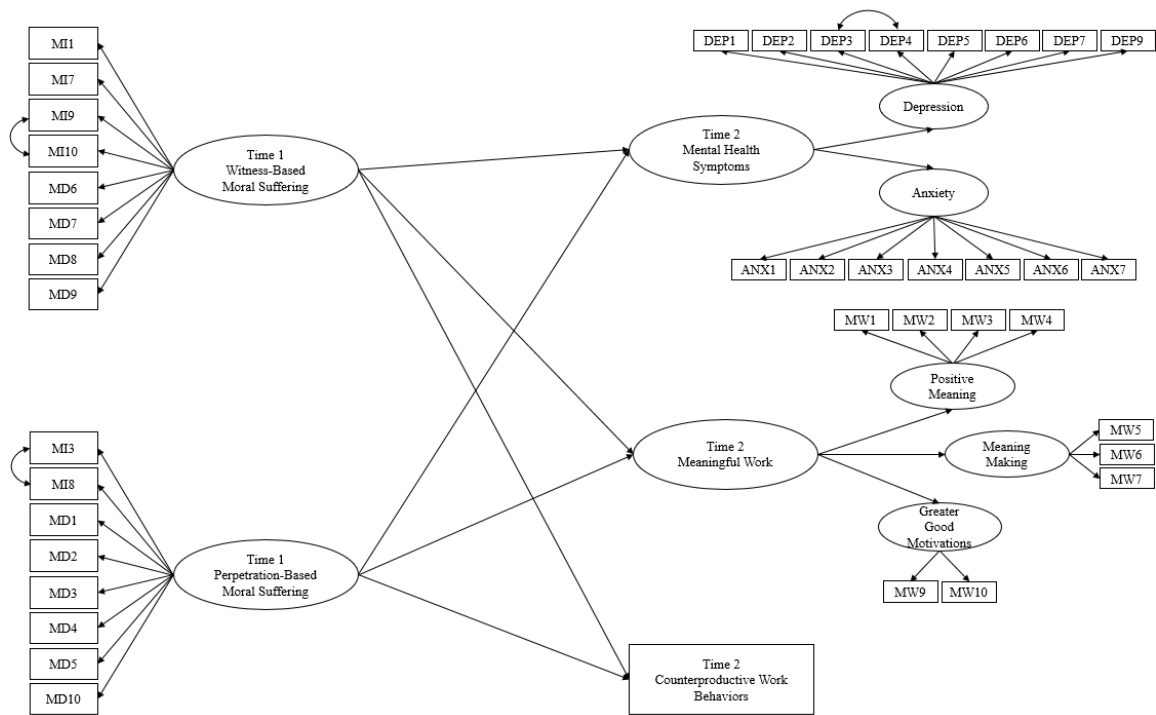


Figure 2. Structural Equation Models for Hypotheses 1-3. The figure represents the conceptual SEMs demonstrating measurement structure and regression paths. Errors, disturbances, and control variables are not displayed. Each dependent variable was modeled on its own with the predictor variables. Witness- and perpetration-based moral suffering were analyzed via product scores of the frequency and intensity items.

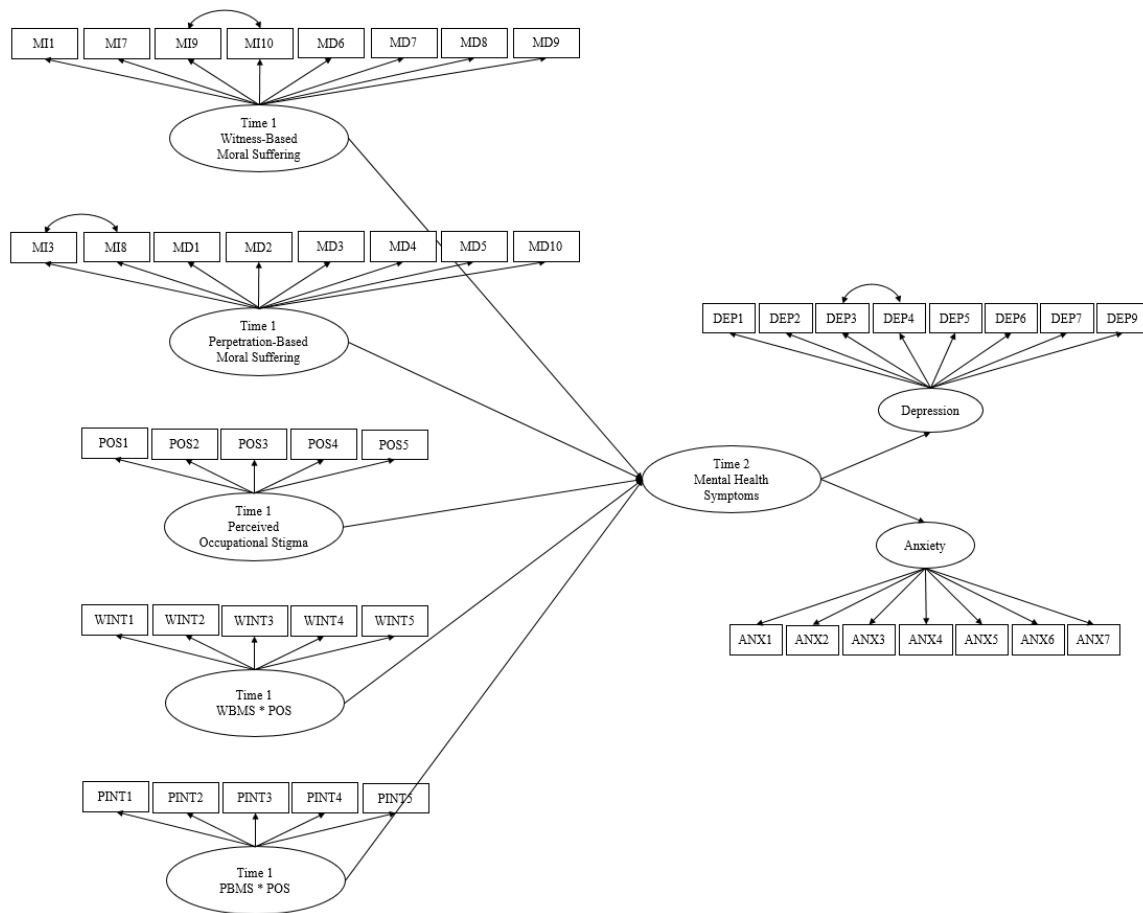


Figure 3. Structural Equation Model for Hypotheses 4. The figure represents the conceptual SEM demonstrating measurement structure and regression paths. Errors, disturbances, and control variables are not displayed. Witness- and perpetration-based moral suffering were analyzed via product scores of the frequency and intensity items.

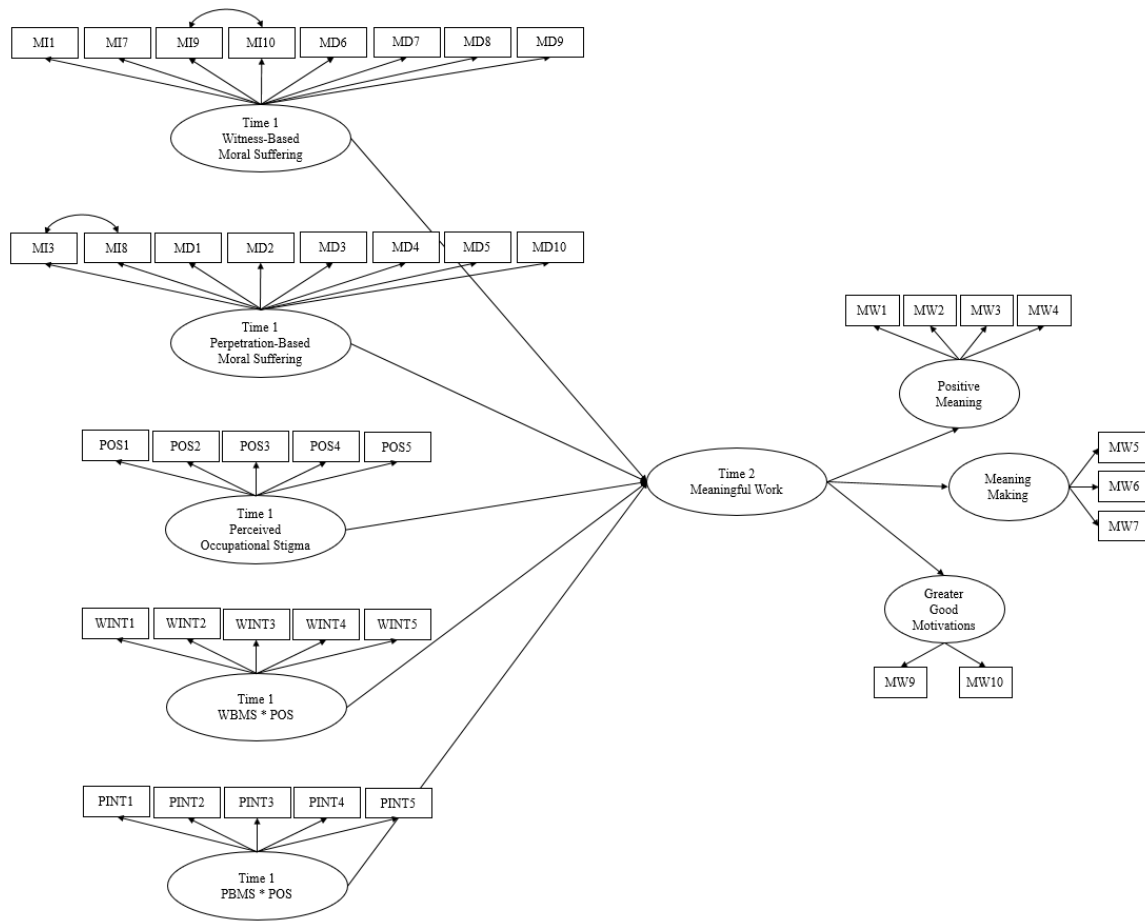


Figure 4. Structural Equation Model for Hypotheses 5. The figure represents the conceptual SEM demonstrating measurement structure and regression paths. Errors, disturbances, and control variables are not displayed. Witness- and perpetration-based moral suffering were analyzed via product scores of the frequency and intensity items.

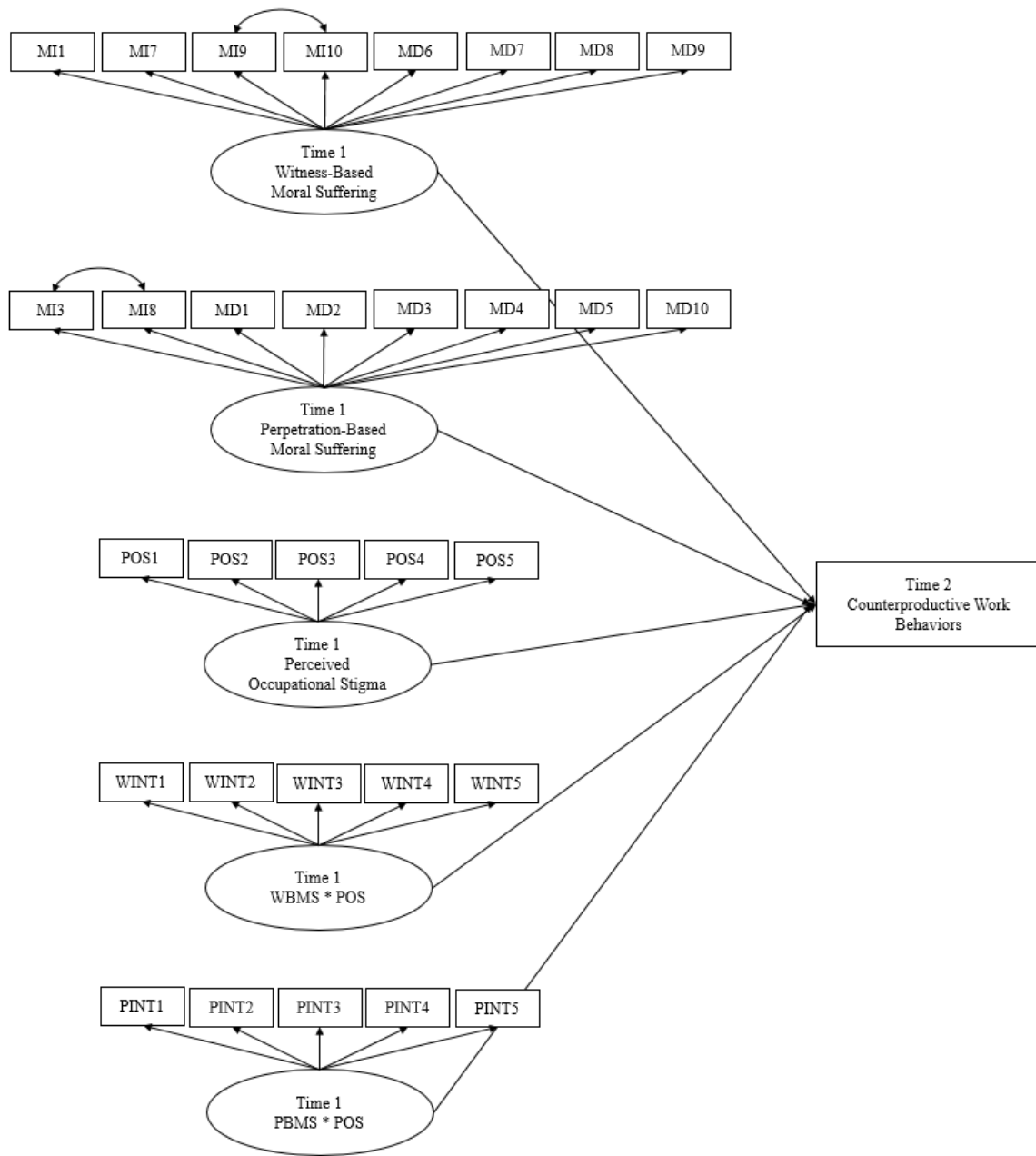


Figure 5. Structural Equation Model for Hypotheses 6. The figure represents the conceptual SEM demonstrating measurement structure and regression paths. Errors, disturbances, and control variables are not displayed. Witness- and perpetration-based moral suffering were analyzed via product scores of the frequency and intensity items.

APPENDICES

APPENDIX A – A Measure of Morally Injurious Events

Considering your experiences at your job, select the choice that indicates how often you have experienced each of the following situations over the past 3 months.

For the items that contain 'someone,' 'others' or 'people' at work, refer to anyone you are in contact with (e.g., your coworkers, clients, patients) on a regular basis.

Frequency (#) Response Scale:	Intensity (B) Response Scale:
1= Never, have no experience	1= Not at all
2= Rarely, once over the three months	2 = Very little
3= Sometimes, more than once over the three months	3 = A little
4= Often, every month	4 = Moderately
5= Very often, every week	5= Quite a bit
6= Always, everyday	6= Extremely

*Items indicated with a * are perpetration-based items*

Over the past 3 months....

1) I have witnessed actions taken by management in my organization that betrayed my trust.

B) To what extent did this situation upset you?

2) I have seen people taking revenge for actions that have happened at work.

B) To what extent did this situation upset you?

*3) I have failed to protect someone at work from unnecessary harm.

B) To what extent did this situation upset you?

4) I have seen someone unnecessarily harmed at work.

B) To what extent did this situation upset you?

*5) I have been able to leave my work psychologically or physically safe when I know others at work cannot.

B) To what extent did this situation upset you?

*6) I failed to take action in helping someone at work.

B) To what extent did this situation upset you?

7) I saw a coworker engage in actions that I did not agree with.

B) To what extent did this situation upset you?

*8) I have not had access to the resources or materials I needed to do my job in a way that protected other people at work.

B) To what extent did this situation upset you?

9) I have seen people at work suffer because of actions involving other employees at my organization.

B) To what extent did this situation upset you?

10) I saw mistakes made by my coworkers or other employees that led to other people suffering at work.

B) To what extent did this situation upset you?

The measure was adapted from Currier et al. (2015)

1) Things I saw/experienced things that left me feeling betrayed or let-down by educational leaders.

2) I saw people taking revenge/retribution for things that happened.

3) I feel guilt over failing to protect a student.

4) I saw the harm of an innocent student.

5) I feel guilt for being able to return to safety at the end of the workday when many students cannot.

6) As a teacher, I had to make decisions at times when I didn't know the right thing to do.

7) I felt betrayed or let-down by my colleagues.

8) As a teacher, I did not have access to the resources or materials I needed to care for my students.

9) Seeing so much suffering in the students has changed me.

10) I saw students suffer because of incident(s) involving teachers or other school personnel.

11) I came to realize that I am no longer affected by violence.

12) I saw mistakes made by teachers or other school personnel that led to the suffering of students.

APPENDIX B – A Measure of Morally Distressing Events

Considering your experiences at your job, select the choice that indicates how often you have experienced each of the following situations over the past 3 months.

For the items that contain 'someone,' 'others' or 'people' at work, refer to anyone you are in contact with (e.g., your coworkers, clients, patients) on a regular basis.

Frequency (#) Response Scale:	Intensity (B) Response Scale:
1= Never, have no experience	1= Not at all
2= Rarely, once over the three months	2 = Very little
3= Sometimes, more than once over the three months	3 = A little
4= Often, every month	5 = Moderately
5= Very often, every week	5= Quite a bit
6= Always, everyday	6= Extremely

*Items indicated with a * are perpetration-based items*

Over the past 3 months....

*1. I have been forced to do my job according to my supervisors' directions, which were against my professional opinion.

B) To what extent did this situation upset you?

*2. I have considered whether to bend the rules to do something that I believed was right despite being against the organization's rules.

B) To what extent did this situation upset you?

*3. I have been forced to do my job according to my organization's protocols, which were against my professional opinion.

B) To what extent did this situation upset you?

*4. I have been forced to do my job according to my supervisors' directions and against my conscience.

B) To what extent did this situation upset you?

*5. I have been forced to relocate/redistribute my work to somewhere/someone else that I believed was unsuitable.

B) To what extent did this situation upset you?

6. There have been situations where I believed management's interests were in contradiction with the purpose of my work

- B) To what extent did this situation upset you?
7. I have seen coworkers behave in contradiction with the best interests of our clients/patients/customers
- B) To what extent did this situation upset you?
8. There have been situations where management has acted superficially and did not serve the best interests of clients/patients/customers
- B) To what extent did this situation upset you?
9. I have seen a colleague behave in an inappropriate way at work that I did not have the ability to prevent
- B) To what extent did this situation upset you?
- *10. I was in a situation where there was an expectation for me to conceal or to give false information.
- B) To what extent did this situation upset you?

The measure was adapted from Eizenberg et al (2009)

1. I do not have enough time to provide the patient with the care that he/she deserves.
2. I was forced to provide care to my patient according to the supervising nurse directions against my professional opinion.
3. I pondered whether to tell the patient (who did not have the means) that he can purchase an expensive medication not included in the “medication basket”.
4. I was forced to invade the patient’s privacy due to inadequate conditions (e.g., a patient in a corridor.
5. I was forced to provide care to the patient according to the physician’s directions against my professional opinion.
6. I was forced to provide an incomplete treatment to the patient owing to work overload.
7. I was forced to keep a patient, who needed a treatment, waiting, due to lack of time.
8. I did not give the patient sufficient attention due to lack of time.
9. I was forced to treat the patient according to the physician’s directions against my conscience.
10. I pondered what to do while witnessing deficient treatment provided by another nurse or a physician.

11. I was forced to ignore the patient's questions because the physician was supposed to address them.
12. I was forced to ignore the clients/customer patient's family questions because my supervisor the physician was supposed to address them.
13. I was obliged to respond to the patient, who deserved a treatment but did not get it.
14. I was forced to deny an appropriate treatment from a patient due to budget cuts.
15. I was forced to move a patient to an unsuitable department instead of providing her/him an appropriate treatment in my department.

The measure was adapted from Lev, Sagit, Ayalon (2018)

1. I acted in a way which has been in contradiction to my professional beliefs due to pressures by the institution's management.
2. I confronted the staff when I perceived their behavior as being in contradiction with the best interests of the residents.
3. There were situations in which I felt that my professional obligation to the residents was in contradiction with the financial interest of the institution.
4. I acted in a manner which I perceived as being in the best interests of the residents, even when it was in contradiction with the demands of the institution's management.
5. I had difficulty handling, in a professional manner, situations of suspected abuse in the workplace towards residents, due to the lack of cooperation or opposition by the staff.
6. There were situations in which I felt that the interest of the institution's management was in contradiction with the interest of the residents.
7. I felt that in situations of suspected abuse towards residents, the management acted only superficially and not to purposefully eradicate the violence interests of the residents.
8. I felt that my personal and environmental resources have not been adequate in order to protect the residents' rights.
9. I confronted the institution's management when I perceived its conduct as being in contradiction with the best interests of the residents.
10. I felt that I have not had sufficient capacity to influence the imposition of sanctions on a worker who behaved in an inappropriate way towards residents.

11. I felt that I do not have sufficient capacity to work to find an alternate framework for residents, even though in my professional opinion an institutional framework is not suitable for them, due to the opposition of the institution's management.

12. I felt that there has been an expectation of me to conceal or to give false information in situations where there is suspicion of abuse.

13. I acted in a way which was in contradiction with my professional beliefs due to concerns of losing my job.

14. I felt criticism from the staff when I advocated on behalf of family members and/or residents.

15. I felt that in my professional work, I have been more driven by the financial considerations of the institution than by considerations for the best interest of the residents.

16. I had difficulty handling, in a professional manner, situations of suspected abuse towards residents, due to lack of cooperation or opposition by the institution's management.

17. I acted in a way which I perceived as being in the best interests of the residents, even when it was likely to hurt my future employment.

APPENDIX C – A Measure of Perceived Occupational Stigma

Measure by Schaubroeck et al. (2018)

Please consider the extent to which each statement applies to your job in general.

Response Scale:

- 1= Strongly disagree
- 2= Disagree
- 3= Slightly Disagree
- 4= Neither agree nor disagree
- 5= Slightly Agree
- 6= Agree
- 7= Strongly agree

1. Most people would not want to associate themselves with a job like mine.
2. Few people would be proud to have my job.
3. Most people would consider my occupation disgusting or degrading.
4. People in my occupation are devalued by others.
5. People may treat me with less respect because of my occupation.

APPENDIX D – A Measure of Mental Health Symptoms

Patient Health Questionnaire by Spitzer, Williams, Kroenke (1999)

Generalized Anxiety Disorder Measure by Spitzer, Kroenke, Williams, and Lowe (2006)

Over the last 2 weeks, how often have you been bothered by any of the following problems?

Response Scale:

- | |
|--|
| 1= Not at all
2= Several days
3= More than half of the days
4= Nearly every day |
|--|

Items indicated with a * assess anxiety.

1. Little interest or pleasure in doing things.
2. Feeling down, depressed, or hopeless.
3. Trouble falling or staying asleep or sleeping too much.
4. Feeling tired or having little energy.
5. Poor appetite or overeating.
6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down.
7. Trouble concentrating on things such as reading the newspaper or watching television.
8. Moving or speaking so slowly that other people have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual.
9. Thoughts that you would be better off dead or hurting yourself in some way.
- *10. Feeling nervous, anxious or on edge.
- *11. Not being able to stop or control worrying.
- *12. Trouble relaxing.
- *13. Worrying too much about different things.
- *14. Being so restless that it is hard to sit still.
- *15. Becoming easily annoyed or irritable.
- *16. Feeling afraid as if something awful might happen.

APPENDIX E – A Measure of Meaningful work

Measure by Steger, Dik, and Duffy (2012)

Please respond to the items using the scale below.

Response Scale:

- | |
|--|
| 1= Definitely Untrue
2= Probably Untrue
3= Neither True nor Untrue
4= Probably True
5= Definitely True |
|--|

1. I have found a meaningful career
2. I understand how my work contributes to my life's meaning
3. I have a good sense of what makes my job meaningful.
4. I have discovered work that has a satisfying purpose.
5. I view my work as contributing to my personal growth.
6. My work helps me better understand myself.
7. My work helps me make sense of the world around me.
8. My work really makes no difference to the world. (R)
9. I know my work makes a positive difference in the world.
10. The work I do serves a greater purpose.

APPENDIX F – A Measure of Workplace Deviance

Measure by Bennett and Robinson (2000)

Please indicate the extent to which you have engaged in each of the behaviors in the last 3 months.

Frequency Response Scale:

- 1= Never, have no experience
- 2= Rarely, once over the three months
- 3= Sometimes, more than once over the three months
- 4= Often, every month
- 5= Very often, every week
- 6= Always, everyday

1. Taken property from work without permission
2. Spent too much time fantasizing or daydreaming instead of working
3. Falsified a receipt to get reimbursed for more money than you spent on business expenses
4. Taken an additional or longer break than is acceptable at your workplace
5. Come in late to work without permission
6. Littered your work environment
7. Neglected to follow your boss's instructions
8. Intentionally worked slower than you could have worked
9. Discussed confidential company information with an unauthorized person
10. Used an illegal drug or consumed alcohol on the job
11. Put little effort into your work
12. Dragged out work in order to get overtime
13. Made fun of someone at work
14. Said something hurtful to someone at work
15. Made an ethnic, religious, or racial remark at work
16. Cursed at someone at work
17. Played a mean prank on someone at work
18. Acted rudely toward someone at work
19. Publicly embarrassed someone at work

Table 1

Frequency of endorsement of moral suffering experiences

Item No.	Moral Suffering Experience	Frequency	Percent
t1_MI1	I have witnessed actions taken by management in my organization that betrayed my trust.	226	47%
t1_MI2	I have seen people taking revenge for actions that have happened at work.	150	31%
t1_MI3	I have failed to protect someone at work from unnecessary harm.	55	11%
t1_MI4	I have seen someone unnecessarily harmed at work.	108	23%
t1_MI5	I have been able to leave my work psychologically or physically safe when I know others at work cannot.	226	47%
t1_MI6	I failed to take action in helping someone at work.	168	35%
t1_MI7	I saw a coworker engage in actions that I did not agree with.	355	74%
t1_MI8	I have not had access to the resources or materials I needed to do my job in a way that protected other people at work.	179	37%
t1_MI9	I have seen people at work suffer because of actions involving other employees at my organization.	246	51%
t1_MI10	I saw mistakes made by my coworkers or other employees that led to other people suffering at work.	261	54%
t1_MD1	I have been forced to do my job according to my supervisors' directions, which were against my professional opinion.	200	42%
t1_MD2	I have considered whether to bend the rules to do something that I believed was right despite being against the organization's rules.	225	47%
t1_MD3	I have been forced to do my job according to my organization's protocols, which were against my professional opinion.	195	41%
t1_MD4	I have been forced to do my job according to my supervisors' directions and against my conscience.	166	35%
t1_MD5	I have been forced to relocate/redistribute my work to somewhere/someone else that I believed was unsuitable.	155	32%
t1_MD6	There have been situations where I believed management's interests were in contradiction with the purpose of my work	243	51%
t1_MD7	I have seen coworkers behave in contradiction with the best interests of our clients/patients/customers	292	61%
t1_MD8	There have been situations where management has acted superficially and did not serve the best interests of clients/patients/customers	261	54%
t1_MD9	I have seen a colleague behave in an inappropriate way at work that I did not have the ability to prevent	265	55%
t1_MD10	I was in a situation where there was an expectation for me to conceal or to give false information.	116	24%

Note. Responses were coded as (0) having never experienced that item or (1) experienced that item at least once over the past 3 months. Data is based on the complete sample (N=699).

Table 2

Principal axis factor analysis for the moral suffering measurement model

Item No.	Moral Suffering Experience	F1	F2
t1_MI1	I have witnessed actions taken by management in my organization that betrayed my trust.		.41
t1_MI2	I have seen people taking revenge for actions that have happened at work.	.45	
t1_MI3	I have failed to protect someone at work from unnecessary harm.	.98	
t1_MI4	I have seen someone unnecessarily harmed at work.	.71	
t1_MI5	I have been able to leave my work psychologically or physically safe when I know others at work cannot.	.66	
t1_MI6	I failed to take action in helping someone at work.	.70	
t1_MI7	I saw a coworker engage in actions that I did not agree with.		.78
t1_MI8	I have not had access to the resources or materials I needed to do my job in a way that protected other people at work.	.62	
t1_MI9	I have seen people at work suffer because of actions involving other employees at my organization.		.63
t1_MI10	I saw mistakes made by my coworkers or other employees that led to other people suffering at work.		.64
t1_MD1	I have been forced to do my job according to my supervisors' directions, which were against my professional opinion.	.54	
t1_MD2	I have considered whether to bend the rules to do something that I believed was right despite being against the organization's rules.	.81	
t1_MD3	I have been forced to do my job according to my organization's protocols, which were against my professional opinion.	.65	
t1_MD4	I have been forced to do my job according to my supervisors' directions and against my conscience.	.78	
t1_MD5	I have been forced to relocate/redistribute my work to somewhere/someone else that I believed was unsuitable.	.54	
t1_MD6	There have been situations where I believed management's interests were in contradiction with the purpose of my work		.57
t1_MD7	I have seen coworkers behave in contradiction with the best interests of our clients/patients/customers		.76
t1_MD8	There have been situations where management has acted superficially and did not serve the best interests of clients/patients/customers		.67
t1_MD9	I have seen a colleague behave in an inappropriate way at work that I did not have the ability to prevent		.63
t1_MD10	I was in a situation where there was an expectation for me to conceal or to give false information.	.68	

Note. Principal axis factor analysis was conducted with promax rotation and robust maximum likelihood estimator. The EFA utilized the intensity scores of the first split half sample (N = 349).

Table 3

Factor loadings from the confirmatory factor analysis of the final moral suffering model

Item No.	Moral Suffering	Perpetration	Witness
t1_MI1B	I have witnessed actions taken by management in my organization that betrayed my trust.		0.68
t1_MI3B	I have failed to protect someone at work from unnecessary harm.	0.65	
t1_MI7B	I saw a coworker engage in actions that I did not agree with.		0.75
t1_MI8B	I have not had access to the resources or materials I needed to do my job in a way that protected other people at work.	0.68	
t1_MI9B	I have seen people at work suffer because of actions involving other employees at my organization.		0.72
t1_MI10B	I saw mistakes made by my coworkers or other employees that led to other people suffering at work.		0.75
t1_MD1B	I have been forced to do my job according to my supervisors' directions, which were against my professional opinion.	0.83	
t1_MD2B	I have considered whether to bend the rules to do something that I believed was right despite being against the organization's rules.	0.82	
t1_MD3B	I have been forced to do my job according to my organization's protocols, which were against my professional opinion.	0.85	
t1_MD4B	I have been forced to do my job according to my supervisors' directions and against my conscience.	0.84	
t1_MD5B	I have been forced to relocate/redistribute my work to somewhere/someone else that I believed was unsuitable.	0.64	
t1_MD6B	There have been situations where I believed management's interests were in contradiction with the purpose of my work		0.8
t1_MD7B	I have seen coworkers behave in contradiction with the best interests of our clients/patients/customers		0.76
t1_MD8B	There have been situations where management has acted superficially and did not serve the best interests of clients/patients/customers		0.8
t1_MD9B	I have seen a colleague behave in an inappropriate way at work that I did not have the ability to prevent		0.67
t1_MD10B	I was in a situation where there was an expectation for me to conceal or to give false information.	0.66	

Note. The CFA was conducted using robust maximum likelihood estimators. Items MI2, MI4, MI5, and MI6 were removed from the final model. The confirmatory factor analysis was conducted with the second split half sample of validation dataset (N = 349).

Table 4

Factor loadings from the confirmatory factor analysis of the moral suffering product scores final model

Item No.	Moral Suffering	Perpetration	Witness
t1_MI1	I have witnessed actions taken by management in my organization that betrayed my trust.		0.77
t1_MI3	I have failed to protect someone at work from unnecessary harm.	0.72	
t1_MI7	I saw a coworker engage in actions that I did not agree with.		0.78
t1_MI8	I have not had access to the resources or materials I needed to do my job in a way that protected other people at work.	0.68	
t1_MI9	I have seen people at work suffer because of actions involving other employees at my organization.		0.79
t1_MI10	I saw mistakes made by my coworkers or other employees that led to other people suffering at work.		0.78
t1_MD1	I have been forced to do my job according to my supervisors' directions, which were against my professional opinion.	0.9	
t1_MD2	I have considered whether to bend the rules to do something that I believed was right despite being against the organization's rules.	0.88	
t1_MD3	I have been forced to do my job according to my organization's protocols, which were against my professional opinion.	0.87	
t1_MD4	I have been forced to do my job according to my supervisors' directions and against my conscience.	0.88	
t1_MD5	I have been forced to relocate/redistribute my work to somewhere/someone else that I believed was unsuitable.	0.73	
t1_MD6	There have been situations where I believed management's interests were in contradiction with the purpose of my work		0.89
t1_MD7	I have seen coworkers behave in contradiction with the best interests of our clients/patients/customers		0.82
t1_MD8	There have been situations where management has acted superficially and did not serve the best interests of clients/patients/customers		0.86
t1_MD9	I have seen a colleague behave in an inappropriate way at work that I did not have the ability to prevent		0.74
t1_MD10	I was in a situation where there was an expectation for me to conceal or to give false information.	0.77	

Note. The CFA was conducted using robust maximum likelihood estimators. Items MI2, MI4, MI5, and MI6 were removed from the final model. The confirmatory factor analysis was conducted with the second split half sample of validation dataset (N = 349) and utilized the product term of frequency*intensity scores.

Table 5

Fit statistics for the final measurement models of the latent study variables

	Wave	N	χ^2	df	RMSEA	SRMR	CFI	TLI
Moral Suffering Product Model	1	349	195.218	101	0.079	0.041	0.954	0.945
Perceived Occupational Stigma	1	479	44.798	5	0.189	0.055	0.942	0.883
Mental Health Symptoms	2	479	253.316	88	0.082	0.048	0.950	0.941
Meaningful Work	2	479	97.711	24	0.101	0.022	0.977	0.965

Note. Fit statistics shown for CFAs of all study variables (latent only) at all relevant waves. Moral suffering measurement model was based on the split half sample ($N = 349$) and utilized the product term of frequency*intensity scores.

Table 6

Means, standard deviations, and bivariate correlations among study variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
<i>Control Variables</i>														
1. Age	40.56	10.98	-											
2. Tenure	7.71	7.28	.47**	-										
<i>Time 1</i>														
3. Witness	5.38	6.41	0.01	-0.01	(.91)									
4. Perpetration	2.01	3.23	-.11*	-0.05	.34**	(.89)								
5. POS	2.41	1.64	0.05	-0.01	.40**	.27**	(.89)							
6. MW	3.74	1.18	0.07	.16**	-.32**	-.10*	-.36**	(.95)						
7. CWB	1.25	0.69	-.11*	-0.04	.31**	.52**	.25**	-0.07	(.93)					
8. MHS	1.66	0.84	-0.05	-0.05	.41**	.25**	.31**	-.43**	.31**	(.95)				
<i>Time 2</i>														
9. POS	2.43	1.57	0.04	0.02	.35**	.22**	.59**	-.33**	.23**	.21**	(.91)			
10. MW	3.74	1.16	0.08	.18**	-.28**	-0.05	-.31**	.80**	-0.05	-.38**	-.36**	(.95)		
11. CWB	1.22	0.64	-0.09	-0.04	.21**	.41**	.26**	-0.04	.60**	.23**	.25**	-0.06	(.94)	
12. MHS	1.64	0.81	-.10*	-0.06	.34**	.22**	.32**	-.37**	.22**	.73**	.25**	-.40**	.26**	(.95)

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in parentheses in the diagonal represent Cronbach's alpha. POS refers to perceived occupational stigma (responses ranged from 1-7), MW refers to meaningful work (responses ranged from 1-5), CWB refers to counterproductive work behaviors (responses ranged from 1-6), and MHS refers to mental health symptoms (responses ranged from 1-4). Witness- and perpetration-based moral suffering refers to the frequency*intensity product scores.

* indicates $p < .05$. ** indicates $p < .01$.

Table 7

Regression estimates for the structural models of moral suffering predicting outcomes (H1 - 3)

Hypothesis	Regression	Estimate	Standard Error	Standardized Estimate	
1	Mental Health Symptoms ~	Witness-Based	.42**	.14	.38
		Perpetration-Based	.06	.14	.05
2	Meaningful Work ~	Witness-Based	-.37**	.13	-.36
		Perpetration-Based	.14	.13	.14
3	Counterproductive Work Behaviors ~	Witness-Based	-.07	.07	-.11
		Perpetration-Based	.24**	.09	.38

Note. All predictors were assessed at Time 1 and all dependent variables were assessed at Time 2. The predictors were calculated using the product term of frequency*intensity scores.

~ indicates "regressed on"

* $p < .05$ ** $p < .01$

Table 8

Regression estimates for the structural models of the interaction between moral suffering and perceived occupational stigma predicting outcomes (H4-6)

Hypothesis	Regression	Estimate	Standard Error	Standardized Estimate
4	Mental Health Symptoms ~	Witness-Based	.72**	.58
		Perpetration-Based	1.04**	.84
		POS	.98**	.79
		WBMS X POS	-.85*	-.68
		PBMS X POS	-.95**	-.76
5	Meaningful Work ~	Witness-Based	-.20	-.18
		Perpetration-Based	-.57*	-.51
		POS	-.73**	-.66
		WBMS X POS	.19	.17
		PBMS X POS	.73**	.65
6	Counterproductive Work Behaviors ~	Witness-Based	.04	.06
		Perpetration-Based	.29	.46
		POS	.28*	.44
		WBMS X POS	-.25	-.39
		PBMS X POS	-.06	-.09

Note. All predictors were assessed at Time 1 and all dependent variables were assessed at Time 2. The moral suffering predictors were calculated using the product term of frequency*intensity scores. WBMS refers to witness-based moral suffering, PBMS refers to perpetration-based moral suffering, and POS refers to perceived occupational stigma.

~ indicates "regressed on"

* $p < .05$ ** $p < .01$