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# DECENT WORK AS A MODERATOR FOR SURVIVORS OF TRAUMATIC LIFE EVENTS

by

Matthew M. Carbonelli

A Dissertation Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy
in Educational Psychology

at

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#### **ABSTRACT**

# DECENT WORK AS A MODERATOR FOR SURVIVORS OF TRAUMATIC LIFE EVENTS

by

#### Matthew Carbonelli

The Univserity of Wisconsin-Milwaukee 2021 Under the Supervision of Professor Nadya Fouad

The Psychology of Working Theory (PWT) is a vocational psychology theory that aims to

explore the pathways and outcomes that may hinder or improve the likelihood of obtaining decent work by including contextual factors such as marginalization and economic constraints. Vocational psychology primarily focuses on individual characterological elements of obtaining work; however, limited evidence exists exploring how traumatic symptoms or exposure may affect one's abilities to find work. This study seeks to utilize PWT to understand better how the relationship between trauma exposure and job satisfaction and personal wellbeing is moderated by decent work. Sampling consisted of 61.3% female (n = 211) and 38.7% male (n = 133) and a racially representative sample of the United States. Model testing suggests decent work moderates the effects of trauma symptoms when measured by life satisfaction ( $R^2 = 0.29$ , p < .001) and the relationship between trauma and job satisfaction is moderated by decent work ( $R^2$ = 0.33, p < .001). Decent work appears to have a relation with improvements in survivors' of trauma mental health, only if the person has experienced one traumatic life event. There is no statistical relationship when the survivor has experienced more than one traumatic life event. Confirmatory and longitudinal research is needed to explore the nuances of the relations between trauma symptoms and decent work overall. The limitations of the study include the length of the survey instruments, over-representation of female participants, and cross-sectional research design.

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# LIST OF ABBREVIATIONS

BJSM Brief Job Satisfaction Measure

BTQ Brief Trauma Questionnaire

DW Decent Work

DWS Decent Work Scale

PWB Personal Well-Being

PTSD Post-traumatic Stress Disorder

PCL-5 Post-traumatic stress disorder Checklist Fifth Edition

PWT Psychology of Working Theory

SWLS Satisfaction with Life Scale

TLE Traumatic Life Event

To my wife, children, and family.

# ACKNOWLEDGEMENTS

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# Chapter 1: Introduction

Seventy percent of adults in the United States have experienced a traumatic life event (TLE), yet limited empirical evidence explores the relationship between the TLE and how it may affect the outcomes of decent work (Bisson & Andrew, 2005; Frans, Rimmo, Aberg, & Fredrikson, 2005; Kessler et al., 2017). Furthermore, it is not clear how individuals transition following a traumatic event back into the workplace, as most recover from the symptoms of posttraumatic stress disorder (PTSD). Similarly, research has not explored how higher quality or fulfilling employment (decent work) may affect one's PTSD symptoms. Current research suggests social class, economic constraints, or marginalization may affect the probability of a TLE within a person's lifetime and the subsequent development of PTSD (Bisson & Andrew, 2005; Frans, Rimmo, Aberg, & Fredrikson, 2005). Of the 70% of US adults who experience a TLE, most return to active careers without incidence, while approximately 20% go on to develop PTSD and struggle with employment and interpersonal relations. Little is known, how decent work may moderate the relationship between work satisfaction, subjective well-being, and decent work (Brewin, Andrews, & Valentine, 2000). This study aims to understand how decent work may help moderate trauma-related outcomes, i.e., subjective well-being, work satisfaction, and trauma symptoms. The study is exploring how traumatic stress and the relationship with personal well-being (PWB), trauma symptoms, and work satisfaction is moderated by decent work.

Research suggests, decent work will moderate the relationship between trauma exposure and trauma symptoms (Smith, Schnurr, & Rosenheck, 2005). Trauma-informed care is a growing and imperative perspective for working with individuals who have experienced a TLE; however, vocational counseling and human resources researchers have yet to explore the topic (Anderson, Blitz, & Saastamoinen, 2015). This research will better inform mental health clinicians and

policymakers about the effects of traumatic stress on employment outcomes to improve the overall well-being and contributions to society of people who have experienced a TLE. The secondary hypothesis will explore the relationship between economic constraints and marginalization and experiencing a TLE.

People often find meaning and purpose in their lives (Steger, Oishi, & Kashdan, 2009) and most people find meaning and purpose through their work and careers (Ford, Heinen, & Langkamer, 2007). Despite work being a central facet of most people's lives, most denizens of the United States do not experience decent work, e.g., the quality of work has a lower rating by current employees. Results from the most recent American Working Conditions Survey (Meastas, Mullen, Powell, von Wachter, & Wenger, 2017), suggests that 61% of currently employed participants report harsh working conditions. Additionally, half of all respondents report a need to work during their free time to meet workplace demands, and only 38% of respondents suggested their positions offer prospects for advancement. These statistics and further evidence suggest that decent work is more challenging to attain and is not universally accessible in the United States, particularly by people of color and historical minority groups (Blustein, 2008). Overall, despite an increased focus on workers' rights and workplace conditions, it appears that access to decent work is less common than in previous decades; however, it has historically always been inaccessible to women, people of color and individuals from lower socioeconomic statuses (SES), and others from minority backgrounds. (Blustein, 2008; Maestas et al., 2017).

In 2013, the International Labor Organization (ILO) developed five standards for decent work which researchers (Duffy, Blustein, Diemer, & Autin, 2016) integrated into the Psychology of Working Theory (PWT). Duffy, Blustein, Diemer, and Autin (2016) define decent work, as

possessing the five ILO criteria: (1) physical and interpersonal safety, (2) hours allowing for free time and rest, (3) organizational values, (4) adequate compensation, and (5) adequate access to health care. Ultimately, decent work only exists when with all the criteria fulfilled. Despite the ILO's definition of decent work, the United States has yet to implement many of the core ideologies. The RAND Labor and Population Report (Maestas et al., 2017) concluded working conditions in the United States have, "[...] a substantial proportion of workers are exposed to an adverse physical and social work environment and are subject to high pressure and hour variations that spill over into personal lives. [...] men without a college degree, but also women and younger workers more generally, experience substantially worse job conditions." More evidence suggests 61% of US workers report working in repetitive or intense physical work and 20% report workplace abuse or harassment in the past several days. Unfortunately, the report does not discuss the ramifications of these conditions on an individual's mental health. Given the burgeoning body of evidence as it pertains to vocation and mental health, namely traumatic stress, the lack of integration of psychological well-being in the workplace effectively minimizes work productivity for the many people who experience a TLE in their life (Oswald, Proto, & Sgroi, 2015).

Considering that most adults in the United States experience at least one TLE (Bisson & Andrew, 2005; Frans, Rimmo, Aberg, & Fredrikson, 2005) it is surprising there is limited data on how trauma affects work. Epidemiological studies indicate that anywhere between 58.4 (Holtslad, Post, van der Werken, 2007) and 70% (Gabbe et al., 2016) of people who experience a TLE return to work. Thus, there is ample room for growth within the realm of integrating vocational psychology and mental health to assist people with the transition back to work. According to Mental Health America (2017), 81% of respondents from the general population

suggest that their work affects their relationships with friends or family, which suggests a possibly negative work-life balance. In contrast, 34% reported positive social support in the workplace and considered their workplace relationships to be essential additions to their lives.

Harvey and colleagues (2017) conducted a meta-analytic review which suggests that workplace relations whether negative or positive are impactful indicators of mitigating or exacerbating mental health symptoms (Weighted OR 2.82; 95% CI 2.21 to 3.59). A similar study with veterans with PTSD exploring workplace interactions with mental health (Smith, Schnurr, & Rosenheck, 2005), indicate veterans with more significant distress were more likely to be unemployed or underemployed compared to individuals without a diagnosis of PTSD. Both studies (Harvey et al., 2017; Smith, Schnurr, & Rosenheck, 2005) suggest that underemployment, negative workplace experiences, or inadequate compensation may exacerbate mental health symptoms. Hence, understanding how decent work may moderate the relationship between trauma severity and job satisfaction and personal wellbeing is imperative to improving the mental health of trauma survivors and their re-integration into the workforce.

Provided that research indicates unemployment or underemployment (Smith, Schnurr, & Rosenheck, 2005), harmful workplace safety standards (Maestas et al., 2017), and workplace harassment or bullying (Harvey et al., 2017) increase the likelihood of exacerbating mental health symptoms, it is believed trauma exposure will exacerbate trauma symptoms when someone experiences non-decent work and result in lower perceptions of job satisfaction and PWB. Alternatively, the context of decent work may improve the relationship between trauma exposure or symptoms with improved job satisfaction and PWB. The primary aim of this study is to explore how decent work may function as a moderator between the symptoms following a TLE and work satisfaction and PWB. Similarly, the study will explore how decent work may

mediate the relationship between trauma exposure and trauma symptoms. Consistent with the research above, the hypothesis is that trauma exposure or trauma symptoms relationship with job satisfaction and PWB will be moderated by decent work.

# **Demographics**

A large National Epidemiologic Survey on Alcohol and Related Conditions (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011) of over 35.5 thousand individuals found a lifetime prevalence rate of diagnosable PTSD to be highest among people who identify as Black/African American (8.7%), relatively even among people who identify as White or Hispanic (7.4% and 7.0%, respectively), and lowest among people who identify as Asian (4.0%). Abundant evidence suggests how high prevalence rates of PTSD affect public health, often including increased risk of developing secondary mental health disorders, substance use (Hassan, Le Foll, Imtiaz, & Rehm, 2017), and diminished economic and social opportunities including higher rates of unemployment (Kessler, 2000). Epidemiological evidence suggests there is a racial, ethnic, and socioeconomic status (SES) discrepancy between the rates minorities and non-minorities and individuals of lower and higher SES experience a TLE.

Furthermore, individuals who develop PTSD often have an increased risk of repeated exposure to trauma and increased risk of suicide (Kessler, 2000). Interestingly enough, people who identify as female are more likely to meet criteria for PTSD with a DerSimonian-Laird odds ratio (OR) at 1.98 but are far less likely to experience a TLE (OR = 0.77; Tolin & Foa, 2006). Epidemiological evidence does not suggest a rationale for the discrepancy, but suggest a possible sociocultural effect. The epidemiological evidence suggests that individuals from minority backgrounds are statistically more likely to experience a TLE and subsequently develop PTSD.

Hence, people who experience a TLE are hypothesized to have lower self-reports on job satisfaction and PWB and possibly moderated by decent work.

A large meta-analysis (n = 2746) of predictors for PTSD (Ozer, Best, Lipsey, Weiss, 2003) suggest that peritraumatic psychological processes and not necessarily traits are the strongest predictors of developing PTSD. The top four predictors of the development of PTSD include a perceived threat to an individual's life, perceived social support, peritraumatic emotions and dissociation. Ozer and colleagues (2003) and Brewin and colleagues (2000) categorized their findings by temporal proximity to the TLE, i.e., distal and proximal. Distal elements may include age, socioeconomic status, gender, IQ, and race. Proximal elements include specifics about the event itself such as the individual's response to the threat and their socioemotional support relative to the event. Hence, when a person experiences trauma and has limited support from his or her family or community the likelihood of meeting criteria for a PTSD diagnosis increases.

Brewin and colleagues (2000) established the groundwork that the elements surrounding the traumatic event weigh more heavily on the development of PTSD than the severity or type of trauma its self. Similar to the earlier findings by Brewin et al. (2000) that calculated an estimated weighted effect size of .40 for individuals with lack of social support, with a higher weighted average than both familial psychiatric history (r = .19) and past trauma (r = .12). Likewise, a high level of "life stress" results in a higher probability of developing PTSD (r = .32). Compared to peritraumatic and proximal elements such as the severity of the traumatic event itself, the peritraumatic events have a more significant effect size (r = .23). Hence, this suggests that the circumstances of an individual's life are more likely to contribute to the development of PTSD than the traumatic event or the severity of the event. Moreover, most

individuals who experience a traumatic event return to work (Holtslad, Post, van der Werken, 2007; Gabbe et al., 2016). Unfortunately, there is limited evidence exploring how PTSD development is affected by decent work or employment.

# **Psychology of Working Theory**

Historically, the vocational theories maintained the ideology assuming individuals have the freedom to choose their vocation. This assumption receives criticism as focusing heavily on individuals of privilege and discounting the vocational needs of people who identify as minorities (Blustein, 2006). In 2006, Blustein wrote about the Psychology of Working Perspective with philosophical roots from feminist and multicultural critiques of the more traditional vocational perspectives. Blustein highlighted several of the aspects of what would later become the Psychology of Working Theory (PWT; Duffy, Blustein, Diemer, & Autin, 2016) such as the needs for survival, relatedness, and self-determination. The Psychology of Working Theory builds from the critiques from feminist and multicultural ideologies concerning work, i.e., the privilege of being able to pursue different vocations, which individuals of privilege historically receive and minorities unable to access decent work. Furthermore, Duffy, Blustein, Diemer, & Autin (2016) recognized the need to have an empirically testable theory to minimize the divide between the historically exclusive nature of vocational psychology to a more general theory of vocation, e.g., considering the dynamics of marginalization and economic constraints the individual may experience.

PWT (Duffy, Blustein, Diemer, & Autin (2016) posits the crux of the theory is decent work (Appendix A) as defined by the ILO (2013). Most prominently, access to decent work is affected mostly by economic constraints, marginalization, work volition, and career adaptability. There is a growing body of evidence that explores economic elements and diverse aspects of an

individual's life affect decent work; although, limited information exists exploring how work is affected by trauma. Furthermore, the American Psychological Association's *Professional Practice Guidelines for Integrating the Role of Work and Career into Psychological Practice* (2016) offer insightful knowledge on how to integrate vocational psychology into psychological practice but do not go into detail concerning survivors of trauma specifically. This study hopes to further bridge the gap between the exclusive nature of vocational counseling to extend into survivors of trauma. As such, this study hopes to understand how decent work may function as a moderator between trauma exposure and trauma symptoms and job satisfaction and personal wellbeing.

#### **Outcomes of Decent Work**

The United Nations Economic and Social Council first started conceptualizing the idea of decent work as early as 2002 (Anker et al.) when the first peer-reviewed article appeared to explore the measures of decent work. Initially, six indicators ranging from macro measures, e.g., labor force participation to micro levels such as wage compensation. Currently, the ILO (2013) defines decent work with the overarching themes of dignity, equality, fair income, and safety. The Decent Work Scale (DWS; Duffy et al., 2017) includes all of these criteria with five subscales; safe conditions, access to healthcare, adequate compensation, time and rest, and values.

The outcomes of decent work relate to some of the basic needs people expect from their work (Duffy, Blustein, Diemer, & Autin, 2016). The outcomes of decent (Appendix A) work include need satisfaction and work-fulfillment and well-being. For many, work functions as a means of providing for themselves and their loved ones, i.e., survival needs and those who are the least satisfied with their work tend to experience difficulties with meeting their survival

needs. Similarly, many people socialize with their colleagues and consider their relationships with colleagues as meaningful. The relational theory of working suggests an individual's occupation fulfills the basic human need for social connection. (Blustein, 2008). Inequality tends to inhibit the opportunities of individuals of color or of minority backgrounds which often limits their social connection needs as a result of sociocultural trends, e.g., overt discrimination or microaggressions (Triana, Jayasinghe, Pieper, 2015). The third need according to PWT is self-determination needs. Individuals fulfill this need by engaging in work activities that are either extrinsically or intrinsically motivating "in a meaningful and self-regulated fashion." For instance, individuals who engage in jobs to support one's family are extrinsically motivated.

The other two outcomes of decent work are work fulfillment and well-being. These outcomes are of primary interest in this study. Previous research (Clark, Oswald, & Warr, 1996) posits that if the needs are not met, then work fulfillment and well-being are less likely to be realized. People find work to be fulfilling when those needs are met, and they feel intrinsically and extrinsically motivated. As such, those who feel they are helping or improving the lives of others are more likely to be satisfied and find their work to be meaningful. The outcome of decent work is a sense of well-being and is suggested that individuals in pursuit of their intrinsic goals will experience improved self-esteem, self-actualization, and are less likely to develop mental health concerns (Deci & Ryan, 2000). In short, when the needs from decent work are met, the more likely an individual is to experience work fulfillment and well-being. Concerning this study, it is believed that the outcomes of decent work will moderate the relation between the symptom clusters of PTSD or trauma exposure and job satisfaction and personal wellbeing.

## Decent work as a Moderator

Generally, a moderator is a variable that is either qualitative or quantitative which affects the strength and direction of a relationship between an independent variable and the dependent variable (Baron & Kenny, 1986). Evidence suggests that work-related stress results in a decreased sense of meaning in life and many other statistical relationships (Seiger & Weise, 2009; Zunker, 2012). Copious research exists connecting the adverse effects work stress may have on the individual. For instance, an individual experiencing higher levels of work-related stress are more prone to depressive symptoms (Tennant, 2001) and compassion fatigue (Ramirez et al., 1996). Similarly, work-related stress is negatively correlated with wellbeing (Daniels & Guppy, 1994) and job satisfaction (Guinot, Chiva, & Roca-Puig, 2014). The relationship between work-related stress and the above variables has shown to be moderated by social support (Viswesvaran, Sanchez, & Fisher, 1999) and human capital (Ng, Eby, Sorenson, & Feldman, 2005). Hence, decent work is hypothesized to moderate the relationship between trauma exposure and symptoms and job satisfaction and personal wellbeing, as work, itself is a form of social support (Kossek, Pichler, Bodner, & Hammer, 2011).

Similar to the Allan, Douglass, Duffy, and McCarty (2016) study, that explored how meaningful work may function as a moderator between meaning in life and work stress, this study hopes to understand better how decent work may moderate the relation between trauma exposure and trauma symptoms and job satisfaction and personal wellbeing. For instance, some research suggests that economic dependency of work positively moderates the relationship between a person's job satisfaction and their performance and organizational commitment (Brett, Cron, Slocum, 1995). In other words, if an individual is more economically dependent on their

job, it will negatively impact the relationship between organizational commitment and performance and job satisfaction.

Many researchers believe that work contributes positively to one's life (Savickas, 1997) and provides a sense of meaning and purpose (Allan, Duffy & Douglass, 2015). Given that, work is considered a significant form of social support (Seiger & Weise, 2009; Zunker, 2012) and social support itself is statistically shown to be a positive moderator of psychological strengths and subjective wellbeing (Khan & Husain, 2010), it is hypothesized that decent work will be a positive moderator of the relationship between trauma symptoms and exposure and personal wellbeing and job satisfaction. Thus, if an individual has decent work, then the relationship between their trauma symptoms and job satisfaction and personal wellbeing will improve.

# **Post-Traumatic Stress Disorder**

Post-traumatic Stress Disorder is a diagnosable mental health disorder and is an increasingly well-studied area of psychology (APA, 2013; Brewin, Andrews, & Valentine, 2000; Trickey et al., 2012). PTSD includes eight different criteria for a diagnosis. The first criterion is the existence of a traumatic event that is either directly or indirectly experienced, e.g., being in a motor vehicle accident compared to witnessing someone grievously injured from a motor vehicle accident (APA, 2013). The other symptom clusters include (B) intrusive and (C) avoidant symptoms, (D) negative alterations in mood and cognition, (E) alterations in arousal and reactivity, (F) duration of more than one month, (G) clinically significant distress, and (H) not attributable to another physiological condition or effect. This study will focus mainly on the symptom clusters of the trauma exposure, re-experiencing the trauma, avoidance, negative alterations in mood and cognition, and alterations in arousal and how these symptom clusters may affect the outcomes of decent work.

Intrusive symptoms involve recurring and involuntary thoughts or emotions, distressing dreams, dissociative flashbacks, intense or prolonged psychological distress, and marked physiological reactions to internal or external cues that relate to any aspect of the traumatic event (APA, 2015). This symptom cluster may include but is not limited to flashbacks, night terrors, or recurrent memories of an aspect of the traumatic event. The avoidant symptom cluster involves the individual who experienced a TLE to avoid the distressing memories, thoughts, or feelings associated with the topic or avoidance of external reminders of the traumatic event. For example, an individual involved in a motor vehicle accident may avoid driving a vehicle.

Negative alterations in mood and cognition (Ehring & Quack, 2010) may typically two or more of the following: involve inability to recall a critical component of the traumatic event (dissociative amnesia), pronounced negative beliefs or expectations of one's self, distorted cognitions about the cause or consequences of the event, chronic negative affective state, anhedonia, feelings of detachment from others, or chronic inability to experience positive emotions. The final symptom cluster of interest for this study is the marked arousal and reactivity to stimuli associated with the traumatic event. These symptoms include two or more of the following: irritability, recklessness or self-destructive behaviors, hypervigilance, marked startle response, difficulty concentrating, or sleep disturbances (APA, 2015). These symptoms comprise the bulk of the clinically significant psychological distress that an individual may experience who survived a TLE. This study hopes to understand how the clinically significant psychological distress following a TLE may affect the outcomes of decent work. This research focuses on how trauma symptoms or trauma exposure and job satisfaction and personal wellbeing may be affected by the context of decent work.

## Trauma and Work

Trauma itself and the treatment thereof have well-established efficacy and thoroughly researched topics; however, limited information exists concerning the intersection between trauma and work. Strauser and Lustig (2001) explored the implications of PTSD on vocation and treatment planning; primarily their article explores how vocational psychologists may work with individuals who have experienced trauma. Coursol and colleagues (2001) utilized the Career Maturity Inventory to assess the difference between people who have and have not experienced a TLE and found no difference with maturity; however, Coursol and colleagues' (2001) findings "approached significance" (p - .06) with the subscales of career involvement and independence. The researchers accounted for this lack of significance due to the sample consisting of "mainly displaced homemakers" who arguably "have career development patterns similar to those of trauma survivors" (p . 347) by suggesting the mostly female sample (12 male to 84 female) have less career maturity.

Strauser, Lustig, Cogdal, and Uruk (2006) conducted a follow-up study of 131 college students who had experienced a TLE; their research indicates higher trauma symptoms are associated with an increase in dysfunctional career thoughts and "lower levels of work personality." The implications for the study suggest PTSD symptoms have the potential to negatively affect a trauma survivor's ability to retain, develop or produce effective career behaviors and thoughts. Furthermore, Strauser, Lustig, Cogdal, and Uruk (2006) suggest the importance of assessing for trauma in career or vocational counseling as a means of improving career outcomes for people who experienced trauma.

In a related study exploring the results of combat trauma among US veterans (Possemato et al., 2014) researchers concluded that the most highly predicted variables independently

predicted a diagnosis of PTSD, unemployment, alcohol use, social support, and stressful life events. Furthermore, their work environment, if negative, predicted the likelihood of having an increase in PTSD severity. PTSD severity is predictably worse if the veteran perceives a lack of social support. A similar study by Kunst (2011) suggests that PTSD symptom severity and symptom cluster scores are positively correlated to higher rates of unemployment

# **Research Questions**

The primary research questions this study hopes to explore is: "how does decent work moderate the relationship between work satisfaction and subjective well-being and traumatic life events of trauma symptoms?" The extant research suggests there is a relationship between trauma and work; considering this research, higher scores on the PCL-5 or exposure to trauma will decrease the likelihood that an individual experiences work-satisfaction and PWB. This study will explore the relationship, if any, between the symptom clusters of PTSD and work satisfaction and PWB. For this study, the symptom clusters of PTSD include (a) the trauma itself, (b) re-experiencing the trauma, (c) avoidant behaviors, (d) negative cognitions or mood, and (e) hyperarousal and the possible moderating effects of decent work with PWB and work-satisfaction. Using linear regression and moderation analysis, the moderating effect of decent work will strengthen the relationship between trauma symptoms and how an individual experiences PWB and job-satisfaction. In brief, the research will explore the possible moderating relationship between trauma symptoms and job satisfaction and personal wellbeing.

#### Conclusion

This study aims to explore and inform counseling and vocational psychologists on how to assist individuals who experienced a TLE secure decent work and maximize the outcomes of decent work. Potentially decent work may moderate the relationship of PTSD symptoms or

trauma exposure with job satisfaction and PWB. Specifically, the study plans to use the Post-traumatic Checklist fifth edition (PCL-5), Well-Being Index - Adult (WBI) and the Generic Job Satisfaction Scale (GJSS), and the Decent Work Scale (DWS) to determine how decent work acts as a moderator between PTSD symptoms and PWB and job satisfaction. Given that the symptom clusters of PTSD, parallel some of the aspects of decent work, it is hypothesized that PTSD symptoms will correlate negatively with the PWB and work satisfaction and that decent work will positively moderate this relationship. That is when an individual whom a TLE has decent work their PWB and work satisfaction will increase despite their PTSD symptom severity or trauma exposure. Ultimately, this study hopes to understand the effects of trauma as moderated by decent work and the contextual factors that may affect access to decent work.

# Chapter 2: Literature Review

This literature review will focus on the possible connection between PTSD symptoms and the outcomes of decent work. Both PTSD and vocational psychology separately are well documented and well-studied topics; however, there is limited empirical evidence exploring the intersection of trauma and vocation. Mental health and employee wellness is an increasingly researched topic among vocational psychologists. The increasing scope of improving worker rights and performance have an interest among the majority of people in the United States (Maestas et al., 2017; Organization for Economic Cooperation and Development, 2018).

# **Human Rights and Vocation**

The International Labor Organization (ILO) acknowledged the importance of decent work in 1998 to highlight the inherent human rights that are involved in work and working conditions (Bellace, 2011). Decent work is increasingly difficult to obtain amongst the general population, and more awareness begets more challenges faced by employers and policymakers (Blustein, 2018). Suggesting that work ought to be considered a human right is not a new concept with some of the concepts first being introduced by in the United States by Franklin Delano Roosevelt in 1933 (Bernstein, 1985). Unfortunately, the New Deal and several of the core ideas have failed to maintain public support, and many have argued that an improved focus on workers' well-being is long past due (Angrave & Charlwood, 2015; Ganster, Rose, & Fisher, 2018). Although, the economic and social burden placed upon society for enacting policies that solely place the welfare of workers above profits still have not garnered widespread support (Seppala & Cameron, 2015). Historically, people of color have often experienced the most violations towards their human rights (Smith & Silva, 2011) and consequentially negatively affects their perceptions of vocational choice (Fouad & Byars-Winston, 2005).

The acknowledgment of decent work by the International Labor Organization aimed to encourage countries and companies to focus on improving workers' lives (Bellace, 2011). At the conception of the International Labor Organization in 1918, the United Nations delegates recognized growing concerns about working conditions throughout the world. Although they did not explicitly argue for social justice and reform until relatively recent years, it was an underlying principle and a driving force of the organization (Bellace, 2011). The ILO later based their criteria of decent work largely on the Universal Declaration of Human Rights from the United Nations (Assembly, U.G., 1948). The creation of decent work guidelines included quantitative and qualitative dimensions of employment such as remuneration, access to work, workplace safety, and health (Ghai, 2003). Originally, it was argued that workers' rights would improve peace relations among countries as worker unrest is less likely when workers are satisfied and content (Bellace, 2011). Still relevant today is the notion that capitalistic competition leads employers to reduce wages and working conditions to improve profits and increase productivity.

Currently, the Federal Reserve Economic Data (FRED) reports consecutive years of record-setting levels of productivity in the nonfarm business sector of output per hour per person (FRED, 2019) from 1950 to present. Despite the record-setting work -to- productivity ratio, decent work is increasingly difficult to obtain throughout the world (Blustein, Olle, Connors-Kellgren, & Diamonti, 2016). Conservative business leaders and policymakers suggest improving working conditions are often too costly for the employers and typically result in macro-economic losses, vis-à-vis, consumers end up paying more for household products and mass layoffs to offset the increased labor costs (Bannon & Batkins, 2018).

Fernandez-Villaverde (2017) suggests that many of the individuals who will benefit from minimum wage increases are more likely to experience the consequences of such a policy, i.e., more competition for entry-level positions due to commensurate down-sizing. Conservative economists (Bannon & Batkins, 2018) suggest enacting fair wage initiatives, e.g., "fight for 15" or other such legislative policies will result in an estimated job loss of more than 150,000 positions. Similarly, economists Bannon and Batkins (2018) suggest the work condition improvements placed during President Obama's tenure resulted in "over 400 million paperwork hours that companies will need to invest in compliance with the law." Conservative economists conclude that the responsibility is on the individual to find employment that fits their needs.

In other words, the individual employee ought to find employment that fits their individual needs and preferences, whether that work is "decent work" or not is irrelevant (Bannon & Batkins, 2018; Fernandez-Villaverde, 2017). Similarly, Fernandez-Vallaverde (2017) suggests that creating pressure on companies to enact fair wage policies or improving workplace conditions create a net deficit for employment positions available to people, i.e., the cost of improving wages and workplaces conditions results in fewer jobs. Hence, companies that want more competitive employees will enact these policies to improve their talent pools and policies are thus irrelevant towards this end. However, these economists have largely not focused on the adverse effects experienced by people of color due to deregulation (Galinsky et al., 2015) or how the current generation has the lowest probability of upward mobility among any generation in the history of the United States (Chetty, Hendren, Kline, Saez, & Turner, 2014).

Despite the strong narratives suggesting improved work conditions, compensation, and benefits are mostly negative for the economy – and, by extension, the country; there is a growing body of evidence that suggests a "rising tide lifts all boats" (Bivens et al. 2017; Dabla-Norris et

al., 2015; Rezagholi, 2018). First, consumer spending accounts for 68% of the entire economy of the United States (Bureau of Economic Analysis, 2017). Two-thirds of the 68% is spent on services, e.g., health care and housing and the remaining third is spent on durable and non-durable goods, such as autos and groceries, respectively. In fact, consumer spending accounts for over 60 percent of total employment within the economy and consumers are more likely to spend on personal services when possible, such as health, business, or social services (Toossi, 2002). Hence, when employees work without adequate compensation the individual, and by extension, receives a net negative impact, e.g., the employee has less money to spend to improve the economy (Toossi, 2002).

Second, individuals who are provided with safety (Rezagholi, 2018), adequate compensation (Cooper & Mishel, 2015; Coviello, Deserranno, & Persico, 2019), and health care (Bambra, 2011) result in fewer costs to the employer by minimizing productivity losses. In a work-environment survey (Rezagholi, 2018), the researchers concluded that improving workplace safety results in overall labor effectiveness, decrease workplace injuries, and reduces productivity losses. Fair compensation has been found to improve worker productivity, and no evidence in research have suggested adverse effects on employment opportunities (Cooper & Mishel, 2015; Coviello, Desarranno, & Persico, 2019). Coviello, Deserranno, and Persico (2019) suggest that it is infeasible to suggest a company would hire fewer people due to wage compensation, e.g., one person cannot possibly do the job of two people, only due to a wage increase without such a hiring practice negatively affecting productivity.

Hence, it seems the benefits of improving work conditions and compensation is more than a human rights issue. Most of the evidence suggests that improving work conditions improves the economy in combination with improving worker well-being. At present, it seems

the ILO guidelines of work is an inherent human right, and the standards of decent work benefit not only the individual but also the bulk of the country. Furthermore, the data suggesting the cost to employers outweighing the benefits of improving work compensation and conditions do not seem to have as secure of an argument. Economists do not seem to have a resounding consensus on improving work compensation and workplace safety; however, improving the minimum wage alone would improve work compensation for 40 million US denizens (Cooper, 2019) and thus create more employment through increased consumer spending (Toossi, 2002). In short, the evidence suggests that improving the rights of workers benefits individuals and society.

# **Traumatic Life Events Research**

A Traumatic Life Event (TLE) is defined as an experience of adversity that results in exposure to actual, threatened, or perceived threat of death, serious injury, or sexual violence. An estimated 70% of individuals in the US will experience a TLE within their lifetime (Bisson & Andrew, 2005). Also, they will have a 6.8% lifetime prevalence of developing PTSD, with the average individual experiencing 3.2 TLEs in their lifetime (Kessler et al., 2017). Of the multitude of ways, an individual may experience trauma, the incidences with the highest prevalence rates of developing PTSD mostly involve interpersonal violence. The highest rates of those developing PTSD are survivors of rape and other sexual assault and intimate partner violence. Sexual assault accounts for nearly 42.7% of the prevalence rate for PTSD (Kessler et al., 2017). Treatment for PTSD continues to improve, and psychotherapeutic interventions continue to be thoroughly investigated (Cusack et al., 2016; Ozer, Best, Lipsey, & Weiss, 2003).

The DSM-5 (APA, 2015) suggests that there are similarities in the symptom presentations between individuals with PTSD; however, some evidence suggests differences exist between the type of trauma and the presentation of the symptom patterns (Amir, Kaplan, &

Kotler, 1996; Ehring & Quack, 2010; Kelley et al., 2009). Ehring and Quack (2010) suggest differences in emotional regulation between different types of survivors of TLEs. Namely, individuals who experience chronic interpersonal traumas at an earlier age are more susceptible to the development of PTSD compared to older cohorts experiencing the same types of trauma. Ehring and Quack (2010) concluded that symptom severity between groups of people who experience different types of TLEs at an older or younger age relates to difficulties in emotional awareness and engagement in goal-directed behaviors, i.e., younger people who experience a TLE are more susceptible to display emotional and goal-directed behavioral concerns.

Similarly, Amir, Kaplan, and Kotler (1996) reported statistically significant differences between war experiences and survivors of domestic terrorism and work-related accidents, but no statistical significance was noted with traffic accidents. The authors suggest the individuals who experienced traumas associated with war scored higher on the PTSD-Checklist; however, the "differences in scores reached only partial significance" (p = .06; p. 344). Although, denoting statistical tests as "partially significant" is generally frowned upon in the literature (Cohen, West, & Aiken, 2014). Despite this shortcoming from the research, it does seem to suggest the potential for a difference based upon the proximal characteristics of the survivor, i.e., age and social support.

In a similar study, exploring the group differences relating to trauma type and comparing the symptom clusters of PTSD (Kelley et al., 2009) the researchers found statistically significant differences between motor vehicle accidents, sexual assault, and sudden loss of a loved one. Their research indicated that experiencing sexual assault was associated with a higher risk for PTSD diagnosis (p < .001) and higher rates of PTSD symptom severity (p = .001). Furthermore, their findings suggest more nuanced differences between trauma type and the symptom

presentations, i.e., survivors of sexual assault, motor vehicle accidents, and sudden loss of a loved one respond differently to the traumas. As such, Kelley and colleagues (2009) suggested a "departure from parallelism" and interpersonal isolation and avoidance are more pronounced among survivors of sexual assault. Despite this exciting finding, their participants were recruited and self-selected from a non-clinical sample. Moreover, the sample consisted of subclinical diagnoses of PTSD, i.e., Post-Traumatic Stress Disorder Checklist fifth edition scores of less than 33. Despite these criticisms, the data seems to suggest a possible intergroup difference between survivors of various traumas.

The articles above suggest some disparities between types of TLEs and how individuals respond. Broadly, the "gold standard" psychotherapeutic interventions for PTSD do not recognize these differences and endorse a parallel process between symptom presentations (Cusack et al., 2010; Ehring & Quack, 2010; Rauch, Eftekhari, & Ruzek, 2012). The "gold standard" treatments for PTSD, such as exposure therapies and cognitive processing therapy, focus on different techniques of exposure-based interventions with four therapeutic elements, psychoeducation, in vivo and imaginal exposure, and emotional processing (Rauch, Eftekhari, & Ruzek, 2012). Meta-analytic research suggests consistent positive effect sizes for the treatment of PTSD with psychotherapy (d = 0.27; Kline, Cooper, Rytwinski, & Feeny, 2018). Despite the plethora of effective treatment modalities for PTSD none in the meta-analysis suggest employment or vocation as a supplement to improving overall wellbeing (Smith, Schnurr, & Rosenheck, 2005). As such, employment outcomes predict PTSD symptom severity better than the treatment itself and improved PTSD symptoms suggest attaining better employment.

While the randomized controlled trials for exposure therapies and other trauma-focused therapies evidence large effect sizes (Bisson & Andrew, 2005; Bisson et al., 2007)., the research

often minimizes the robust drop-out rates that are experienced in their trials (Najavits, 2015; Najavits, Norman, Kivlahan, & Kosten, 2010). Furthermore, the bulk of PTSD treatments involve combat veterans as the principal participants in randomized controlled trials. Najavits (2015) suggests the dropout rates for PTSD treatment is an outlier and further research needs to be considered to improve the dropout rates to improve mental health for survivors of TLEs.

While the prevalence rates of having a TLE in one's lifetime occurs more often than not, psychotherapeutic treatments suggest promising treatment outcomes. Similarly, the drop-out rates are higher compared to other treatment modalities, possibly due to the problematic nature of PTSD treatment or the difficulties of exposure therapies. Furthermore, limited research exists about the relationship between the individual's level of functioning as a possible result of a TLE or how their trauma symptoms may affect the outcomes from decent work.

#### Trauma and Work

While workplace conditions continue to be an area of concern for many people working in the United States (Meastas et al., 2017), there continues to be limited support for individuals who experienced a TLE to receive support in the workplace. Most of the preeminent vocational psychological theories and perspectives do not explicitly discuss mental health concerns or more specific diagnoses, i.e., PTSD (Brown & Lent, 2004). The American Psychological Association's (2019) website offers a limited number of accommodations to support an employee who experienced a TLE. Finally, there is limited societal support for people who have experienced a TLE, except uncompensated medical leave through the Family Medical Leave Act of 1993 (Wadfogel, 1999). Traditionally, vocational psychology assumed that individuals have career choices, the predictability of the world, and individuals have some natural tendency to find their "career" (Swanson & Fouad, 2015). Currently, there is a shift towards more dynamic

and inclusive vocational perspectives that encourage contextual factors into the counseling process.

One such perspective that integrates trauma and career is Haynie and Shepherd's (2011, Appendix B) Theory of Discontinuous Career Transition. Their perspective developed from multiple case studies involving soldiers and marines who were injured in wartime operations and their transition from military to a civilian career. Mainly, their qualitative research suggests incorporating both substantial personal and occupational development such as "reconstruct a foundational set of beliefs about the external world and self [...] to construct a career that meets personal needs and to think structurally about competencies" (p. 519). The career transition of people who experience a TLE as a result of trauma is distilled into a dichotomy of either "transitioning well" or "transitioning less well" and is categorized by the survivor's subjective well-being and career progress. This perspective is one of the few vocational psychology perspectives that explicitly looks into the effects of trauma and career as a process.

While Haynie and Sheperd's (2011) study is an excellent exploration of the causal relationship of how one may come to a career transition due to a disabling TLE, it does not seem to consider more of the contextual factors of what may hinder someone from "transitioning well" and "transitioning less-well." Specifically, the theory did not discuss how marginalization or societal factors might contribute to the survivor's transition to a rewarding career. Furthermore, the discontinuous theoretical model appears to suggest that trauma results in a necessity to change career, when many careers may offer different duties or workplace accommodations due to a workplace injury. Similarly, their theory does not seem to account for much latitude in the symptom severity thoroughly.

Research suggests employment instability exists among intimate partner violence (Kimerling, Alvarez, & Pavao, 2008), survivors of the terrorist attacks (Nandi, et al., 2004), combat veterans (Prigerson, Maciejewski, & Rosenheck, 2001), asylum seekers (Hocking, Kennedy, & Sundram, 2015) and presumably others as PTSD symptom severity is strongly predicted by unemployment (Smith, Schnurr, & Rosenheck, 2005). Furthermore, individuals who participate in mental health services for PTSD and complete the treatment regime who after treatment meets a sub-threshold diagnosis for PTSD are far less likely to be unemployed than individuals who do not participate in PTSD treatment (Smith, Schnurr, & Rosenheck, 2005). It is well established that PTSD treatment is effective (Bisson & Andrew, 2005; Cusack et al., 2016); however, a systematic review of interventions improving work outcomes for work-related PTSD yielded only seven articles (Stergiopoulus et al., 2011). Stergiopoulus and colleagues (2011) concluded that work-related interventions are effective at reintegrating and returning employee productivity to pre-trauma levels. Ultimately, it appears that further research is required to understand the connection between work and trauma further.

# **Decent Work**

In 2006, The United Nations Economic and Social Council (European Parliament, 2000) defined "decent work" as employment, which "respects the fundamental rights of the human person as well as the rights of workers in terms of conditions of work safety and remuneration." Despite employment being a cornerstone of individual existence, it appears that employers and labor markets have created an atmosphere that creates undue burdens for people to find decent work (International Labor Organization, 2014). Decent work is the central variable for the PWT model and looks to explore how more inclusive groups experience decent work than traditional vocational, psychological perspectives (Blustein, Olle, Connors-Kellgren, & Diamonti, 2016).

In a study exploring job quality in the United States since the late 1970's (Howell & Kalleberg, 2019) the authors concluded three primary areas of concern for workers. First, the authors suggest stagnation and decline in "real wage levels" that are defined as pay that is adjusted for inflation or the number of goods and services that may be purchased. Second, there is a quickly growing wage inequality between the top and bottom earners and third increasing incidences of low pay compensation. Ultimately, Howell & Kalleberg (2019) suggest that deregulation and advances in technology create a more privileged position for employers who do not require as many employees as previous decades required. In fact, low-wage employment rose from 46.9% to 63.4% from 1979 to 2014 and the current "poverty wage" cutoff is estimated to be at about 13.33 dollars per hour, and the lower wages account for approximately 45% of working age adults according to the economic institute of the United States (as cited in, Howell & Kalleberg, 2019).

Furthermore, due to deregulations and rollbacks in workplace safety, the Economic Policy Institute estimates increases in workplace fatalities, decrease workers' rights, and result in a net deficit for the country due to losses in productivity, injury, recovery, and other expenses (McNicholas, Shierholz, & von Wilpert, 2018). Natural field experiments (Blanding, 2012) suggest that companies who are subject to Occupational Safety and Health Administration's (OSHA) random inspections resulted in a 9.4% decrease in rates of injury across their companies compared with companies who forewent an inspection. Furthermore, the regulatory proceedings have been estimated to save a company on average of 350 thousand per company without any noted losses in employment. Currently, it is estimated that the United States has one of the lowest minimum wages among industrialized nations (Jones, 2017).

Ultimately, it appears that there is limited empirical evidence, at this time, that suggests workplace safety and pay regulations to result in a negative net effect on employment opportunities or unacceptable costs for employers. The research indicates that improving workplace safety results in net profits through reduced costs of productivity losses, employment turnover, and medical expenses (Blanding, 2012; McNicholas, Shierholz, & von Wilpert, 2018).

# **Psychology of Working Theory**

The Psychology of Working Theory was first introduced as a psychological framework to encourage psychologists to incorporate vocational psychology ideas into clinical practices (Blustein, 2006). The main aim of the perspective is to be more inclusive and account for the lack of choice for the individual worker, especially for individuals who are not from a privileged group. PWT was built from vocational and multicultural psychology and incorporated intersectionality and sociological perspectives on work (Duffy, Blustein, Diemer, & Autin, 2016). One of the fundamental premises of the theory is to understand better "work-based experiences of people on the 'lower rungs of the social position ladder." (p. 127). Specifically, PWT looks into exploring the work of people who experience marginalization due to any given minority status and individuals who are required to work involuntarily, e.g., providing for their self or family as a primary means of survival.

Individuals from marginalized backgrounds and their work-based experiences seem to face marginalization from sociocultural factors as well as academic and research perspectives as their experiences went understudied (Blustein, Kenny, & Di Fabio, 2018). The psychology of working framework focused on the following assumptions: work is a major contextual factor in an individual's welfare and well-being, work has an impact on psychological processes, constraints to work may result from political, social, or economic elements, work includes

activity in the marketplace and caregiving, and systemic and psychological practice needs to focus on everyone involved in the workspace. The psychology of working framework later became a theory focusing on decent work as the primary area of investigation to include avenues to securing decent work and the outcomes of decent work (Duffy, Blustein, Diemer, & Autin, 2016). The focus on decent work stems mainly from the rise of precarious and unstable work following the Great Recession and as a result of which the labor market pain participation rate declined by nearly 3% between 2007 and 2014 (International Labor Organization, 2018).

Unfortunately, the labor market and employers responded to the Great Recession with protectionist ideologies to minimize their future losses and as labor accounts for the majority of operating costs for most organizations, employers sought to hedge their bets against their employees (Cooper, 2019; Elsby & Sahin, 2010; Blustein, 2019; Blustein, Kenny, Di Fabio, 2018). Spurning from this ideology Duffy, Blustein, Diemer, & Autin (2016) argued in the PWT that individuals do not necessarily have a choice when it comes to careers, and as a result, the majority of workers are employed in positions that serve as a means to an end, e.g., survival needs. The assumption that "anyone can become anything" in the United States resulted in the bulk of individuals receiving misleading or inaccurate depictions of their possible career paths. As such, it led to further marginalization of individuals who did not have apparent work volition due to minority status (Fassinger, 2008).

Decent work has five overarching themes for the outcomes of decent work categorized as survival, social, and self-determination needs, and work fulfillment and well-being (Duffy, Blustein, Diemer, & Autin, 2016). Both work fulfillment and well-being are both inter-related with a correlational relationship and are the two outcomes of decent work being explored by this study. Work fulfillment primarily relates to an individual's level of content with their work and

well-being is an individual's perception of feeling well, their happiness and both physically and mentally healthy.

## **Job Satisfaction.**

This study will focus on work satisfaction and is defined in this study as a person's subjective reaction to his or her work. Job satisfaction research has extensive research history and how it affects job performance and productivity (van Saane, Sluiter, Verbeek, & Frings-Dresen, 2003). According to a meta-analysis (Faragher & Cooper, 2003) the relationship between job satisfaction and psychological health is strongly correlated with self-esteem (r = .43), burnout (r = .48), and anxiety (r = .42) and physical health was less strongly correlated (r = .29). The research indicates a strong relationship between work and physical and mental health and suggests that with improved work the individual may experience more positive mental and physical health outcomes.

# Personal Wellbeing.

This study will focus on Personal Wellbeing (PWB). PWB is a multi-dimensional construct that includes, but is not limited to, different life domains such as health, life achievement, standards of living, community-connectedness, and future security (International Wellbeing Group, 2013). PWB is defined herein as an individual's perception of feeling well, being happy, physically and mentally healthy and have a positive outlook on his or her life. Employment and well-being are well documented and studied (Kuoppala, Lamminpaa, Liira, & Vainio, 2008; McKee-Ryan, Song, Wanber, & Kinicki, 2005). In a meta-analytic study of 437 effect sizes of unemployment and well-being (McKee-Ryan, Song, Wanberg, & Kinicki, 2005) PWB has a moderately large effect size on physical and psychological well-being (d = -.41 and -

.52, respectively). As such, it naturally follows that employment and the quality of employment suggest a statistically significant relationship.

## Conclusion

The review of the literature suggests strong importance to understand better how decent work may moderate the relationship between trauma exposure and trauma symptoms and job satisfaction and personal wellbeing. Currently, it seems PTSD and trauma exposure affects an individual's wellbeing and different aspects of their employment, e.g., unemployment rates. Furthermore, the research suggests individuals of color (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011) and people of lower socioeconomic status (Brewin, Andrews, & Valentine, 2000) are more likely than not to have trauma exposure and develop PTSD at higher rates than people who identify as white (Schnurr, Lunney, & Sengupta, 2004). This study hopes to understand better how decent work may moderate the relations between trauma exposure and trauma symptoms and job satisfaction and personal wellbeing.

# Chapter 3: Methodology

This study's primary aim was to explore the possible moderating effects of decent work on the relationship between work satisfaction and well-being with the symptoms of PTSD. Additional analyses included using multiple regression to examine the group differences between the number of traumas experienced by a person. This research used cross-sectional data and regression analysis, the study focused on improving the understanding of the moderating effect of decent work on the relationship between trauma symptoms and job satisfaction and personal wellbeing. PTSD symptom severity is operationally defined using the language from the PCL-5, i.e., total scores above 33 out of a maximum total of 80 suggest a likelihood of a PTSD diagnosis with higher scores indicating more distressing PTSD (Blevins, Weathers, Davis, Witte, & Domino, 2015). Trauma is operationally defined using language explicitly from the DSM-5, "[e]xposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways: 1. directly experiencing the traumatyic event(s), 2. witnessing, in person, the event(s) occurred to others, 3. learning that the traumatic event(s) occurred to a close family member or close friend, [...] 4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s)." (p. 271, American Psychiatric Association, 2013).

# **Research Questions**

The goal of this research was to understand the statistical relationship better how decent work may serve as a moderator between the symptom clusters of PTSD and Generic Job Satisfaction Scale (GJSS) and Personal Well-Being Index – Adult (PWI-A). The study hypothesizes that decent work as measured by the Decent Work Scale (DWS) will positively increase the likelihood that an individual experiences job satisfaction and PWB despite trauma exposure.

 $H_1$ : Total scores on the DWS will moderate the relationship between trauma exposure and job satisfaction and personal wellbeing as measured by the Brief Job Satisfaction Measure II and the Satisfaction with Life Scale, respectively.

 $H_2$ : Total scores on the DWS will moderate the relationship between trauma exposure and trauma symptoms as measured by the PCL-5.

# **Participants**

Using G\*power (Faul, Erdfelder, Lang, & Buchner, 2007) at the .01 level of significance and the power at .99 it is suggested to have a sample size of 205 participants. It is suggested that setting a level of  $\alpha$  (alpha) at this level decreases the likelihood of a type 1 error (Faul, Erdfelder, Buchner, & Lang, 200), in this case, the likelihood that there is no moderating effect when, in reality, there is a moderating effect between decent work and PTSD symptoms and job satisfaction and PWB. Similarly, setting  $\beta$  (beta) to .99 decreases the likelihood of a type II error, i.e., the null hypothesis being false when the data analysis suggests the null hypothesis is correct. Using the significance and power levels at these parameters decreases the likelihood of committing either a type I or type II error. Research participants will be recruited from Amazon Mechanical (mTurk) and receive compensation of \$0.25. Participant eligibility criteria will include being between the ages of 18 and 65 and voluntary agreement to participate in the study. The population will include individuals from all backgrounds with individuals who have and have not experienced a TLE.

According to recent demographic information (Difallah, Filatova, & Ipeirotis, 2018) about Amazon Mechanical Workers (mTurk Workers) suggest a diverse sample of over 100 thousand workers with over 2000 workers active on the platform at any given time. Currently, the demographic data suggest a relatively even distribution of female-to-male workers (51% to

49%) and the vast majority from the United States (75%). Furthermore, the education levels of

Race and Ethnicity of the sample			
Race	n		%
American Indian / Alaskan Native		2	0.578
Asian American		26	7.514
Black / African American		33	9.538
Hispanic American		14	4.046
White / Caucasian	2	251	72.543
Bi-/multi-racial		17	4.913
Other		1	0.289
Missing		2	0.578
$\sum$	3	346	

Table 1. Racial demographics of the sample.

mTurkers workers are relatively even among high school graduates (35%), some college (29%), and college educated (36%). Finally, the racial and ethnic demographics of mTurkers

Workers appears to closely resemble the population demographics within the

United States (Levay, Freese, & Druckman, 2016). Broadly, these demographic analyses concluded that mTurk Workers are a viable asset in quickly gathering data (Huff & Tingley, 2015).

# **Demographics**

The demographics of the respondents from this study indicate a sample of people of varying ages ranging from 18 to 77 ( $\bar{x} = 35.67$ ,  $\mu = 10.96$ ). The sample is relatively skewed towards more females than males (211:133, respectively). Compared to the US population, there

Education attainment	ucation attainment of the sample			Income ranges of the sample		is an
<b>Education</b>	n	<b>%</b>	Income*	n	%	
Elementary School	1	0.29	Less than 22.9	80	23.12	overrepresentation of
Middle School	3	0.87	23 - 31.9	47	13.58	1 1 1
High School	33	9.54	32 - 59.9	111	32.08	sexual minorities,
Some College	72	20.81	60 - 99.9	77	22.25	i.e., people who
Associate's Degree	34	9.83	100 - 119.9	12	3.47	i.e., people who
Bachelor's Degree	142	41.04	More than 120	17	4.91	identify as gay,
Master's Degree	51	14.74	Missing	2	0.58	<b>3</b>
Doctoral or	8	2.31	$\sum$	346		lesbian, and bisexual,
Professional	٥	2.31	Table 3. The inc	come		
Missing	2	0.58	frequencies of t	he san	nple.	17.67 percent of the
$\sum_{i}$	346		*Income in the	thousa	ands.	
Table 2. Educational	attainme	nt.				sample. The racial

demographics of the sample appear to be comparable to the overall demographics of the denizens of the US (Table 1). Married inviduals accounted for 49.13% of the sample, whereas single or divorced or separated individuals accounted for 39.88% and 10.41%, respectively.

The frequencies of college educated indivualds in this sample is skewed towards people with post-secondary degrees compared to the current national averages (Table 2). Reported household incomes of the participants suggest similar incomes to the general population (Table 3). The identified areas of identified employment of the participants was concentrated on computers and technology (n = 61), management and business (n = 58), education and social services (n = 54), and healthcare and allied healthcare (n = 43). Fewere respondents identified as

Trauma	n	<b>%</b>
War/Combat	69	5.2
Motor Vehicle	187	14.1
Disaster	173	13.0
Serious Illness	93	7.0
Crime	179	13.5
Sexual Assault	185	13.9
Other trauma	141	10.6
Family/Friend	139	10.5
$\sum$	1329	

Table 4. The frequencies of traumatic life experiences by category of the sample from the Brief Trauma Questionnairre (BTQ).

being currently employed in the sciences (n = 14), trades and transportation (n = 13), civil service (n = 4), and architecture and civil engineering (n = 3).

Thirty-one (9%) participants identified as not having experienced a traumatic event within their lifetime and 315 (91%) participants identified as experiencing at least one traumatic experience within their lifetime. The sample reported experiencing several different types of TLEs, per the BTQ, with the most common TLE among the sample being motor vehicle incidents (n = 187), closely followed

by sexual assault (185), and natural disasters (173). The range of traumas experienced by the sample range from zero to ten with a mean of 2.9 ( $\mu$  = 2.18). Results from the Post-traumatic stress disorder checklist – fifth edition illustrate an elevated mean on PTSD symptoms ( $\bar{x}$  =40,  $\mu$  = 6.18). Of the 345 participants who completed the PCL-5, 138 of the participants screened

negatively for PTSD and 207 endorsed a pattern of responses, which indicates a possible diagnosis of PTSD.

# **Research Design and Data Analysis**

Using multiple regression analysis to assess how decent work may moderate the relationships between trauma exposure and job satisfaction, as measured using the generic job satisfaction scale (GJSS) and the satisfaction with life scale (SWLS) and the decent work scale (DWS). In other words, the study analyzed how the independent variable of trauma affect the statistical relationship between the dependent variables of job satisfaction and wellbeing, as moderated by decent work. It is hypothesized decent work will positively moderate the scores on GJSS and PWI-A about trauma exposure and the trauma symptoms.

Multiple regression has five assumptions to be statistically viable; linear relationship, normality, no or limited multicollinearity, no auto-correlation, and homoscedasticity (Pituch & Stevens, 2015). The linear relationship assumes errors are independent of measurement and assume a distribution that is normal with a constant variance. The residuals of the sample should not be correlated with each other. Normality is assumed that the data is centralized on a mean. Multicollinearity happens when two or more variables are highly correlated and is often the result of the variables containing similar constructs, e.g., it is difficult to determine how the variance is explained from the data. Auto-correlation occurs when residuals are dependent on each other's, that is the data points have some relation to one another. Homoscedasticity assumes the variance of residuals need to be the same at each level of the explanatory variables, in this study the variance of the relationship between trauma exposure and job satisfaction and wellbeing need to have the same variance about decent work.

# Multiple-Regression Analysis and Moderation.

The research conducted in this study hypothesize that decent work will moderate the relationship between trauma symptoms and life and job satisfaction. Generally, a moderator is a quantitative or qualitative variables that affect the strength and direction of the relation between a predictor (independent) variable and the criterion (dependent) variable (Baron & Kenny, 1986). Baron and Kenny (1986) posit a moderator essentially is a "third variable" that exists within a correlational matrix that affects the zero-order correlation of the predictor and criterion variables. Moderation analysis address how circumstances and conditions or for specific populations a specific condition may or may not exist and to what magnitude (Hayes & Rockwood, 2017). In this study, the predictor variable is the trauma exposure or the trauma symptoms, and the criterion variables are job satisfaction and personal wellbeing.

Multiple regression is believed to be superior to structured equation modeling (SEM) for moderation analysis due to the advances in statistical software providing more nuanced approaches using specific syntax to support the analysis (Hayes & Rockwood, 2017).

Furthermore, SEM is the preferred methodology for more complex moderation analysis involving latent constructs and variables, e.g., more than one predictor variable. In this case, there is one continuous predictor variable. Hayes (2013) developed the PROCESS macro for SPSS and SAS and is widely used to test moderation. Mathematically, this is depicted as:

$$\hat{Y} = b_0 + (b_1 + b_3 M) X_+ b_2 M$$

Whereas,  $\hat{Y}$  is the criterion variable (job satisfaction and personal wellbeing), W is the moderating variable (decent work), X is the predicter variable (trauma exposure or trauma symptoms), the  $b_1$  represents the mean difference in  $\hat{Y}$  between groups 1 and 2,  $b_2$  represents the

mean difference in  $\hat{Y}$  between groups 1 and 3, and  $b_3$  estimates the effect of X on Y as M changes an individual unit. If  $b_3$  is zero, then X's effect on Y is not linearly related to M and

The PROCESS macro for SPSS (Hayes, 2013) suggests the researcher use groups that are not dichotomous, e.g., not combining groups to simplify the analytical problem. As such, this research will aim to have a continuous variable as the moderator.

Similarly, linear regression will be utilized to determine how marginalization and socioeconomic status predict decent work and trauma exposure. Hand Montoya (2017) created a step-by-step tutorial to conduct a multicategorical moderation analysis using the PROCESS macro for SPSS that will be used for the data analysis. In this study, the hypothesized models involve the moderating effects of decent work on the relationship between symptoms or trauma exposure and job satisfaction and personal wellbeing (Figures 1 & 2).

Proposed model of the moderating effect of decent work on job satisfaction

Proposed model of the moderating effect of decent work on personal wellbeing

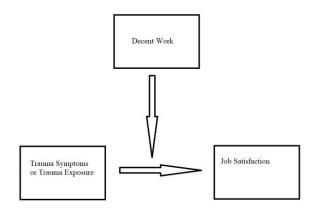


Figure 1. The hypothesized moderating effect of decent work on the relationship between trauma exposure or symptoms on job satisfaction.

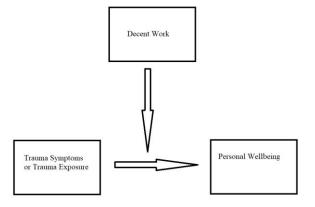


Figure 2. The hypothesized moderating effect of decent work on the relationship between trauma exposure or symptoms on personal wellbeing.

Proposed model of the mediating effects of decent work on trauma symptoms

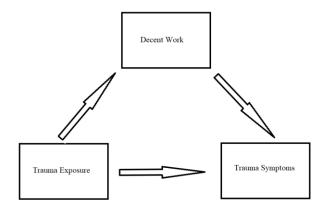


Figure 3. Hypothesized model outlining the possible mediating effects of decent work between trauma exposure and trauma symptoms.

Likewise, decent work is
hypothesized to be a possible mediator
between trauma exposure and trauma
symptoms. Kenny (2018) suggests that
mediation is a an analysis of the casual
model that involves a third variable with
the third variable presuming to cause the
outcome and not the independent variable.

Diagramatically it is depicted in figure 3.

Similarly, regression analysis is an effective statistical method for determining

the likelihood or predictability of within various contexts and fields (Palmer & O'Connell, 2009; Wampold & Freund, 1987). Mathematically the analysis is similar to the moderation analysis:

$$Y = b_0 + b_1 X_1 + b_2 X_2$$

In two separate analyses, Y being the predictor variable of decent work or trauma exposure, the b values represent the partial regression coefficient for Y on  $X_i$ , and the X values represent the independent variables, i.e., marginalization and socioeconomic status. The first such analysis will predict decent work from marginalization and socioeconomic status (*Figure 3*). The second such analysis will predict trauma exposure from marginalization and socioeconomic status.

## **Procedures**

Participants completed a 62-item self-report survey on Qualtrics. All participants were recruited from Amazon Mechnical Turk and were compensated 25 cents for the completion or

attempted completion of the survey. All participants were provided with an informed consent document that highlighted the risks and benefits of their participation in the study. Participants were then asked to complete an automated check to confirm they are not utilizing a computer check, vis-à-vis "bot check." After the 400 sample was collected, outliers were removed based on the interquartile range 1.5 rule, individuals who responded inconsistently, and data sets that were incomplete, resulting in 60 data sets being removed from the final analysis.

JASP was developed in recognition of Bayesian pioneer Sir Harold Jeffreys and stands for Jeffery's Amazing Statistics Program (JASP). JASP utilizing *R* programming to run the data analysis, was programming in C++ and has found to be an effective and powerful data analytic software (Love, et al., 2019; Wagenmakers, et al., 2018). JASP is funded and supported by the Psychological Methods Group at the University of Amsterdam. The programmers and developers of JASP include their coding and statistical analysis software is routinely updated and reviewed by the University of Amsterdamn.

# **Survey Design**

Using cross sectional data, an online sample, and multiple regression this study will exaimine how decent work moderates the relationship between trauma exposure or trauma symptoms and job satisfaction and job satisfaction. To provide further context to understand this possible moderating relationship, this research will explore how trauma exposure and decent work are possibly predicted from socioeconomic status and marginalization. Online survey research has the advantage of producing empirical data quickly, typically more representative than college or university samples, and is relatively cost-effective (Kelley, Clark, Brown, & Sitzia, 2003). Furthermore, researcher bias is usually better controlled as there is less chance of

subtle interpersonal behaviors and mannerisms to affect participant response, e.g., voice tone, subconscious mannerisms.

## **Measures**

# **Brief Trauma Questionnaire.**

The Brief Trauma Questionnaire (BTQ; Schnurr, Vielhauer, Weathers, & Findler, 1999) is selected to compare the different types of trauma and screen for trauma exposure. The BTQ is a 10-item self-report questionnaire that solicits information concerning an individual experiencing different traumatic life events. The Kappa coefficients for meeting criterion A.1 of the DSM (experiencing a life-threatening event) were above .7 to 1.00 for all events except "other" events (.60; Schnurr, Spiro, Vielhauer, Findler, & Hamblen, 2002). Intraclass correlations between the Clinician-Administered PTSD Scale with lifetime and current PTSD severity scores are .99 and .96, correspondingly.

# Post-traumatic Stress Disorder Checklist – 5<sup>th</sup> Edition.

The PTSD Checklist-fifth edition (PCL-5) explores the different criteria for a diagnosis of PTSD as defined by the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (Bovin et al., 2016). The PCL-5 is a 10-item, five-point Likert questionnaire ranging from "not at all" to "extremely." This instrument was selected as it has ( $\alpha$  = .96), convergent and discriminant validity, and test-retest reliability (r = .84). The PCL-5 is a well-studied and routinely utilized instrument to assist a clinician in diagnosing PTSD and tracking treatment, particularly in veteran populations of diverse backgrounds and demographics.

# **Decent Work Scale.**

Decent work is the focal point of the Psychology of Working theory of the Decent Work

Scale (DWS) was developed as a means to accurately measure the different proponents of decent

work (Duffy et al., 2017). Duffy and colleagues (2017) constructed the DWS as a means to empirically validate PWT, as it is the centralized element in the PWT model. DWS was developed based on the definition of decent work by the International Labor Organization. The DWS is a 15-item, seven-point Likert questionnaire and explores the five components of decent work, with higher scores indicating more decent work. Duffy and colleagues (2017) found strong coefficients indicating internal consistency and reliability from .87 to .97.

## **Brief Job Satisfaction Measure II.**

The Brief Job Satisfaction Measure II (BJSM) developed by Judge, Locke, Durham, and Kluger (1998) is a five-item scale that explores an individual's perception of their satisfaction with their current employment. The reliability of the BJSM showed a good reliability coefficient at 0.75. Internal consistency was also high at 0.8 and a high construct validity (r = 083).

## Satisfaction with Life Scale.

The Satisfaction with Life Scale (SWLS) developed by Diener, Emmons, Larsen, and Griffin (1985) is a well-established and widely used instrument. The SWLS measures an individual's perception of how satisfied one is with their life. Kobau and colleagues (2010) found the internal consistency reliability to be high at 0.88, and a high construct validity (r = 0.75). Kobau and colleagues (2010) concluded that the SWLS is one of the "most extensively used and validated instruments in well-being research" and has shown superior test-retest reliability over as many as four years. Example items of the SWLS include: "In most ways my life is close to my ideal" and "If I could live my life over, I would change almost nothing." Due to the high reliability, validity, and its wide use across different cultural backgrounds (Kobaue, et al., 2010) the SWLS was selected for this research.

# Validity & Reliability

The research data for the measured variables was standardized by using the z-scores for the PCL-5, DWS, BJSS, and SWLS to account for possible heteroscedastiticity and ensure the variable symmetry as some measures utilize different ranges on the Likert scales. Omnibus testing on the reliability of the measures and models indicate an acceptable (Cronbach's  $\alpha$  = 0.74). The measures were found to be independent of the other measures by way of the variance inflation factor (VIF), the Shapiro-Wilk test, and the Durbin-Watson tests (Table 5). The variance inflation factor (VIF) between variables on the models do not illustrate concerns with variable independence in the tested models. VIF values ranged from 0.39 to 2.56 (Table 5), which is lower than the recommended statistical score of less than five. As such, the variables are independent in the tested models and do not suggest redundancy in assessed measures, i.e., minimal multicollinearity.

Reliability and Validity summary of the proposed models researched

Model	Statistic	Value	p
1. Satisfaction with life and PTSD symptoms	Durbin-Watson	1.94	0.60
moderated by decent work	VIF	1.09	
2. Satisfaction with life and traumatic life events	<b>Durbin-Watson</b>	1.96	0.74
moderated by decent work	VIF	2.56	
3. Job satisfaction and PTSD symptoms moderated	<b>Durbin-Watson</b>	2.05	0.64
by decent work	VIF	0.92	
4. Job satisfaction and traumatic life events	<b>Durbin-Watson</b>	2.04	0.71
moderated by decent work	VIF	0.39	

Table 5. Reliability and validity testing of the proposed moderation models.

The reliabilities of the different measures were within acceptable limits (table 6). Acceptable levels of Cronbach's alpha range from 0.70 to 0.95, the range of Cronbach's alpha values found within this data analysis. The BJSM reliability coefficient was 0.75 and the SWLS

reliability coefficient was 0.93. Overall, the data in this research is interpretable due to the reliability and valididty measures and is able to be further analysed.

#### Reliability (α) Scale PCL 0.89 DWS 0.82 0.75 **BJSM Hypotheses** 0.93 **SWLS**

This research will explore the ways in which decent

Table 6. Cronbach's alpha reliability testing of the scales

Reliability of the Likert scales used in the data analysis

work functions as a moderator or mediator in the relationships between decent work and PTSD symptom severity and how traumatic life events change in relation to scores on the Decent Work Scale.

Overview of resea	arch hypotheses
Null/Alternative	Hypothesis
$H_{\theta}$	Total scores on the DWS will not moderate the relationship between
	trauma exposure and job satisfaction and personal wellbeing as measured
	by the Brief Job Satisfaction Measure II and the Satisfaction with Life
	Scale, respectively.
$H_1$	Total scores on the DWS will moderate the relationship between trauma
	exposure and job satisfaction and personal wellbeing as measured by the
	Brief Job Satisfaction Measure II and the Satisfaction with Life Scale,
	respectively.
$H_2$	Total scores on the DWS will moderate the relationship between trauma
	exposure and trauma symptoms as measured by the PCL-5.
$H_3$	Decent work will mediate the relationship between trauma exposure and
	job satisfaction and personal wellbeing as measured by the Brief Job
	Satisfaction Measure II and the Satisfaction with Life Scale, respectively.

Table 7. Hypotheses that were statistically examined within this research project.

## Chapter 4: Results

All data analysis was conducted using JASP © version 0.13.10 and utilizing moderation analysis and the structured equation modeling analyses of the program. The research here is differentiated into five distinct research questions. The moderating effects of decent work on the subjective perception of one's satisfaction with their lives on traumatic life events (TLE) and post-traumatic stress disorder (PTSD) symptoms. Research also explored the moderating effects of decent work on one's subjective perception on one's satisfaction with their current employment with their TLEs and PTSD symptoms. The research also explored the possible mediating effects of decent work between TLE and PTSD symptoms.

## **Model Results**

Omnibus testing of the hypothesized moderating effects of decent work on satisfaction with life and job satisfaction and TLEs and PTSD symptoms illustrate an overall relation between these variables (table 6). The moderating effects of decent work on satisfaction with life and PTSD symptoms showed an overall statistically significance F(4, 339) = 33.84 and accounts for a moderate variance ( $r^2 = 0.29$ ). The moderating effects of decent work on satisfaction with life and TLEs was found to be statistically significant F(4, 339) = 33.85 and accounts for a moderate variance ( $r^2 = 0.28$ ). The moderating effects of decent work on job satisfaction and PTSD symptoms showed an overall statistically significance F(4, 339) = 41.46 and accounts for a moderate variance ( $r^2 = 0.33$ ). The moderating effects of decent work on job satisfaction and TLEs showed an overall statistically significance F(4, 339) = 41.20 and accounts for a moderate variance ( $r^2 = 0.33$ ). Mediating effects of decent work between TLEs and PTSD symptoms did not yield statistically significant findings (Z = -1.31, p = 0.19).

Summary statistics of the proposed hypotheses

Hypothesized Models	Statistic	Value	p
1. Satisfaction with life and PTSD symptoms moderated	F (df)	33.84 (4,339)	< .001
by decent work; model summary & ANOVA	$R^2$	0.29	
2. Satisfaction with life and traumatic life events	$F(\mathrm{df})$	33.85 (4, 339)	< .001
moderated by decent work; model summary & ANOVA	$R^2$	0.28	
3. Job satisfaction and PTSD symptoms moderated by	$F(\mathrm{df})$	41.46 (4, 339)	< .001
decent work; model summary & ANOVA	$R^2$	0.33	
4. Job satisfaction and traumatic life events moderated	$F(\mathrm{df})$	41.20 (4, 339)	< .001
by decent work; model summary & ANOVA	$R^2$	0.33	
5. Trauma exposure and Trauma symptoms mediated by	Z	-1.31	= .19
Decent work Direct and Indirect Effects	Z	0.97	= .33

Table 6. The summary statistics from the research questions.

## **Interaction effects**

Further analysis, did not indicate statistically significant moderating or mediating effects in the five models. The hypothesized moderating effect of decent work on PTSD symptoms and satisfaction with life was not statistically significant (p = 0.14). The hypothesized moderating effect of decent work on TLEs and satisfaction with life was not statistically significant (p = 0.13). The hypothesized moderating effect of decent work on job satisfaction and PTSD symptoms was not statistically significant (p = 0.40). The hypothesized moderating effect of decent work on TLEs and job satisfaction was not statistically significant (p = 0.98). The hypothesized meditating effect of decent work on TLEs and PTSD symptoms was not statistically significant (p = 0.33).

Individual effects in the hypothesized models appear to be consistent with the psychology of working theory. That is, decent work was found to be statistically significant to predict job satisfaction and life satisfaction in the data collected. The decent work scale in the four moderation analysis models was found to be statistically significant (table 8 & 9), which is consistent with previous research of the predictive value of decent work on satisifaction with life

and job satisfaction. Other individuals effects, i.e., PTSD symptoms and TLEs were not statistically significant among the four moderating models of this study.

Interaction effects of decent work and it's moderating effects in the hypothesized models

Model	Statistic	Value	p
1. Satisfaction with life and PTSD symptoms moderated by	t	11.00	< 0.01
decent work	t	-1.49	= 0.13
2. Satisfaction with life and traumatic life events moderated	t	5.78	< 0.01
by decent work	t	1.50	= 0.13
3. Job satisfaction and PTSD symptoms moderated by decent	t	12.38	< 0.01
work	t	0.84	= 0.40
4. Job satisfaction and traumatic life events moderated by	t	7.79	< 0.01
decent work	t	0.04	= 0.97
5. Trauma exposure and Trauma symptoms mediated by	z	-1.31	= 0.19
Decent work			

Table 8. The interaction effects between decent work and TLE(s) or PCL5 scores

# **Exploratory analyses**

Post-hoc analysis included explored differences between subsamples from the overall data set. Individuals who have experienced a single TLE have a statistically significant moderating effect between the relationship between job satisfaction and PTSD symptoms t(176) = 1.99, p = 0.048). The overall model highlighting the moderating effect of decent work on the relationship between job satisfaction and PTSD symptoms accounts for a good amount of variance  $r^2 = 0.35$ . There was no such moderating effect with the same sample with regards to satisfaction with life and PTSD symptoms t(176) = -1.26, p = 0.21). Individuals with two or more TLEs did not experience a moderating effect between satisfaction with life or job satisfaction in any of the hypothesized models.

Individuals experiencing higher and lower levels of PTSD symptomatology, regardless of the number of TLEs did not experience statistically significant differences when accounting for decent work. The data did not support evidence of differences in the severity of PTSD

symptomatology affecting the mediating effect of decent work, (table 10). Decent work and the number of TLEs is statistically significant to predict PTSD symptom severity; however, accounts for a small variance (table 10). Although, the interaction effect between the number of TLEs and decent work does not moderate PTSD symptom severity (t = 0.73, p = 0.47). Satisfaction with life and TLEs are statistically significant at predicting the severity of PTSD symptoms and accounts for a small variance (table 10). Job satisfaction and the number of TLEs are statistically significant at predicting the severity of PTSD symptoms and accounts for a small variance (table 10).

Post-hoc analysis of individuals experiencing high or low levels of PTSD symptomatology				
Model	Statistic	Value		
Survivors experiencing high PTSD symptomatology – Mediation	p	0.191		
Survivors experiencing low PTSD symptomatology – Mediation	p	0.233		
Decent work and number of traumas affecting PTSD symptom	F	2.93		
severity	p	0.034		
	$r^2$	0.025		
Satisfaction and number of traumas affecting PTSD symptom	F	2.654		
severity	p	= 0.049		
	$r^2$	0.023		
Job satisfaction and number of traumas affecting PTSD symptom	F	4.59		
severity	p	= 0.004		
	$r^2$	0.039		

Table 9. Post-hoc analyses examining the difference of symptom severity of survivors and the mediating effects of decent work.

## Chapter 5: Discussion

The vast majority of people in the United States (70%) experience at least one traumatic life event (TLE) within their lifetime (Bisson & Andrew, 2005) and overall there is an estimated 6.8% lifetime prevalence of developing PTSD, with the average individual experiencing 3.2 TLEs in their lifetime (Kessler et al., 2017). The majority of these individuals will go onto productive and active careers after experiencing a TLE (Bisson & Andrew, 2005; Kessler, et al., 2017). The interaction between people who have experienced a TLE and how it affects their vocational and career performance is under researched. The research conducted here attempted to explore the intersection of those who have experienced a TLE and how decent work may mitigate their PTSD symptoms.

Previous research into the topic of trauma's effects on vocation and employment is relatively scant (Smith, Schnurr, & Rosenheck, 2005). Trauma-informed care attempts to bridge this gap and focuses on improving the mental health of individuals who have experienced a TLE (Anderson, Blitz, & Saasamoinen, 2015). Unfortunately, there is limited empirical evidence of the effects of TLEs on vocation, work performance, or interpersonal effectiveness in the workplace. The research here focused on improving the knowledge speficic to how decent work, as outlined by the psychology of working theory (PWT; Duffy, Blustein, Diemer, & Autin, 2016), may moderate the relationship between PTSD symptoms and job satisfaction and satisfaction with life.

The International Labor Organization (ILO) developed the five standards that qualify work as "decent" these criterion were integrated into PWT (Duffy, Blustein, Diemer, & Autin, 2016). PWT defines decent work as possessing five core elements: (1) physical and interpersonal safety, (2) hours allowing for free time and rest, (3) organizational values, (4) adequate

compensation, and (5) adequate access to health care. Decent work exists when all of these criteria are fulfilled. The RAND Labor and Population Report (Maestas, et al., 2017) conclude that working conditions within the USA have, "[...] a substantial proportion of workers are exposed to an adverse physical and social work environment and are subject to high pressure and hour variations that spill over into personal lives [...] men without a college degree [and women and younger workers] more generally, experience substantially worse job conditions."

Furthermore, the a large majority (61%) of US workers experience work in physically intense or repetitive work and 20% have reported workplace harassment or abuse in the past several years.

Currently, the global pandemic's effects on workplace conditions and employee satisfaction is not currently known; however, the unemployment numbers have risen greatly due to the global pandemic (Blustein, et al., 2020).

Prior research highlights the devastating effects of unemployment on an individual's and community's psychological, economic, and social well-being (Blustein, 2019). According to a meta-analysis (Paul & Moser, 2009) unemployment showed an average overall effect size (d = 0.51) where people who are unemployed experience significantly more distress compared to people who are employed. Notably, the meta-analysis also found that 34% of individuals who are unemployed report psychological problems compared to the 16% of people who are employed. Employment is an integral aspect of most people's lives and many identify themselves by their work or vocation (Luyckx, Schwartz, Goossens, & Pollock, 2008).

Given the deleterious mental health effects of unemployment and the understanding that most people find identity with their vocation, it logically follows that individuals will experience positive mental health effects due to positive workplace experiences, vis-à-vis, decent work. As such, a literature review concluded the hypothesis that decent work would moderate the

relationship between trauma symptoms and life and job satisfaction. The research outlined four hypotheses towards this end: (1) satisfaction with life and PTSD symptoms are moderated by decent work, (2) satisfaction with life and TLEs are moderated by decent work, (3) job satisfaction and PTSD symptoms are moderated by decent work, (4) job satisfaction and TLEs are moderated by decent work, and (5) trauma exposure and trauma symptoms are mediated by decent work. The moderation analysis did not find a statistically significant relationship between these hypothesized relationships. The overall models accounted for a statistically significant variance. Namely, the models account for roughly a third of the variance to account for either job satisfaction or satisfaction with life. Post-hoc testing found that decent work does moderate the relationships between job and life satisfaction and TLEs and PTSD symptoms, if the survivor has only experienced one TLE. Conversely, decent work does not moderate these relationships if the survivor has experienced two or more TLEs.

# Threats to Reliability & Validity

The most common threat to external validity is the generalizability of a study, with this study having a suggest sample size of 205, it is suggested that the generalizability threat will not be as significant. Although, using a sample size of mTurk Workers who more frequently tend to be younger and more partisan compared to the general population (Levay Freese, & Druckman, 2016). Despite the partisanship and age demographics, Levay, Freese, & Druckman (2016) conclude that mTurk Workers do not differ on fundamental terms and as such is a productive population for gathering data. Similarly, the constructs follow the consistent consensus definitions for the different variables being measured, e.g., the definition of "decent work" is consistent with the Psychology of Working Theory literature.

The threats to internal validity are considered to be controlled through close selection of the instrumentation and selection of research participants. The instruments above were selected primarily due to their statistical significance and their high rates of reliability and validity with the normative groups used during the instrument development. Furthermore, most of the instruments were developed using a diverse group of participants and see regular use in the literature. Similarly, the demographic data suggests that mTurk Workers are as diverse as the general population of the United States (Difallah, Filatova, & Ipeirotis, 2018; Levay, Freese, & Druckman, 2016).

## **Limitations & Future Research**

Like all contemporary research, this study has limitations that need to be considered both in the interpretation and when future research is explored looking into how decent work may affect other mental health variables. First, the data was cross-sectional prior to the 2020 international pandemic, as such, it is possible that work conditions may change in the coming years or mental health symptoms by the general populace may shift. Longitudinal data would improve the quality and create a higher confidence level in determing the true relation, if any, between decent work and trauma symptoms. The survey design may be further improved by incorporating in-person interviews to determine true PTSD symptoms through the Clinician-Administered PTSD Scale, which is the gold standard of determining PTSD diagnosis and symptom severity. Similar mixed-methods research may provide a more robust knowledge on the thoughts, perceptions, and feelings experienced by survivors of trauma who return into the workplace.

While, there was limited evidence of multi-collinearity within this study, more nuanced explorations of variables may illustrate stronger relations between decent work and PTSD

symptoms, i.e., more thorough measures of overall life and job satisfaction rather than the brief scales used in this study. Furthermore, the data was collected via online recruitment methods, which possibly affected the response rate, endorsed beliefs, and is possibly more susceptible to random response tendencies, e.g., yay or nay-saying, respondent fatigue, indiscriminate response bias etc. Additionally, the female-to-male ratio of the study is not representative of the general population, which may attributed to reported increases in overall symptom pathology endorsed by the sample. Future studies may consider increasing a larger sample size, streamlining the survey design, or conducting in-person or supervised surveys.

Future research may consider more nuanced explorations of mental health and trauma symptomatology as it relates to decent work through a longitudinal study, exploring different variables that may affect access to decent work, or the experiences survivors of trauma face in the workplace. Similarly, understanding if there is a possible connection with people's perceptions of the meaning they find with their work and their PTSD symptoms may provide more insight into the relationship, if any. Additionally, future research may explore how decent work affects other mental health disorders to understand if decent work may ameliorate or act as a moderating factor with regards to other mental health disorders, e.g., depression or anxiety. Furthermore, incorporating in-person or mixed methodology may alleviate some of the biases due to online response variance. Finally, future research may find it beneficial to include respondent attention checks to minimize the probability of type I errors.

# Conclusion

Analysis between the relationships between trauma exposure and trauma symptoms and life satisfaction and job satisfaction as moderated by decent work suggest that decent work does not moderate these relationships with cross-sectional data. Omnibus testing suggested a

statistically significant relationship overall in the model and accounted for a moderate variance in the sample. Future research is needed to better understand the relationship, if any, between decent work and PTSD symptoms.

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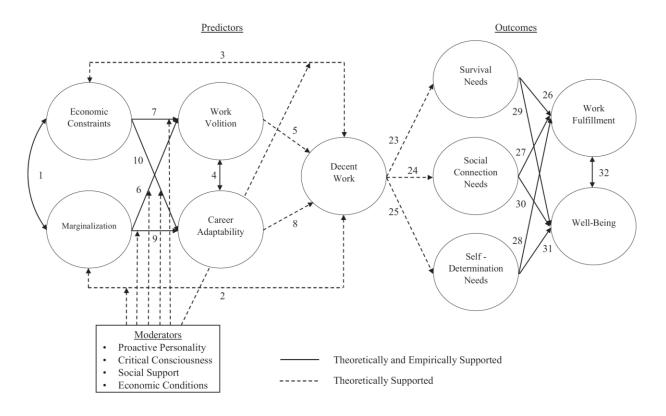
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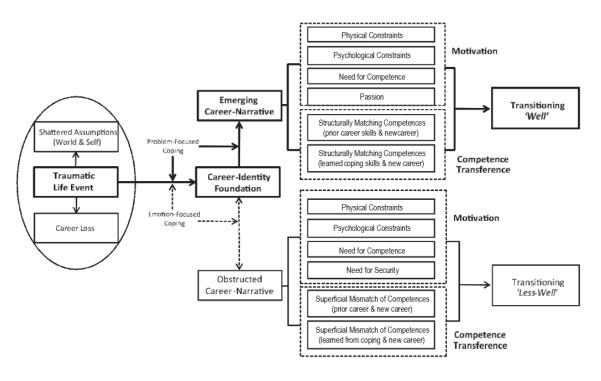
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# Appendix A

#### THE PSYCHOLOGY OF WORKING THEORY



# Appendix B



# Appendix C

# Dissertation Decent Work as a Moderator

University of Wisconsin-Milwaukee

Informed Consent to Participate in Research

**Study title**: Decent work as a moderator for survivors of traumatic life events

**Researcher**[s]: Matthew Carbonelli, MS, NCC, LPC-IT, SAC-IT; Nadya Fouad, Ph.D. – Department of Counseling Psychology

We are inviting you to participate in a research study. Participation is completely voluntary. If you agree to participate, you can always change your mind and withdraw. There are no negative consequences, whatever you decide.

# What is the purpose of this study?

The purpose of this study is to determine how survivors of traumatic events are affected by decent work as measured by life and job satisfaction. The goal of this study is to understand better how individuals who experienced trauma perceive their work and what possible benefits may be derived from the quality of work someone has, i.e., decent work. Individuals do not need to have experienced a traumatic life event to be eligible for participation in this study.

#### What will I do?

During this study, you will be asked to answer a series of questions about your demographics, post-traumatic stress, life events, your economic resources, life and job satisfaction, and your overall employment experiences. All items will be completed in a survey format and should take approximately 5 to 10 minutes to complete. You are not required to answer any questions you find answering to be uncomfortable.

Risks Some questions may be very personal or upsetting. You can skip any items you do not want to answer or stop the survey entirely.

- Survey questions will ask questions relating to possible traumatic life events you may have experienced. As such, some individuals may find this distressing, and we have included the crisis line number to use if you become distressed.
- Online data being hacked or intercepted: This is a risk you experience any time you provide information online. We are using a secure system to collect this data, but we cannot eliminate this risk.
- Amazon could link your worker ID (and associated personal information) with your survey responses. Make sure you have read Amazon's MTurk participant and privacy agreements to understand how your personal information may be used or disclosed.

- Breach of confidentiality: There is a chance your data could be seen by someone who should not have access to it. We are minimizing this risk in the following ways:
- o The data is anonymous.
- o We will store all electronic data on a password-protected, encrypted computer.

#### **Possible benefits:**

- · Assisting research about survivors' employment experiences
- Helping health professionals with working with survivors
- · Creating a more inclusive and supportive work environment
- · Informing employers of the benefits of providing support for employees who experience trauma

Estimated number of participants: 500

**How long will it take?** Completing the survey will take approximately five to ten minutes.

Costs: None

**Compensation**: Twenty cents following completion of the survey. Research participants who attempt to complete the survey, but do not complete the entirety of the survey will be compensated the full amount for their time and contributions.

Future research: Your data will not be used or shared for any future research studies.

**Funding source**: This research is not funded by any external sources.

# **Confidentiality and Data Security**

· We will not collect any personally identifiable information.

#### Where will data be stored?

On the servers for the online survey software (Qualtrics).

#### How long will it be kept?

Until completion of the study, which will approximately take 1 year.

# Who can see my data?

- We (the researchers) will have access to de-identified (no names, birthdate, address, etc. This is so we can analyze the data and conduct the study.
- The Institutional Review Board (IRB) at UWM, the Office for Human Research Protections (OHRP), or other federal agencies may review all the study data. This is to ensure we're following laws and ethical guidelines.

- · We may share our findings in publications or presentations. If we do, the results will be aggregated (grouped) data, with no individual results or de-identified (no names, birthdate, address, etc.).] If we quote you, we'll use pseudonyms (fake names).
- · Amazon: Because they own the MTurk internal software, and to issue payment, Amazon will have access to your MTurk worker ID. There is a possibility Amazon could link your worker ID (and associated personal information) with your survey responses.

#### Contact information:

For questions about your rights as a research participant, complaints, or problems: Contact the UWM IRB (Institutional Review Board; provides ethics oversight) at 414-229-3173 / irbinfo@uwm.edu.

Please print or save this screen if you want to be able to access the information later.

IRB #: 20.065

IRB Approval Date: 10/21/2019

I am at least 18 years old

# **Agreement to Participate**

If you meet the eligibility criteria below and would like to participate in this study, click the button below to begin the survey. Remember, your participation is entirely voluntary, and you're free to withdraw at any time.

What gender do you identify as?

Male
Female
Transgender
Other (Please Specify)

What sexual orientation do you identify with?
Heterosexual
Gay/Lesbian

O Bisexual
Other
Please type in your age.
What race do you identify with? Please check all that apply.
American Indian/Alaska Native
Asian American
Black/African American
Hispanic American
Middle Eastern American
White/Caucasian
Bi-racial or Multi-racial
Other (Please Specify)
What is your ethnic identity?
O Hispanic
O Non-Hispanic
What is your marital status?

○ Single
O Married
O Divorced
○ Separated
Do you have any dependents?
○ Yes
○ No
If yes, please indicate how many dependents you have.
What is your highest level of education?
O Elementary School
O Middle School
O High School
O Some College
O Associate's Degree
O Bachelor's Degree
O Master's degree
O Doctorate or Professional Degree
What is your yearly income?

○ \$22,999 or less per year
\$23,000-\$31,999 per year
○ \$32,000-\$59,999 per year
○ \$60,000-\$99,999 per year
○ \$100,000-\$119,999 per year
○ \$119,999 or above per year
What state do you live in?
▼ Alabama U.S. Virgin Islands
Are you a MIlitary Veteran?
O Yes
○ No
If yes, What branch of service did you deploy?
○ Army
O Air Forse
O Navy
O Marines
O Coast Guard
Did you deploy to a combat zone?

○ Yes
○ No
How many times did you deploy?
What conflict(s) did you serve?
O World War II
O Korean Conflict
O Vietnam Era
O Conflicts in Lebanon, Grenada, and/or Panama
O Persian Gulf War
Operations Enduring Freedom, Iraqi Freedom, New Dawn, and/or Inherent Resolve
O More than one
Are you currently employed?
○ Yes
○ No
What field best describes your current work?
▼ Architecture and Civil Engineering Other
What is your current employment categorization?

How many traumatic events have you experienced in your life?
The following questions ask about events that may be extraordinarily stressful or disturbing for almost everyone. Please indicate "Yes" or "No" to report what has happened to you. If you answer for an event, please answer any additional questions that are listed. If you answer please continue with the next event.
Have you ever served in a war zone, or have you ever served in a noncombat job that exposed you to war-related casualties (for example, as a medic or on graves registration duty?)
○ Yes
○ No
Did you think your life was in danger or you might be seriously injured?
○ Yes
○ No
Were you seriously injured?
○ Yes
○ No
Have you ever been in a serious car accident, or a serious accident at work or somewhere else?
○ Yes
○ No

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Did you think your life was in danger or you might be seriously injured?

○ Yes
○ No
Were you seriously injured?
○ Yes
○ No
Have you ever been in a major natural or technological disaster, such as a fire, tornado, hurricane, flood, earthquake, or chemical spill?
○ Yes
○ No
Did you think your life was in danger or you might be seriously injured?
○ Yes
○ No
Were you seriously injured?
○ Yes
○ No
Have you ever had a life-threatening illness such as cancer, a heartattack, leukemia, AIDS, multiple sclerosis, etc.?
○ Yes

○ No
Did you think your life was in danger or you might be seriously injured?
○ Yes
○ No
Before age 18, were you ever physically punished or beaten by a parent, caretaker, or teacher so that: you were very frightened; or you thought you would be injured; or you received bruises, cuts, welts, lumps or other injuries?
○ Yes
○ No
Did you think your life was in danger or you might be seriously injured?
○ Yes
○ No
Were you seriously injured?
○ Yes
○ No
If the person who physically punished or beat you is living with someone under the age of 18, you can file an anonymous report through Child Protective Services. Go to http://www.thehotline.org/ to file an anonymous report.
O Please click to continue

you ever been attacked, beaten, or mugged by anyone, including friends, family members or strangers?
○ Yes
○ No
Did you think your life was in danger or you might be seriously injured?
O Yes
○ No
Were you seriously injured?
○ Yes
○ No
Has anyone ever made or pressured you into having some type of unwanted sexual contact? Note: By sexual contact we mean any contact between someone else and your private parts or between you and some else's private parts.
○ Yes
$\bigcirc$ No
Did you think your life was in danger or you might be seriously injured?
○ Yes
○ No
Were you seriously injured?
○ Yes

○ No
If the person who made or pressured you into having some type of unwanted sexual contact is continuing to harm you or another person, go to: https://hotline.rainn.org/online/ to file an anonymous report or to learn more about resources in your area. Please click the response below to continue the survey.
O Please click to continue
Have you ever been in any other situation in which you were seriously injured, or have you ever been in any other situation in which you feared you might be seriously injured or killed?
○ Yes
○ No
Did you think your life was in danger or you might be seriously injured?
○ Yes
○ No
Were you seriously injured?
○ Yes
○ No
Has a close family member or friend died violently, for example, in a serious car crash, mugging, or attack?
○ Yes

○ No					
Did you think yo	our life was in o	danger or you m	night be seriously	injured?	
O Yes					
○ No					
Were you seriou	sly injured?				
O Yes					
○ No					
you ever witness	sed a situation i	in which you fea	someone was seri ared someone wo nt you already rep	ould be seriously	injured or
Considering all	of your life eve	nts, how many	would you identi	fy as traumatic?	
Please read each	problem caref have been bothe	ully and then chered by that pro	nes have in responeck one of the nublem in the past r	umbers to the rig nonth.	ght to indicate
	Not at all	A little bit	Moderately	Quite a bit	Extremely
Repeated, disturbing, and unwanted memories of the stressful experience?	0		0		

disturbing dreams of the stressful experience?	0		0	0	0
Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?					
Feeling very upset when something reminded you of the stressful experience?	0	0	0	0	0
Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?					

Avoiding memories, thoughts, or feelings related to the stressful experience?	0		0	0
Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?				0
Trouble remembering important parts of the stressful experience?	0	0	0	0
Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be				0

trusted, the world is completely dangerous)?			
Blaming yourself or someone else for the stressful experience or what happened after it?		0	0

Below is a list of problems that people sometimes have in response to a stressful experience. Please read each problem carefully and then check one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

	Not at all	A little	A moderate amount	A lot	A great deal
Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	0	0		0
Loss of interest in activities that you used to enjoy?	0	0	0	0	0
Feeling distant or cut off from other people?	0	0	0	0	0
Trouble experiencing positive feelings (for example,	0	0	0		0

being unable to feel happiness or have loving feelings for people close to you)?					
Irritable behavior, angry outbursts, or acting aggressively?	0	0	0	0	0
Taking too many risks or doing things that could cause you harm?	0	0	0	0	0
Being "superalert" or watchful or on guard?	0	0	0	0	0
Feeling jumpy or easily startled?	0	0	0	0	$\circ$
Having difficulty concentrating?	0	0	0	0	$\circ$
Trouble falling or staying asleep?	0	0	0	0	0

Please indicate one answer to each of the following statements:

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
I feel emotionally safe interacting with people at work.	0	0	0	0	0	0	0
At work, I feel safe from emotional or verbal abuse of any kind.	0	0	0	0	0	0	0
I feel physically safe interacting with people at work.	0	0	0	0	0	0	0
I get good healthcare benefits from my job.	0	0	0	0	0	0	0
I have a good healthcare plan at work.	$\circ$	$\circ$	$\circ$	0	0	$\circ$	0
My employer provides acceptable options for healthcare.	0	0	0	0	0	0	0
I properly paid for my work.	$\circ$	$\circ$	$\circ$	0	0	0	0
I am paid enough based on my qualifications	0	$\circ$	0	0	0	$\circ$	0

and experience.							
I am rewarded adequately for my work.	0	0	0	0	0	0	0
I have enough time for non- work activities.	0	0	0	0	0	0	0
I have time to rest during the work week.	0	0	0	0	0	0	0
I have free time during the work week.	0	0	0	0	0	0	0
The values of my organization match my family values.	0	0		0	0	0	0
My organization's values align with my family values.	0	0	0	0	0	0	0
The values of my organization match the values within my community.	0	0	0	0	0	0	0

Some jobs are more interesting and satisfying than others. For each statement below, use the following scale to indicate which is most descriptive of your current job:

	Strongly Disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
I feel fairly well satisfied with my present job.	0	0	0	0	0	0	0
	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Most days I am enthusiastic about my work.	0	0	0	0	0		0
	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Each day of work seems like it will never end.	0	0	0	0	0		0
	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\circ$	$\bigcirc$
I find real enjoyment in my work.	0	0	0	0	0	0	0
	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$
I consider my job rather unpleasant.	0	0	0	0	0	0	0

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item.

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
In most ways my life is close to my ideal.	0	0	0	0	0	0	0
The conditions of my life are excellent.	0	0	0	0	0	0	0
I am satisfied with my life.	0	0	0	0	0	0	0
So far I have gotten the important things I want in life.	0	0	0	0	0	0	0
If I could live my life over, I would change almost nothing.	0	0	0	0	0	0	0

Thank you very much for your time. If you experienced or are experiencing any concerning thoughts or emotions, please contact the Crisis Text Line by texting "CONNECT" to 741741 or call the National Suicide Prevention Lifeline at 1-800-273-8255 if you are living in the United States. Additionally, if you are feeling unsafe please contact your local emergencies services by dialing 911. Again, thank you very much for completing the survey and we hope to use your contribution towards improving the work lives of people who have experienced a traumatic event. If you have any comments, concerns, or questions regarding the survey please use the below contact information.

# **Curriculum Vitae**

# Matthew M. Carbonelli

PROFESSIONAL LICENSES / CERTIFICATIONS	
Substance Abuse Counselor – In Training	2016 – Present
Licensed Professional Counselor – In Training	2016 – Present
Nationally Certified Counselor	2016 – Present
Question, Persuade, Refer (QPR) Suicide Prevention Training Instructor	2017 - Present
Community Based Residential Facility Training Certified	2015 - Present
Emergency Medical Technician – Basic	2005 - 2012
CPR Certified	2004 – Present
PROFESSIONAL INTERESTS	
Trauma Informed Care, Social Justice, Alcohol and Substance Use Disorder approach, Humanistic-Existentialism, and Veterans' Mental Health Issues	s, Biopsychosocial
EDUCATION	
<i>University of Wisconsin</i> – Milwaukee, Milwaukee, WI	
PhD in Counseling Psychology	2016 – Present
Minor: Educational Statistics & Measurement	
Advisor: Thomas Baskin, Ph.D.	
Marquette University, Milwaukee, WI	
MS in Clinical Mental Health Counseling	2014 - 2016
Minor: Addictions Counseling	
Advisor: Sarah Knox, Ph.D.	
Loras College, Dubuque, IA	
BA in Psychology	2012 - 2014
Minor: Biology	
Advisor: Mark Hopper, Ph.D.	
Elgin Community College, Elgin, IL	
AAS with Honors	2010 - 2012
Areas of Concentration: Psychology, Biology, and Chemistry	
AWARDS, SCHOLARSHIPS, & FELLOWSHIPS	
Pi Lambda Theta – National Honor Society for Educators	Spring 2018
Greater Milwaukee Foundation Donald P. Timm Fund Scholar	Fall 2017
VFW-SVA Legislative Fellowship	Spring 2017
National Board for Certified Counselors; Military Scholar	Spring 2015
Psi Chi; Psychology Honors Society	2013 - 2014

Dean's List – Loras College	Fall 2013
Phi Theta Kappa International Honor Society	Fall 2010 – Spring 2012
Honorable Discharge – United States Army	2010
Afghanistan Campaign Medal with Campaign Star	2009
Combat Medical Badge	2009
North Atlantic Treaty Organization Medal	2009
Army Achievement Medal (3 <sup>rd</sup> Award)	2006, 2007, & 2009
Overseas Service Ribbon	2009
Physical Fitness Award	2006
Army Service Ribbon	2004
National Defense Service Medal	2004

#### TEACHING EXPERIENCE

# UW - Milwaukee Suicide Prevention and Training Team

**Volunteer Instructor** Fall 2016 – Present Taught college students the basics of suicide prevention and awareness

Assisted in the development of the suicide prevention and awareness training for campus Educate students on how to respond to a person's suicidal ideation

#### UW - Milwaukee

**Teaching Assistant** Fall 2016 – Spring 2018

Educational Psychology 104: Pathways to Success at UWM

Educational Psychology 105: Motivation Strategies

Counseling 774: Trauma Counseling, Theory, & Research

Veteran's Place Central – Milwaukee, WI

Volunteer Instructor Spring 2015 – Spring

2016

Developed curriculum for time management and life skills training Taught Veterans that are homeless time management and life skills Advocated for Veterans' issues through local and state legislature Assisted Veterans acquire social benefits and housing

# Clinical Mental Health Counseling Program - Marquette University

**Group Discussion Leader** Summer 2015

Led group discussions about career and vocational development Assisted high school students through career assessments and counseling

# Medical Assistant Program - First Institute - Crystal Lake, IL

Adjunct Instructor Spring 2011 – Fall 2013

Implemented interactive learning through 3D anatomical models
Initiated usage of different multimedia to increase student involvement

Instructed students in human anatomy and physiology, medical terminology, medical ethics, and basic laboratory procedures

#### RELATED EXPERIENCE

# Zablocki VAMC – Outpatient Post-Deployment Clinic – Milwaukee, WI

**Volunteer Instructor** Fall 2017 – Fall 2018

Instruct college students on suicide prevention and awareness

Inform college students about campus and community resources to

Educate students on how to respond to a person's suicidal ideation

# Zablocki VAMC, EB-PREP, & Operation HOPE – Milwaukee, WI

# **Doctoral level Practicum Student**

Fall 2017 – Fall 2018

Provided social skills training to Veterans with schizophrenia spectrum disorders

Coordinated with providers to support the Veteran

Provided individual psychotherapy with an emphasis on coping with hallucinatory experiences

# Veterans of Foreign Wars & Student Veterans of American

# **Legislative Fellow**

Fall 2016 - Spring 2017

Drafted legislation and proposed to members of the US Congress and Senate

Advocated for awareness of veterans' mental health and suicide prevention

Lobbied state and federal legislators for improved mental health services for veterans

Worked with the VFW and SVA to create community action for veterans who are at risk for suicide

#### Dr. Fouad's Research Teas – UW - Milwaukee

Research Assistant Fall 2016 - Present

Developed and formulated research on the Psychology of Working Theory

Contributed to academic writing and editing of all phases of publication

Developed Qualtrics and mTurk survey-designs to explore vocational psychology

#### Dr. Baskin's Research Team – UW - Milwaukee

Research Assistant Fall 2016 - Present

Developed and formulated meta-analytic study of trauma-based psychotherapies

Collected and cataloged over a thousand trauma-based psychotherapy research articles

Utilized SAS, SPSS, and R-Studio for data analytics

# **Preparing Future Faculty and Professionals** – Marquette University

Student Fall 2015 – Spring 2016

Attended seminars to prepare to be a future faculty member and professional

Created an individual development plan focusing on personal and professional development

Participated in workshops improving my writing, technology, and teaching ability

#### Milwaukee Center for Independence – Crisis Resource Center, Milwaukee, WI

#### **Masters Level Crisis Clinician**

Spring 2015 – Present

Promoted from mental health technician to masters level crisis clinician in May 2016

Assisted in the resolution of psychiatric crises

Encourage individuals to self-advocate to secure housing and employment plans

Ensured safe administration of medications to clients

Supervised and trained employees and masters level interns

Utilized Evolv-CS Software, Avatar, and Provider Connect medical records applications

# Aurora Psychiatric Hospital - Inpatient Unit, Wauwatosa, WI

# **Intern Psychotherapist**

Spring 2015 – Spring 2016

Assessed individuals for suicidal, homicidal ideation, and psychopathology

Co-facilitated group therapy sessions for inpatients

Interacted with a diverse population of individuals with mental health disorders

Utilized Epic software and electronic medical records for patient administration

# Loras College Neuroscience Lab – Dubuque, IA

# **Research Assistant**

Fall 2013 – Spring 2014

Assisted in the Internal Review Board application process

Compiled and collected research data, including statistical analysis, using SPSS©

Implemented cold pressor task to induce stress and the effects on memory and cognition

Gathered and reviewed relevant literature throughout the research process

# *United States Army – 1/178th Air Assault Infantry*

Combat Medic (Emergency Medical Technician)

April 2004 – April 2010

Combat Medic Advanced Skills Training Course Certified

Provided emergency medical interventions in unstable areas in Afghanistan

Instructed soldiers and locals on the basics of first aid and field sanitation

Maintained medical equipment and inventory for a clinic serving 500 individuals

Triaged medical casualties during high-pressure situations

#### **PRESENTATIONS**

- Opelt, B., Ghosh, A., Heyrmen, K. E., Kessler, M. J., Carbonelli, M. M., & Fouad, N. (2018, August). Combat Veterans transition into higher education. Poster to be presented at *American Psychological Association Annual Convention*, San Francisco, CA.
- Everhart, S.A., Hunt, J.C., Linneman, N.G., Carbonelli, M., Woronzoff Veridden, A., Baskin, T. (2018, August). *Meta-Analysis of Psychological Interventions for Pain vis-à-vie Mental Health Outcomes*. Poster to be presented at American Psychological Association Annual Convention, San Francisco, CA.
- Carbonelli, M.M. & Sessler, D. (2017). "Cultural competence of working with student Veterans." [Invited speaker]. University of Wisconsin Milwaukee. Teaching and graduate student orientation.
- Carbonelli, M.M. & Daanen, D. (2015). "Cultural perspectives and research review of veterans that identify as lesbian, gay, or bisexual." [Poster presentation]. Marquette University. Clinical Mental Health Work with Specific Populations.

# Jeter, D. & Carbonelli, M.M. (2015). "Center for Veterans Issues: Resources for Homeless Veterans." (Poster presentation).

Marquette University. Project Homeless Connect.

#### COMMUNITY SERVICE & ADVOCACY

# Counseling Psychology Student Association

Newsletter Editor Fall 2017 – Present

Write and manage articles submitted to the organization newsletter

Disseminate information to the counseling psychology department

# Military and Veteran Resource Center (MAVRC) UW - Milwaukee

#### **Volunteer Student Advocate**

Fall 2016 – Present

Advocated for Veterans concerns on campus

Assisted and helped organize events for Veterans suicide awareness and prevention

Act as a liaison between MAVRC and the Student Veterans of America Chapter

# Diversity Advocate Trainer – Marquette University

# **Marquette University Diversity Advocates**

Spring 2015 – Fall 2017

Advocated for concerns facing students of diverse backgrounds Campus

Educated students on the basics of diversity awareness and advocacy skills

Facilitated discussions concerning issues facing students with diverse backgrounds

Trained students to be aware of and overcome personal biases and stereotypes

# Student Veterans Association – Marquette University

#### **Graduate Student Representative and Co-founder**

Fall 2014 – Spring 2016

Advocated for veteran's concerns on Marquette University Campus

Co-wrote student organization's constitution and charter

Raised funds for veterans that need assistance in the Milwaukee, WI area

Organized events to raise awareness about veteran's issues on campus

# Counselor Education and Counseling Psychology - Marquette University

Secretary

Fall 2015 – Spring 2016

Recorded and disseminated information to all executive and regular members

Created, edited, and disseminated monthly newsletter to the department staff and students

Oversaw and authored new articles to constitution bylaws to make the organization more inclusive

# Coalition for Justice - Milwaukee, WI

# **Event Coordination Committee Volunteer**

March 2015 - June 2015

Advocated for social justice about the mistreatment of African-Americans by police

Assisted in the organization of rallies and marches around Milwaukee, WI

Campaigned to raise awareness of social inequities in Milwaukee, WI

Traveled to Washington D.C. to lobby for the fair and equal treatment of African-Americans

# United Nation's International Children's Emergency Fund (UNICEF) – Dubuque, IA

# **Social Events Committee Member**

Fall 2012 – Spring 2014

Advocated for children in need on campus and the community

Assisted in organizing fundraising events for children needing emergency assistance in

Raised funds for Trick or Treat for UNICEF

# Sigma Phi Epsilon - Iowa Eta Loras College Chapter – Dubuque, IA

# Standards Board, Brother Mentor, and Co-founder

Fall 2012 – Spring 2014

Co-wrote standards for proper conduct of fellow fraternity brothers

Disciplined fellow fraternity brothers for actions incongruent with moral and ethical behavior

Encouraged fraternity brothers to seek substance abuse treatment when necessary

Organized socially responsible events around campus

Taught seminars on responsible drinking on campus

# Psi Chi, International Psychology Honor Society – Dubuque, IA

Member Spring 2012 – Spring

2014

Advocated for individuals with mental health disorders

Fundraised to the National Alliance on Mental Illness

#### **AFFILIATIONS**

American Civil Liberties Union of Wisconsin	2015-Present
Wisconsin Counseling Association, Student Member	2014-Present
American Counseling Association, Student Division	2014-Present
American Psychological Association, Student Affiliate	2013-Present
Phi Theta Kappa; International Honor Society	2010-2012
American Legion	2009-Present
American Veterans	2009-Present
Iraq and Afghanistan Veterans of America	2009-Present
Veterans of Foreign Wars, Life Member	2009-Present
Wounded Warrior Project, Alumni	2009-Present