THE LIVED EXPERIENCE OF RETURNING TO WORK AFTER A TRAUMATIC INJURY: A HEURISTIC STUDY

by

Elizabeth R. York

ANTONIO SANTONASTASI, PhD, Faculty Mentor and Chair

JOEL WIDZER, PsyD, Committee Member

JOHN HINTON, PhD, Committee Member

Andrea Miller, PhD, Dean of Psychology

Harold Abel School of Social and Behavioral Sciences

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Capella University

September 2017

© Elizabeth R. York, 2017

**Abstract**

Work is vital to an individual’s well-being. For many, it provides a sense of identity, stability, and autonomy. However, a traumatic injury can change all this, turning one’s life upside down. This dissertation explores the experience of returning to work after a traumatic injury. This researcher used a heuristic phenomenological approach to collect and analyze data that described the lived experience of returning to work after traumatic injury. The experiences of eight men and women who have survived a traumatic injury were also examined. Open-ended interviews were conducted as unstructured dialogues to explore the participants’ experience of the traumatic injury and the aftermath. Emerging themes from the study revealed that trauma survivors experience physical challenges, psychological challenges, and social challenges when they return to work after a traumatic injury. As the primary researcher experienced a motor vehicle accident resulting in several injuries, including a traumatic brain injury, the research ultimately centered on similar injuries in the participants. Some themes emerged as more pronounced in those participants whose injury included traumatic brain injury. This inquiry found that the meaning and essence of experiencing a traumatic injury, and then returning to work, is a complex and multi-faceted experience, with nuances and characteristics often invisible to others. This discovery led to unexpected insight and a richer understanding of the essence of traumatic injury, as well as the experience of returning to normalcy through work. These insights may help to inform the work of professionals who assist individuals as they return to work, enable them to better accomplish this goal.

# Dedication

# The morning of July 21, 2011, was typical for a day in Hawaii – warm, sunny, with balmy breezes blowing in from the ocean. I said to my husband, “Let’s take the bike up to Hale`iwa and walk around the art festival.” Nothing suggested that a few short hours later, I would be lying on hot asphalt, drifting in and out of consciousness, with paramedics working to put me on a stretcher and get me into an ambulance. Thus, began a journey that many others have also taken – the journey to find normalcy with a brain that will never be “normal” again.

# This study is dedicated to those who have experienced trauma and survived, those whose struggle to regain normalcy often goes unnoticed and unknown, often with injuries that are invisible to the outside world. Their courageous efforts to continue to be productive members of the organizations that employ them inspire and deserve acknowledgment.

**Acknowledgments**

I would like to extend special recognition to my mentor, Dr. Antonio [Santonastasi](https://campus.capella.edu/a/dsantonastasi/web/public/info), for his support and encouragement. I would also like to acknowledge the members of my dissertation committee, Drs. Joel Widzer and John Hinton. The doctoral journey has been, for me, a long and arduous one. It was gratifying to know that I had the support of respected I/O psychologists on my side.

Thank you, also to Kim Boulden and Jonathan Gehrz. These two members of the doctoral advising staff know better than anyone some of the challenges that have appeared along the way. This has not been an easy journey and has taken much longer than I would have imagined at the start.They helped me navigate the twists and turns that sometimes held me back, and were instrumental in helping to remove obstacles that could have been difficult to overcome. For this, I am truly grateful.

I am also grateful for having found the Brain Injury Alliance of Washington. The work of the BIAWA is remarkable and they truly make a difference in the lives of Traumatic Brain Injury survivors throughout the Pacific Northwest. They provide support, education, services and advocacy for people affected by TBI, their families and the community as a whole. I am deeply appreciative of the support.

I would like to express a special thank you to my son, Eric, who sacrificed along with me for the completion of this journey. Thank you for believing in me always, and reminding me that I could accomplish great things, even when I did not believe I could. You strive for excellence, constantly, inexhaustibly, and unwaveringly. You hold yourselves to high ideals and I am endless proud watching you reach those ideals. This inspires me more than you will ever know. Thank you, also, to my daughter, Kamala. You inspire me with your resilience. May you always find joy, wonder and peace in your journey.

Finally, but not least, I would like to give my heartfelt appreciation to Rick, who may not have been there at the beginning of this journey, but whose belief in me never wavered, whose loving support was unconditional. You cheered me on at every hurdle, pushing me toward the finish line. Thank you for holding space for me. You inspire me with your brilliance, your curiosity, your endless determination, and your courage. For this, you have earned my undying love and eternal gratitude.

# Table of Contents

Acknowledgments iv

List of Tables ix

CHAPTER 1. INTRODUCTION

 Background of the Problem 3

 Statement of the Problem 5

 Purpose of the Study 6

 Significance of the Study 7

 Research Design 8

 Research Questions and Hypotheses 10

 Assumptions and Limitations 11

 Definition of Terms 13

 Expected Findings 14

 Organization of the Remainder of the Study 15

CHAPTER 2. LITERATURE REVIEW

 Introduction to the Literature Review 17

 Review of Methodological Literature 20

 Theoretical Orientation for the Study 23

 Review of Research Literature 27

 Review of Research Literature Specific to the Topic

or Research Question 29

 Synthesis of the Research Findings 39

 Critique of the Previous Research 40

 Summary 45

 CHAPTER 3. METHODOLOGY

 Purpose of the Study 47

 Research Design 49

 Target Population and Participant Selection 58

 Procedures 65

 Instruments 66

 Research Questions and Hypotheses 70

 Data Analysis 73

 Ethical Considerations 78

 Expected Findings 83

CHAPTER 4. DATA COLLECTION AND ANALYSIS

 Introduction: The Study and the Researcher 85

 Researcher’s Personal Interest and Involvement 88

 Description of the Sample (Participants) 96

 Research Methodology Applied to the Data Analysis:

Data Collection 100

 Presentation of the Data and Results of the Analysis:

 Individual Depictions 111

 Summary: Composite Depiction of the Experiences 140

 Themes and Characteristics 144

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

 Introduction 159

 Summary of the Results 161

 Discussion of the Results 163

 Discussion of the Conclusions 177

 Limitations 179

 Recommendations for Future Research or Interventions 179

 Conclusion 180

REFERENCES 182

APPENDIX A. STATEMENT OF ORIGINAL WORK 195

APPENDIX B. TABLE OF RECURRING THEMES 198

# List of Tables

Table 1. Table of Recurring Themes 198

CHAPTER 1. INTRODUCTION

In 2012, the National Highway Traffic Safety Administration reported that 33,561 people died in motor vehicle accidents (MVAs) in the United States. In addition, it is estimated that another 2.36 million people were injured (Traffic Safety Facts - Research Note: 2012 Motor Vehicle Crashes: Overview, 2013). A study undertaken by M. Murray and colleagues of the European Brain Injury Consortium (1999) found that motor vehicle accidents account for 52% of head injuries and are a major cause of morbidity in survivors (Murray et al., 1999). Their research also found that disability may occur regardless of the initial severity of the head injury and that impairement in surviving patients with brain injury are more severe than patients with injuries to other parts of the body. While the leading cause of brain injury is falling, brain damage resulting from traffic accidents accounts for the greatest number of hospitalizations (Johnson, 2010). The motor cycle crash this researcher experienced that day in 2011 resulted in 12 broken ribs, several broken bones in her hands, skull fracture, and concussion. After five days of unconsciousness, she was finally released a week after the crash. The broken bones have since healed, but the severe traumatic brain injury (STBI) drastically affected her level of functioning in many areas. Returning to normal functioning in the area of work has been the most challenging. Dr. Johnson (2010) explains that accidents occurring when traveling at slower speeds can result in head injury. Vast numbers of individuals visit medical doctors each year in America for blows to the head. Of these individuals, many will experience prolonged problems that will affect their ability to work and/or affect their daily lives. Human resource departments in organizations offer employee assistance programs (EAPs) geared toward helping employees remain viable in the workplace. Many organizations have policies in place to accommodate the unique physical challenges that trauma survivors face. An employee assistance program (EAP) is an initiative that is established in the USA with the aim of solving the personal issues of employees. The basis behind this act is to win the problematic but experienced personnel back through professional care (Altuntas, 2010). In recent years, EAPs have expanded their role from the original alcohol and substance abuse counseling to include family support, financial advice, legal assistance, domestic abuse support and prevention, generational education and support, mental health support, work and family balance, occupational health and safety programs, workplace bullying and sexual harassment prevention, and health and well-being services (Carchietta, 2015). These programs often include paid therapy visits to assist the employee in handling the psychological effects that can sometimes accompany a traumatic experience. However, Carchietta (2015) suggests that these free services are not widely accessed, and that the national average for EAP use by employees continues to be 3% to 4%. The EAP offered to this researcher by her organization provided only five visits with a social worker, a mental health provider who lacked specific experience and training for working with trauma survivors. The research found that this level of services is the standard among corporations and as such proved woefully inadequate. Moreover, the human resources professional in my organization seemed to lack the tools and knowledge that guide and inform their interaction with a trauma survivor. This led this researcher to feel that it was assumed that a trauma survivor was no longer a valuable employee, and could not make a viable contribution to the business.

This experience prompted to pose the question: What did others in similar circumstances experience? Would knowing what a trauma survivor experiences help those in the corporate world relate better, make better use of the intellectual assets of such employees, perhaps prompt the development of more comprehensive EAPs to retain the value of an employee who has experienced a trauma?

This study explores the phenomenon of returning to work after a traumatic injury and seeks answers to these questions. As a heuristic study, this researcher explores this premise from an internal perspective, sharing her insights, ideas, and discoveries. Data gathered by compiling both her experiences and insights with those of others in similar situations will be shared to help inform those in the corporate world as they develop policies and programs to help trauma survivors return to work.

# Background of the Problem

It has been estimated that as many as 80% of the U.S. population has been exposed to traumatic experiences (Breslau, 2002). This suggests that many individuals will experience at least one traumatic event in his or her lifetime. Adverse psychological outcomes resulting from this exposure are not uncommon. The American Psychological Association defines trauma as “an emotional response to a terrible event such as an accident, rape, or natural disaster (Trauma, 2016).” The Meriam-Webster dictionary offers a more precise definition of truama as “an injury (as a wound) to living tissue caused by an extrinsic agent, and/or a disordered psychic or behavioral state resulting from severe mental or emotional stress or physical injury (Trauma, 2017). Holtslag and colleagues studied the phenomenon of returning to work after a traumatic injury. In their study, they found that returning to pre-injury work status after traumatic injury is an excellent indicator of successful social reintegration. A person’s sense of self-worth is often tied to their work, increasing personal fulfillment (Holtslag, Post, van der Werken, & Lindeman, 2007). The value of work is well recognized. One study found that active involvement in society (such as engaging in employment) and ﬁnancial independence (receiving wages for that employment) can have a significant impact on health and well-being. Holtslag et al. (2007) also note that "from an economic viewpoint, the societal costs of productivity loss due to disability might considerably exceed the direct costs of medical care (p.87).”

An initial exploration of literature related to trauma has found a wealth of material that focuses on trauma. However, there is currently an incomplete understanding of theoretical literature on the lived experience of returning to work after a traumatic injury. Many who experienced traumatic injury reported that their ability to function well in a work environment is significantly challenged. Posttraumatic stress disorder (PTSD), a not-uncommon result of having experienced and survived a traumatic event or injury, may result in difficulty returning to employment (Brenneman, Redelmeier, Bjoulanger, McLellan, & Culhane, 1997). These individuals were found to be significantly less likely to return to employment than those individuals without trauma-related anxiety disorders (Burton, Polantin, & Gatchel, 1997). This study explored the experience of returning to work after trauma, and sought to gain knowledge and insight about this experience.

# Statement of the Problem

A traumatic injury can significantly affect an individual's ability to function in daily life. Pain, physical restrictions, emotional sensitivity, lowered mental functioning and psychological effects resulting from the injury can interfere with daily functions, challenging one's ability to interact with others, think clearly, or perform at optimum levels (Lin et al., 2013). Many who experience traumatic injury are significantly challenged when returning to their previous work environment.

An exploration of literature related to trauma has yielded a wealth of material that focuses on trauma. However, currently there exists an incomplete understanding within theoretical literature of the lived experience of returning to work after a traumatic injury. Holtslag et al.’s study of the experience of returning to work after trauma found that work provides a level of personal fulfillment that supports an individual’s sense of self-worth. This in itself can have a significant bearing on the person’s social reintegration when recovering from trauma (Holtslag et al., 2007). The value of work is well recognized. Holtslag et al. (2007) found in his study that active involvement in society and ﬁnancial independence go hand-in-hand with a person’s health and well-being. They also suggest that "from an economic viewpoint, the societal costs of productivity loss due to disability might considerably exceed the direct costs of medical care” (p.87). This study explored the experience of returning to work from a trauma survivor’s perspective, and asks the fundamental question: *What are the essential experiences of this phenomenon of those who experienced this phenomenon intensely*, as suggested by Patton (2002)? As a trauma survivor, this researcher explored the experience of returning to the work while recovering from a traumatic injury and shares her perceptions, thoughts, and discoveries that grew out of that experience.

# Purpose of the Study

The incomplete understanding of what an individual experiences when returning to work after a traumatic injury, suggests that human resource professionals, and others in the corporate world whose purpose is to help these individuals regain normalcy may be attempting to do so without the information necessary to do so efficiently and effectively. This would suggest that individuals who are trying to return to work after trauma are not receiving the support or resources that would help them accomplish their goals? Human resource professionals, supervisors, managers and others in the corporate world are doing their employees disservice by not providing adequate resources. Labor laws preclude such corporate professionals from terminating trauma survivors if one is determined to be less functional than his or her non-traumatized coworkers and are required by law to make accommodations for such individuals. However, labor laws focus on making physical or technical accommodations. Trauma survivors may be returning to work with psychological needs beyond the scope of the corporate policy, or even beyond the level of training that most human resources professionals or supervisors may have. As such, are trauma survivors being faced with challenges greater than simply returning to work, recovering from the trauma, or trying to regain normalcy?

This researcher’s experiences suggest that a greater understanding of the psychological challenges under which a trauma survivor must function may help to provide the information that those in the corporate world need to develop policies, procedures, and resources that will help them effectively return the trauma survivor to normal functioning within the work world.

# Significance of the Study

Research indicates that what constitutes a successful return to work after trauma continues to be explored. While many of these studies focus on a particular type of injury or trauma, studies that focus on the experience from the injured person's perspective are rare, and employers’ understanding of the process and thus the means to affect successful reintegration are widely varied and inconsistent. In 2004, Ownsworth and McKenna reviewed 85 studies published between 1980 and December 2003 which investigated factors associated with employment outcome following traumatic brain injury (Ownsworth & McKenna, 2004). Their research found that the aspects of premorbid occupational status, functional status at discharge, and involvement in vocational rehabilitation services garnered the greatest level of empirical support. In these studies, perceptual ability, executive functioning and emotional status were also considered important factors in determining employment outcome following TBI. Ownsworth and McKenna (2004) assert that metacognitive, emotional and social environment factors that can be modified through specific interventions are worth investigating, and suggest the need for future research. In presenting their findings, they focus their attention on interventions in relation to employment outcomes and suggest evaluation of such interventions to guide evidence-based practice in TBI vocational rehabilitation. This study agrees with this researcher’s findings which emerged from a literature review in support of this study. While not discounting the value of observational studies that focus on metacognitive skills about returning to work after a traumatic injury, no studies were found that focus on these skills as experienced from the trauma survivor’s point of view.

The process of returning to work after trauma is far more complicated than simply rejoining the workforce. A heuristic study compiled by a trauma survivor offers organizational psychologists insight not available through merely observing the phenomenon. The data gathered through such a study guides and informs employers on how to develop programs and strategies to produce more effective return to work outcomes.

# Research Design

This heuristic phenomenological study sought to understand the essence of the lived experience of returning to work after a traumatic injury. As explained by Patton (2002), a heuristic study brings delves into the personal experience of the researcher and brings forth her own insights. The study is based on asking the researcher to examine deeply and intensely her own experience with the phenomen.

This researcher’s the experience of returning to work while recovering from a traumatic injury is explored from the perspective of a traumatic injury survivor. Her perceptions, thoughts, discoveries and insights that grew out of that experience are shared through personal narrative. This unique viewpoint, that of a trauma survivor, may illuminate some of the issues heretofore not available to or recognized by organizational psychologists. This information will help to inform their work with trauma survivors as well as with employers in their efforts to accommodate injured or traumatized employees. This study provides insight unique to the individual who experienced the trauma that is unavailable to the employer by any other means (Moustakas, 1990). Data collected primarily through personal experience and presented via personal narrative is presented here. The experience of returning to work after the trauma of a motorcycle accident that occurred in July 2011 and moving toward recovery from trauma experience is shared through an intimate and uniquely personal perspective (Moustakas, 1990).

The experiences of 10 other individual participants gathered via interviews and provided supporting data to enhance that provided primarily by myself, as the main researcher. Participants were asked to discuss the effects they experienced as a result of the traumatic event, and their experiences of recovery, specifically, in returning to work, focusing on the participant’s personal experiences, thoughts, feelings, insights, and discoveries that occurred while returning to work.

Interviews are conducted directly with the 10 participants, in person, by phone or in writing. Information gathered regarding the traumatic event, its nature, cause, and any other pertinent details is guided by the series of open ended questions presented in the return-to-work (RTW) interview guidance. These questions are designed to encourage the story telling by the participant, enabling each to describe the experience, their feelings, impressions, and insights.

Analysis consisted of reviewing the data for commonalities found to exist between experiences, unique differences that stand out were noted, and then insights or information found that emerged, and appeared significant. For some participants, myself, in particular, journaling current experiences, noting ongoing characteristics, symptoms or characteristics that have resolved over time, and recording thoughts, insights, and discoveries as they relate to the experience of returning to work after trauma provided additional data.

# .Research Questions and Hypotheses

Traumatic injury is commonplace within the course of human experience. Many can speak to the challenges of returning to the type of life they had before the traumatic event. For most, this means returning to work. The experience itself is often complex, multifaceted, and may be arduous and fraught with obstacles, both unintentional, as in those presented by individuals who genuinely want to help, or intentional, as in those who would benefit from keeping an injured person on the disabled list as long as possible, such as insurance companies who may be trying to avoid a payout. Though some questions are interwoven into the research on the subject, there is one overarching question that drove this inquiry. *What is the lived experience of returning to work after a traumatic injury?* As a trauma survivor, this researcher has chosen the phenomenological methodology to answer this question, in order to allow the answer to emerge and make it known fully. A heuristic study intends to bring to light the dimensions of the lived experience of returning to work after a traumatic experience as described by each participant.

In other types of qualitive inquiry, the researcher begins with a predictive hypothesis, anticipating what might be discovered through the study. However, in a heuristic approach, no such preexisting notion is considered. This inquiry was begun, rather, with this researcher being cognizant of assumptions and limitations of the phenomenon. These are discussed in detail in a subsequent section.

# Assumptions and Limitations

This study sought to understand the lived experiences of the primary researcher, and those of ten participants who also had lived the experience of returning to work after a traumatic injury. As each participant described his or her experiences, it was assumed that commonalities would emerge as the participants reported similar experiences; it was also assumed that unique distinctions of each would also become evident, and work to differentiate each experience. The individuals were expected to frame their descriptions, each in his or her perceptions, ideas, and insights. While the experiences were expected to be similar, it was also assumed that no two would be identical. According to Moustakas (1990), each experiences the phenomenon according to their internal components of thought, perception, biases, past experiences, ideas, and concepts. These are often altered and driven according to the external components of the behaviors with which one interacts coupled with assumed biases or ideas. The overarching assumption was that heuristic methodology would elucidate the unique components present in similar lived experiences. In this context, it was assumed that the researcher’s experience, as the primary researcher would differ from theirs in some ways and be similar in other ways to those who have also lived the experience of returning to work after trauma.

From a theoretical perspective, the information gathered through this study would add to the current evidence regarding a trauma survivor’s experience of returning to work. Through the use of diligent sampling protocols and thoughtful analysis of the data, this researcher assumes that the research findings would offer a different perspective, adding value to the knowledge that informs the psychology of helping trauma survivors regain normalcy by returning to functioning within the scope of work. In this manner, gaps in the existing literature would be enhanced. Explication of additional psychological findings will add to the body of knowledge and inform the efforts of organizational leaders and other professionals to effectively reintegrate trauma survivors back into the workplace.

The nature of a heuristic study does present some inherent limitations. The primary researcher is intimately involved with the phenomenon under inquiry. Her perceptions are integral to the experience, and human nature leads these perceptions to develop opinions, conclusions and biases. A potential challenge exists for the researcher when collecting and analyzing data, as the need for objectivity is still required in heuristic inquiry, as in other forms of qualitative research. The researcher’s biases may become a factor within the scope of the study. Gordi (1970) and Moustakas (1990) both acknowledged this possible dilemma. Both assert that heuristic methodology is designed to capture the researcher’s experiences in all their complexity and richness. Heuristic study enables the development of new knowledge that is not available through other means. While unbiased interpretations of the phenomenon may be difficult, the researcher’s intuitive analysis of the data is recognized as an enhancement of existing knowledge, as it is based on the researcher’s intimate familiarity and experience with the phenomena. Researchers who undertake heuristic study must be fully cognizant of the necessity of *epoche,* the suspension of judgment. Edmund Husserl, the founder of phenomenology, employed this concept suggested this technique as a means of addressing this particular aspect of heurstic inquiry (Epoche, 2015). More fundamental than that of abstraction and the examination of essences, *epoche* serves to highlight consciousness itself, putting personal beliefs into brackets, transendentally suspending conviction. A heuristic researcher must put his or her beliefs aside, without ceasing to believe them and focus on the phenomenon in question. To this end, this researcher crafted the narrative of her responses to the research questions before conducting participant interviews, thus avoiding a narrative influenced by the responses of the participant.

# Definition of Terms

This study explores the lived experience of returning to work after a traumatic injury. At its basic level, the terms employed within this question are often subjective and may mean different things to different individuals. For the purpose of this study, the following terms are used:

* *Lived Experience:* A lived experience is defined as the temporal process and contingent dynamics of “becoming experienced”; experience as a practical, temporal, interactional, transactional and reflexive process or configurations of interweaving processes (Experience, 2011).
* *Return to Work:* As defined for this study, return to work refers to reengaging in gainful employment, and encompasses both returning to the same job after the traumatic experience or hiring on to a new job, other than the one the trauma survivor had before the trauma occurred.
* *Traumatic Injury:* Traumatic injury is defined as a traumatic event that involved an injury or threat of injury to one’s self or others. The injury or threat may be either actual or just perceived, and cause feelings of fear, helplessness, or horror (Baldwin, 2014). The threat may be physical, as in injuries such as broken bones, cuts or bruising, assault or battery; psychological, as in verbal abuse, bullying, coercion or threats, or emotional, as in death of a loved one, divorce, or loss. Witnessing a traumatic event can also cause some of the same feelings.
* *Work:* The Fair Labor Standards Act (FSLA), The U.S. Department of Labor, defines work as “to suffer or permit to work” (“The Fair Labor Standards Act of 1938, as Amended, p. 4). The U.S Supreme Court statement of work as defined as “time spent in physical or mental exertion (whether burdensome or not) controlled or required by the employer and pursued necessarily and primarily for the benefit of the employer and his business (“Tennessee Coal Co. v. Muscoda Local No. 123.” para 12).

 The subjective and personal nature of these terms can be broad and extensive; these criteria have been narrowed and specified for this study. Participants were limited to those who have experienced a motor vehicle accident resulting in traumatic injury and who have returned to work or attempted to return to work. The primary researcher’s traumatic injury resulted from a motorcycle crash and narrowing the criteria to this specific type of experience helps to give correlation to the data gathered.

# Expected Findings

As a trauma survivor who experienced a motorcycle crash, was badly injured, and who returned to work, the primary researcher is identified as meeting the basic criteria necessary for participation in this study. Having identified others who have also experienced motor vehicle crashes which resulted in injuries, and then returned to work, the natural expectation was to follow these participant’s descriptions of challenges that are similar to her experiences within the context of returning to work after a traumatic injury or event. The primary researcher experienced challenges, for example, on a personal level while struggling to function with cognitive issues resulting from the traumatic brain injury. Also, she encountered bias upon returning to work both from coworkers and supervisors upon revealing that a traumatic brain injury existed. A pervasive lack of understanding about brain injuries was perceived, and biases about the limitations, ramifications, and abilities that might exist after a traumatic experience, led to anxiety, prompting her to try to appear normal and uninjured. It was anticipated that participants would also encounter similar biases, and thus experience similar anxieties.

These incidences represented biased expectations based on the primary researcher’s previous individual and observed experiences. These types of biased expectations are also expressed within the literature. A journaling process before interview participants was effective for helping to place these expectations aside, allowing initial data collection to take place without bringing such personally held biases into the interview process. *Epoche,* the state where all judgments about non-evident matters are suspended (Moustakas, 1990), was also employed, allowing personal biases to be bracketed and ensuring as much objectivity as possible, with minimal bias.

# Organization of the Remainder of the Study

This dissertation is comprised of five chapters. The next chapter, Chapter 2, presents the Literature Review. The researcher’s exploration of the prevailing literature on the subject of traumatic injury is discussed and how it relates to the context of this study is examined. Basic themes are explored for relevance in resolving the research question, and pertinent studies are reviewed. Methodology is discussed in Chapter 3, and the process used to collect and interpret data is presented. Chapter 4 presents the research findings and discusses the analysis of the data. Conclusions were drawn from the data in this study and are presented in Chapter 5, in a concise overview and summary. A discussion of what was accomplished during the study is also provided. Recommendations for future research are presented in this final chapter.

**CHAPTER 2. LITERATURE REVIEW**

**Introduction to the Literature Review**

The purpose of a literature review is to discover what is known about a subject, the depth and breadth of the knowledge that has been gathered to help foster an understanding of a particular phenomenon. A researcher seeks to establish a study’s relevance and significance within the existing body of knowledge and how the information gathered through the study fits within that framework, lending support and credence to that which has been discovered by other researchers. A diligent and thoughtful review of that literature on the subject also seeks to discover what may be missing from the existing body of knowledge and to uncover gaps in information that a new study’s findings may add to the body of knowledge on the subject. A review of the existing literature allowed this researcher to explore what is known about the experience of returning to work after a traumatic injury.

This researcher lived the experience of surviving a traumatic injury and then returned to work. Her experience prompted her to question whether others who had returned to work after a traumatic injury shared similar experiences. To seek answers to this question, she located relevant research and literature which addressed the multiple facets that such an experience can entail. The experience itself can take many forms and may be driven from various perspectives. This researcher discovered that much attention had been focused on the subject of returning to work after a traumatic experience. One study of the prevailing research that examined the experience of returning to work after injury examined those aspects of employment outcome that most often followed a traumatic brain injury (Ownsworth & McKenna, 2004). These researchers placed particular focus on the metacognitive skills. They also felt that the injury survivor’s occupational status prior to their injury was a factor in determing employment outcomes as it appears to relate to one’s ability to return to work post-injury. Other factors examined by these researcher include the individual’s level of functioning at time of discharge, specifically executive function, global cognition, and perception. Involvement in vocational rehabilitation services and the individual’s emotional stability were also considered factors that affected the ability to return to work after injury. Ownsworth and McKenna (2004) also recognize the value of social environment as a factor in determining employment outcomes. A traumatic injury can impact the injured individual’s employment potential in various ways, including self-identity. While psychosocial outcomes can be valuable indicators after injury, returning to work is considered one of the best indicators of levels of functioning. Return to work success is more complex than simply the ability or opportunity to earn a living wage. Indicators of success also include such factors as personal perspective and self-esteem.

A systematic review of factors affecting return to work after traumatic brain injury was found in which researchers examined physical and other aspects of the experience, such as employment status, found that methodological quality of many of the studies they reviewed was “very low” (Saltychev, Eskola, Tenovuo, and Laimi, 2013, p. 1). While many researchers agree that return to work success can be affected by many factors, most of the articles reviewed by the primary researcher in this heuristic study include such factors as age, educational level, severity of traumatic brain injury, emotional condition, and social factors can enter into the equation of predicting return to work success. However, Saltychev et al. (2013) assert that the evidence found in their review is weak. Further, Saltychev et al. concluded in their 2013 systematic review of the prevailing literature on returning to work after traumatic brain injury, that “no strong evidence to support any effect of different rehabilitation interventions on vocation outcomes among people with TBI. (p. 1524)” This is consistent with many of the studies reviewed by this researcher.

Others explored the experience from the corporate perspective and focused on efforts to accommodate an injured worker and help them regain functionality in line with that which the worker enjoyed before the injury (Wrona, 2010). As with many of the studies reviewed, the focus was placed on medical rehabilitation and vocational rehabilitation. While these are important factors that can determine return to work after traumatic injury success, each of the studies reviewed examined the experience from a clinical, experiential, or vocational perspective. No heuristic studies were found that explored the specific experience of returning to work after a traumatic injury as discussed from the trauma survivor’s perspective. An exploration of the researcher’s experience, along with the first-hand accounts of others with similar experiences resulted in depictive portraits unlike that of any of the studies she reviewed. Computer searches were utilized as the most comprehensive resource for finding literature on the subject of trauma. Extensive searches were conducted through some standard databases including the Capella University Library of Databases including EBSCO, PsyInfo, and PsycArticles. Searches were limited to those that were conducted within a business or corporate environment and focused specifically on returning injured workers to the workforce. Searches conducted on the topic of returning to work after trauma or traumatic injury produced little but searches conducted focusing on trauma, traumatic injury and recovery from trauma did produce some viable results. However, studies connecting trauma, traumatic injury, recovery, and work or returning to work produced fewer results. This leads to the conclusion that while considerable attention has been focused on trauma and traumatic injury, recovery and returning to normalcy after injury is often studied with respect to areas of daily life such as home, family, personal perspective but that the return to work aspect of recovery from traumatic injury may be considered a small or insignificant aspect of the recovery process. This leads this researcher to the belief that a study that explores the personal and internal aspects of returning to work after traumatic injury may prove enlightening and informative.

**Review of Methodological Literature**

 Much of the research in the field of psychology has focused on studies that are quantitative, observational, verifiable, and repeatable with less attention given to the uniquely personal, subjective, and experiential (Sela-Smith, 2001). However, this study sought to find the deeper meaning, the essence of the experience of returning to work after a traumatic injury. As such, it was necessary to review not only those works that focused on the experience of traumatic injury or the experience of returning to work, but also those that focused on the deeper meaning of the experience. Keeping in mind, the research question was considered – W*hat is the experience of returning to work after traumatic injury?* – The intimate and deeply personal nature of the research question was illuminated. To accommodate this, this researcher reviewed literature that is related to the philosophical and methodological attempts to include the personal knowledge in human science research, some presenting some of the problems which arose from those attempts.

 A significant contribution to research in psychology when Moustakas (1990) described a method that draws upon the researcher’s personal and intimate perspective - the heuristic research method (Sela-Smith, 2002). In this way, one may inquire into individual internal experience, what Polanyi (1966) referred to as tacit knowledge. According to Polanyi, the internalization of experience can result in knowledge that is richer and more complete. Tacit knowledge is not the knowledge that is immediately available to the conscious awareness of the researcher. Rather, this information may be deeply imbedded within the researcher’s conscious, residing beyond his or her awareness.

According to Moustakas (1990), the heuristic process opens the researcher to the knowledge that is contained within the self. Moustakas (1990) states that his deeper understanding of the heuristic process was influenced by the work of others in the field including Bridgman, Buber, Gendlin, Jourard, Maslow, Polanyi, and Rogers. and his own earlier work (Moustakas, 1968, 1981, 1988). Heuristic research differs from other qualitative research in that its source of knowledge comes from within, rather than without, the researcher. “This interiority, the process of seeking answers from within, is the focus of heuristic research, and can be seen at the center of Buber’s (1970) understanding of what is formed within the self and flows between the *I and thou*. It is Polanyi’s (1962, 1964, 1966, 1969, 1974, 1983) unique background of practical and personal knowledge that each person develops from every encounter and brings to the next. This is the essence and source of experience (Sela-Smith S., 2002, p.55).”

 Throughout the course of investigating the prevailing literature on the topic of heuristic inquiry, this researcher found that this type of research is applicable in a wide range of disciplines. While reviewing works for this study, this researcher found heuristics were used in a variety of studies. Heuristic inquiry is useful in any inquiry where the researcher is venturing into an area not previously explored. When is being undertaken in an area where paradigm has been established, heuristic inquiry provides an open, unstructured method for discovery. Rather than depending on hypothesis, heuristic inquiry allows research to engage in exploratory discovery, often with only the initial curiosity as a guide. The path of the research is determined by the discovery of new information as it becomes presented. Once the heuristic inquiry is undertaken, and new knowledge brought forth as a result, the knowledge becomes part of the base knowledge from which other researchers can hypothesize, conducting further tests, verifying the new knowledge, and adding to the existing body of information. Polya (1945) used the term “heuristics” to “identify the mental operations or procedures one moves through in the process of solving problems in mathematics (Sela-Smith, 2002, p.58).” The process of heuristic research lends itself well to higher order thinking, including reflection and judgment. In recent years, this type of inquiry has been applied to computer sciences to research complex issues (Reeves, 1993).

 Douglass and Moustakas (1985) referred to heuristics as, “in its purest form, a passionate and discerning personal involvement in problem solving (p. 39).” They describe it as “an effort to know the essence of some aspect of life through the internal pathways of the self. The private and imaginative nature of heuristic inquiry introduces a unique challenge in research investigations and philosophical conceptualizations of human science. When utilized as a framework for research, it offers a disciplined pursuit of essential meanings connected with everyday human experiences (p. 39).” Douglass and Moustakas hoped to develop “through discussion of its inherent processes and values, a fresh perspective of the understanding and application of a heuristic application of a heuristic approach to scientific investigation. They suggest that this method presents a means by which researchers can be awakened and inspired to make contact with and respect their questions and problems, to suggest a process that affirms imagination, intuition, self-reflection, and the tacit dimension as valid ways in the search for knowledge and understanding (p. 39).”

 In a study in which one seeks to understand the deeply personal nature of the experience of returning to work following a traumatic injury, a heuristic methodology is an approach well suited to discover the finely detailed nuances and hidden characteristics of such a human experience.

**Theoretical Orientation for the Study**

This researcher’s exploration of literature related to trauma has found a wealth of material that focuses on trauma. However, there is currently an incomplete understanding of theoretical literature on the lived experience of returning to work after a traumatic injury. The American Psychological Association defines trauma as “an emotional response to a terrible event like an accident, rape, or natural disaster” (Trauma, 2016), and as more precisely defined by Merriam-Webster, as “an injury (as a wound) to living tissue caused by an extrinsic agent, and/or a disordered psychic or behavioral state resulting from severe mental or emotional stress or physical injury (Trauma, 2017)”.

More accurately, however, when discussing trauma, it is important to recognize the effects of the trauma, the disability that results. The term “disability” covers a wide range of concepts, and may vary widely depending on the context in which is it used. Meriam-Webster define disability as “a physical, mental, cognitive, or developmental condition that impairs, interferes with or limits a person’s ability to engage in certain tasks or actions or participate in typical daily activities and interactions (Disability, 2017). This definition encompasses all the myriad effects of those traumatic events that can result in impairment, including disease or injury, as explained by Jette (as cited in Verbrugge and Jette, 1994).

The World Health Organization released the International Classification of Functioning, Disability, and Health (ICF) in 2001, a standard for measuring functional ability resulting from injuries (Li and Baker, 2012). This publication of the ICF is considered as a landmark reference for determining disability (2012). As such, disablement includes all the “various impacts” of trauma or disease on both “specific body systems,” “basic human performance,” and “people’s functioning in necessary, usual, expected, and personally desired roles in society (Verbrugge and Jette, 1994, p.1).” According to this definition, all the issues that may result from trauma can be encompassed within it. Those issues that have been known to follow trauma such as pain, physical impairments, anxiety and other forms of psychological distress, and functioning impairments are all included in this definition (Jette, 1994).

Two disablement frameworks have been adopted by the World Health Organization over the past 30 years have emerged as the definitive reference for disablement. These are derived from (a) the work of Phillip Wood, and (b) the work of Saad Nagi (International Classification of Impairments, Disabilities, and Handicaps: A manual of classification relating to the consequences of disease, 1980). The latter work was utilized by the Institute of Medicine (IOM) and provided the basis for the IOM’s “Disability in America: Toward a National Agenda for Prevention,” published in 1991 (Pope and Tarlov, 1991). According to Jette (1994), these two frameworks form the basis of subsequent disablement frameworks being utilized today. The basis for Nagi’s (1991) disablement framework is based on (a) impairment, (b) functional limitations, and (c) disability. For Nagi’s purposes, impairment refers to physiological or mental deficit. Functional limitation refers to behavioral deficits. Nagi argued that disability results when disease or injury leaves an individual with physical or cognitive limitations. Functional limitation can follow (e.g., the patient is unable to manipulate objects, or has difficulty performing mental tasks). Disability occurs when the injured individual is unable to accomplish normal daily activities, work at a job or participate in recreational activity (Verbrugge and Jette, 1994).

Holtslag et al. (2007) found that return to pre-injury work status (return to work) is the origin of rehabilitation medicine and the ultimate expression of successful social reintegration after major trauma, because work increases a person’s sense of self-worth and personal fulfillment (Holtslag et al., 2007. p. 373). The value of work is well recognized. One study found that active involvement in society (such as engaging in employment) and ﬁnancial independence (receiving wages for that employment) appears to be closely related to health and well-being. Holtslag et al. (2007) also note that "from an economic viewpoint, the societal costs of productivity loss due to disability might considerably exceed the direct costs of medical care” (p. 373).

The studies that this researcher reviewed reported that return to work after injury varied widely (Zeigler et al., 2011; Opsteegh et al., 2009). However, many of these studies focused on specific injury types. Other factors that affect return to work success include the individual’s ability to perform the functions of the job, or what accommodations the employer can provide to assist the injured employee to perform within the limitations or restrictions resulting from the injury (Holtslag et al., 2007; Krause et al., 1999; Yasuda et. al., 2001; MacKenzie et al., 1998). Factors that can also affect return to work (RTW) success have been found to include age of the individual at the time of injury, and his or her education level. Marital status can also enter into whether an individual is able to return to work. Marital status often relates to emotional, psychological and economic support. Personal income may also be a factor as it speaks to access to rehabilitation services and may even affect length of hospital stay. Injury severity, and injury locus were also found to be mitigating factors (MacKenzie et al., 1987). In addition, job satisfaction and motivation can determine return to work success, as found by Holtslag et al. in their research. This researcher also discovered when reviewing the literature on returning to work after injury that cultural or economic differences vary widely between countries. Systems of insurance and access to disability pensions can influence a worker’s return to work decisions (p.95). Soberg et al. found in their study that psychosocial factors may also influence one’s ability to return to work after traumatic injury. These include social support and functioning, and other levels of functioning such as emotional, mental, and cognitive (Soberg, Finset, Bautz-Holtzer, Sandvik, & Roise, 2007). The effectiveness of such factors varies widely, with physical, emotional and psychological factors all playing a significant part in determining when, and under what conditions a worker may be returned to work. Individuals often experience lingering emotional and psychological disturbances following a traumatic inury. Posttraumatic stress disorder (PTSD), major depressive disorder, alcohol or other drug disorders (MDD/AoDs) are not uncommon in traumatic injury survivors. These conditions may work in conjunction with a person’s trauma history to create challenges to the individual successfully returning to work, in either a full or limited capacity (Hruska, Irish, Pacella, Sledjeski, & Delahanty, 2014). PTSD can have a significant impact on one’s ability to return to work, especially in cases where the trauma survivor is returned to the same or a similar environment or circumstances as when the injury occurred and has, in fact, been found to be one of the most common psychological disorders associated with experiencing an injury (Heron-Delaney, Kenardy, Charlton, & Matsuoka, 2013). A study of victims of motor vehicle accidents (MVAs) victims found that PTSD following the traumatic experience can lead to more physical and psychological impairment than those whose accidents did not result in conditions of PTSD (Bryant et al., 2010). These individuals tend to incur greater medical and psychiatric expense than victims without PTSD (O'Donnell, Creamer, Elliott & Atkin, 2005).

**Review of Research Literature**

Traumatic injury affects thousands of individuals around the world every day and these injuries often lead to time off work. Economic stress and loss of community can sometimes result (Andries et al., 1997) and impact an individual’s health and well-being. Other research looked at the economic ramifications of returning to work after traumatic injury, and found that to cost to society in terms of loss of productivity might significantly exceed the costs of medical care (Morris, Sanchez, Bass, & MacKenzie, 1991; Krause, et al., 1999). This researcher’s review of the prevailing literature found that returning to work after traumatic injury is generally agreed among researchers to be of intrinsic value to the injury survivor physically, emotionally, psychologically, and economically. However, when Holtslag et al. reviewed the existing research on the subject, they found that most studies of return to work after major trauma focus on the type of injury rather than on events that occur after the traumatic injury (Krause et al., 1999). Injuries studied included traumatic brain injury (Yasuda et al., 2001), lower extremity injury (MacKenzie, Morris, & Jurkovich, 1998), and spinal cord injury, just to name a few (Holtslag et al. 2007). This was consistent with this researcher’s review of the prevailing literature on the experience of returning to work after traumatic injury.

In 2007, Holtslag et al. sought to investigate those factors that determine injury work status and to quantify how well individuals who have experienced a major trauma do in returning to work. They focused their research on some severely injured trauma survivors admitted to a level 1 trauma center between January 1999 and December 2000. These individuals were employed full-time when their injury occurred. They found that around 60% of the patients were able to return to their pre-injury status. Holtslag et al. found that the return to work rate was only partly explained by disability at follow-up. It was found that independent determinants of return to work differ at the time of assessment. Forty percent of people working full-time before injury did not return to their former work status. These researchers found that “most studies of return to work after major trauma have focused on specific injury types, such as spinal cord injury, traumatic brain injury, and lower extremity injury (p.374).” This study is typical of the literature on returning to work after a traumatic injury. It focuses on the clinical statistical aspects of the return to work process. The reasons why those statistics take the forms they do are not considered. In the book, *After the crash: Psychological assessment and treatment of survivors of motor vehicle accidents (2nd ed.)*, Blanchard & Hickling report that the leading cause of posttraumatic stress disorders (PTSD) is motor vehicle accidents (MVA) (Blanchard & Hickling, 2004). These researchers completed two different studies of MVA survivors. They conducted their efforts on assessment, and prospective follow-up of MVA survivors who sought medical attention following an accident. While researchers did gather data on events and effects following the accident, those data focus on such aspects as the quality of life, relationship quality, and general functionality; there is little discussion specific to the return to work experience.

# Review of Research Literature Specific to the Topic or Research Question

Traumatic experiences can take many forms, traversing a broad spectrum of human experiences from chronic, ongoing and long-term experiences, such as childhood bullying and psychological abuse, to sudden, severe, catastrophic events such as the 9/11 terrorist attacks. As discussed previously, psychosocial functioning is a critical factor in returning to work. The ability to perform well despite the effects of trauma, both cognitively and socially, has been explored by many researchers. For example, a 2012 study conducted on women survivors of domestic violence and its aftermath explored the recovery aspects of psychosocial functioning. This study employed mixed-methods to explore the recovery process for 37 women with a history of abusive intimate partnerships (domestic violence). This study found that these women were largely free of symptoms of posttraumatic stress disorder and showed remarkable resilience, according to standardized measures of psychosocial functioning. These researchers report that social and spiritual support was appeared to impact recovery, growth, and resilience (Anderson, Renner, & Danis, 2012).

Domestic violence has been found to impact nearly every aspect of a survivor’s life. Leaving an abusive relationship often involves transitioning from a life without control to one in which the survivor takes control. As intimate partner abuse often means a life filled with fear, tremendous strength is often required to shift out of survival mode resulting from living with violence (Caldwell & Senter, 2002). Domestic violence often includes physical, emotional, and sexual assault and may last for several years. Ending the relationship does not always mean that consequences no longer affect the survivor’s life. In a 2010 study on the mental health consequences of intimate partner abuse (IPA), researchers found posttraumatic stress disorder (PTSD) and depression are not uncommon emotional sequelae of trauma among survivors of intimate partner abuse (Mechanic, Weaver, & Resick, 2008). Mechanic et al. found IPA may adversely affect the survivor’s sense of self-worth and self-efficacy, which may impact efforts of recovery and attempts to regain normalcy. Another study on relationship abuse examined the connections between the trauma and coping skills and mental well-being outcomes among a sample of women who had survived domestic violence. They found sexual aggression common among the survivors and suggest that such behavior may be a strong predictor of poorer mental health. These researchers found that those who exhibited signs of positive mental health showed positive engagement coping strategies, while disengagement coping strategies such as substance abuse and other negative behaviors were predictive of poorer mental health following the trauma (Waldrop & Resick, 2004, Coker et al., 2002). In a 2009 study, that sought to link intimate partner violence and posttraumatic disorder, found that the severity of PTSD symptoms increases in relation to the survivor’s exposure to traumatic effects. This correlation is referred to as Herman’s ‘dose-response’ curve. In other words, the more trauma one experiences, the more difficulty one has with recovery (Dutton, 2009). Dutton found through her research, an insufficient number of randomized clinical trials involving treatment for PTSD. Dutton also recognized that there exists a unique context with regard to actual threat vs. percieved ongoing threat in continuing trauma. She report that she found even fewer studies regarding this phenomenon.

It is important to note also that the prevalence of trauma can occur in many areas of an individual’s life. Those who experience traumatic events directly related to their work may have even more difficulty returning to work after such an event. Fire fighters, emergency response personnel, and police personnel are just some of the occupations that are at high risk of experiencing trauma. Lamberts et al.’s 1997 study of police personnel in the Netherlands found that PTSD occurs at a rate of 7% among the population under study, and as many as 34% show sub threshold PTSD symptoms (Lamberts, Carlier, & Gersons, 1997). These researchers found that a significant number (90%) of police officers who experienced a traumatic event while in the line of duty, returned to work after treatment for the symptoms of PTSD that resulted from the trauma experience.

There is little question that the experience of trauma touches many other aspects of the trauma survivor’s life beyond returning to work. Trauma, regardless of type, cause or outcome, encompasses considerably more than the injury itself. As work is important to the quality of one’s life, the work itself, the environment in which the work is performed, and the psychosocial aspects of the work must also be considered. To date, only one article has been found that addresses the experience of returning to work after a trauma. A 2007 article published by the Irish Independent discusses a cardiologist’s return to work after the trauma of his 4-year-old daughter's disappearance. The article focuses on the doctor's ability to function in his profession. It includes quotes by the doctor that he is "keen to get back in" and quotes by his supervisor that the doctor's "trauma is well known but his professionalism is high and that he will be able to focus his attention on the job at hand" (Britten, 2007. p.1). The doctor who experienced this trauma states that he was focused on the job and that he was keen to “get back a degree of normality with a working routine.” Although this doctor spent six months dealing with the disappearance of his daughter, others see his return to work as admirable. The full levels of the various aspects of his traumatic experience are not recognized or discussed (p.1).

Review of the available literature finds that while these studies are significant, these studies focus on treatment and recovery from the therapist's point of view. Although returning to work after traumatic injury may be complicated by psychological issues and have been recognized in some studies (Asmundson, Norton, Allerdings, Norton, & Larsen, 1998), the role of such symptoms and their significance to returning to work has received less attention in the areas of occupational injuries (Lin et al., 2013). Specific treatment options have been studied extensively, and range from physical or ergonomic accommodations to treatments for the psychological symptoms that may have resulted from the trauma experience, but have been studied about the specific injury. These treatments may also include behavioral and cognitive-behavioral approaches that have been shown to be effective in the treatment of PTSD that has resulted from the traumatic injury (Foa, Rothbaum, Riggs, & Murdock, 1991). This researcher’s study of the experience of returning to work is intended to bring to light the deeper, more personal effects of trauma on a survivor’s life.

Recovery from traumatic injury is a complex process. Returning to work is often undertaken while rehabilitation is on-going, and the physical, economic, and social aspects of the traumatic injury survivor’s recovery all affect the process. While the perceptions of caregivers, occupational and physical therapists and other health care practitioners are important, perhaps a more significant element of the recovery process is the traumatic injury survivor’s own perception of his or her own well-being, and ability to return to work. Recognizing this concept, researchers in Australia undertook a three-year study to examine how survivors of road trauma who sustained serious injuries view their own experiences of recovery while receiving rehabilitation (Harms, 2001). This research used an ecological framework to examine the psychosocial and subjective aspects of recovery. They considered the qualitative aspects of recovery, including the trauma survivor’s perception of trauma, how they viewed recovery, utilization of recovery resources and coping in the future. Harm identified four main themes that relate to recovery. These include finding a new fit, the privacy of suffering, anticipatory coping and survivor pride. These aspects all have significant effect on the overall recovery process, and ultimately affect the individual’s eventual return to work.

Many traumatic injury survivors talk about the lasting effects that go along with their physical injuries or appear after their physical injuries have healed. It is important to understand the processes of trauma recovery, not only for the trauma survivor but for those who work with trauma survivors. Beyond the experience of the traumatic injury itself, many of the traumatic injuries acquired from the accident cause significant, lifelong difficulties (Watts & Horne, 1994). Caregivers, social workers, administrators, health care practitioners, and behavioral health specialists can all benefit from a greater understanding of the process. Much can be learned from the trauma survivor himself or herself.

An enhanced understanding can be gained from an exploration of the trauma survivor’s perspective of the recovery process. According to Harms (2001), in trauma research, recovery is generally considered to have occurred when symptoms of PTSD such as intrusion, avoidance and hyperarousal have been relieved or eliminated entirely. (Blanchard & Hickling, 1998; Hororwitz, 1992; Watts, Anson, & Battistel, 1997; Mayou, Bryant, & Duthie, 1993). A diagnosis of Posttraumatic Stress Disorder (PTSD) is often made when these symptoms continue more than a month after the traumatic event (Mayou, Bryant, & Duthie, 1993). Blanchard & Hickling found through their research that for up to 45% of traumatic injury survivors, symptoms of PTSD may persist beyond a year or more (Blanchard & Hickling, 1998). There is a growing recognition that a “psychiatrised” view of recovery. This is an understanding that trauma may result in a cognitive wounding. While this useful, it overlooks other important aspects of the recovery process (Davis, 1999). Harm’s research sought to explore the essence of distress for survivors and how the experiences of intrusion, avoidance, and hyperarousal may relate to their recovery. She further sought to discover how growth and change was theorized, as it was experienced by many trauma survivors, and whether a conceptualization of recovery would take into account how an injury survivor is impacted by systemic and social factors common to the recovery experience. She found in her study that the majority of trauma survivors self-reported ongoing issues three to four years following the accident. For many, this included physical, psychological, social, financial, legal and spiritual issues. The survivors assert that these affected their recovery.

Harms asked her research respondents what their recovery meant to them? For many respondents (74%), recovery was understood to be about being able to return to the quality of life that they had prior to their accidents, both physically and psychologically. Her respondents expressed a perception of recovery as being able to return to normal or being able to do all the activities that they could prior to their accidents. Harms reports that this concept was so dominant among her respondents had the words “get back to” appeared somewhere within their answers. For many of Harm’s respondents, the realization that they may not be able to return to the level of functioning that they enjoyed before their traumatic injuries, gave rise to a significant degree of internal conflict. Harms (2001) stated that the notion of recovery as ‘getting back to,’ implicit and explicit in the trauma literature, was mirrored in these responses. So, too, was the impossibility for many, of ever being able to fulfil this expectation. Harms reports that her respondents reported a crisis in this conflict at about one year after the accident, at a time when they were discharged from the rehabilitation center and attempting to resume daily living. (Harms, 2001). Harms did not explore further the ramifications of how this realization affected the trauma survivor’s well-being from that point on. Further exploration into the experience of this realization and how it affects efforts to achieve normalcy are warranted as this researcher was unable to find literature regarding whether this aspect of recovery has been studied or addressed.

According to Kessler et al. (1995), conducted a large-scale study on motor vehicle accidents, (MVAs) are the most frequent cause of trauma directly experienced by males (25.0% lifetime) and the second most frequent for females (13.8). In another study by Norris (1992), found that MVAs are also the leading cause of posttraumatic stress disorder (PTSD). Blanchard and Hickling (2004) assert that despite the number of occurrences of MVAs, the psychological assessment and treatment of survivors has not been extensively studied in the United States. At the time that Blanchard and Hickling were publishing the first edition of their book, studies of MVA survivors were widespread in other countries. Their research found study groups in Europe, Australia, and Canada (Blanchard & Hickling, 2004). They note, however, that in more recent years, there have been other research groups in many countries who are actively studying the MVA survivor, including the Middle East and the United Kingdom.

While this researcher did find that more attention is now being given to the psychological effects of traumatic injury, that attention still centers around PTSD. PTSD was introduced as a distinct diagnosis by the DSM-III in 1987, and has since been studtied extensively. According to Blanchard and Hickling (2004), the primary groups of trauma victims that have been studied include combat veterans, especially veterans of the Vietnam War (mostly males typically 10-25 years post trauma), victims of sexual assault (generally female, studied within days or weeks of the trauma or five plus years post trauma for treatment), those who have survived natural disasters, and adult survivors of child sexual and physical abuse who are studied as adults.

Blanchard and Hickling assert that MVA survivors, however, represent a different population. In the studies that they reviewed, they found that to reduce the possibility of gender differences, males were represented as females so that response to trauma and treatment for PTSD can be studied. They report that there are few data on the treatment of males with PTSD of short duration, periods of a few months. Physical injury often lingers after traumatic injury, and this presents an opportunity to how this aspect of traumatic injury affects treatment and recovery. Blanchard and Hickling also recognized the effects of PTSD can come into play in other areas beyond treatment and recovery. litigation is often a factor after a motor vehicle accident. They the “MVA survivor with PTSD is frequently involved in litigation so that studying this population can enable us to learn, in part, what role litigation plays in recovery. Finally, as Norris (1992) documents, the MVA survivors with PTSD constitute a large population by themselves, and their similarities and differences with other PTSD populations needs to be elucidated (Blanchard & Hickling, 2004).”

This researcher’s review of the available literature on the subject of the psychological effects of traumatic injury yielded few comprehensive studies that discussed the impact of trauma on the emotional and psychological well-being of the trauma survivor. Blanchard and Hickling’s study was in-depth and informative, but ultimately, they concluded that their findings strongly support that PTSD following an MVA can be helped with psychological treatment. PTSD is recognized as a relatively common and often debilitating aspect of recovery from traumatic injury. While PTSD should not be discounted, it may not be the only psychological aspect of trauma recovery. Other psychological and psychosocial symptoms may also present after a traumatic event and may warrant deeper investigation.

Moreover, the well-being of a traumatic injury survivor is closely related to his or her ability to return to work. When Saltychev et al. (2013) sought to undertake a systematic review of literature addressing returning to work after traumatic brain injury (TBI), they found no strong evidence that vocational outcomes after TBI could be predicted or improved. They concluded that a need exists for both experimental and observational well-conducted studies on this important subject. They also found that scales and terms varied widely between studies and strongly encouraged researchers to use unified and standardized terms and scales in further studies. Saltychev et al. (2013) found that methodological quality of most of the relevant studies included in their review was estimated as very low, with weak evidence that age, educational level, pre- and post-injury occupational status, severity of TBI, functional status, level of depression and anxiety, gender and race may be predictive for the vocational outcome after TBI.

These findings are consistent with this researcher’s review of the literature. Numerous studies of the return to work experience have been conducted, but few have focused on the vocational outcomes in particular. The Saltychev (2013) review, for example, considered vocational outcomes such as employment status, job satisfaction, work stability, and change in occupational status. While these criteria are important indicators of successful return to work after traumatic injury, they may not address the more personal psychological or psychosocial challenges that may determine individual success. No heuristic studies were found that explored the return to work experience from the trauma survivor’s personal internal perspective. Moreover, significant inconsistencies were found between studies. For example, return to work (RTW) was described as “return to productivity”, “status of employment”, “work situation”, and other terms. Heterogeneity was also noted with regard to description of samples, interventions, follow-up periods and documentation of outcome. The reports also covered a range of different severities of TBI. Some studies recruited people with only mild or severe TBI, others recruited patients with TBI of any injury severity. Some studies used mixed samples including TBI, stroke or other cerebral pathologies.

This variation and inconsistency among the literature reviewed illuminated the gap that exists in the prevailing literature on the subject of returning to work after traumatic injury. The information that can be provided by the trauma survivors themselves may prove significant in developing a deeper understanding of the return to work experience.

# Synthesis of the Research Findings

As evidenced by the wealth of literature focusing on trauma, much has been studied about the experience of trauma. Trauma and traumatic injury encompass a broad range of conditions, each containing a complex range of considerations and characterizations. Trauma encompasses a broad spectrum of experiences ranging from childhood sexual trauma and bullying to catastrophic events. Likewise, the effects of experiencing trauma can be as widely complex as the types of events that can be considered traumatic. These effects include physical injuries, damage to cognitive skills and executive functioning, emotional and psychological effects, and social dysfunction that can limit one’s ability to interact with others.

This researcher’s review of the prevailing literature found that much attention has been focused on the subject of trauma. As the subject of trauma is a broad one. It is one that is extremely complex and multi-faceted. As such, this researcher found that the best way to develop a comprehensive understanding of the prevailing literature was to delve into various aspects of the subject. It was found that much of the research on the subject of trauma focuses on particular types and most common effects of those traumas. Other research explores treatment options related to specific types of traumas. This researcher’s examination of prevailing literature on the social aspects associated with trauma most commonly focuses on the challenges of living with a disability, or on the effects of a trauma survivor’s disabilities on those close to the survivor, such as family, friends, or caregivers. Some research found that explores the economic aspects of trauma, such as living with a disability, or returning to work after trauma focuses on the organization’s attempts to accommodate the disability for the injured worker, while other studies examine how those accommodations affect the injured worker.

# Critique of the Previous Research

In general, this researcher found some gaps in the prevailing research on the subject of trauma. While the prevailing research on trauma was found to focus on various aspects of the experience, the majority of the research focused on the most common aspects of traumatic injury – the physical aspects of the experience, such as physical injuries, the psychological effects such as post-traumatic stress disorder (PTSD), the economic aspects, such as costs to employers who are required to provide accommodations for disabled individuals, as set forth by the Americans with Disabilities Act (2016), or the costs of rehabilitation. Others explored the social aspects such as caregiver interaction, or changes in interaction with friends, family members or coworkers. Each of the studies on the experience of traumatic injury provides valuable insight as to the many facets of trauma.

 As this researcher delved deeper into the existing research on the subject of trauma and traumatic injury, an important consistency began to emerge. Each exploration into the various aspects of trauma was undertaken from an observer’s perspective. The research on the subject of returning to work after trauma is rarely if ever, written from the trauma survivor’s point of view.

The subject of trauma, and specifically traumatic injury is broad and diverse. It is a subject that has been studied extensively and much has been written on as aspects of trauma, from cause and prevention to care and rehabilitation. This researcher did an exhaustive search of the prevailing literature on trauma to discover what is known about the subject, how it is experienced in general, and how it affects the various aspects of daily life. The exploration of the prevailing literature on the subject of returning to work after traumatic injury began with the resources available via the Capella library. Initially, the subject of traumatic injury was explored in a general sense, but as this researcher experienced a traumatic brain injury, the literature review was later narrowed to this particular type of injury. The Capella Library presents a vast and comprehensive range of articles, books, and dissertations/theses. To develop a fully comprehensive review, this researcher conducted searches on PubMed, EBSCO, Elsevier, Google, ProQuest, and Sage. Also, the American Psychological Association (APA) databases were explored seeking information on trauma, work, and returning to work. This researcher found that literature is focusing specifically on the subject of returning to work after a traumatic injury, while some of which examined the subject of returning to work from various perspectives, was not as prevalent as those that focused on trauma, traumatic injury, or work. Because of this, it was necessary to broaden the scope of the review to include the more generalized topics.

As returning to work after a traumatic injury is mostly contingent upon the trauma survivor’s functioning on the job and the ability to perform the duties associated with the job, many of the studies found focused on rehabilitation. For example, one such study on returning to work after traumatic injury was a systematic review of the existing studies that presented evidence on the pre- and post- predictors of vocational outcome after TBI (Saltychev, Eskola, Tenovuo, & Laimi, 2013). The researchers who conducted this study reviewed 80 studies and found that the methodological quality of the studies included in the review was “very low (p. 1516).” They found week evidence that age, educational level, pre- and post-injury occupational status, the severity of TBI, functional status, the level of depression and anxiety, gender and race may be predictive of the vocational outcome of TBI. They concluded that no strong evidence was found that vocational outcomes after TBI could be predicted or improved, and assert that there is a need for both experimental and observational well-conducted studies on the subject. Further, these researchers found that inconsistencies exist between studies as not all researcher conducted on the subject used unified and standardized terms and scales, and recommended standardization in further studies, suggesting the use of the International Classification of Functioning, Disability, and Health (ICF) as the best tool for this purpose. These conclusions are consistent with this researcher’s conclusions after her extensive literature review.

Another study on returning to work after traumatic brain injury was conducted in the United Kingdom and focused on gathering data on the effects of vocational rehabilitation (VR) (Radford et al., 2013). These researchers sought to determine whether a TBI specialist VR intervention (TBI-VR) was more effective at work return and retention 12 months after injury than usual care (UC). They also had a secondary aim of exploring the feasibility of collecting economic data to inform a definitive trial. This study was conducted on ninety-four participants (40 TBI-VR) with TBI resulting in hospitalization, which was followed up by questionnaire at 3, 6 and 12 months post discharge. This study was also typical of those found by this researcher’s literature review. These researchers concluded that More TBI-VR participants returned to work than UC participants, and that those with moderate/severe TBI benefitted most, and that their research indicated this positive trend was achieved without greatly increased health costs, suggesting cost-effectiveness. However, they did admit that VR is limited and efficacy or costs were seldom reported. This appears contradictory to this researcher, highlighting problems with the study. This researcher found this also consistent with several of the studies reviewed. Limitations found in many of the studies reviewed included small sample size, limited data collected, or methodologies that limit the amount of data collected, such as questionnaires or short interviews.

This researcher’s review of the literature supports her conclusion that studies of the psychological aspects of returning to work after traumatic injury are rare. Holtslag et al. found through their research that large generic major trauma studies investigating return to work are few, and rarely investigate the psychological aspects of the return to work experience that are personal and private. No heuristic studies on this important element of the process were found. Of the studies reviewed, reported return to work rates range from 50% to 90% (van der Sluis et al., 1998; Redmill, McIlwee, McNicholl, and Templeton, 2005). These variations can be attributed to varying factors, including differences in instruments used, timing of measurements, inclusion criteria, (e.g., working age only), definitions of return to work (e.g., part-time vs. full-time work, working with modifications, returning to a different position or employer). Mean follow-up was also a varying factor resulting in differences in the studies. Those with a mean follow-up of 1-2 years after major trauma found lower return to work rates, generally in the area of 50-60% (MacKenzie, Morris, & Jurkovich, 1998; Vles et al., 2005; Michaels et al., 2000). Studies with a mean follow up of five years or more found a return to work rates of 60-75% (Morris et al., 1991; van der Sluis et al., 1998; Redmill et al., 2005; Anke et al., 1997). Studies also varied widely in their criteria of severity of injury, with some selecting severely or less severely injured patients for their studies (Redmill et al., 2005; Kivioja, Myllynen, & Rokkanen, 1990). Other determinants included such factors as age, which was found to be an important determinant in several studies, as were educational level, pre-injury income and social support (Morris et al., 1991; Mackenzie et al., 1987; Anke et al., 1997; Kivioja, Myllynen, & Rokkanen, 1990). Physical or psychological limitations and comorbidity negatively affected functional outcome after specific injury types (Morris et al., 1991; Kivioja et al., 1990; Bergeron et al., 2004).

Combine these so they all share the same parentheses.

Ultimately, the wide range of variants among the factors affecting return to work viability illuminates the complexity of the return to work experience. This variation supports this researcher’s findings that each trauma survivor experiences the return to work process in a unique and personal way.

As this researcher is exploring the experience of returning to work after traumatic injury from a personal perspective, a heuristic study, several comprehensive searches were conducted to find studies of a similar nature. An exhaustive search produced a wealth of heuristic studies on a wide variety of subjects and experiences. However, a heuristic study of the experience of returning to work after the traumatic injury was not found. This indicates a gap in the understanding of the more personal aspects of the experience. A heuristic study explores the intimate, private and often unshared thought processes that accompany the return to work process. While observational research is valuable and is widely accepted as a means to discover the many aspects of an experience, there may be information only available from an intimate, internal perspective; information that is hidden within the trauma survivor, that can only be understood by experiencing a phenomenon. This heuristic study examines aspects of the return to work experience from the trauma survivor's perspective.

# Summary

Qualitative heuristics, which were developed at the University of Hamburg, Germany, try to bring back the qualities of systematic exploration and discovery into psychological and sociological research (Kleining & Witt, 2000). Qualitative heuristics apply to all topics within psychology and the human and social sciences which are open to empirical research. Qualitative data are especially suitable to discover qualitative relations such as structure or patterns and structural changes. The nature of the traumatic injury, with its broad scope and myriad characteristics that vary widely depending on the type, cause, effects and outcomes, dictates that any exploration of the topic should be one that allows the researcher to make discoveries without the limitation of structure or direction. It is a method that requires the research person to be open to new concepts and change her or her preconceptions if the data are not in agreement with them. A heuristic study is one in which the researcher enters the research with a preliminary topic to be explored, and understands that this may change as the research progresses. The process of discovery determines the path upon which the research will travel, with each new bit of information prompting the researcher to explore a direction not previously assumed. Finally, the analysis of the data is directed toward the discovery of similarities. In this way, a heuristic study follows Simmel’s famous chapter on the method which states that out of complex phenomena the homogeneous will be extracted… and the dissimilar paralyzed (Simmel, 1908).

Is any part of this a verbatim extract from Simmel? If so, enclose the quoted portion in quote marks and add a page citation.

The nature of the topic of traumatic injury and the experience of returning to work lends itself to well to heuristic study. This researcher reviewed numerous journal articles, reports, studies and other literature to find what is known on the subject. She found that while a vast number of studies have been undertaken to discover the range and consistencies within the prevailing body of knowledge on traumatic injury and how it affects survivors who return to the workforce, no studies were found that explored the experience from the introspective, intimate perspective that is uniquely owned by the survivor. Introspection is a critical element of heuristic study (Moustakas, 1990). This type of deep exploration leads to insights and discoveries that are not likely to occur through other types of observational study. While the many facets of traumatic injury have been examined in study after study, a heuristic study produces a type of information that moves beyond the physical injuries and illuminates psychological, emotional, and cognitive aspects that are unique to the survivor. This researcher’s discoveries are unique to this study.

**CHAPTER 3. METHODOLOGY**

**Purpose of the Study**

The purpose of this study is to understand the meaning and experience of returning to work after a traumatic injury. Those who have experienced a traumatic injury often find themselves returning to work, both as a means of regaining normalcy after such an event and as a necessity to obtain resources for daily living. However, returning to work is far more complicated than simply rejoining a workforce. Many trauma survivors find that they must return to the workforce while still recovering from their trauma, and may be challenged with physical limitations, psychological and emotional issues, or the stresses of financial obligations. Many who experience traumatic injury find that their ability to function well in a work environment is also significantly challenged. Individuals with posttraumatic stress disorder (PTSD) have been reported to have difficulty returning to employment (Brenneman, Redelmeier, Bjoulanger, McLellan, & Culhane, 1997).

There is a lack of insight in the literature into an understanding of the experience of returning to work after a traumatic event, what it means to the trauma survivor and those associated with the trauma survivor, how it is experienced. Historically, studies that have focused on helping individuals return to work after trauma has centered upon recovery from particular types of injuries or trauma through treatment or the accommodations an employer must make when a traumatized or injured employee returns to work. There is a paucity of studies that examine the experience of returning to work from the employee’s perspective, and no heuristic studies have been found in which an individual shares the personal and private thoughts, feelings and ideas that accompany the process of returning to work. The process of returning to work after trauma is far more complicated than simply rejoining the workforce. While employers may make accommodations for physical limitations affecting the employee’s ability to function and perform the tasks required by the job, little is known about the internal challenges that may accompany the process. Employers may offer few resources or assistance for dealing with psychological issues that may be present, such as performance anxiety, posttraumatic stress disorder, emotional instability, or relationship issues. Many employers offer Employee Assistance Programs geared toward helping a worker manage the emotional and psychological issues that may accompany the return to work process, but many of these programs are limited or inadequate to address the range of issues that employees may face. EAPs themselves have become the subject of controversy, characterized by widely varying models, some dating back to the inception of EAPs in the 1960s, suggesting confusion in the field. Some EAP experts suggest that American society over the past half century or so and especially in the economy have chanced beyond recognition. If employers wish for their Employee Asistance programs to remain relevant and effective in the new environment, they must be changed as well. Globalization, women, minorities and the disabled in the workforce, extraordinary technological innovation, and the increasing cultural diversity must all be recognized as important factors that determine the directions that workforces will take in the future (Mannion, 2004). Moreover, the current political climate, economic stresses, intellectual, psychology and physical requirements of work and personal time, all work to contribute to increased chances of trauma.

Many employers are finding that they do not want to lose the investment they have incurred in their employees. Keeping them viable in the workplace is of paramount important. While EAPs and other strategies can help mitigate the loss of their investment, information about the experience of returning a viable employee to the workforce can be invaluable in helping them retain their investment. When viewed from this perspective, the need for a study that explores the experience of returning to work after traumatic injury from the trauma survivor’s perspective becomes clear.

# Research Design

This researcher has chosen to explore the research question by conducting a heuristic phenomenological study, as explicated by Moustakas (1990). The heuristic research method grew out of the phenomenological research method. Heuristic research is a form of phenomenological research that emphasizes the personal experience and insights of the researcher (Patton, 2002). Phenomenological research, in turn, is a form of qualitative research designed to understand the essential meanings of human experience (Robson, 2002). Qualitative research is interpretive in nature, and qualitative researchers create an interpretation of the data that is largely unique to them because of their unique, individual biases, values, and interests (Creswell, 2003; Patton, 2002). Qualitative research advances the goal of all scientific inquiry in that it facilitates the discovery of truth.

As a trauma survivor, this researcher is uniquely poised to experience the phenomenon in a personal and intimate manner. A heuristic study written by a trauma survivor illuminates some of the issues heretofore not recognized by organizational psychologists and helps to inform their work with trauma survivors as well as with employers in their efforts to accommodate injured or traumatized employees. A heuristic study provides insight unique to the individual who experienced the trauma that is unavailable to the employer by any other means (Moustakas, 1990). This type of study brings to the forefront insights gained from this researcher’s personal experience of returning to work after a traumatic injury, along with those of the participants. It is a research model that places special emphasis on knowing the self, becoming one with the topic and experiencing it. There are two focusing elements of heuristic inquiry within the larger framework of phenomenology – the researcher must have personal experience with, and an intense interest in, the phenomenon under study and be willing to participate. The other participants must also share an intensity of experience with the phenomenon (Moustakas, 1990). Moustakas emphasized that the researcher must be present in the study; the researcher utilizes her intuition, perception, and knowledge to investigate new information. As this type of study progressed, new information presented itself and was recognized and explored further. In this manner, the study took on a life of its own. In such a study, the original assumptions may be replaced with new assumptions; the original path intended for the direction of the research may change in relation to the guidance presented by the new information. A heuristic study, then, is fluid in nature, changing, growing, and becoming as it progresses.

Moustakas (1990) noted that a heuristic study emphasizes connectedness as well as relationships between the researcher and participants. Such a study emphasizes the essence of a personal experience and its significance to the individual. The researcher utilizes intuition as a means of furthering the creativity of both the researcher and the participants in discovering new knowledge. Additional insights gained from the experiences of others help lend credence, support and help to expand perspective to the study’s findings. The participants remain as whole persons in the study. Open-ended questions are used to encourage dialogue and expand thoughts and perceptions toward further exploration, allowing the process to unfold naturally.

This heuristic phenomenological study is guided by Moustakas’s research model, which begins with a personal question or challenge, one that has a social or universal significance. It is aimed at discovery through self-inquiry and dialogue. The life experience of the heuristic researcher and the research participants is not a text to be interpreted but a full story that is vividly portrayed and further elucidated through art and personal documentations. From these individual depictions and portraits from research participants, a composite depiction is developed. This represents the entire group of core research participants. The primary researcher then develops a creative synthesis of the material (Moustakas, 1990). Following this model resulted in a comprehensive study of the phenomenon of returning to work after trauma.

Moustakas (1990) proposed a six-step process for heuristic research. Per the tenets presented by Moustakas, the research process begins with the researcher, with initial engagement, immersion, and incubation. This part of the process takes place as the researcher formulates the question to be explored. The next step occurs as the researcher becomes immersed in the existing documentation, reported, studies and other literature on the subject of trauma and how those who have experienced it may be changed about their work. This literature provides supporting historical data and helps to identify themes as they emerge. It is important for any researcher to have a thorough knowledge of that research that has already been conducted in the field before undertaking new research to explore any subject (Mertens, 2005).

For this study, a range of studies was reviewed to discover emergent themes. This review found that the understanding that exists among both health practitioners and employers on the challenges unique to the experience of returning to work after trauma may be limited. A wide disparity in experiences ranging from those who simply return to work immediately after the trauma with no treatment to those who experience post-traumatic stress symptoms and seek treatment and assistance with coping has also been noted in the initial literature review. This researcher experienced PTSD-like symptoms and other challenges that influenced the experience of returning to work, prompting additional research to develop a complete understanding of the process. This researcher became aware of the importance of approaching this study with an open mind. A researcher should approach this type of study with as few predeterminations, assumptions, and biases as possible (Craig, 1978). While personal experience provides the foundational data for this study, that experience was likely to differ from the experiences of others. Reporting multiple perspectives, identifying the many factors involved in each situation, helps sketch the larger picture that emerges from the whole of the data gathered (Cresswell, 2007). For a larger perspective on methodologies, the works of researchers who explored the various manifestations and presentations associated with trauma were reviewed including such researchers as Asmund et al. (1998), Baldwin (2003), Bandura (2003), Blanchard & Hickling (2004), Breslau (2002) and others.

A thorough understanding and knowledge of past and current research was helpful in formulating an idea of what information might be gained by learning about the experiences of those who had returning to work after a traumatic injury. This is the step at which the researcher did well to let the nature of the topic direct the path of the research. Probing questions were used to bring forth the most intangible nuances of the data being presented by the researcher and participant. This process was used to clarify the research question through intuition and tacit dimension. Moustakas (1990) emphasized the value of tacit knowledge, that which is cultivated through perception and is necessary to develop understanding. Focal aspects of the experience are integrated to understand the essence of the phenomenon, while subsidiary factors allow an individual to understand distinctive and unique aspects of an experience.

Returning to work after a traumatic experience presents complexities unique to the experience, and tacit knowledge provides an avenue of exploration beyond that which can be gained through quantitative information. Moustakas (1990) emphasized that when tacit knowledge, or tacit dimension, is restricted, the depth, as well as the range, of the phenomenon is smaller. Exploring the phenomenon of the experience of returning to work after a traumatic injury while allowing tacit knowledge to develop without restriction, allows the research to follow a new path, guided and informed by that tacit knowledge. Intuitive inquiry openly invites the researcher to structure the research method, procedures, settings, and context to maximize -- rather than minimize -- the very gateway through which a researcher understands or is inspired by the experience studied. Patton (2002) asserted that heuristic methods draw upon a humanistic, person-centered approach to knowledge, on the idea that individual development toward self-actualization (Maslow, 1998), and on concepts of “tacit knowledge” and “indwelling” (Polanyi and Sen, 2009, p. 30). By relying on tacit knowledge, the primary researcher can sense the unity or wholeness of a phenomenon through an in-depth understanding of its parts. Moustakas (1990) suggested that the tacit dimension forms a bridge between the implicit knowledge acquired through the primary researcher’s intuitive understandings of the phenomenon and the explicit knowledge that is observable through researcher’s descriptions.

Moustakas (1990) emphasized becoming one with what one is seeking to know through identifying the focus of inquiry. An integral pathway for discovering the qualities and components that compose an experience may be found through self-dialogue. Through self-dialogue, this researcher allowed the phenomenon to speak directly to her experience, to be questioned by the experience, and to enter a dialogue with it. This required an open, receptive, acute awareness of all facets of her experience, “allowing comprehension and compassion to mingle and recognizing the place and unity of intellect, emotion, and spirit (p. 51).” The primary participant’s self-knowledge enabled her to develop an understanding of the phenomenon more fully by engaging in the rhythmic flow of the self-dialogue, expanding the inquiry with participants, allowing for a deeper, more fully realized understanding of the phenomenon through the perspectives and voices of others.

The tacit knowledge gained from the investigation process works as the third concept of the structural framework for this heuristic study. Polanyi (1966) explicated that this knowing is a reconsideration of the nature of human knowledge by asserting that “we can know more than we can tell” (p. 4). A prime example of this type of knowledge can be seen when individuals study any complex science. Years of martial arts training illuminated this principle for this researcher. As explained by a martial arts instructor with more than six decades of training in his style of the art, one’s level of knowledge moves through a predictable progression from novice to mastery. At the novice level, one learns techniques and through practice and repetition, develops a level of proficiency. While initially, all movements require conscious thought and effort. Over time, the muscles develop a memory of the movements, and the mind is no longer engaged in the conscious effort of remembering which movements are required in a pattern to create a technique. This level of learning is expanded as multiple simple techniques are committed linearly to create a system of movements performed in a pre-arranged progression. Over time, these sets of movements no longer need conscious attention to be performed. While the individual may be able to carry out the system of movements, and therefore is considered proficient and practiced, he or she may not be able to articulate the complex pattern of muscular motions necessary to carry out the movements.

The ability to perform a complex set of movements does not necessarily indicate that the individual can articulate the complex pattern. Therefore, one knows how to do the movements, is cognizant of what actions are necessary to carry out the elementary functions which constitute the performance, yet is unable to *tell* what they are. Moustakas (1990) asserted that the power of revelation in tacit knowledge is the foundation of all heuristic studies.

However, the question remains, how can we know more than we can tell? How can we see a problem from which heuristic revelation could be revealed, see that which is hidden? Polanyi suggests, “It is to have an intimation of the coherence of hitherto not comprehended particulars” (1996, p. 21). He asserted that to see a problem that will lead to discovery is not to see something hidden, but to uncover that of which others do not currently a perception. Polanyi suggests that one can have tacit foreknowledge of things yet undiscovered. The researcher is guided toward the presence of realities by clues sensed through tacit foreknowledge. A researcher’s awareness of a problem, his or her capacity to pursue it and seek a solution, and valid anticipation of the yet undetermined implications of the discovery arrived at in the end are all elements that can be attributed to tacit knowledge.

Moustakas (1990) then takes up this premise of tacit knowledge as the framework of the concept of indwelling. Knowing relies on an interiorization of the human experience. This allows us to understand the comprehensive entity in its entirety. A researcher indwells “inside the subsidiary and focal factors, to draw every possible nuance, texture, fact, and meaning from them” (Moustakas, 1990, p. 24). Polanyi (1962) asserts that knowing the subsidiary factors of a comprehensive whole is dependent upon attending focally to the whole which they constitute. “The extent to which things are known subsidiarily regarding something else cannot be known at the same time as in themselves” (p. 2). In this manner, the collective meaning and comprehensive relationship of the subsidiary factors are understood through “dwelling” in them, rather than by simply “looking at things.” A researcher seeks to apprehend the experience in a living sense. This allows the researcher to gain a level of understanding beyond that which is gained externally, through observation alone. This level of connectedness with the question at hand allows the researcher to gain insight into the deep elements of a problem, i.e., the circumstances from which it arises internally as well as externally, its qualities, the events and people connected with it, and how they are affected and changed by the situation. The indwelling process requires the researcher to not only initially experience the event, but to remain connected to it; even to return to it again and again, until the researcher can fully articulate the event in words, illustrations, creative expressions, and narratives. To adequately engage in the essential process of indwelling informed by the tacit dimension, one must bridge the gap between knowledge inherent in the tacit and explicit which is observable and describable. This bridge is intuition (Moustakas, 1990).

Through intuition, one utilizes an internal capacity to make references from observable factors and arrive at the knowledge of underlying structures or dynamics. The intuitive process draws on clues which become a sense of pattern or "underlying condition that enables one to imagine and then characterize the reality, state of mind, or condition" without the intervening steps of logic and reasoning (Moustakas, 1990, p. 118). The process of indwelling enables the researcher to access and uncover insights and tacit mysteries which ultimately explicates the parameters and details of the experience being investigated.

The core themes, identified through intuition, are then clarified through focusing, which is the next essential piece of the heuristic conceptual framework. Focusing can be described as a sustained process of inner attention, staying with the focus of inquiry to see it as it is, prior conceptions are removed, and marginal qualities or feelings of minor importance are set aside, allowing a purity of concept to take place. The researcher is then able to distinguish and evaluate vital feelings of "meanings and perceptions that register as internal shifts and alterations of behavior" (Douglas and Moustakas, 1985, p. 51). Following this logic, nine individuals who experienced traumatic injury and then returned to work were interviewed to gather information on how meanings and perceptions related to the experience may have affected them emotionally and psychologically. Did such internal shifts and alterations of behavior occur, as Douglas and Moustakas observed in similar studies?

# Target Population and Participant Selection

The goal of this research is to understand the experience of the participants in the study. To gain this understanding, taking advantage of the benefits provided by qualitative research was important. The primary advantage was that qualitative research produced a great deal of detailed information about relatively few cases increasing the depth of understanding of the phenomenon (Patton, 2002).

"To know and understand the nature, meanings, and essences of any human experience, one depends on an internal frame of reference of the person who has had, is having, or will have the experience" (Moustakas, 1990, p. 26). The primary researcher in this study must be aware of her internal frames of reference and must develop an atmosphere of trust and openness with each participant. This encourages full expression. Unrestrained disclosure and unqualified explications of each person's experiences can then be gathered to support the primary researcher's insights, adding depth and richness to their experiences. Moustakas (1990) suggested that the way in which the researcher provides this atmosphere is from her personal internal searchers from which she develops significant awareness of her internal frame of reference. She is then afforded an empathetic understanding of the experiences of others.

 This study explored the experience of participants who have experienced trauma and what they encountered when returning to work. This study is rooted in faithful and truthful reporting of the data gathered from participants via interviews and journals, following Patton's (2002) recommendations. Establishing the results of qualitative research are credible or believable from the perspective of the participant in the research is critical to the credibility criteria. Since the purpose of qualitative research is to describe or understand the phenomenon of interest from the participant's eyes (Creswell, 2007), the participants are the only ones who can legitimately judge the credibility of the results. For this reason, a researcher who undertakes such a study must have extensive, first-hand experience from which to draw (Moustakas, 1990). Having experienced a trauma of severe enough nature to affect the daily professional functioning, and then returning to work and attempting to regain normalcy, renders this researcher uniquely and exceptionally qualified to explore the experience of returning to work after trauma. Extensive training in I/O psychology and business is blended with the intimate personal experience to result in a richer, more robust undertaking. This researcher draws upon the skills and knowledge accumulated from more than three decades in the business environment as well as the developed from business and psychology training acquire within the pursuit of this doctoral degree. This knowledge provides value by enhancing perspectives of the return to work experience, giving it a different point of view than that which can be provided either by a professional in an observational capacity or a trauma survivor in a lay person's capacity. While not dismissing the value of either of these types of viewpoints, the combined value of personal experience, professional experience, advanced education, provide a richer, more deeply developed perspective.

While the primary researcher provides the foundational data for this study, 10 other participants were interviewed to share their experiences. Each participant was required to meet three foundational criteria: (a) each was required to have experienced a traumatic injury, (b) each was required to meet an age above 21, and (c) each was required to have been actively working prior to their injury, and have either returned to work or are planning to return to work. Additional inclusion for this study was that the participant had received their traumatic injury via motor vehicle accident, as a means of keeping consistency between the primary researcher and participants. For this study, the type of work was not considered relevant, nor was the time of the traumatic event to present considered. Gender criteria included both men and women, and there was no race or location criterion. Exclusion criteria included those individuals who have no ability or intention of returning to work, or whose injury may have resulted from a medical condition or event such as stroke.

This study is a robust exploration of the experience of returning to work after trauma. By its nature, this study precludes any individuals who have not previously been employed. The U.S Census Bureau’s statistics on working adults acquiring work experience encompasses the age range of 25 to 65+ years (Chenevert & Litwok, 2014). Working adults within this age range will be asked to participate. Type of work, gender, income, marital status, and other personal characteristics, will not be used as criteria for gathering participants; nor will the length of time between the trauma experience and returning to work be considered. Rather, the population will consist of adults who meet the criterion of having returned to work after trauma.

The sampling size is an equally important decision to sampling strategy in the data collection process (Creswell, 2007). The intent of the qualitative research is not to generalize the information (except in some forms of case study research), but to elucidate the specific (Pinnegar & Daynes, 2006). Many examples of narrative research gather data from only one or two individuals unless a larger pool of participants is used to develop a collective (Huber & Whelan, 1999). In phenomenology, the number of participants can range from one (Dukes, 1984) to up to 325 (Polkinghorne, 1989). Patton (2002) recommended studying 3-10 subjects. As a heuristic study, the researcher will serve as the main participant, while data from other participants are gathered to provide information that compares to the main participant’s story. In a narrative study such as the one conducted here, the stories of 10 to 15 individuals, along with the main researcher’s experiences, provide ample opportunity to identify themes of the cases. In addition, this researcher can conduct cross-case theme analysis, without being overburdened with more data than is necessary to develop a well-saturated theory (Creswell, 2007).

As in any qualitative study, the researcher must answer the question of *how many interviews are enough to reach data saturation* (Guest, Bunce, & Johnson, 2006)*.* Failure to reach data saturation has an impact on the quality of the research and hampers content validity (Bowen, 2008). While a number of issues can affect sample size in qualitative research, saturation is generally the determining factor. Because of the nature of qualitative study, sample sizes are generally smaller than those used in quantitative studies. Ritchie, Lewis and Elam (2003) assert that there is a point in qualitative sample of diminishing return. A single occurrence of a piece of data is enough to ensure its inclusion in the analysis framework, as one piece is potentially as useful as many in understanding the process behind a topic as qualitative research is concerned with meaning rather than generalized hypothesis statements (Crouch & McKenzie, 2006). Qualitative samples must be large enough to assure the most or all of the perceptions that might be important are uncovered, but if the sample is too large data becomes repetitive and may become superfluous (Mason, 2010). Saturation occurs when the collection of new data does not shed any further light on the issue under investigation (Glaser & Strauss, 1967; Fusch & Ness, 2015). Marshall and Rossman (2011) suggested that the field of data saturation is a neglected one, and problematic because of the vast number of research designs in existence. What is saturation for one may not be nearly enough for another. This researcher employed case study design to study the experience of returning to work after traumatic injury. While a phenomenological study design, the saturation point for case study will differ from other types of research.

There is no *one-size-fits-all* method to reach data saturation because study designs are not universal. While researchers do agree on some general principles and concepts: e.g., no new data, no new themes, no new coding, and the ability to replicate the study (Guest et al., 2006), the point when a study reaches those levels of saturation will vary from study design to study design. While as few as six interviews may be sufficient to reach saturation in a qualitative study, it has been suggested that richness of data is of more value to a study than the thickness of data obtained by large sample size (Burmeister & Aitken, 2012). One cannot assume data saturation has been reached simply because resources have been exhausted. Data saturation is not about numbers *per se,* but about the depth of the data (Burmeister & Aitken, 2012). In the interviews conducted for this study, the participants provided large amounts of deep, rich data. The intent of qualitative research is to elucidate the specific, rather than to generalize (Pinnegar & Daynes, 2006). Huber and Whelan (1999) gathered data from only one or two individuals unless developing a collective using a larger pool. Some of Dukes (1984) studies used only one participant while Polkinghorne (1989) gathered data from as many as 325 participants. Patton (2002) recommends 3-10 subjects and Creswell (2007) suggests that 10-15 participants provide ample opportunity to identify themes. Based on the depth of the data provided by this researcher’s participants, and following the guidelines suggested by experts in phenomenological research, this researcher feels the requirements for data saturation have been satisfied.

Following these guidelines, this researcher continued to interview traumatic injury survivors, noting recurring themes as they emerged. Upon interviewing Participant Number 8, this researcher realized that no new information appeared that added to or enhanced that which was provided by the previous participants. One additional participant was interviewed for confirmation that the saturation point had been reached. Nothing new was added after interviewing Participant Number 9, so the interview was ended. This researcher felt that saturation point had been reached.

Each was chosen for their viability as trauma survivors. Initially, this study was designed to work only with those trauma survivors who had experienced motor vehicle accidents. Sampling procedures for this study grew into a snowball/referral sampling methodology. It has been suggested that viewed critically, this popular sampling method can generate a unique type of social knowledge - knowledge that is emergent, political and interactional. The organic nature of social media, social networks, and social dynamics lends itself well to a study in which a wide variety of participant may exist and tend to gather in groups, sharing experiences and gaining support from the empathy of individuals who are also endeavoring to recover from similar circumstances (Noy, 2008).

As is the nature of a heuristic study, the method for obtaining participants grew and developed in an organic manner. Social media was the intended resource for participants. It provided an excellent foundation for finding and initiating dialogue with potential participants. As is common with social media, referrals for participants determined the path the population seeking process would take. It was soon discovered that an excellent resource for participants who had experienced motor vehicle accidents, and the resulting trauma were those members of brain injury support organization. The most common effect of motor vehicle accidents is head trauma and concussion. It is also less commonly considered, but whiplash, a common injury experience in motor vehicle accidents, has a common co-morbidity of concussion, in a large percentage of cases (Blanchard & Hickling, 2004). Among the 10 participants in this study, six are female, and four are male. Seven of the individuals experienced motor vehicle accidents. Two experienced falls resulted in brain injuries and other physical and psychological symptoms. One received his injury as a result of a work incident. The time frame from traumatic events varies from as far back as 26 years to as recent as six months. Each agreed to a conversational interview of 1 1/2 to 2 hours. Those individuals who were accessible locally were interviewed in person. Those at distant locations were interviewed via email, social media messaging, or teleconference.

To acquire and select participants, the researcher made initial contacts via social media. One of the first individuals who expressed interest in the study suggested that an excellent resource for finding potential participants would be to join and attend a brain injury support group meetings that occurred regularly at various locations in the Seattle area. This suggestion proved extremely productive. Initial contact with the individuals who oversee and facilitate the meetings was accomplished by visiting the brain injury support website and emailing the facilitators with a request to participate in the meetings. This researcher met with one of the meeting facilitators who expressed enthusiasm in having information about the study presented during a meeting. She explained that many brain injury survivors were in fact high performing individuals who before their injuries, held high-level management or technical positions and might be interested in participating. She also said that a large percentage of the members had acquired their brain injuries via motor vehicle accidents but that many had also experienced work-related injuries such as falls at work or being hit with objects. Attendance at these meetings resulted in the ability to identify about three dozen potential participants. From this group, 15 viable participants were identified. This initial group of participants also referred 6 other researchers from different areas and three researchers from distant locations were identified. The final group of 10 participants represents those identified as most appropriate for the study. Information on the remaining 11 participants identified through this process has been filed for future reference if one or more of the current participants should become unavailable for the study.

# Procedures

Upon completion of the selection and acquisition process, the primary researcher presented and explained the consent forms to be completed. The interview process was explained and questions answered. Some participants asked questions regarding the requirements of time limitations. One expressed concern that the amount of time that had elapsed since her motor vehicle accident might prove detrimental to the study. This researcher explained that the focus of the study was the experience of returning to work after a traumatic injury and that that experience would not be altered regardless of the amount of time that has elapsed since the injury. Her experience of returning to work, the challenges she experienced, and her perceptions and insights provided a much-needed perspective for the study.

The primary researcher used a sample size of *N*=11, which includes the primary researcher plus the ten participants. Creswell (2007) recommends for phenomenological type cases, studying 3-10 subjects for such an inquiry. In her phenomenological inquiry with heuristic analysis of findings, Vogel-Welch (1998) demonstrated a rich and detailed contribution to the literature with her research using as few as five participants. Homberg (2010) published through Capella University's Harold Abel School of Behavioral Sciences, a portrayal of the lived experience of self-trust in six women during mid-life, which was accomplished using the primary researcher plus five participants. The majority of the literature supports a sample size of 11 as sufficient for this researcher's study.

# Instruments

 The forms which the primary researcher developed and implemented for instructing participants on their participation in the study include:

1. Recruitment letter
2. Instructions to research participants
3. Qualification Questionnaire
4. Interview guidance with glossary of terms
5. Adult consent form

 A 1 1/2 to 2-hour conversational interview was conducted with each participant. Instructions, consent forms, qualification questionnaire, and interview guidance were sent to each participant to review and sign before the interview and data collection. Participants were informed that journals were recommended for participation, but none opted to do this portion of the data gathering process. Each opted for a single interview and follow-up interviews with any additional information that proved necessary to create a full, well-rounded narrative of his or her experience. As these participants were telling of a past experience and then explaining about ongoing recovery issues, this proved adequate for gathering the necessary data. As each narrative was completed, a follow-up interview was conducted to ensure that enough data had been collected and had been presented in each narrative accurately and fully. The interview guidance proved to function as a guide only, as in conversational interviews, spontaneous generation of questions and a naturally unfolding dialogue occurs. Formal protocols such as keeping to the exact questions and the pre-arranged order of the questions proved unnecessary. Moustakas (1990) supported his type of interview process as the rhythm and flow of heuristic inquiry is enhanced by this type of interview process. This allows a fluid, organic interview experience, unencumbered or restricted by a rigid set of questions. Moustakas (1990) suggested that the search for meaning is added as expression, elucidation, and intimate disclosure are encouraged. Self-disclosure by the primary researcher encourages and elicits intimate disclosure by the participants builds trust by demonstrating openness and shared experience (Jourard, 1968). Moustakas also explained that cooperative sharing between the participant and the researcher opens avenues for each other to explicate the phenomenon more fully. Heuristic interviewing's success is dependent on the researcher being flexible and free to vary procedures to respond to what is required in the flow of dialogue (Moustakas, 1990).

Upon choosing conversational dialogue as the most efficient means of eliciting information from participants, as prescribed by Moustakas (1990), the primary researcher then asked open-ended questions:

1. How did your traumatic injury affect your ability to work?
2. What perceptions did you have about your interactions with coworkers, supervisors, clients?
3. How did your personal perception of yourself change after your traumatic injury?
4. What were skills or abilities changed after your injury?
5. Did your injury affect your home life or personal interactions outside of work?

While the use of such instrument provided guidance and structure to a qualitative inquiry, Patton (2002) suggested that the researcher himself or herself functions as the instrument, in contrast to the use of instruments such as tests, survey questions, and other measurement tools that are specific to quantitative research. "The credibility of qualitative methods, therefore, hinges to a great extent on the skill, competence, and rigor of the person doing the fieldwork - as well as things going on in a person's life that might prove a distraction" (p. 14). This concept of the researcher as the instrument and participant can be illustrated by the principles as explicated by Moustakas (1990) in the roles undertaken by the researcher. Moustakas (1990) asserted that the initial data is the researcher, as the nature of the question is explored and meaning is discovered and explicated. The researcher is not only lifting out essential meanings of experience but is actively awakening and transforming the self in the process (p.13). The primary researcher can provide a "safe space" for authentic dialogue, which encourages the participant to articulate his or her experience with the phenomenon. This "safe space" is provided by the researcher as she relaxes, simultaneously building rapport and neutrality. Both elements are necessary for the person being interviewed to feel safe sharing their experience, personal perspectives, and intimate thoughts without fear of disapproval, recrimination, or judgment. Also, the researcher's role requires that she be a full participant in the dialogue, a true participant, actively listening while engaged in critical observation. This allows her to gather information that proved useful, relevant and appropriate to the elucidation of the phenomenon under investigation.

The researcher also participated in the study by writing a full and complete narrative of her experience. This allows engagement in self-dialogue through the writing process. By adopting both interviewer and interviewee roles, the researcher fosters the inquiry through continual reflexivity and self-dialogues that fully, deeply and intimately explore the research question.

The researcher acts as an observer, both during the interview process with participants and upon completion of each interview. The researcher reflects on the information shared by the participant, noting what she observed as relates to the setting of the interview, the participants’ demeanor and body language, and the expressions that presented during the interview. These observations are added to the final narrative for each participant, enhancing the fundamental data gathered during the interview, and helping to grow a rich and robust narrative.

The processes that were employed by this researcher for identifying participants and gathering data for the study was reviewed and approved by the Institutional Review Board (IRB) as required for all Capella doctoral learners. The IRB review ensures research compliance with federal regulations and ethical practices for human protections (Institutional Review Board (IRB), 2016). Capella University’s IRB is responsible for reviewing all research involving human participants or records, including all research by learners engaged in the dissertation process.

The IRB oversees doctoral research and sets standards for protecting privacy and confidentiality of participants, maintaining participant autonomy and dignity, minimizing risks while maximizing benefits for participants and ensuring participants have adequate information to make informed decisions. Before any research was conducted, the IRB approved the Scientific Merit Review submitted for this study and approved the topic and focus of the study. All materials used in the data gathering process were approved before beginning the process of identifying participants. These materials included recruitment proposal, samples of forms including informed consent, questionnaire, and interview guidance. This process ensured that this study would be conducted ethically and that this researcher had fully considered the benefits and risks of the research.

# Research Questions and Hypotheses

“My intention is to lift out ideas and meanings from life experiences that hold individual and universal significance and that facilitate person-to-person interactions, connections that give birth to new awareness, and encourage pathways to the expression of feelings and values” (Moustakas, 1990, p. ix).

This study seeks to answer the question, “What is the lived experience of returning to work after a traumatic injury?” This heuristic phenomenological study will seek to understand the essence of this experience. A heuristic study, a form of phenomenological inquiry, brings to the fore the personal experience and insights of the researcher, asking the foundational question: What is my experience of this phenomenon and the essential experience of others who also experience this phenomenon intensely (Patton, 2002)? As a trauma survivor, this researcher explored the experience of returning to the work while recovering from a traumatic injury. A heuristic study provided the means by which the primary researcher could include her experience in the study. This researcher’s experience provided a rich data source from which to draw. She shared her perceptions, thoughts, and discoveries that grew out of that experience. This researcher’s intent was to present her personal experience and history as it pertained to her research question, providing the background of the study as it related to her interest in investigating the lived experience of returning to work after a traumatic injury. This study had its origins in 2011 when a motorcycle crash resulted in physical, emotional, and psychological trauma that ultimately interfered with this researcher’s ability to work.

Many questions and answers evolved as the journey back to normalcy unfolded, prompting a great deal of reflective thought. It became necessary to gain a clear understanding of what trauma means. A trauma is defined by the American Psychological Association as an emotional response to a terrible event like an accident, rape, or natural disaster, and more precisely defined as an injury (as a wound) to living tissue caused by an extrinsic agent, and/or a disordered psychic or behavioral state resulting from severe mental or emotional stress or physical injury (Trauma, 2016). However, as the research question evolved, it became clear that trauma is far more complicated than simple “emotional response.” Trauma has deeper connotations than simple emotional response. A traumatic event is one that involved a threat of injury to one’s self or others. The threat may be either actual or just perceived, and cause feelings of fear, helplessness, or horror (Baldwin, 2014). The threat may be physical, as in injuries such as broken bones, cuts or bruising, assault or battery; psychological, as in verbal abuse, bullying, coercion or threats, or emotional, as in divorce, or the death of a loved one. Witnessing a traumatic event can also cause some of the same feelings. This researcher experienced a trauma that affected her ability to work effectively, and this researcher began to consider if other’s ability to work was affected by similar experiences.

For many, work is a critical element of survival. Work provides the structure and stability that daily life requires. It increases a person’s sense of self-worth and personal fulfillment (Holtslag et al., 2007). The value of work is well recognized. One study found that active involvement in society (such as engaging in employment) and ﬁnancial independence (receiving wages for that employment) appears to be closely related to health and well-being. However, returning to work after trauma may not be as simple as rejoining the workforce. Many factors determine one’s success when returning to work after a traumatic injury. Determining factors related to returning to work have been studied and reported to include such factors as age, education level, marital status, and personal income, hospital length of stay, social support, injury severity, and injury locus (MacKenzie et al., 1987). Other studies by Holtslag et al. (2007) found that a complex range of other factors can also influence the return to work experience. Such factors as personal motivation and job satisfaction can affect one’s motivation to return to work. Environmental factors such as cultural differences between countries, social security systems or insurances, average employment rates and disability pensions can also influence a worker’s return to work experience (Holtslag et al., 2007). Psychosocial factors may also influence one’s ability to return to work after traumatic injury including social support, social functioning, role-emotional function, mental health, and cognitive function (Soberg, Finset, Bautz-Holtzer, Sandvik, & Roise, 2007). The effectiveness of such factors varies widely, with physical, emotional and psychological factors all playing a significant part in determining when, and under what conditions a worker may be returned to work. Experiencing a trauma may result in negative mental health outcomes including posttraumatic stress disorder (PTSD) symptom severity, major depressive disorder, alcohol or other drug disorders (MDD/AoDs). These effects may be complicated by other factors such as gender, or interpersonal trauma history to create challenges to the individual successfully returning to work, in either a full or limited capacity (Hruska, Irish, Pacella, Sledjeski, & Delahanty, 2014). PTSD has been found to be one of the most common psychiatric disorders following injury (Heron-Delaney, Kenardy, Charlton, & Matsuoka, 2013). One study found that motor vehicle accident (MVA) victims with PTSD experience more physical and psychological functional impairment (Bryant et al., 2010) and utilize great medical and psychiatric health dollars than victims without PTSD (O'Donnell, Creamer, Elliott, and Atkin, 2005).

# Data Analysis

This researcher engaged with the data in a variety of ways. Oral and written texts were diligently gathered and transcribed. An intellectual analysis of emergent and common themes was performed on each participant’s contribution. During this process, it was discovered that intuitive and meditative processes are equally important. A heuristic researcher endeavors to explore data with eyes and ears of the heart as well as with the physical eyes and the analytical mind. Per Moustakas (1990) because heuristic inquiry challenges the extremes of perceptions, passionate yet disciplined commitment is vital if the search is to attain scientific credibility. Through rigor and disciplined commitment, one follows the subjective past ordinary levels of awareness, living the question internally in sources of being and nonbeing, recording hunches, ideas, and essences as they emerge, and ultimately, consulting with others regarding the phenomenon or experience.

Per Douglass and Moustakas (1990), “it is the focused attentiveness and internal awareness, rather than predetermined methods and procedures that guide the researcher into revelations of meaning.” This premise supports the fundamental attitude required to research the topic effectively – to be open to the self-revealing illumination under study, through faculties and modalities that are themselves unfamiliar. This requires the researcher to be willing to step outside his or her comfort zone, exploring the subject in ways that may be unusual for the researcher, to gravitate away from methods used most commonly or by habit. Exploring unfamiliar territory using different or uncomfortable methods allows the researcher to gain insight that will prove cathartic or enlightening, and to obtain insight that may have otherwise not occurred to the researcher. This attitude is held centrally in intuitive inquiry and expressed beautifully by its developer.

Intuitive inquiry openly invites the researcher to structure the research method, procedures, settings, and context to maximize -- rather than minimize -- the very gateway through which a researcher understands or is inspired by the experience studied. Patton (2002) asserted that heuristic methods draw upon a humanistic, person-centered approach to knowledge, on the idea that individual development toward self-actualization (Maslow, 1998), and on concepts of “tacit knowledge” and “indwelling” (Polanyi, 1983). By relying on tacit knowledge, the primary researcher can sense the unity or wholeness of a phenomenon through an in-depth understanding of its parts. Moustakas (1990) claimed that the tacit dimension forms a bridge between the implicit knowledge acquired through the primary researcher’s intuitive understandings of the phenomenon and the explicit knowledge that is observable through researcher’s descriptions.

In a heuristic inquiry, data analysis proceeds from depictions of individual experience with the phenomenon to a collective portrayal that displays themes and patterns (Creswell, 2007). Following Moustakas’s guidance for data analysis, initial engagement and immersion that took place to accomplish the data gathering process was followed by a period of incubation. Data was then put through a process of analysis following these steps:

1. Incubation: Incubation is the period in which the researcher retreats from the intense, concentrated focus on the question, detaches from involvement with the question and becomes removed from awareness of its nature and meanings. Even though the researcher is no longer absorbed in the topic directly, or alert to things, situations, events, or people that will contribute to the understanding of the phenomenon, growth is still, nonetheless, taking place. This period enables the inner tacit dimension to reach its full possibilities (Moustakas, 1990).
2. Data organization: Transcripts, notes, and personal documents were gathered together and organized by the researcher into a sequence that told the story of each participant. Data were then organized into logical categories. Personal perspectives, impressions, and ideas were separated from actual events. Data that are relative to the research question were separated from those that are not, but data not related to the research question will be stored and categorized for later analysis, or be reinserted into the data if analysis illuminates the previously unforeseen value of the separated data. Data was first separated according to the participant, then reorganized according to similarities of experiences. This step proved to be extremely important. It was at this step that the uniqueness and widely varying experiences became evident. Each trauma survivor had a story that included experiences, ideas and even ranges of symptoms that were unique to each survivor.
3. A full reflective depiction of the experience reflecting core meanings not only of the individual participants but the group as a whole was developed. This depiction serves as the creative synthesis, combining, in an esthetically pleasing way, the themes and patterns of a representation of the whole. This was done by constructing and developing narrative portraits (Clark, 1988), individually, using only the participant’s words gathered from interviews and journals to describe the experience of returning to work after trauma. Interview notes and transcripts were stripped of the researcher’s words, and reflective passages written by the researcher were identified as such. Researcher drew upon her role as the primary instrument of interpretation (Patton, 2002) to select passages and descriptions that appear most relevant to the research question and arrange them chronologically to create a logical flow and edit for grammar, verb tense and other technical requirements of good writing to ensure clarity. This portion of the analysis process proved to be extensive and the most time consuming as many of the trauma survivors suffered traumatic brain injury, the resulting condition rendering them unable at times to express thoughts cohesively, at times affected both short term and long-term memory, and affected attention and their ability to remain focused.
4. Researcher’s narrative includes not only those data developed during the research process but an explication as recommended by Moustakas (1990). Explication is the process of examining what has been awakened in consciousness by the previous steps in the research process. The goal of explication is to develop a full elucidation of the qualities of the experience under investigation.
5. Narrative portraits were then examined closely for repeating patterns and themes to create analytic categories. They were examined from a holistic perspective, identifying common themes with the intent of (a) creating an organized framework to describe the richness and depth of the collective experience, (b) expressing the experiences in written form as a composite depiction of the phenomenon, as suggested by Moustakas (1990), and (c) capturing the experiences in a creative synthesis of researcher’s own determination. Repeating patterns such as increased or decreased anxiety, intellectual immersion in subject’s creative endeavor, changes in emotional well-being, feelings or attitudes, and other indicators of effects were noted. Lack of change, either positive or negative was also noted in some of the participant’s experiences. This was considered a significant indicator of effects.
6. Portraits were returned to participants for verification, and to ensure that the tenor, ambiance, and emotions are accurately captured in the narrative. Upon return of the narratives, participant’s comments, corrections, and additions were edited into the text to create final, cohesive narratives from which data were drawn from the final report. This researcher also kept a separate reflective journal about the research process and included it in the appendices to the study as recommended by Carter (2000). In this manner, researcher’s personal reactions to the data and own biases, confusion, concerns, and observations in the researcher process add to the richness of the study.
7. Relating identified themes and patterns to an analytic framework in literature. Data gathered via the study was compared against those found in existing literature about returning to work after trauma and consistent patterns and themes noted. New information not previously presented in existing literature is presented.
8. Presenting data by expressing the combined experiences in a personal artistic display that Moustakas (1990) calls a creative synthesis. This creative synthesis will include the final narrative that expressed the themes and patterns that emerged from the study.

# Ethical Considerations

 Clinicians strive to predict which patients will recover from trauma and regain functionality and which will require more time and treatment. An individual’s odds of recovery depend greatly on many factors, medical as well as nonmedical. The patient’s expectations for recovery, social support available, and the intimate meaning the trauma survivor makes of his or her distress all influence the recovery (Holtslag et al., 2007). The success of caregiving may hinge on an understanding of the injury recovery process. Some affected by trauma will remain so irretrievably damaged by their experience that they can no longer participate in the competitive workplace (Asmundson, Norton, Allerdings, Norton, & Larsen, 1998). Others may prove to be more resilient. Not everyone who experiences an injury develops debilitating symptoms. Research findings suggest the physical effects may heal while the psychological effects may remain, causing longer term challenges. Recovery from trauma, regardless of the cause or effects, is an individualized process. Each trauma survivor's recovery process is unique (Kellermann, 2009).

The primary researcher completed the required CITI modules for this study as well as the SMR documentation. She also completed the IRB document required for the project.

As a trauma survivor, and as an individual who has experienced first-hand the effects of traumatic brain injury as well as other physical injuries associated with her motorcycle crash, this researcher is acutely cognizant of the sometimes delicate nature of the trauma survivor’s state of mind. This awareness has guided and influenced her actions as she worked to build rapport with participants. This consideration has been a factor in the effective gathering of data through informal, conversational interviewing and journaling through ethical means and has been critical to her success in these interviews. Thematic analysis of conversational interview dialogues, journaling, and integration of other data collection methods such as email, observational data, and review of participant’s blogs has been a central component in her data gathering and analysis process. Over the years, this researcher has accessed the ability to build relationships with others based on similarities and shared experiences as she has worked extensively as a coach and instructor in the martial arts for more than 20 years. She has worked extensively with individuals in a variety of teaching situations including tutoring and training in computer programs, managing teams in a business environment, and giving workshops in art and business. This has resulted in an extensive background in careful observation and documentation, often requiring thematic analysis of a variety of disciplines. This researcher felt that these were highly correlative to the skills necessary to ethically execute the research project presented here, and she felt well prepared and confident to conduct this research study in the highest ethical standards.

To further ensure ethical considerations were addressed, the investigator made the boundaries of the research very clear from the onset with regards to the nature and the context of this research study and the specific parameters of her unique relationship with the participants. This strategy consisted of clearly making it known to each participant that no payment to the primary participant would be incurred during the study. The participant had the option of removing them from the study at any time, for any reason, without risk of reprisal. Participants were also informed that the interaction with the primary researcher and participant would always take place as a conversational interview, with non-directive informal dialogue. It was also made clear to the participant that the direction of the data gathered would be predicated on the intent of exploring and jointly explicating the lived experience of returning to work after a traumatic injury. Each was also assured that he or she would have the right of approval regarding that which was written in the final paper, as it relates to the information during the interview, shared for the purpose of the study. Finally, the participant was promised and provided complete anonymity.

Each participant was chosen for their willingness to participate. Participants were informed as to the nature, purpose, and usage of the study and then asked to sign an authorization to ensure that each was fully cognizant of the intended use of the data gathered during the study. Each was asked to sign a consent form that includes the following (Creswell, 2007):

* The right of participants to voluntarily withdraw from the study at any time
* The central purpose of the study and the procedures to be used in data collection
* Comments about protecting the confidentiality of the respondents
* A statement about known risks associated with participation in the study
* The signature of the participant as well as that of the researcher

It was important to recognize that some individuals who have experienced trauma may be at risk of re-traumatization stimulated by participation in the study. A traumatic injury is often characterized by a complex set of effects including physical injury, emotional trauma, and PTSD. Participants who have experienced physical injury would possibly be under a doctor’s care or had recovered. However, the emotional and psychological effects that result in PTSD may take longer to resolve. Some individuals never completely recover the emotional or psychological state that was enjoyed before the injury but had nonetheless reached a level of functioning close to normal. Recognizing that participation in this study poses a risk of re-stimulating some of the emotional and psychological effects and that talking about the trauma may cause the participant to remember or even re-experience some of the trauma experience it became the responsibility of this researcher to monitor the participant for signs of restimulation. Participants who appeared to be experiencing emotional distress or psychological symptoms such as anxiety, hypersensitivity, flashbacks or other signs of psychological distress were given the opportunity to opt out of the study. However, none of the participants asked to be removed from the study. With diligent and careful monitoring, this researcher felt that each participant was protected in as much as one can be within the scope of the study.

The information pertinent to each participant was also protected to assure confidentiality by implementing some procedures that helped to obscure and hide the information. These include giving each participant a unique identifying number, which operated as a coded link with the general information the primary researcher collected from the participant. Each participant was also given a pseudonym name to protect confidentiality. General information was gathered for each participant, including phone numbers, names, and email addresses. This information was housed in a drive kept separate from the main computer upon which much of the writing was done. A second email address was obtained to manage the email correspondence specific to this study, and at periodic intervals, the emails and other data were collected, downloaded to the separate drive and kept in a locked file cabinet. Only the primary researcher had access to this information. This data will remain secured for seven years, and then be destroyed.

# Expected Findings

In 2011, this researcher experienced a traumatic injury. She was involved in a motorcycle accident, resulting in injuries including multiple broken bones, skull fracture, and severe traumatic brain injury. Before this event, her work in logistics demanded intense organizational skills, computer skills, and leadership skills. After the accident, this researcher experienced emotional and psychological issues along with the physical injuries, including PTSD, anxiety, depression, memory issues, inability to manage emotions, cognitive impairment, and personality and other psychological changes. Returning to work presented a wide range of issues as she attempted to reconnect with co-workers. Relationships suffered both from loss of time and from the other person’s inability to understand the symptoms and changes that had taken place as a result of the injuries from the accident. She found these relationships required extreme effort to redevelop. Anxiety and depression resulted from a perceived loss of the ability to perform to the high standards she had achieved before the accident. The experience of returning to work prompted this researcher to question if her experiences were unique. What had others in similar circumstances experienced? What would the work environment be like if others were aware of the trauma survivor’s challenges? Would the return to work experience be different if others were informed?

This researcher chose the methodology of heuristic study to explore the answers to these questions. A heuristic study differs from other types of qualitative and quantitative inquiry in that it simply explores an experience, with the intent of discovering what information can be gained from the exploration. No theory is presumed before undertaking this type of inquiry. The study takes on a fluid and organic nature, guided and driven by the information that is gathered. This type of study intends to find new information, to discover that which may be hidden from view (Moustakas, 1990).

In keeping with this premise, this study intended only to discover the lived experience of returning to work after a traumatic injury might entail. The main researcher shared her experiences with as little bias or prejudice as possible. Participant’s experiences were gathered and documented only for whatever information might be discovered.

**CHAPTER 4. DATA COLLECTION AND ANALYSIS**

# Introduction: The Study and the Researcher

*Heuristics,* derived from the Greek word that means “to discover.” Heuristic study is one in which learning is achieved through experience (Witt & Kleining, 2000). The researcher is called upon to think things through, to deduce, to consider deeply, and to affect a process of elimination. A heuristic study is, as Moustakas (1990) suggested, born out of a researcher’s deep passion for a phenomenon. It serves as the foundation throughout the research process. This passion drives the researcher to formulate the research question, collect and analyze data and seeks an answer to the question. Moustakas (1990) continued that the researcher’s passion and involvement in the research of the phenomenon are evident as the researcher makes no claims to remain objective during the collection and presentation of the data. It is this deep immersion, this intimate perspective that makes a heuristic study unique among qualitative research. It is also the quality that leads to deeper understanding of the intangible aspects of the research question.

This study was driven dynamically by the researcher’s desire to gain insight into her personal experience of recovery from the traumatic injuries received from a motorcycle crash. Each of the injuries – multiple broken bones, fractured skull, severe traumatic brain injury (STBI) – held its place in the recovery experience. However, the STBI ultimately emerged as the focus of the experience. The study permitted the researcher to immerse herself into the question of what was her lived experience. It became an experience of discovery – of self, of others who experienced similar injuries, and of the environment and culture surrounding the experience. The foundation of the research was laid in the first three chapters of this dissertation with a presentation of the research subject and the experiences that prompted the formulation of the question. The choice of methodology was explained, and its logic, then the step-by-step methods for data collection and analysis were presented. This chapter, Chapter 4, has the primary purpose of presenting the results of that analysis and will contain an explanation of the data analysis and discuss the study’s findings. The collective phenomenon, or essence of the experience that has been extracted from a process, is inherent to heuristic research (Hiles, 2002). The source for origination is the researcher and her participants’ responses to the research question: “How do you perceive and describe your experience of returning to work after a traumatic injury?”

As the research was conducted, some themes began to emerge. Ultimately, as the research evolved, a perception was identified as an essential component of the experience and took the focus of the study. It became evident that heuristic study of the phenomenon was the correct choice for this research and would ultimately prove to be the method that recognized the importance of the individual perceptions. This realization did not fundamentally alter the research question, but it did drive the research path. All research begins with assumptions. Researchers pose a question, and most do so with an honest objectivity, doing their best to remain objective. A heuristic study, by its nature, requires the researcher to put aside all assumptions and be willing to follow the research toward an answer to the question at hand. This study sought to discover what is encountered by those who have survived a traumatic injury and then attempted to return to work; to discover what is, in essence, the learned as one attempts to regain normalcy after experiencing a trauma. All human experience, regardless of how minor or insignificant, carries the possibility of changing the person who has the experience. Trauma, described as a distressing or disturbing experience resulting in an emotional response (American Psychological Association: Trauma, 2016) has the possibility of affecting, changing or altering perceptions of the survivor. The heuristic process allows the researcher to become an integral part of the study by experiencing the phenomenon, but also allows the researcher to gain the unique perspectives of other individuals who have experienced the phenomenon by learning their stories through interviews (Moustakas, 1990). The researcher’s experience is accepted as important and encouraged through self-discovery and creative self-process, along with gaining perspectives from others (Moustakas, 1990). These self-discoveries and creative aspects of self-involvement are also important elements of data collection, data analysis, data interpretation, and in sharing the information with others (Neuman, 2003). Regarding answering the research question, as well as the subcomponent of the question of self-efficacy, the inclusion of self-data in the process is of equal importance as collecting data from others. To this end, it is important to explore and share the lived experiences of the participants as well as to include my self-process (Moustakas, 1990).

This chapter includes: (a) a description of the researcher’s personal experience with the research topic; (b) a description of the research participants, hereafter referred to as participants; (c) a step-by-step description of the heuristic process applied to the process of data analysis, as guided by Moustakas; (d) a presentation of the data and its movement from specifics unique to the data to the abstractions of patterns and themes; and (e) a creative aesthetic synthesis of this final interpretation representative of the researcher. The chapter concludes with a summary of the research findings, explaining the universal essence of the experience of returning to work after traumatic injury as emerged through abstract themes. A heuristic inductive process extracts the context of the contribution of each participant's perceptions and descriptions of their experience

**Researcher’s Personal Interest and Involvement**

2011 was the year of change. The researcher had reached the completion of her coursework in Industrial/Organizational Psychology and was looking forward to starting the doctoral dissertation process. She was immersed in the process of determining a topic for her study. She had built a career as a logistician and database manager, performing the job successfully for large civilian military contractors, and state and Federal agencies. She was an avid Kendo practitioner. She was married to a long-time biker. She was the mother of two adult children. She was a successful artist, tailor, and budding novelist. She was looking forward to becoming an I/O psychologist and making a significant career change. On a sunny day in July, that all changed. Everything turned upside down.

On that day, she was a passenger on a motorcycle driven by her husband, a biker with more than 30 years riding experience. They had ridden together for years, traveled hundreds of miles by motorcycle. That afternoon the unthinkable happened. They were involved in a multi-vehicle accident in which she was thrown from the motorcycle at high speed. This accident resulted in a week in a hospital, 12 broken ribs, and multiple broken bones in hands, fractured skull and severe traumatic brain injury (STBI). After five days in and out of consciousness, she was told that her husband had suffered a broken back, shattered shoulder, fractured skull and traumatic brain injury to the right frontal lobe. She was released from the hospital after seven days, but he remained hospitalized for another five days. Upon his return home, she found herself thrust into the position of his caregiver. Despite the stresses of her physical, psychological, and emotional recovery, and the challenge of providing care for a 300 lb. Hawaiian man, she found she was also in a position of needing to work. Sitting at home with a disability was not a luxury she could afford.

The researcher’s studies in I/O psychology had illuminated to her the value of work. She had become cognizant of the important role it plays in a person’s life. In our society, individuals identify themselves by the work they do. Work provides not only a means of survival by providing a wage, but is, for most, a source of self-esteem, a means by which one finds a sense of place in society, and source of social interaction, connection, and belonging. Studies have shown a clear correlation between personal motives and values and work (Furnham, Hyde, & Trickey, 2013). McClelland (McClelland, 1961, 2010) found work associated with achievement motivation, authority/power motivation, and affiliation motivation; all aspects of psychological development that determine success. In our society, work provides the fundamental means for meeting those human needs as described by Maslow (1943, 2013) as critical to life. The wages, an agreement between employer and employee, in which the employee provides time and energy in exchange for money, allows the worker to meet his fundamental physiological needs of food, shelter, and the necessities of living. Also, the security of the job allows the employee to meet her fundamental needs for safety, and the social interaction and social structure allows her to meet her basic needs for belongingness and love, esteem, and self-actualization. The intellectual challenge of work, the chance for promotion, and the opportunity to learn new skills and gain knowledge allows the worker to meet her needs for personal and intellectual growth (Maslow, 1943, 2013). The value of work is undeniable and a recognized element of our social structure and culture.

As a person who has always worked, who was raised with an ethic in which work is a necessity on many levels, and who is psychologically predisposed to work, the sudden inability to work was startling for this researcher. Long before she began to study the effects of work on the individual, she was cognizant of the value of work on a personal, emotional, psychological and intellectual level. The effects of trauma on the individual brought a new element into the mix. The requirement to act as different caregiver put enormous strain on the researcher. This adversely affected both the marriage and the efforts to continue with her doctoral requirements. The physical injuries of broken bones made long hours at a computer keyboard painful and exhausting. The researcher is allergic to painkillers and opiates and was unable to treat the pain of her injuries pharmacologically. The most problematic and debilitating injury, however, was the severe traumatic brain injury. The symptoms resulting from this injury included migraine headaches, short term and long term memory loss, inability to focus, attention deficit disorder (ADHD), obsessive-compulsive disorder (OCD), cognitive issues related to reading, comprehending, and processing information, communication issues including aphasia, mental and physical exhaustion, post-traumatic stress disorder (PTSD), depression and anxiety.

This researcher discovered during this time of high stress that the only means of handling the pain and physical limitations caused by the injuries, was to spend long hours in her artist studio, painting watercolors. She found that the creative process helped to reduce her pain considerably. This prompted her to question why it seemed that while she had difficulty typing and concentrating enough to do the research necessary for the dissertation process; she could hold a paint brush and create new works of art. During this time, she was extremely productive, producing as many as 3 to 4 paintings per day of various sizes, in various media. Research into this phenomenon led to a discovery of the value of art therapy for survivors of PTSD and TBI. In 2015, Schouten et al., undertook a systematic review of controlled, comparative studies on art therapy for trauma in adult patients. They noted a significant decrease in psychological trauma symptoms in treatment groups, and one study reported a significant decrease in depression. Although there are limitations in the study, the results contributed to insight into the effectiveness of art therapy in trauma treatment and form an evidence base for the urgent need for further research on art therapy and trauma treatment (Schouten, de Neit, Knipscheer, Kleber, & Hutschemaekers, 2015). A number of standard treatments have been recognized as effective for the symptoms of PTSD and TBI, including Eye Movement Desensitization and Reprocessing (EMDR) and Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), but several authors (Bisson et al., 2007; Bradley, Greene, Russ, Dutra, & Weaten, 2005; Harvey, Bryant, & Tarrier, 2003) have stated that more than 30% of the clients do not benefit from these treatments. Many of these patients suffer from prolonged or multiple exposures to trauma (Robertson, Humphreys, & Ray, 2004; Spinazzola, Blaustein, & van der Kolk, 2005) or have a poor verbal memory (Wild & Gur, 2008). For these patients, no alternative evidence-based treatment has been recommended, but art therapy might offer an appropriate alternative treatment for such patients because it appears to fit in with the nonverbal nature of traumatic memories (Herman, 1992). These findings help to support this researcher’s experience with art as a therapy, one that helped to provide a means of expression of aspects of the trauma and the traumatic injury that were ultimately inexpressible by conventional and expected means. The subsequent assumptions regarding its value encouraged this researcher to seek further information on this phenomenon and to plan later studies about art therapy and its value as a trauma treatment.

After several weeks, it became necessary for this researcher to return to work. Although recovery was still ongoing, her pain had subsided somewhat, enough to make it manageable with over-the-counter pain medications such as Ibuprofen and Tylenol; economic stresses had increased exponentially following the accident. This researcher’s husband was unable to work, had suffered considerable physical, psychological, emotional, cognitive and relational issues, rendering him both unable and unwilling to work. Although still faced with numerous issues of her own, she began the process of returning to work. She discovered that although she was aware that she was in a highly stressful situation, she was only partially cognizant of the deep psychological, emotional, physical, cognitive and relational issues she was experiencing as a direct result of the accident. Unable to return to her previous job, she had been separated from her position under the premise of not being able to do the job. At the time this researcher was not aware that PTSD and TBI survivors are afforded protected status under the Americans with Disabilities Act. This type of behavior by organizational professionals is prohibited under ADA. Ironically, although this researcher had served as union liaison for the workforce for several years before the accident for more than one organizational workforce, it did not occur to her that there were options for fighting the separation. It was as if she had never known this information in the past. Long-term as well as short-term memory issues and cognitive issues are common among TBI survivors (Boyd, Rodgers, Aupperle, & Jak, 2016). This discriminatory practice, one that is also illegal under employment law, has since been found by this researcher to be the norm rather than the exception in the business world.

As this researcher continued to navigate the employment world, she encountered bias and prejudice that adversely affected her attempts to find employment. This bias became evident when interview after interview resulted in no offers of employment. Many of the interviews were for positions for which this researcher was eminently qualified. She offered years of experience, had received awards for her accomplishments, and had received numerous positive references from former employers, as well as co-workers. No reasonable explanation could be found for her inability to secure employment. One factor did emerge through these interviews and remained consistent throughout the interview process. While the interviews always took a positive direction, enough so that it appeared that an offer was imminent, at some point within the interview process, information regarding the motorcycle accident would at times emerge. At this point, the interviewer’s demeanor often changed, and questions would turn toward this researcher’s ability to do the job effectively. Memory issues would sometimes become evident during the conversation. Discussions of technical requirements such as which computer programs with which the researcher was proficient, or whether she was capable of learning new or customized programs would lead to questioning by the interviewer. Although this researcher holds a bachelor’s degree in database management, along with several years’ experience, this level of questioning began to lead to increased levels of anxiety. While interviewing for work is an anxiety producing situation under normal circumstances, interviewing while managing the symptoms of PTSD and TBI can result in levels of anxiety exponentially higher than normal. This researcher began to conclude that employment would not be possible unless she could keep the issues related to her PTSD and TBI from becoming an adverse factor during interviews, and subsequently while performing the requirements of her job once finally employed. She began to be very selective about with whom she shared this information. Also, she found that disclosing that she had suffered a TBI and the related PTSD in professional circles, often resulted in bias and assumptions by others. Many operated under misconceptions, misinformation, and incorrect assumptions regarding both PTSD and TBI. This researcher also found this common among social circles as well, as associates, family, and friends displayed evidence of similar biases. Eventually, she could secure employment, but at a position far below her experience and skill level.

These experiences prompted the researcher to ponder the experience of surviving a traumatic injury and then trying to return to a level of normalcy. She began to ask “what have others who have survived a traumatic injury experienced when trying to return to work?” This researcher perceived bias from those in the workplace. She wanted to know if other TBI survivors perceived similar biases. Were similar biases consistent among organizational professionals? What information did these professionals have that informed their interaction, development of policies, and efforts to help employees who have survived a traumatic injury obtain employment and remain employed? While the Americans with Disabilities Act provides protection for disabled individuals, how effective are laws at helping to diminish or eliminate human biases and assumptions?

This researcher began exploring the phenomenon as a means to gain professional knowledge, and to find answers to the questions posed herein. However, she also found that the research process opened new discoveries and convergence to her experience. Her search for existing information to understand the phenomenon led to the conclusion that returning to work after a traumatic injury was a phenomenon that has garnered scant research. She posited that the return to work after traumatic injury experience was not a new phenomenon. Employees have been experiencing traumatic injury for centuries. Employment laws have developed considerably over the years, requiring employers to protect employees in the workplace by providing safe environments in which to work, offering means of personal and professional intellectual growth, and increasing social awareness that supports a fair and respectful workforce. Her review of the existing research found that much has been learned about creating safe and productive work environments.

Traumatic injury has been found to affect both the employee and the organization in various ways, both in the workplace and as occurs outside work. As this researcher delved deeper into the question of how traumatic injury affects the employee, she found that the return to work experience has been examined extensively. Consistent with the existing research, however, was evidence that the phenomenon has been studied from a clinical, organizational or researcher’s perspective. She found that little has been done to increase understanding of the phenomenon of returning to work after a traumatic injury as can be gained by examining the phenomenon from the injury survivor’s viewpoint.

This researcher began examining her experience as a way to explore the phenomenon. This personal exploration led her to understand that she not only needed to understand the experience of returning to work after traumatic injury from a personal perspective, she would also need to understand it from a professional viewpoint as well.

As an Industrial/Organizational psychologist, this researcher understands that an individual’s reality is composed of perceptions. To work with individuals who have survived a traumatic injury and then returned to work, as well as work with those within the organizational environment, it was important to understand the phenomenon beyond what she experienced. She realized that the way to fully and completely understand the phenomenon was to delve into the lived experiences of others who have also survived an injury and then returned to the workforce. This shared information, along with her experience would allow information to be gathered that is not available on a conscious level (Moustakas, 1990). The heuristic process allowed her to glean the individual as well as the composite experiences of returning to work after a traumatic injury. Eight participants shared their experiences of returning to work after a traumatic injury and their stories present a diverse perspective on multiple levels. Although this study originally identified ten participants, two were later found not to be viable participants for the study. Their willingness to share their experiences contributed to a rich and robust description of the phenomenon of what it is like to return to work after a traumatic injury.

# Description of the Sample (Participants)

In addition to the researcher, who is the primary researcher in the study, 14 individuals expressed interest in participation in the study. Of these 14 individuals, six ultimately did not participate in the final study. One individual, a man in his 40s, was injured on the job and was terminated soon after. He did take a job selling cars, but he experienced the extreme stress of recovering from his injury. His injuries included mild traumatic brain injury as well as physical injuries, but the most debilitating effects of the injury included mood swings, cognitive issues, memory issues, and anxiety. Over time he became convinced that his employer did not understand his challenges and was not doing enough to provide accommodations for his specific needs. During this time of extreme stress, he also experienced marital and family conflict is leading to separation. Eventually, he determined that participation in the study added emotional stress that exacerbated both his injuries and his emotional state. Two other individuals also experienced emotional issues due to revisiting their traumas. It was found that the nature of the study had the predictable effect of increasing emotional stresses and anxiety when these individuals talked about their traumas. Those individuals who found that discussing the details of their traumas re-stimulated memories thought to have been laid to rest or resolved were allowed to discontinue participation in the study. Re-stimulation of symptoms or increased symptoms including heightened emotions, flashbacks, increased anxiety, and other symptoms is not uncommon when an individual who has experienced trauma is placed in a situation of remembering the trauma (Kausch & Marks, 2013). Another individual who had expressed strong interest in participating in the study experienced a work injury, then suffered a brain injury that resulted from medical malpractice that occurred during surgery to correct the condition. This resulted in coma and then the loss of skills that rendered him unable to work. The severity of his traumatic injury, coupled with the subsequent legal issues was determining factors in his qualifications to participate in the study. Although he expressed strong motivation to participate, it was ultimately decided that participation in the study would have placed him at risk of emotional and psychological harm. Two other individuals who expressed interest in participating in the study found that they were challenged with time management issues. One more individual expressed strong interest in participation but is currently actively involved in therapy and treatment for a complex blend of psychological trauma resulting from extensive and chronic long-term trauma. The primary researcher made the decision that participation in the study may have placed the participant at risk of psychological harm and therefore was not included in the study.

Eight individuals took part in the study as participants. Of the individuals who did bravely and openly share their experiences, three were women, and five were men. Along with the primary researcher, this helped to create a nearly even balance of men and women. Three of the participants learned of the study when the primary researcher attended a support group for people with traumatic brain injuries. One individual was contacted through social media after learning of book she had recently published in which she discusses her injury, the subsequent healing process, and how work has played a major role in that healing. One individual was approached about participation after meeting at a seminar in which he was a speaker. Three of the participants learned of the study through acquaintances of the primary researcher and expressed interest in participating.

Three of the participants acquired their injuries because of motor vehicle accidents, which aligned well with the method of acquisition experienced by the primary researcher. Two of the participants acquired their injuries from falls which happened during the performance of normal daily routines. One participant experienced multiple concussions acquired during years of sports activity. Two of the participants received their injuries during the performance of work. One of the work injuries was a type of auditory trauma that is not commonly encountered during the performance of the type of work he was doing at the time. Four of the participants, as well as the primary researcher, had experienced injuries from multiple traumatic events. Four of the participants did not express multiple incidents, so no multiplicity is assumed.

Two of the individuals are in their late 20s, one in her late 30s, but the rest of the participants are all within the age range of 50s to mid-60s. Four of the individuals are white, and four are ethnic minorities including Mexican-American, Pacific Islander, and Chinese. Four of the participants provided their information from locations distant to the primary researcher while four participated locally, providing their information via face-to-face interviews. Educational levels varied considerably between participants, with four having attended college while the other four have high school educations. The primary researcher holds the highest level of education, with three bachelors, a master’s, and her current doctoral pursuit. Three of the participants are single, four are divorced, and including the primary researcher and one is married. Three are not involved in close relationships. Five of the participants have adult children, including the primary researcher.

Each of the eight participants continued to work at the job they had at the time of their traumatic injury. However, two of the participants had to stop working due to pain or other symptoms resulting from the traumatic event. One of these participants spent nearly two years attempting to find employment while dealing with the symptoms of his injury. He recently completed a vocational assessment and placed into a job where he performs tasks vastly different from those he performed before his injury. The other participant who was forced to stop working at a point several months after receiving her injury has been determined permanently disabled and no longer works. Six of the participants changed jobs at some point after their injury due to emotional, psychological, intellectual or physical changes or limitations that developed following their traumatic injury. These individuals have all developed new and different skills reflective of the changes that occurred because of the injuries. Five of these individuals report that they are more successful with their new jobs and with their new skills than they were before their injuries. One of the six participants who has been forced to change jobs, however, continues to try to do the same type of work he was doing before his accident. He is having difficulty in this regard, as he reported that issues with cognitive and other skills, memory, mental and physical exhaustion and other symptoms of traumatic brain injury are interfering with his ability to perform well. One of the five is now retired.

# Research Methodology Applied to the Data Analysis

**Data Collection**

Data collection began when the dialog was initiated between participant and primary researcher. This researcher found that during social conversations, in which she revealed that she was engaged in a study to learn more about the experience of returning to work after a traumatic injury, those with whom she was interacting would almost consistently express interest in knowing more about the study. This researcher found that a large portion of the population has at some point suffered a traumatic injury that affected their ability to function in the workplace. Current statistics presented by the Centers for Disease Control (CDC) confirm the prevalence of traumatic injury, specifically traumatic brain injury (TBI). An estimated 1.7 million people in the U.S. sustain a traumatic brain injury annually, ranging from “mild” to “severe.”

These injuries contribute to a substantial number of deaths and cases of permanent disability and include injuries ranging from a bump, blow, or jolt to the head or a penetrating injury that disrupts the normal function of the brain. These injuries include falls, which are the leading cause of TBI, resulting in the greatest number of emergency room visits (523,043) and hospitalizations (62,334). Motor vehicle-traffic injuries are the leading cause of TBI-related deaths, with rates highest for adults between the ages of 20 and 24 years (*Get the Stats on Traumatic Brain Injury in the United States*, 2016). These statistics support this researcher’s assumption of the prevalence of traumatic brain injury and explain her ability to find individuals who were willing to share their experiences in the participation of the study.

Data gathering was conducted through conversational interviews. Each participant was vetted for viability for participation in the study through conversation in which this researcher guided the conversation via open-ended questions and allowed each participant to tell their story at his or her pace and in his or her words. Because the nature of traumatic brain injury often leads to issues with attention and focus, as well as communication issues, most of the participants opted to forego recording the conversation. Attempts to record conversations with participants resulted in excessively long recordings that tended to contain large amounts of non-specific and extraneous information. Also, because revisiting the details of a traumatic event has been found to restimulate emotional and psychological effects of the event, and participants consistently expressed discomfort with this element of the process, this researcher opted not to record conversations. The open nature of the conversations led to taking notes during the conversation to capture the details of type, date, and effects of the injury, as well as the subsequent experiences shared by each participant. Participants were given the opportunity to review this researcher’s narratives for accuracy and validity. All participants approved the final narratives.

During initial conversation, each participant was supplied with an explanation of the study, the purpose of the study, and the procedure that would be used to capture their stories. Participants also received an assurance of confidentiality, and information on who would have access to the information, the ethical issues, and the benefits and possible risks associated with the study.

Four participants shared their stories in a local venue. Arrangements were made to meet in a casual setting to reduce stress. This researcher met with these participants at local coffee houses. Four participants shared their stories via long distance methods due to geographic locations – two via phone conversation and two via email. One of the participants who communicated via email is a professional writer and gave permission for the study to include information she shares through her book and blogs. In-person interviews averaged one-and-a-half to three hours. Phone conversations averaged one hour. This researcher also conducted follow-up interviews with each participant, seek answers that clarified and expanded on the details presented in each participant’s narrative. Each participant averaged three interviews, while two of the participants had four meetings.

Each participant was given a written description of the procedures and a brief overview of the study before it began. As each participant had already had an initial conversation with the researcher, the written documents served as support and clarification for each participant. Each participant was also asked to sign an informed consent document that states that they understand the nature, purpose, and intent of the study and agree to participate by providing information about their personal experiences. This document also contained a glossary with descriptions of the terms each participant would encounter during the interview process. These terms include trauma, work, experience, productivity, and coping skills. Each participant was informed that the type of trauma, time of trauma, and type of work were not being considered as factors warranting focus, but that these factors would be presented as inherent factors within the scope of the narrative. Rather, the study focused on the return to work experience, the participants’ perceptions, emotional and psychological responses, and insights developed from interaction with supervisors and co-workers. Personal environment including perceptions of family, friends, and other associates would also be included in the narrative, allowing the building of a rich and robust description of each participant’s experiences.

Each interview began with the participant being asked to talk about their traumatic event, the injury that occurred and how it affected their work. Each was given the opportunity to share his or her experiences and perspectives according to their needs. Most the participants began the interview by recounting the traumatic event; others began by focusing on the effects the traumatic event had on the various aspects of their lives. Some of the participants answered the main research question as a matter of course while discussing the traumatic event and it was not necessary to rigidly follow the interview guidance format. For others, it became necessary to ask specific questions following the interview guidance.

As recommend by Berg (2004), this researcher asked probing questions during the interview conversations, to further the descriptions already being offered by the participants. This researcher kept notes during these conversations, capturing vital information regarding the traumatic injury, the type of work being done by the participant at the time of the injury, and details about the social environment in which the participant lived. As the interviews progressed, this researcher began to take notice of similarities between participants’ stories. This led to notes regarding recurring themes that were emerging as the research progressed. This researcher also noticed unique qualities that set each participant apart from the others. The similarities were compiled into an extensive document which contained the researcher’s observations of consistencies shared by the participants. These observations often led to additional research into these recurring characteristics, to gain knowledge about those elements of the experience of trauma that appeared repeatedly, and could be either attributable directly to the trauma experience or to the human experience that accompanies a traumatic event.

The information being shared via the interviews with participants about their traumatic injuries was deeply personal and often intimate. Participants bravely allowed the intimate details of their experiences and perceptions to be shared with this researcher. As this researcher became immersed in the stories of the participants, she became cognizant of honesty and openness each participant displayed. Each participant connected with the researcher in a deeply personal manner that was dependent upon the rapport that developed between the researcher and each participant. Very early in the interview process, the researcher became aware of the level of vulnerability each participant was allowing. This led the researcher to pay strict attention to the non-verbal cues that indicated emotional and psychological vulnerability and often led to asking sensitive questions. The researcher recognized the honor and trusted each participant was bestowing on the researcher, and this resulted in the researcher accepting that listening to the participant as he or she shared his or her story was far more important than simply noting facts. Because of the level of attending each participant, she could recognize that the emotional responses that occurred about the traumatic event were still as fresh for those whose injury had occurred years before the present time as they were for those whose injuries were more recent. This approach to the process allowed this researcher the opportunity to develop an increased self-awareness, self-discovery, and a deeper understanding of her experience (Moustakas, 1990).

Upon completion of each interview, this researcher planned to meet with the next participant. It was also during these periods between interviews that this researcher would revisit the materials in Chapters 1, 2, and 3 to revise sections as needed. This allowed time between the interview and writing the narration. These short periods between interviews allowed for the incubation period described by Moustakas (1990), in which one is removed from the intensity of the study and allows tacit knowledge and intuition to take over so creativity and integration could surface. After these periods of incubation, the researcher reviewed the notes and then wrote each participant’s narration of their traumatic event and the experience of returning to work. Each participant is identified within the context of his or her narration only by number or initials. All geographic information is also stripped from the narrative. This helps to ensure the protection of the participant’s anonymity.

As the interviews progressed, this researcher noticed multiple consistencies as themes emerged. As each participant was interviewed, and new themes were noted, previous narrations were reviewed to discover if those new themes existed within the context of the previous interview but had previously gone unnoticed. When indicators of new themes emerged during the review process, this researcher then contacted the participant to ask additional questions. Often, these additional questions brought more themes to the surface, prompting the researcher to revisit subsequent interviews. This allowed the researcher to verify and confirm the newly noticed theme. The research soon developed into a process that had a forward/backward/forward momentum. This researcher built an extensive database of consistent themes. As the research progressed, newly identified themes were added to the database. The research process also began to include additional research into existing literature to discover consistencies not noticed before engaging in the research process. This back-and-forth process gave the researcher an opportunity to experience each interview from a different perspective. As she learned more about the experience of returning to work after a traumatic injury from interacting with each participant, her self-awareness, self-understanding, and self-discovery were enhanced. Moustakas referred to this process as the illumination phase of the research process (Moustakas, 1990). Themes and subthemes became apparent and were validated and confirmed as she continued to add to the created database of common themes. These commonalities formed the basis for coding the experience characteristics of each participant and allowed a quantification of the themes and subthemes. This coding provides the basis for graphs and charts that illustrate what an individual who has experienced a traumatic injury and then returned to work experiences.

Moustakas (1990) likened this illumination phase to a type of hidden knowledge that is present in mind but not acknowledged. As the interviews progressed, and more information was shared by each participant about their personal experiences and perception, this researcher found she related to what the participants shared and found that her feelings converged with those of the participants. Moments of catharsis occurred during this process, leading to “aha” moments. It soon became evident to this researcher that emotions and perceptions that occurred shortly after her accident had been dismissed as unrelated to the accident. However, as she listened to the stories of the participants, she found that some of their experiences resonated with her, aligning with her experiences, emotions, and perceptions. She found herself relating to the words of the participants on a deep and intimate level. For example, this researcher experienced anxiety, fear, trepidation and lowered esteem when she discovered that she was experiencing challenges with memory, mood, cognition, communication, balance and coordination, and other changes immediately following and progressively later after the accident. She found she could understand and relate too many of the physical, psychological, and emotional symptomatology that the participants shared and that this allowed her to delve further into the participants’ stories for new and more complex information. This researcher’s feelings began to make sense. Many of the participants reported lowered self-efficacy, lack of self-trust, helplessness, self-doubt. The physical issues this researcher experienced such as migraine headaches and tension, muscle and joint pain in areas other than where broken bones or physical injuries had occurred were shared by several of the participants. Some also reported struggles with unexplained or uncontrollable emotions of anger or sadness at times, inappropriate laughing or periods of emotional flattening and detachment, which were also challenges shared by this researcher. She soon found herself immersed in their stories.

Before beginning the research phase of this study, this researcher read much about traumatic injuries and gained an understanding of the effects of on an intellectual level. She felt well situated to work on the research from an objective perspective. However, in connecting with others who had experienced traumatic injury and then returned to work, she discovered a level of psychological trauma heretofore not realized in her experiences. This deep understanding on an intimate level allowed her to understand more deeply on an emotional and psychological level the pain and challenges that those who have survived a traumatic injury suffer. This realization led to an even deeper commitment to the study. This researcher immersed herself more completely into the experiences of each participant, living with the effects of traumatic injury more fully. She came to embrace the heart and soul of this type of research.

It is from this newly embraced perspective that the case studies were written, with each extensive receiving consideration to identify all emerging themes and subthemes. It was during this process that the back-and-forth progression took place. This researcher engaged in the long hours of review of the material shared by each participant to identify all emerging themes and subsequent sub-themes. This analysis was not a static activity, but rather a dynamic endeavor that took on a life of its own as she went over the material multiple times, searching for and identifying the individual truths. Each review brought new insights to the surface and prompted her to return to other participant’s narrative but to review the narrative from a new perspective. Also, as this multiple review process progressed, she was struck more than once with individual truths that resonated within her story. The researcher’s narrative is viewed as an equal part of the research data, not separate from the other narratives, and thus was included in the back-and-forth review process. Each participant’s narrative was reviewed as many times as it was felt necessary to gain additional insight. Only when this researcher felt that all had been gained from each experience, did the review process stop. This eventually resulted in this researcher writing her interpretation of each interview from a different perspective, an awakening of the phenomenon.

Once each participant’s narrative was written, it was emailed to each participant for review. Each was requested to read the narrative, and then suggest additions, deletions or changes that were appropriate in their eyes. Individual participants requested very few details. As each narrative focused on the experience of the participant, with specific details removed to protect each participant’s anonymity, the narratives became a presentation of the experience, rather than a description of the time and placed the person received the traumatic injury. The participants were elevated to the essence of their experiences, rather than simply reduced to a person who had received a traumatic injury. The essence of the experience, with the feelings, perceptions, thoughts, and ideas, at became the focus of the narrative. Every effort was made by this researcher to capture the essence of the experience, to bring the participants’ experiences to life. The heuristic process is more than simply the acquisition of knowledge, it is a process that brings new understanding (Moustakas, 1990), and this researcher crafted participant narrations using the participant’s words to bring to life the essence of the experience.

This researcher found that the experience of each participant was unique and that each participant told his or her story in his or her way. While there were similarities in how each participant had received his or her traumatic injury – some had experienced falls, some motor vehicle accidents, some sports injuries – each participant’s experience was unique and specific to them. Each responded to the traumatic event in his or her way. However, as this researcher built each narration, it was found that the stories converged on multiple levels. Because of this, determining the order in which the narrations are presented came into question. Individual narrations could have been arranged according to type or cause of traumatic event, cause of trauma, or level of severity of injury or symptomology associated with the injury. Other factors that might have determined the order in which narrations were presented could have included the length of time since receiving the injury and what resolutions or recoveries have taken place. They could also have been presented according to more benign criteria such as age, gender, profession, size or type of organization in which the participant was employed at the time of the injury. This researcher also considered whether the injury was received at work or outside of work. Each of these considerations would have been a valid means of organizing the data for presentation. After much consideration, it was ultimately decided to present the data in order of type of traumatic injury. This researcher received her injuries via motor vehicle accident (MVA), as did four of the participants. MVAs are one of the most common methods of which individuals are injured (Get the Stats on Traumatic Brain Injury in the United States, 2016). Of the nine researchers, including the primary researcher, eight received traumatic brain injuries. Two received their injuries from falls; one received him from multiple sports injuries, and one received his from an auditory work injury. Based on prevalence, then, this researcher determined that presentation of data according to cause and type would be the most logical means of organization. This organization decision does not reflect the importance of the effects of the traumatic injuries, nor does it reflect the value of each participant. Each participant is considered equal in value and importance to the study. Each contribution is considered equally important. As this researcher added her experiences to those of the participant, she found that while the type, time, or venue of each traumatic event, as well as the behaviors, activities, and tactics or strategies for recovery associated with each, varied greatly from participant to participant, the stories shared common threads. This researcher found her voice within the context of the participants' stories, and that their experiences, feelings, thoughts, and perceptions found a voice within hers.

A robust, deep and comprehensive understanding of the phenomenon of returning to work after a traumatic injury would not be possible without each participant’s willingness to relive his or her experience, and then share that experience with this researcher. Their stories illustrate more than just the challenges inherent to returning to work after a traumatic injury. They illustrate and illuminate the challenges of finding normalcy; or more precisely, building a new “normal.” The individual depictions are presented first, according to the type of injury and cause, and followed by the common depiction (Moustakas, 1990).

# Presentation of the Data and Results of the Analysis

**Individual Depictions**

*Participant 1*

 Participant 1 (P1) is a woman in her 60s who experienced traumatic injuries in a motor vehicle accident in the summer of 1996. She was driving that day, in the performance of her work as a sales representative specializing in high-level printing. She was driving alone, traveling approximately 40 miles per hour, when she approached an intersection in the town where the business and most her clients were located. A woman made an illegal left-hand turn in front of her car, causing a head-on collision.

P1 reported she experienced no loss of consciousness. She was hospitalized for “a few days.” P1 said she does not remember the exact number of days. She experienced extreme and frequent headaches which were attributed to whiplash and a “mild concussion”, as explained by the emergency room physician and nurses. Standard treatment for such injuries was simply to rest, take aspirin for the headaches, and observe for internal injuries or other complications. She remembers she was told the headaches were “nothing to worry about,” and would eventually stop. However, P1 said before long she also began experiencing memory issues, issues with balance and coordination, mood swings and impulse control, and cognitive issues in the form of math functioning. The memory issues came into focus after an incident when the family’s personal checks began bouncing. This was unusual for her; she reported that she had always been extremely well organized, managing to excel at the requirements of her job as well as the demands of motherhood and family. In this instance, however, she had forgotten to deposit a check and had simply acted as if she had done so. Even while balancing her checkbook, she did not recognize that funds were missing and that her account was at a deficit.

P1 reported that this incident caused her to look more closely at the struggles she had been experiencing at work since the accident. The job demanded exceptional organizational and memory skills. She found she was having difficulty remembering even those details of her product line that she had previously memorized and knew well. The memory issues began to plague her repeatedly. Finally, she reported to her supervisor that she was struggling to meet her client’s needs. In response, the supervisor made some accommodations, but the demands of the job were not reduced enough to allow her to be successful at the job. Although she had been highly successful, energetic, and well organized before the accident, P1 said she could no longer handle the stresses of the job. She explained she felt tired, both physically and mentally. She recognized she was having difficulty and this caused her anxiety. She said the more she tried to manage the memory issues and stay on top of the organizational issues, the more anxiety she felt. She explained that this was compounded by trying to keep her problems hidden from her supervisor, her coworkers, and her clients.

P1 talked about the stresses of her home life and said that they had a compounding effect on the stresses of the job. As a wife and the mother of two small children, she felt that expectations at the time were high for her. She stated that her husband and children seemed unable to cope with the changes that occurred in her behavior after the accident, resenting the changes in her interactions with others. She talked about becoming often confused, lost track of time, and feared getting lost. She reported that Post-traumatic stress disorder (PTSD) symptoms such as hyper-vigilance, sensitivity, and anxiety plagued her daily. She experienced anxiety during driving, nervous that she would get lost or confused and forget where she was going, which she states happened often, or have another accident. Her family members depended on her to manage the household as well as provide a large portion of the family income, and the fear that she was no longer able to meet these expectations weighed heavily on her. P1 reported she became deeply depressed at the idea of not being able to take care of her family as she had always done before the accident. Although depression developed along with her other symptoms, she reported that she never received pharmacological treatment or therapy. She states that the pressure to “be ok” discouraged her from seeking treatment for depression or the other symptoms. She reported she was embarrassed and ashamed.

P1 continued to work the high-end paper job for another three to four years after the accident. Ms. P said she is not clear in her mind as to exactly how long this period was but reported that she was never able to achieve the success she had before the accident. Eventually, her supervisor and co-workers suggested that she try another line of work. She quit this job, feeling she would be better suited to a job with fewer responsibilities and lower stresses. She took a job at a small retail store, but this job was short-lived. She said she had difficulty reconciling the cash register tills although she said she did “ok” at sales. After a few months, she was fired from this job, but she stated that her termination this was due to “politics,” and not due to her performance on the job.

P1 said she took a job at a large retail store where she worked for the next 15 years. She stated that by this time she had developed some coping mechanisms, including constant note taking, list making, and mnemonics and other strategies for remembering. She stated that she had difficulties with the cash registers at this position as well and reported that she told her supervisor about her memory and cognitive issues. He allowed her to focus her attention on sales, stocking, and product staging, which relieved her of the stresses of handling money or learning the computer sales system. This was the full extent of the accommodations that were made for her at this job. P1 said no other accommodations were made for her and that she felt that these accommodations were as much as she deserved.

Today, P1 is retired and lives with her daughter and son-in-law. She reported that the memory and cognitive issues persist, even though 20 years have passed since the accident. While her daughter has learned to cope with and accept her mother’s memory and cognitive issues, P1 stated that she has difficulty interacting with her son-in-law. She attributed the tensions between them to his inability to understand her limitations, and that he is personally extremely impatient and demanding. P1 said she has also come to recognize that her symptoms align to what is commonly reported for accident survivors. She said she realized that she suffered a traumatic brain injury and attended a self-help group for TBI survivors. She reports she had taken steps toward finding the medical and psychological treatment that was not available for TBI survivors 20 years ago when she had her accident. She has taken some steps to reduce stress in her daily life, but expressed a wish that her son-in-law would take the time to learn more about TBI in the hopes that this would help him gain some tolerance and acceptance. She said she holds little hope that he will do so. She reported that the quality of her life currently is good.

This researcher noted while talking with this participant that she often displayed signs of shame and embarrassment. She would lower her head and look away, sometimes laugh lightly at herself when she talked about her struggles. This researcher also noticed that although she was enthusiastic about the prospect of telling her story, she would at times minimize, diminish or trivialize the event as she talked. Her memory issues were apparent, and while some inability to remember details of events that occurred can be attributed to age, the evidence of memory issues in TBI survivors appear differently than those that are common with age.

*Participant 2*

Participant 2 (P2) is a business consultant and entrepreneur in his mid-60s. He told this researcher that just before lunch on a day in June 2010, while driving down I-5; his car was rear-ended by a loaded cargo van doing more than 65 miles per hour. Both the front and back of his mini-van were crushed. He walked away from the accident, though not unscathed. He sustained a severe whiplash as well as spine and hip injuries. He reported no loss of consciousness, although common in crashes of this severity, so received no hospitalization for his injuries. He said that the accident was followed by months of chiropractic care, massage, and physical therapy. He expressed frustration and bitterness when he told this researcher that his insurance company eventually wanted to stop covering. P2 reported that it was not until seven months after the accident that he discovered that he had also sustained a serious brain injury. Concussions can occur from sudden rotational or shear forces, such as those experienced during a rapid acceleration or deceleration of the head and neck from a whiplash type of force (Hovda, Wojtys, & Landry, 1999), as well as direct head contact with a hard surface (Hynes & Dickey, 2006). Learning this, P2 said he went to his insurance company to request coverage for neurological testing. Neurological testing can cost as much as $3000, and P2 said his insurance representative was not sure if such testing would be covered. P2 reported that not long after this exchange, he had occasion to discuss the ramifications of his accident with a noted doctor he met at a professional football conference. It was during this discussion that P2 learned that a severe concussion could occur as a result of only a 9 mile-per-hour impact. P2 now shares this information at every opportunity.

P2 reported that sometime in January 2011, he began to realize he was having memory issues. He said he began to do his research and discovered that he also suffered a range of symptoms including mood swings, anger, depression, communication issues such as word-finding and lag, but said that the short-term memory issues give him the most frustration. He also said that one of the most difficult issues for him to deal with, as a business consultant and entrepreneur, was his lost his “mojo.” He explained that before the accident, he had an innate ability to persuade others to his way of thinking; he had an almost infallible sales ability. He reported that this ability seems to have been lost. He now finds he has lost not only the charisma that he once had, but that that has led to increased anxiety and loss of confidence and self-esteem. He said he believes that this has had a negative effect on his success in business. He told about some projects that he has conceived over recent years since the accident, but that he has had little success in finding the funds to move these ideas to fruition. He said that he has started and run some unique small businesses since he was a teenager, but that today he struggles financially, emotionally, physically and psychologically. Eventually, he recognized that he suffered a traumatic brain injury in the accident, along with the other physical injuries.

Today P2 spends a great deal of time working in the area TBI treatment and advocating for the education of those in the medical profession and other areas. He worked as a key participant in helping gather the 100+ professional football players for a comprehensive concussion study. This research found a possible correlation between traumatic brain injury and substance abuse problems, and through studies of the brain via SPECT scans, may be making strides in developing treatment options for TBI and concussion (Amen, Wu, Taylor, & Willeumier, 2011). Also, P2 said learned at one of his football conferences about TBI treatment using hyperbaric oxygen therapy (HBOT) and about a small national trial was being conducted that was recruiting brain injury victims. He was accepted into the pilot program and underwent HBOT late in 2011. His treatments included eight weeks of one-hour sessions, five days a week for a total of 40 hours of pure oxygen at 1.5 atmospheres. He reported improved cognitive scores to levels near what they were before his accident. Follow-up testing occurred at 6 and 12-month intervals. P2 also underwent SPECT scans more recently, as of November 2015. He continues to research and advocate for technical advances and continued research into the area of TBI. He expressed frustration at the lack of awareness about brain injuries, with what is known being both scattered and often confusing. He still works closely with a professional sports organization and hopes to increase their awareness of the long-term effects of sports-related brain injuries. P2 also expressed frustration at insurance actuaries. He believes that although they are now armed with decades of statistics and information, still focus much of their attention on property damage, with little regard for the health and well-being of those injured in motor vehicle accidents. Moreover, P2 expressed concern that when physical injuries are addressed, brain injuries are often overlooked or downplayed.

Today, P2 is focused on building a new business which entails the use of digital credit cards as payment devices. He expressed hope that in time this technology will replace the standard plastic cards currently used by all banking institutions. However, P2 expressed extreme frustration that he has not been able to secure financial backing for his project. He also expressed frustration that he has never undergone neurological assessment. He said that this is still a source of anxiety and resentment for him. He blames his financial frustrations on his brain injury and attributes the difficulties he has been experiencing in getting his new business off the ground to the symptoms that he deals with daily.

*Participant 3*

Participant 3 (P3) served in the military, where he worked as a police officer (MP). P3 experienced a motor vehicle accident one evening during the regular performance of his job. He reported that he was nearing the end of his shift, after 10 hours on patrol. He was driving a military-owned patrol vehicle, a civilian vehicle, adapted for MP purposes. P3 said he does not remember the impact of the accident. He said he only remembers driving the vehicle, then waking up some time later to discover that he had driven into the back of another vehicle. He said he has no way of knowing how long he may have been unconscious, but that he awoke to find the airbag had deployed. He assumed he might have fallen asleep while driving. He reported he was disoriented and dizzy, had burns on his hands, wrists, forearms, and face. He exited the vehicle and called his desk sergeant, and a tow truck was dispatched. P3 said the owner of the vehicle he had impacted, a local civilian, did come out and talk with him. P3 reports that he was understanding, and not angry about the accident. However, the collision resulted in nearly $5000 in damage to the patrol vehicle.

P3 reported that immediately after the accident, he was taken back to base and drug tested standard procedure in these types of events. The drug test results were negative, but following the incident, he was said he was pulled off patrol while an investigation was undertaken. He said that this action resulted in his being alienated by his peers, who bullied and humiliated him. P3 said he did not meet the standard criteria for alcoholism. He reports he did not drink excessively; he did not drink alone, only drank socially, and never to the degree that it caused problems with his work. However, despite not meeting the standard criteria for alcoholism, he was forced into psychological treatment. This treatment took the form of group therapy and other common treatment for alcoholism. He said he did not display any of the other characteristics often associated with alcoholism. He does, however, report symptoms that occurred as a result of the accident. He said that although he was not diagnosed with a concussion, he has since learned that the accident may have resulted in a concussion. He said he still struggles with long-term effects of the concussion. P3 reported that immediately following the accident, in addition to the disorientation, dizziness, whiplash and burns, he experienced black spots and lightning flashes in his field of vision. He reported PTSD symptoms including anxiety, panic attacks, hypervigilance, headaches, irritability, impatience, mood swings, and extreme fatigue, and sleep disturbances including mild sleep apnea and difficulty falling asleep. He reported both short-term and long-term memory issues. P3 said that he did not experience these symptoms before the accident nor does he remember experiencing chest pain or injury. He suggested that the body armor he was wearing at the time may have shielded him from the airbag deployment or perhaps may have absorbed or cushioned the blow in some way. He also reported severe depression but is not sure if this is directly related to the injuries that occurred from the accident or were due to the events that occurred after the accident, such as the treatment he received from his peers and supervisors. He said that his perception that he did not meet the criteria for alcoholism, and repeated attempts to fight this characterization, he eventually gave up and decided that it would be best, easier if he just went along with the diagnosis. This giving up, along with the bullying and harassment he continued to receive from his peers launched him into deeper depression and anxiety. He said he was alienated and ostracized by his fellow soldiers. The feelings of aloneness and isolation further deepened the depression he felt.

The alcohol rehabilitation program he was placed into lasted for two and a half months. P3 said that while this was going on, the relationship with his sergeant deteriorated into an adversarial and hostile interaction. P3 said that he experienced excessive irritability, anger, frustration and feelings of hopelessness. He said that he has since learned that these are common symptoms of concussion and traumatic brain injury, but at the time, he felt these symptoms were related to his feelings of being treated unfairly and with extreme hostility by his sergeant. He reported that this strained relationship culminated into a final incident involving his sergeant. P3 reports that sergeant coerced him into drinking with him. As he was completing the rehab program, he was not allowed to drink for any reason. However, on this occasion, the sergeant insisted that he “share a beer to celebrate his [the sergeant’s] birthday.” P3 said the sergeant promised not to report the infraction. However, the sergeant was not true to his word. He reported the infraction, and P3 was then subjected to punishment. At this point, P3 said that his depression deepened even further, he felt he was wasting his time fighting against the bullying and coercion. He said he was offered a discharge, which he accepted. He said he was promised an acceptable discharge but later discovered that the discharge had been designated RE4, under a label of “failure to adapt.” P3 said that this designation means that he is ineligible for re-enlistment, and is denied his veteran’s benefits. He reports that he attempted to fight the designation but that doing so would mean an uphill legal battle. P3 said he has found that many years later, the dishonorable discharge has followed him into his civilian career, forcing him to justify and explain every time he applies for work. He said he occasionally considers whether it may be worth the effort to obtain the services of an attorney and try to have the unfavorable remarks and designation removed from his records.

P3 also reported that today he still experiences lasting effects of the accident which include PTSD symptoms such as anxiety, depression, irritability, impatience and sudden mood swings ranging from euphoria to rage to depression. He reported that he still experiences sleep disturbances, nightmares and sleep apnea. He reported nicotine addiction that lasted till present time but has quit all nicotine substances. He also said that his short-term and long-term memory issues continue and cause quite a bit of difficulty and frustration as he attends school to obtain his BA in Graphic Design, and interferes at times with his ability to do his job at a big box home improvement store. He reports that he noticed personality changes that include deepened introversion. Although he reported that he has always been a loner, he said that he often isolates himself even more so than before the accident. He said he struggles with self-esteem issues, lack of confidence, and often seeks reassurance from friends, peers, and supervisors. He said that the fatigue is often a problem and he finds that being tired or stressed results in migraine headaches, irritability, and impatience. Recently, P3 began seeking treatment for his traumatic brain injury and is currently taking a series of nutritional supplements, which he said has helped reduce the TBI and PTSD symptoms. He reported that he is now better able to handle work pressure, feels more focused, feels his short-term memory has improved and is more relaxed.

Currently, P3 works at a large home improvement retail chain. He reported that he started with this company as a cashier, and despite occasional interactions with customers for which he has been coached; he is performing the requirements of the job well. He said that he has been reluctant to share with his supervisors that he has experienced a traumatic brain injury (TBI), and fears that he will encounter bias and assumptions that may adversely affect his work status. He said that he lives with a constant fear that his supervisors or his co-workers will find out about his TBI and that this knowledge will be used as an excuse to bully and harass him. He said that his experiences with the Army had influenced his perceptions and he constantly worries about being fired. He said that the effort to keep his PTSD and TBI symptoms hidden from others is exhausting. He said he is very selective about with whom he shares this information.

*Participant 4*

Participant 4 (P4) is a man who experienced a motorcycle accident in 2011. He was driving the motorcycle with one passenger when a jeep-type vehicle stopped suddenly ahead of them. He reported that he was a seasoned rider, and had had previous accidents. He said there are some actions to which riders commonly resort when attempting to avoid a collision. These include such actions as course corrections, either to the right or the left to bypass the obstacle. However, he said that in this instance, he was unable to avoid a head-on collision. The majority of the impact was absorbed by the right side of his body. Injuries included two broken vertebrae in his lower back, a shattered humerus on his right side, skull fracture of the right front cranium, and traumatic brain injury of the right frontal lobe. His passenger also sustained several injuries when she was thrown from the motorcycle. P4 reported he underwent several hours of surgery to repair the right shoulder. An 11-inch titanium pin was inserted in place of the shattered humerus. Additional surgery was necessary to remove the paint and metal chips that were imbedded into his skull. He said remained in and out of unconsciousness for the next four days. He was hospitalized a total of 10 days. During this time, he reported both short-term and long-term memory loss, depression, extreme physical pain, dizziness, and headaches.

P4 that he also has Type II diabetes, a condition common in his family. At the time of the accident, he said the emergency room physician advised him that his blood sugar levels were over 500, dangerously high. This level of blood sugar can lead to conditions such as diabetic ketoacidosis (DKA) and hyperosmolar hyperglycemic nonketotic syndrome (HHNS). This has been shown to result in confusion, loss of vision, hallucinations, weakness on one side of the body in some cases, or in cases of prolonged condition, seizures, coma or death (Hypersmolar Hyperglycemic Nonketotic Syndrome, 2016). Research shows that drivers with diabetes are 12 to 19% more likely to get into an accident, with risk jumping to 40% among people who have suffered from bouts of hypoglycemia, or dangerously low blood sugar (Stork, van Haeften, & Veneman, 2006). Studies have also shown that stress or trauma can cause the blood glucose levels to spike (Eakins, 2009). P4 said that it is not clear whether his high blood sugar levels were the result of the accident or if the accident was caused by his high blood glucose levels.

P4’s release from the hospital was the beginning of a long recovery that is ongoing today. He reported that he was placed on insulin injection therapy; although before the accident he was taking insulin orally in pill form to control his blood glucose levels. He admits to having discontinued this medication for approximately six months before the accident. P4 worked as a field technician for a Navy contracted torpedo production program but was terminated. P4 would not state specifically when he was terminated or under what circumstances. He said that this left him without medical insurance. P4 said he collected unemployment, but the amount was not enough for him to afford insurance. He reported the lack of work resulted in deepening depression and was caused stress and tension between himself and his wife. He said that as the depression worsened, and he did not seek help for it, his motivation to look for employment waned considerably. He reported additional effects that emerged after the accident. Due to the debilitating nature of his injuries, he was forced to allow his wife to act as his sole caregiver. P4 is a large man of who outweighed his wife by more than 150 lbs. He said this caused him great distress, as he felt ashamed and humiliated to have to depend on another person, especially one of small stature, for even the most mundane tasks. His injuries – the broken vertebrae, the right arm which was in a cast - forced him to rely on her for help in getting to the bathroom, bathing, eating, dressing and more. Moreover, he reported extreme symptoms related to the brain injury, including extreme dizziness, vertigo, headaches, ringing in the ears, vision issues including lack of peripheral vision and depth perception.

P4 also said he noted changes in mood, bouts of extreme anger and rage, paranoia, frustration, shame, depression, sleep disturbances including sleep apnea and nightmares, night terrors, long bouts of wakefulness, irritability, and impatience. He recounted an incident in which he had to go to the bathroom during the night and, not wanting to call his wife for help, attempted to go to the bathroom on his own, in the dark. He had resorted to a habit of sleeping sitting upright in a chair with the back injury made it difficult for him to sleep in a horizontal position. However, the extreme dizziness and vertigo caused him to lose his balance and fall face-forward onto the coffee table in the living room. This fall resulted in a second concussion, hitting his head on the left side front of his cranium. Unable to stand, he had to call his wife for help. He reported that while she came to his aid, he felt convinced that she resented being woken up and having to help him. He said that she tried to reassure him that she held no resentment but he was unable to accept these reassurances. This incident resulted in an ongoing argument and increased tension between them.

He reported that the headaches were constant and rendered him unable to withstand loud noises, various types of sounds, chaotic situations such as large crowds, certain smells and various types of light. Also, as P4 was placed on injected insulin therapy in addition to his oral insulin, he was forced to allow his wife to do the injections three times a day. He found this humiliating and soon forced himself to do the injections himself, despite his injuries.

P4 said he managed the pain of the physical injuries with Vicodin and Oxycodone. He said he developed an addiction to these medications and his anxiety increased as he tried to keep this addiction a secret from friends and family. He said he was ashamed of the addiction and never admitted to his wife that this had occurred. Bouts of withdrawal occurred in which he experienced extreme irritation, impatience, tension, paranoia and physical pain. He reports he continues to take Vicodin for the back pain.

P4 reported that several months after the accident his unemployment insurance was discontinued and he was forced to seek employment. He admitted his attempts to find employment were sparse and half-hearted, and said that he was not as worried about this as he should have been as his wife was providing the household income. This became a source of contention between him and his wife, as the job she had was low paying, and only part-time, with hours that varied between 20 and 38. This was not enough to cover household expenses, so she was also working other small jobs to make ends meet. He said his only attempt to find work was applying to the local Harley Davidson dealer, one of his former employers as the manager was a long-time friend, for a position either in sales or parts management but was told there were no openings for him. He did take a job as a general laborer working for another friend who owned a plumbing business. The pay was low but allowed him to at least contribute to the household expenses. Eventually, he was offered a part-time job with the motorcycle dealer and held both jobs till he was offered full-time employment at the motorcycle dealer as parts manager.

P4 reported that the marriage continued to deteriorate, and two years after the accident, he walked out of the marriage. He continues to work for the motorcycle dealer, although he said he still suffers the effects of the traumatic brain injury and Vicodin addiction. He reported that he has had developed a range of coping mechanisms to help with the memory issues. Thi is often exhausted, has issues with confusion, inability to communicate, has cognitive issues that interfere at times with his ability to do his job, and still suffers constant pain in his back, right arm, and head. He attributes his longevity in the job to his friendship with his coworkers and employer. He said that he feels that any other employer would have terminated his employment due to issues with interactions with customers, mistakes, and high absenteeism.

*Participant 5*

Participant 5 (P5) is a woman in her mid-30s who makes her living as a professional photographer and journalist. She experienced a fall on an icy driveway one morning in the winter of 2014. She requested writing her narrative, in her words:

Participant 5 (P5) experienced a fall on a cold winter day, when she slipped on a patch of ice, hitting her head on pavement. She reports she awoke to find herself lying on the concrete, with excruciating pain in the back of her head and swirling, flickering lights in her vision. She says she does not know how long she laid on the concrete. P5 shared that she and her team of doctors assume she may have blacked out for at least a short time, but as there were no security cameras in the area of the parking lot where she fell, and no witnesses, it is impossible to say. P5 reported that the full impact of the fall was absorbed by her skull. Her injuries were diagnosed by her chiropractor and neurologist and included a severe concussion, mild traumatic brain injury (TBI), pulled muscles in her neck, throat, abdomen, chest, and a dislocated sternum.

P5 went on to explain she experienced a wide range of symptoms, and continued to struggle with the effects of the TBI a year later. Her symptoms included a range of emotions from anger to sadness to euphoria. She struggles with crowds and now avoids restaurants and shopping malls. She finds she experiences over-stimulation when subject to chaotic environments. She says she is easily confused, has memory issues, suffers from vertigo and dizziness, exhaustion, mood swings, and aphasia. Because of this, P5 reports that her personality has changed. She also reports anxiety and panic attacks of varying degrees. P5 shares that she has good days and bad days. P5 expressed frustration over being told often that her injury was “just a concussion.” Many months later the effects of the concussion continue to plague her.

P5 talked about how a traumatic brain injury is invisible. She said that she observed that people made assumptions that she must be fine as she continues to work. She talked about how they do not see the physical exhaustion, the ice packs and pain killers, therapy sessions and doctor visits. P5 has continued to work and spoke of the financial struggle of being self-employed. She expressed that found the economic strain very frightening. P5 said that while she prides herself on being independent, she says that her injury has taught her the value of having people in her life are there for her when she needs help. She says her injury has been a great lesson in patience and she has learned to ask for help.

P5 was not able to continue her work as a photographer but has written a book about surviving a traumatic brain injury. She advocates for TBI survivors, working to inform and educate those who know little about traumatic brain injury and the challenges a survivor faces daily. She often lectures to social and political groups. She brings her positive attitude and gratitude into play when she talks with these groups and works to reduce the ignorance that leads to intolerance. P5 explains that her experiences with others lead her to believe that those who have not experienced a traumatic brain injury may not understand what the TBI survivor experiences. She reported to this researcher that she has more than once been accused of “using her TBI as “an excuse.” She said she was also accused of using her TBI as a means of garnering attention and was told that she was “faking it.” This researcher has experienced similar reports from other TBI survivors.

*Participant 6*

Participant 6 (P6) worked as a janitor at a Navy weapons production facility for several years. She experienced a serious fall while performing her duties. The facility, a standard large production operation, produced full-sized torpedoes for delivery to submarines docked a few miles away. It consisted of a large main floor, with a smaller partial 2nd floor, in which were located offices and the quality assurance documentation area. She was responsible for keeping the entire facility clean, and her regular duties included mopping floors, dusting test equipment, maintenance of six restrooms, maintenance of hazardous materials decontamination rooms, removal of trash and other standard janitorial tasks.

On the occasion of her work injury, she was attempting to carry a large, metal mop bucket filled with water up a steep stairwell to the 2nd floor. This stairwell was approximately 30” wide, and extremely steep. There were no railings on either side of the stairwell. The stairs, as well as the walls, were concrete with metal angle guards on each step. Although she had successfully navigated the stairs several times, she had often complained to the safety officer that the stairs presented a hazard to her. The mop bucket filled with water weighed approximately 50 lbs. and was large and cumbersome. P6 is a strong woman, well-suited to this type of work, but the task of hauling the mop bucket and mops up the steep stairwell was arduous and dangerous. P6 reports that her complaints to the safety officer were met with ridicule and derision. She said she was told that if she tried to file a complaint with OSHA, the Navy or the labor union, she would be fired. P6 said she brought numerous safety violations to the attention of the safety officer. She reports she escalated the infractions to the higher managers, the program manager, and the contract manager, but nothing was ever done about these violations.

On the day of her injury, P6 said she was carrying the mop bucket and her mops up the stairwell to the 2nd floor. When she reached about ¾ of the way up, she slipped and fell. She reported this later to the safety officer that she twisted her ankle. He told her to finish out her work shift and then go home. The next day the ankle was severely swollen, and very painful, although she could walk on it. She continued to work the next day but very slowly. She then took a few days off, using her sick days, to allow the ankle to recover somewhat. When the ankle was no better after a week, she saw a private doctor who told her the ankle was badly sprained and gave her the medical verification needed to take leave with short term disability. P6 reports that her request for disability leave was met with extreme resistance by the safety officer. She reported that she was bullied and harassed, and told not to report the injury to OHSA. In fear of losing her job altogether, she remained silent.

She returned to work four weeks after being placed on disability leave but said the pain in her ankle did not get any better. After three months of working in pain, she went to another doctor who X-rayed her ankle under the premise that pain of a sprain should have resolved by that time. He found a hairline fracture and placed her on full disability. She remained on disability until the company tried to remove her from their employment, and thus eliminate her insurance. She then retained an attorney. He filed an injunction against the company which prevented them from terminating her employment. What followed was a long, arduous and extremely adversarial process to obtain full disability. After about three years of litigation, bullying from coworkers and the safety officer, and harassment, she was finally awarded full disability. She then moved from her home to another state and is now living comfortably. However, she reported that her quality of life has suffered in that she has gained considerable weight due to inactivity and still suffers pain in the ankle. She walks with either a walker or cane and only in short distances. She said she has difficulty breathing, and therefore lives a mostly sedentary life.

*Participant 7*

Participant 7 (P7) is a 27-year-old man who holds a bachelor’s degree in engineering. He told this researcher that he was not able to find work in his field and was working a job as a job as a telemarketer. He was performing his normal duties of providing customer service phone support when a sudden loud, searing noise, similar to a fax tone, rang through his headphones when he picked up a call. The tone was so loud that it caused sudden intense pain in his head. He took off the headphones as the noise continued. The noise was so loud that others in the vicinity could hear it emanating from the headphones. When the noise stopped, and the pain had subsided somewhat, he picked up the headphones and put them back on. P7 reported that when he picked up the next call, the tone happened again; the second time the sound was even more intense, causing enormous pain. He said that the resulting ringing in his ears rendered him deaf, temporarily. He said that in time he could hear again, but the pain in his head continued. The next day he began experiencing migraine headaches which increased in severity. He said they were accompanied by intense dizziness, nausea, loss of balance, tinnitus and various other symptoms like those associated with concussion. He sought treatment for the pain and other symptoms. He was given an MRI which showed no damage. He was also tested for nerve damage but said that none was found and the results were negative. Eventually, P7 was diagnosed with a rare type of traumatic brain injury.

P7 reported that initial attempts to find the extent of the injury caused him a great deal of frustration as doctors worked to eliminate the obvious causes of his symptoms. After first assuming nerve damage and ruling that out, other causes for his symptoms were explored. P7 reported feelings of frustration as doctors attempted to narrow down the effects and treat them.

He continued to work for a time while his symptoms persisted. However, he reported he was also experiencing memory issues, cognitive issues, mood swings, sudden bursts of rage, irritability and agitation, and inability to focus and attention deficit problems. The company moved him from customer service to a position in which he did not have to interact with customers. He was eventually separated from his job as he continued to experience migraines, hearing problems and memory issues that rendered him unable to work. He said he tried to work, but was unable to continue and took leave, first taking a short term, then long term disability payments. P7 reported that his feelings of frustration deepened into depression as he became more and more isolated. He said he battled feelings of loneliness, hopelessness, and anxiety daily. He also reported that his family members did not fully understand the range of symptoms he was dealing. He said that while he felt they tried to be tolerant and patient, he said he felt that their lack of understanding makes coping with his issues difficult for them.

P7 expressed frustration, also, that he is often faced with people who repeat platitudes and phrases that not only express their lack of understanding but make him feel less than capable of normal functioning. He said that while he often hears things like “It’ll get better”, “just try harder,” “just let it go and get on with life,” and other such phrases, these do not help him cope with his symptoms. He reported that while he intellectually understood the value of such phrases, his anxiety and self-doubt do not allow him to embrace the meaning of such phrases. P7 explained that this made him unable to do what the phrases suggest he should be able to do. He said this conflict between logic and feelings caused his anxiety to escalate and that made the feelings difficult to control. He said he feels frustrated because logically he “should” be able to embrace the concepts. He reported that he felt his anxiety about his ability to function in a normal world made it difficult for him to follow through effectively. P7 reported that he believed his sense of self-worth was reduced because of his loss of income and lack of purpose. He reported that he feels he cannot talk to his mother or others about his feelings. This further compounded the feelings of isolation led to deepening depression and even feelings of anger.

P7 was unemployed for 18 months, and he faced financial difficulties resulting from both the loss of his job and the medical issues. He was forced to give up his apartment and move in with his mother. Not knowing when he will be able to return to work if at all, kept him entrenched in a downward spiral of depression, for which he takes medication. His hearing has been affected the most. He said that he hears well, but his hearing is not clear due to sensitivity to ambient noise, tinnitus, and constantly such as ringing, whooshing and low-level buzzing which he hears constantly. These are distracting and cause him to lose focus and concentration. He wears custom fitted ear plugs to control ambient noise. He said he is unable to process sounds normally. Individuals with normal hearing tend to hear selectively. They choose what they pay attention to, and ignore the rest. Extraneous sounds are dismissed and stored away in memory. P7’s TBI interferes with this function and makes daily activities and interaction with others tedious and difficult. He reported that the effort to maintain daily functioning is exhausting.

Initially, P7 received some occupational therapy but had to stop when his medical insurance, once provided by his employer, was stopped. Today he is socially isolated and talks about boredom, being separated from friends and family, and how he feels his time is not being used productively. He talks about how he feels no real purpose in life, and that he is becoming a burden on those who have remained in his life. He states he feels that these thoughts are interfering with his interactions with others, which are often strained and fraught with conflict.

P7 reported that his interactions with coworkers changed drastically as well. Traumatic brain injury survivors report that much of the experience is invisible to others. P7 said he felt that those who have not experienced a traumatic brain injury tend to believe the trauma survivor is “faking it” or simply using the injury as an excuse to get out of work. P7 said he experienced classic signs of this type of injury including memory issues, exhaustion, inability to express thoughts coherently, and that at times others seem uncomfortable with these symptoms and that they are sometimes difficult for others to understand. He said that he has difficulty constructing cohesive thoughts at times. He said he perceives impatience in others at times when he is unable to express himself normally, and this has resulted in friction and stress in his interactions with others. This affected his ability to function as a team member when he tried to continue the job he had at the time of the injury.

P7 also reported that his productivity was drastically altered. As he was no longer able to use a headset, which is often required for the type of work he did, he was unable to perform to the standards of the job. He reported that as short-term memory issues often interfere with his ability to interact with customers on the phone, his technical skills were brought into question. He tried taking notes to remember details but this reduced his response time. He said he would forget small details such as to whom he was speaking and what he was doing during a call, reducing his ability to complete tasks effectively.

P7 stated that the quality of his work product suffered. He said he understands that retraining might be necessary for him to regain skills and that he might never be able to perform at his previous levels. P7 has a good understanding of his limitations and challenges and has developed some coping mechanisms to help him function. He carries a journal or notepad with him so that he can write things down that he is likely for forget. He spends time playing video games as his occupational therapist recommended, as they have been shown to improve such skills as memory and concentration, hand-eye coordination, and deductive and inductive reasoning. He has developed post-traumatic stress disorder symptoms and takes steps to reduce stress causing situations to manage them. He said that he has identified resources to help and has learned how to ask for assistance. P7 said that this is one of his greatest challenges – asking for help. He attends a TBI support group twice a month. He feels that this group is helpful in reducing his social and professional isolation.

P7 is actively working toward recovery. He does feel he is making some progress but that it’s slow and arduous. At the time that his interview was conducted, he had no prospects for work, but on follow-up interviews, P7 shared that he has finally been able to complete both neurological and vocational assessments. These assessments helped specialists determine that he would do well at highly detail oriented, repetitive tasks in an environment where he can work without distraction. He began a new job for a small electronics manufacturer. He reported that he enjoys the work, is allowed to wear noise-cancelling earplugs, and is allowed to work for extended periods without being interrupted or watched over by supervisors. He said this type of work and work environment helps to reduce the frustration and anxiety he feels due to issues with memory, concentration, and focus. He said he feels better and his depression is relieved now that he feels productive.

*Participant 8*

Participant 8 (P8) is a man in his mid-60s who lists himself online as a CEO, strategist, and change leader. He describes himself as a hard-charging CEO, who enjoyed much success as a CEO responsible for the programs that pushed an entire produce category (the avocado industry) over $1 billion in annual sales. He currently serves as CEO for a company that “leverages his life experience and helps senior leaders and teams “transform on time” which claims to help organizations achieve transformation and change. The premise of this “strategy” is built around a metaphor about trying to decorate a room around an ugly yellow chair. The story told about decorating activities – new carpet, paint, accessories, window coverings, – none providing the desired effect - change. Each attempt would fail as the yellow chair continues to influence decisions. No appreciable change is achieved until the yellow chair is discarded and a fresh vision can be found.

P8 also currently serves as executive director for a non-profit organization. . He told this researcher about years of success as CEO in various positions. He considers himself as an expert on strategy, marketing, issues management, state and federal lobbying, board leadership, and persuasive communications, and said he has delivered the leadership seminar around the world and consulted with Fortune 500 companies. His biography lists several high-end positions. P8 reported that he earned an undergraduate degree in business, Management certification, a certificate in Principles of Persuasion , a certificate in Organizational Development and a masters in ministry leadership, all from notable universities.

P8 reported that after spending the first half of his life in the business world. He published two books on business and change management. He speaks glowingly of his success as president and CEO of a large produce commission, a position he held for 10 years. He told this researcher that he launched a trilateral board to unite growers from California, Chile, and Mexico, for a collaborative response to the 100% volume increase in demand that spanned a period of five years. However, P8 reported that this success came at a price – extreme stress, tension, and, he claims, death threats during an international trade crisis. He reported that he suffered what he refers to as “constant fog.” He said he constantly felt dizzy, unable to concentrate, irritable and depressed. He attributes these symptoms to the five major concussions he incurred while playing football as a youth and through college. He also reported that he played full-contact competitive ice hockey as an adult and incurred another major head trauma during this time. He claims the symptoms came on gradually, over time. Seeking help for these issues, P8 said he began working with a brain disorder specialist who performed single-photon emission computerized tomography (SPECT) scans and damage from the concussions he had suffered earlier were found. SPECT imaging is a functional nuclear imaging technique performed to evaluate regional cerebral perfusion (Juni et al., 2009). Because cerebral blood flow is closely linked to neuronal activity, the activity distribution is presumed to reflect neuronal activity levels in different areas of the brain. P8 reported he began a comprehensive treatment program designed by the specialist which included supplements, changes in diet, and hyperbaric oxygen treatments (HBOT). This treatment involves breathing oxygen in a pressurized chamber (Hyperbaric Oxygen Therapy, 2016). Traditionally, HBOT is a standard treatment for air or gas embolism (bubbles in the bloodstream that obstruct circulation), carbon monoxide poisoning, decompression sickness (often known by divers as “the bends”), and thermal burns. Although some success has been claimed for brain injury issues and diseases or conditions such as AIDS/HIV, Alzheimer’s disease, depression, multiple sclerosis, or stroke, this treatment is not approved by the FDA as a treatment. The FDA warns that claims of improvement of other conditions than those approved by the FDA, have not been substantiated through clinical trials and the safety and effectiveness of HBOT have not been established (Hyperbaric Oxygen Therapy: Don't Be Misled, 2015).

When interviewing P8, he spoke mostly about his successes in the business world. P8 gives the impression of high-performance, despite the issues resulting from his history of concussions. On deeper inspection, however, it was learned that P8’s professional history was not without some negative points. One glaring inconsistency was discovered as part of a Google search. An article published in 2013 details an investigation into allegations of malfeasance and questionable spending that occurred while P8 was CEO of the produce commission. An investigation found nearly $2 million in questionable credit card purchases and employee perks including lavish hotel stays, alcohol, body treatments, massages and facials, season tickets to professional sports games, remodeling of P8’s home office and much more. The commission is funded by growers who pay 2.6% of their sales to maintain the commission. P8 was held responsible for these excesses and negotiated a partial reimbursement to the commission regarding cash and returned items.

Today, P8 works as Vice President of Professional Development for one of the brain specialist’s brain treatment programs. This is a program claims to optimize brain function to sharpen team performance and support business successes. P8 reported that today he is more energetic, his brain function is sharper, more focused, more consistent, and that he is better able to lead teams. He lectures in conjunction with both this enterprise and his ministry. When interviewed, P8 steered the conversation around the topic of his direct interaction with peers and supervisors, but the information regarding his performance may speak to his level of functioning after suffering multiple concussions and TBI.

# Summary

# Composite Depiction of the Experiences

A composite depiction emerged as this researcher immersed herself in the individual experiences of each participant. This composite focuses the experiences into a comprehensive explication, blending them into an over-arching perspective. It reflects the essence of the experience of individuals who have returned to work after a traumatic injury.

 As each participant courageously and honestly shared his or her story, a full and robust picture of what an individual experiences when returning to work after a traumatic injury began to emerge. A great deal of time and reflection was devoted to each story, as well as on what was being presented by the stories. This researcher could culminate the experiences into broad themes.

Upon deeper immersion and reflection of the experiences, she found she could distill those themes further until five main themes emerged. Each of these themes further led to the emergence of sub-themes which recurred consistently between participants. These themes include:

1. A core picture of the experience of returning to work after a traumatic injury.
2. A traumatic injury is a life-altering event.
3. Physical, cognitive, psychological, and emotional symptoms can affect social functioning.
4. Physical symptoms can include all areas of the body and are exacerbated by the accompanying emotional and psychological effects.
5. Research into the effects of traumatic brain injury is ongoing.
6. Awareness of traumatic brain injury is increasing due to media attention, creating trending momentum.
7. Eight common physical issues or occurrences were experienced (exhaustion, fatigue, sleep disturbances, changes in various senses, lowered ability to handling effects of stress, brain neuroplasticity, changes in balance and coordination, masking).
8. Twelve common psychological issues were experienced (denial, anger, depression, anxiety, fatigue, exhaustion, emotional flattening, victim identity, vulnerability, impulse control, mood control, PTSD).
9. Positive shifts can occur due to traumatic injury (increased personal awareness, enhanced personal development, optimism, increased spiritual satisfaction, and changed overall perspective of life, the discovery of hidden or previously undeveloped talents or skills).
10. Self-efficacy impacts the path of recovery from traumatic injury.
11. ­­­­­­­­­­­­­­­­Five cognitive changes were experienced after traumatic injury (hidden or previously undeveloped talents, changes in time or special recognition, short-term and long-term memory issues, PTSD symptoms, changes in thinking or learning patterns).
12. A traumatic injury affected personal and professional relationships. ­­­­­­­­­­­­­Eleven social issues were experienced (family/friends/work associates expectations, PCS-new or recurring issues connected to traumatic injury, PTSD, shaming, bias and assumptions, misinformation, perceptions, TBI survivors recognize similarities in other injury survivors, maintaining facades, victimization and victim identifying, vulnerability).
13. Recovery from traumatic injury can be impeded by administrative issues (insurance issues, misinformation or ignorance among medical professionals, need to self-advocate, injury survivor dehumanized, minimized, and trivialized by insurance professionals, corporations, and businesses).
14. Common approaches to overcoming the return to work after traumatic injury experience.
15. Seven suggestions for business professionals for ways to retain valuable employees.

These themes represent a comprehensive, and universal depiction of all participants as the essence of the phenomenon emerged as a common depiction (Moustakas, 1990).

 While the experience of returning to work after a traumatic injury is different for each person who goes through it, the experiences share commonalities. The themes that emerged represent aspects of experience that several of the participants shared. These themes are rich in emotional content. The major themes seen in the participants’ experiences include physical similarities, psychological and social commonalities, and similar experiences about the administrative processes connected with the traumatic injury and subsequent recovery. The participants held a variety of jobs at the time their injuries, ranging from blue-collar to seasoned professional, but all agree that their traumatic injury had a life-altering effect on their work lives, their home lives, and their futures. The major themes included physical aspects such as pain, broken bones, and traumatic brain injury and concussion and the psychological aspects are anxiety, depression, anger, fear, and the grief of loss. Each participant shared social issues that resulted from their experience of traumatic injury and the experience of returning to work. The participants all shared that they encountered issues connected with navigating the administrative processes necessary to obtain treatment to help them recover from their injuries and then enable them to return to work. These themes were found to recur multiple times during the interview process, and while each participant held a unique perspective on each recurring theme, the themes remained consistent. Discussion of the ways these themes relate to the participants’ experiences appears in this composite depiction section and Chapter 5. An organized table of the identified themes is available in Appendix B.

**Themes and Characteristics**

**Physical Injuries**

 The participants experienced traumatic injuries resulting from a variety of incidences, including motor vehicle accidents, falls, concussion from sports activities, and through the performance of regular work duties. Physical injuries resulted in changes in work performance ability for each participant, and the effects of those injuries appeared as one of the overarching issues encountered by the participants. The physical injuries affected, from a lesser to a greater degree, each participant’s ability to continue in their job. Many were affected by limited mobility, were limited in their ability to perform the requirements of their job, needed recovery time, and required employer accommodations. These physical limitations often included the use of medically necessary equipment such as casts or crutches which greatly curtailed the participant’s ability to meet schedule requirements, or even move efficiently within the employer’s facility. One participant shared how the use of crutches made it difficult for her to navigate stairs, carry or use her equipment or even moves from area to area within the building as the building was not altered to accommodate disabled employees. Another participant talked about how his broken bones limited his ability to drive a car. This researcher was greatly limited physically by splints and wrappings on both hands, limiting her ability to type and do other tasks.

 Participants shared how their physical injuries tended to affect other aspects of their ability to physically accomplish the requirements of a job. The participants all talked about issues related to their physical injuries including pain and pain management, medications that affect memory, cognition, mood and impulse control, sleep disturbances, fatigue, and sensory loss or change. While the physical injuries varied widely among the participants, all talked about how the physical injuries resulted in a cascading and complex confluence of symptoms and issues that exacerbated the physical injuries, and that the physical injuries exacerbated the related issues as well. One participant who experienced broken bones from a motor vehicle accident reported sleep disturbances related to pain, leading to irritability, dependence on pain medications, and eventually adversely affected his relationships.

 Fatigue and exhaustion were also complaints that participants shared about their physical symptoms. Participants discussed some factors that led to fatigue and exhaustion, including how the healing process requires large amounts of energy, leaving little for normal daily tasks. This researcher, as well as all but one of her participants, experienced traumatic brain injury (TBI) from their traumatic events. This recurring theme was found to agree with findings of studies on TBI, which found that fatigue is frequent and disabling in patients with traumatic brain injury, but that the mechanisms are complex and multifactorial (Belmont, Agar, Hugeron, Gallais, & Azouvi, 2006). All participants reported issues with fatigue and exhaustion, with causes related to the physical healing process, the mental effort necessary to overcome attention deficit and slowed processing, sleep disorders, and depression.

 Several participants reported changes or loss of sensory function, including changes in hearing, vision, touch, skin sensitivity, taste, and smell. These varied greatly among participants. All participants reported increased sensitivity in hearing and vision. Those with TBI consistently reported hearing issues such as hypersensitivity to certain sounds, inability to distinguish certain types of sounds, inability to withstand sounds of certain pitch or frequency. These participants also reported that the natural ability one must select those sounds to which one wants to pay attention, and selectively ignore or block out other sounds, such as extraneous conversations, was compromised of lost after their accidents. These participants all reported that this increased sensitivity made it difficult for them to be in crowded places or places with excessive noises such as restaurants or theaters. They all shared the frustration with this issue. One participant who experienced a work injury of an auditory nature now wears special ear plugs to help block out those noises that he now finds irritating and painful.

 All participants reported experiencing a phenomenon often referred to as “masking.” Each of the participants reported a confluence of symptoms which would be addressed and treated by medical professionals according to a set of priorities as determined by the medical professional. Treatment of traumatic injuries is prioritized according to their effect on the individual’s life. Those that are serious or critical may lead to permanent disability or death is treated first, while the less dire symptoms are left to be addressed later, once the crisis is resolved. All but one participant suffered a traumatic brain injury along with other physical injuries. All reported that treatment of physical injuries took precedent over the symptoms associated with the less visible injuries to the brain. All reported brain injury symptoms such as headaches, loss of balance and coordination, communication and cognition issues, and other symptoms common to traumatic brain injury. Nearly all reported that these symptoms were left untreated for weeks, months, and in some cases, years. Some participants reported that the traumatic brain injury never received treatment at all.

 Several participants reported noticing that symptoms of conditions or injuries once resolved tended to re-emerge. Some also reported that new symptoms they felt were related to their traumatic brain injuries developed and appeared later after the TBI survivor believed that he or she had recovered from the TBI. These symptoms tended to present as either (a) a similar but less intense version of the original symptom, (b) a similar but more intense version of the original symptom, or (c) a different symptom that the participant felt was related to or similar enough to the original symptom as to be determined as a resurgence of the symptom. Research is currently being conducted that suggests that an individual who has suffered a concussion, either mild or severe, is likely to experience a condition referred to as Post-Concussion Syndrome (PCS). PCS is a complex disorder in which various symptoms, i.e., headaches, dizziness, fatigue, issues with concentration, insomnia, and lowered tolerance for noise and light, can occur months or years later. This condition is emerging often enough among TBI survivors as to warrant deeper investigation. Little is known about this condition, and the topic itself is much debated, but growing awareness of concussion and traumatic brain injury, is prompting researchers to explore this phenomenon to learn more about the condition (Wu, Alt, & Legome, 2016).

**Psychological Effects**

Each participant discussed at length the physical aspects of their traumatic injuries. This researcher noticed while talking with each participant, that while the physical injuries presented a challenge, it was the psychological aspects that drew the greatest concern. The physical symptoms were obvious. For centuries, medical professionals have treated broken bones, lacerations and contusions, and injured organs. Often these injuries are life threatening and therefore cause the greatest concern, thus warranting immediate attention. Treatment is often readily available for these types of injuries. However, participants reported that obtaining treatment for the psychological issues associated with and resulting from their traumatic injuries was far more challenging.

 Trauma is defined as an injury or the threat of injury to one’s self of one’s loved ones (Trauma, 2016). Experiencing a traumatic injury can cause fear and anxiety, as well as other symptoms such as anger, depression, post-traumatic stress disorder (PTSD), dissociation, and other emotional and psychological conditions. Each participant reported experiencing psychological issues after their traumatic injury that had an undeniable effect on their recovery from the trauma and affected their return to work process. While each participant experienced a unique traumatic injury, they consistently reported that having to face the prospect of losing income from work due to the injury caused anxiety. Two participants experienced injuries suffered injuries while performing the duties of their work, and while the employer’s insurance provides some income regarding short-term disability, and then long-term disability, the income was only a percentage of the participant’s regular pay. Over time, the disability insurance ran out. All participants report fear and anxiety arising or increasing from the prospect of lost income. Those whose traumatic injury was not associated with work reported fear and anxiety at higher levels as no insurance was available to relieve this stress.

This researcher noted that each participant displayed emotional levels ranging from denial to anger to depression to acceptance of their situation. This prompted this researcher to consider if traumatic injury survivor might experience the stages of grief that occur when one loses a loved one. Her research supported this premise, as trauma survivors experience emotional change as a result of the traumatic injury. Traumatic injury has been is accompanied with anxiety, and many trauma survivors must not only manage the physical aspects of the injury, but they must also manage the resulting harrowing emotional strain that comes along with it. Although traumatic injuries will conjure to mind physical pain, there is, unfortunately, no escaping the emotional and mental pain synonymous with this kind of situation (Chadda, 2015). Everyone deals with trauma in different ways. Individuals have unique thoughts, personal experiences, and preferences. Each tends to cope with traumatic events in different ways, each according to the ways of which he or she is most comfortable, or which have proven successful in past situations. Despite the differences, many scholars of the field of psychology and counseling, such as Dr. Glen Johnson (Traumatic Brain Injury Survival Guide, 2010), [noted similar findings](http://www.tbiguide.com/emotionalstages.html). This can be distinguished into stages of coping when experiencing trauma. These include denial, anger, bargaining, depression and acceptance. While these stages of emotion have been aligned with grief, they have been found to align closely to the emotional stages experienced by trauma survivors. This researcher noticed that all participants displayed evidence of experiencing one or more of these emotional states while sharing their stories.

All participants talked about the anxiety that comes with the prospect of losing a job. A job represents for many a source of security, allowing them to develop a sense of autonomy and independence. From a psychological perspective, a job is also how one tends to identify themselves and their place in society. Some participants faced the loss of a job. Others faced the loss of an entire career. All participants faced a loss of income, although some only lost income partially or for only short periods. Others found they were building lives from scratch, as it were. This loss of security, loss of identity, and loss of autonomy and independence left each participant feeling high levels of anxiety. All reported feeling of loss, sadness, and fear.

 This researcher also experienced symptoms of post-traumatic stress disorder (PTSD), and discovered while interviewing participants that this was not uncommon. All participants shared that they experienced psychological trauma as well as physical trauma. Researchers are looking more closely at motor vehicle accidents (MVAs) as a common cause of traumatic stress. In one large study, accidents were shown to be the traumatic event most frequently experienced by males (25%) and the second most frequent traumatic event experienced by females (13%) in the United States. Over $100 billion are spent every year to take care of the damage caused by auto accidents. Survivors of MVAs often also experience emotional distress as a result of such accidents. Mental health difficulties such as posttraumatic stress, depression, and anxiety are problems survivors of severe MVAs may exhibit (Todd Buckley, 2016). The five participants who experienced motor vehicle accidents all reported anxiety that emerged when driving. This participant experienced an excessive startle response whenever vehicles would appear suddenly in her peripheral vision while driving. One participant who experienced a fall on an icy sidewalk spoke about how she re-experienced the pain and fear every time she was faced with walking on the icy ground. The participant who experienced concussion resulting from sports injuries did not report PTSD symptoms, nor did the participant who experienced the auditory trauma from the extremely loud noise received through his headphones while working in technical support but both spoke of mild PTSD symptoms resulting from the loss of work and the anxiety associated with it. One participant who experienced a traumatic brain injury from her motor vehicle accident that took place in the 1990s reported noticing that her memory issues increased in recent years as she aged and that her cognitive abilities seem to be waning. She expressed concern that her old symptoms may be returning or that new symptoms may be appearing. Individuals sustaining mild traumatic brain injuries often report a constellation of physical, cognitive, and emotional/behavioral symptoms referred to as post-concussion symptoms (PCS). The most commonly reported post-concussion symptoms are headaches, dizziness, decreased concentration, memory problems, irritability, fatigue, visual disturbances, sensitivity to noise, judgment problems, depression, and anxiety. Although these PCS often resolve within one month, in some individuals PCS can persist from months to years following injury and may even be permanent and cause disability. When this cluster of PCS is persistent in nature, it is often called the post-concussion syndrome or persistent PCS. Both physiological and psychological etiologies have been suggested as causes for persistent post-concussion symptoms. This has led to much controversy and debate in the literature. Most investigators now believe that a variety of pre-morbid, injury-related, and post-morbid neuropathological and psychological factors contribute to the development and continuation of these symptoms in those sustaining mild traumatic brain injury (MTBI) (Ryan & Warden, 2003).

 All but one participant experienced traumatic brain injury resulting from their traumatic injury. One aspect is common to TBI survivors concerns changes in emotional control. All participants talked about being plagued with an inability to control their emotions, and all talked about bouts of sadness, depression, and anxiety. However, each participant also expressed frustration with other emotional expressions surfacing suddenly and without warning. Some participants reported sudden bouts of crying also talked about bouts of laughter occurring at inappropriate times. All participants also talked about noticing a loss of emotion as well. One participant discussed how his love of his wife changed; how although, before his accident, he felt a warm affinity for her, such as is normal for a husband to feel for his wife. However, he said that after his accident his feelings for her seemed to flatten. Another participant also discussed how emotions that were once intense seemed to lose intensity, change form, or disappear altogether. Neuropsychologists have found that dissociation – the feeling of being separated or removed from the trauma – and emotional flattening are relatively common symptoms of traumatic brain injury. One study that investigated the symptom profiles of road accident survivors found that TBI participants reported dissociation since the trauma, as compared to non-TBI participants in the study (Jones, Harvey, & Brewin, 2005). Dissociation—a common feature of posttraumatic stress disorder (PTSD)—involves disruptions in the usually integrated functions of consciousness, memory, identity, and perception of the self and the environment. Acute dissociative responses to psychological trauma have been found to predict the development of chronic PTSD (Bryant, 2003). Moreover, a chronic pattern of dissociation in response to reminders of the original trauma and minor stressors has been found to develop in persons who experience acute dissociative responses to psychological trauma (Lanius & Hopper, 2008).

 All participants reported experiencing changes in the wake of their accidents. Moreover, while all recalled the physical injuries and the emotional trauma associated with the accident, all participants reported experiencing positive changes as well. One participant talked about how experiencing a traumatic injury prompted her to re-evaluate her life and her life goals. Another participant talked about how surviving the injury helped her realize that she is strong, resilient and capable of accomplishing great things. She has published a book, is currently working as an advocate for traumatic brain injury survivors, and is now giving talks in a variety of venues to help educate the public about the challenges that TBI survivors face. She sees the injury as a life-changing and life-affirming event. While self-efficacy plays a role in a trauma survivor’s recovery, it became clear to this researcher that these individuals are the embodiment of the premise of how life challenges help to build more strength of character. Psychologist Albert Bandura has defined self-efficacy as one’s belief in one’s ability to success in specific situations or accomplished a task. One’s sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges. Self-efficacy refers to the individual’s belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1977). Also, related to self-efficacy is the premise of Posttraumatic Growth (PTG). PTG is the positive change experienced from the struggle with a major life crisis or traumatic event. Although the term posttraumatic growth has only recently been coined, the idea that human beings can be changed by their encounters with life challenges, sometimes in radically positive ways, is not new. The theme is present in ancient spiritual and religious traditions, literature, and philosophy. What is reasonably new is the systematic study of this phenomenon by psychologists, social workers, counselors, and scholars in other traditions of clinical practice and scientific investigation. Posttraumatic growth tends to occur in five general areas. Sometimes people who must face major life crises develop a sense that new opportunities have emerged from the struggle, opening possibilities that were not present before. A second area is a change in relationships with others. Some people experience closer relationships with some specific people, and they can also experience an increased sense of connection to others who suffer. Another area of possible change is an increased sense of one’s strength – “if I lived through that, I could face anything.” A fourth aspect of posttraumatic growth experienced by some people is a greater appreciation for life in general. The fifth area involves the spiritual or religious domain. Some individuals experience a deepening of their spiritual lives, however, and this deepening can also lead to a significant change in one’s belief system (Tedeschi, Park, & Calhoun, 1998). Evidence of this phenomenon was present in talks with all participants.

**Cognitive Functioning**

 All participants reported experiencing issues with cognitive functioning resulting from their accidents. While all but one participant experienced a traumatic brain injury from their accidents, all recalled issues with memory, math skills, reading skills, logic and deductive/inductive reasoning, time and special recognition, communication, and other symptoms that indicate limited or reduced cognitive functioning. One participant talked about how she had difficulty performing the duties of her job as she had developed difficulty with math and organizational skills. The memory issues interfered with her ability to recall specific details about the high-end paper products she sold in her job. She also began having issues with remembering details about her customers such as phone numbers and names, being able to meet deadlines and customer expectations and remembering customer’s preferences. Eventually, she was asked to leave this job, and though she eventually found work in a large retail store, she was still unable to manage the money-handling duties that were required. She found she could no longer count cash, had difficulty balancing a till, and forgot tasks that were required to open or close the store. When she expressed this difficulty to her supervisor, she was moved to duties that did not require math skills, such as stocking and keeping products neatly displayed. These types of issues were a recurring theme for all participants. These issues were attributable to both the traumatic brain injuries experienced by participants, but may also be due in part to the posttraumatic stress that accompanied the traumatic injuries. While some participants reported that the issues abated after time, others continue to struggle with them. Those that do have developed coping mechanisms and strategies to allow them to function despite the cognitive issues.

**Social Issues**

 All participants talked about experiencing social issues related to their traumatic injuries. These social issues included difficulties that arose as friends and family members found themselves placed into the position of caregiver for an injured individual. Participants reported anger and resentment from the friend or family member. Participants said they felt these emotions stemmed from the person’s inability to understand the changes that they saw in the trauma survivor. More than one participant reported that he or she was aware that they were different from who they were before their accident. These participants said the people in their lives seemed to lack understanding and were uncomfortable with the change. Many TBI survivors experienced personality changes and changes in mood and demeanor. Fatigue and exhaustion also changed how the survivor functioned. These changes are often difficult for others to comprehend and accept, leading to anger and resentment against the TBI survivor. This researcher experienced severe strain on her marriage following her accident. The subsequent financial strain and the emotional and psychological stress directly affected the well-being of the marriage. This researcher, as well as three of the participants, experienced such extreme stress that the marriages ended in divorce.

 Participants also reported that bias and assumptions were common among friends and family members. Misinformation and often the lack of information lead to unrealistic expectations. Participants report being told that they “should” be able just to stop being depressed or that if they truly wanted to recover, they would. One participant told of being told that she was “just malingering, just being lazy, and just wanting attention.” These accusations caused her enormous frustration and led to deeper depression. She said shame and humiliation accompanied her depression. Many trauma survivors report experiencing similar accusations, and that these behaviors lead to social isolation and avoidance. One participant reported that his shame and embarrassment became so severe that he developed an intense fear of being in public and severe agoraphobia. He also told of the difficulty he had dealing with the depression and had thoughts of suicide. Another participant reported feelings so severe that he turned to drugs and alcohol, leading to dependence and addiction. All participants discussed how these behaviors severely affected their social functioning.

**Administrative Issues**

 Finally, all but one participant reported frustration with medical personnel. The participants who experienced traumatic brain injuries recalled that they had difficulty finding medical professionals who were well versed in the issues and challenges unique to traumatic brain injury. More than one participant reported that medical professionals who are not trained in brain injuries tended to minimize or dismiss symptoms, leaving their symptoms to go untreated. One participant expressed frustration that after his motor vehicle accident, his insurance company focused on the property damage and pressured him to accept an immediate and inadequate settlement. He reported that no attention was given to the concussion and the brain injury he suffered because of the accident. Six months after the accident he was having difficulty with memory, balance and coordination, communication, and cognitive reasoning. He reported that he approached his insurance agent and requested coverage for assessment and treatment of these issues, but that the agent was untrained in such matters, and therefore would not try to obtain coverage for the medical and psychological treatment needed. All participants report difficulties with insurance companies, including refusing to cover treatment, coverage that ended after a period and left them without the ability to obtain therapy or treatment. For these participants, treatment or therapy was simply ended, and the symptoms left untreated.

 All participants report that their greatest challenge after their traumatic injuries resulted from having to navigate medical, insurance, or vocational issues on their own. Only one participant reported that she tried on her own to obtain coverage from the company from which she was entitled to workers’ compensation and was unsuccessful. She was not able to obtain disability compensation until after a long and protracted legal battle that took over two years to reach a settlement. Other participants express frustration that they must act as their advocates because assistance is not available to them. They all report that having to self-advocate while trying to recover from traumatic injury exacerbated an already difficult situation.

Ultimately, this study illuminated that experiencing a traumatic injury is, in itself, very challenging. For many traumatic injury survivors, the challenges go far deeper than simply recovering from the physical injury. The information gathered in this study shows that those who experience a traumatic injury are affected on many levels. A traumatic injury can lead to changes in the injury survivor’s work life, their home life, their social life outside of work and family, and in other areas. These changes may be small inconveniences, or the changes can be so monumental as to be life-altering. The effects of a traumatic injury may require physical recovery, but the accompanying psychological, emotional, and administrative effects will also affect the trauma survivor’s well-being as well.

In today’s demanding business environment, corporations are aware of the investment they have in each employee. It is to their advantage to ensure that that investment is protected. For many organizations, this means taking steps to protect and support the injured employee. The data gathered through this study is intended to inform organizations as they develop and implement policies and strategies to help injured employees return to work. This researcher discusses in detail what her learning experience. The results, conclusions, and recommendations for organizations are shared in Chapter 5.

**CHAPTER 5. RESULTS, CONCLUSIONS, AND RECOMMENDATIONS**

**Introduction**

 In 2010, this researcher was married, the mother of two children recently graduated from high school and making their way toward new adult lives. She was working as an emergency and disaster preparedness planner, and she was just completing her coursework for her doctorate in Industrial/Organizational Psychology. In 2011, everything changed. She was thrown from a motorcycle and experienced multiple injuries, the most severe of which was a traumatic brain injury. This experience, recovering from the injuries, rebuilding a life from one that no longer existed, overtook her entire life. This experience of rebuilding, of seeking to find normalcy again after a traumatic injury, prompted the subject of this study – *What is the lived experience of returning to work after a traumatic injury?*

 While this study initially focused on trauma in general, the path the research process took led to a focus on traumatic brain injury. Traumatic brain injury (TBI) is a serious public health problem. In the United States, each year, traumatic brain injuries contribute to a substantial number of deaths and cases of permanent disability. In 2010, 2.5 million TBIs occurred either as an isolated injury or along with other injuries (Basic Information about Traumatic Brain Injury & Concussion, 2016). TBI contributed to the deaths of more than 50,000 people. TBI was a diagnosis in more than 280,000 hospitalizations and 2.2 million emergency room visits. Every day, 138 people in the U.S. die from injuries that include TBI. Those who survive a TBI can face effects lasting a few days to disabilities which may last the rest of their lives. The effects of TBI, which can include impaired thinking or memory, movement, sensation, or emotional functioning such as personality changes or depression, not only affect individuals but can have lasting effects on families and communities (CDC, 2016).

 Over the course of investigating this widespread and pervasive issue, this researcher met with eight individuals who bravely and honestly shared their experiences of traumatic injury. Seven of the participants experienced traumatic brain injuries as along with other physical injuries. These individuals ranged in age from mid-20s to 60s. The eighth individual experienced trauma resulting in permanent disability, and while she did not state that she was diagnosed with a TBI, she displayed characteristics similar to those who did experience TBI. Until recently, concussion, or mild traumatic brain injury (MTBI) has been largely misdiagnosed or even dismissed by medical professionals. This researcher experienced five days of unconsciousness and yet was simply told that she was fine; that her headaches, nausea, dizziness, confusion and memory loss would just go away. She was told to take aspirin, and that the symptoms would clear up in a few days.

 This study is a heuristic inquiry. This researcher set out to explore the subject of returning to work after a traumatic injury. A heuristic inquiry is an open discovery process, one that follows the path where the discovery leads. Some of the findings were unpredictable and unexpected. This researcher found much of what she discovered was surprising and remarkable.

 This chapter presents the summary of the data collected and its analysis. A discussion of the results is provided, combined with the researcher’s personal experience and views on the findings. The study’s limitations are also presented. Finally, recommendations for future research, recommendations for professionals in the corporate arena, and conclusion are also outlined.

**Summary of the Results**

This researcher found over the course of her investigation that there exists an array of research on traumatic injury incidents and some of these studies focused on the process of returning injured workers to the workforce. However, not many studies were found that focused on the experience of returning to work after a traumatic injury, as told from the survivor’s perspective. Typically, these studies focused on the ways corporate human resource departments could provide accommodations for injured workers, as required by the Americans with Disabilities Act (ADA) (2016). The ADA guides employers whose workforce includes a disabled individual, who is protected under this law. Employers are required to provide reasonable accommodations and adjustments to a job or work environment that make it possible for the individual to perform job duties. This is interpreted by employers as accommodations for functional limitations of the person doing the tasks and considers the level of the hardship for the employer and other issues. While this act does protect the employee, this research found that in many cases, physical, operational and functional accommodations may not have been enough for the traumatic injury survivor to return to work. This was found to be especially true for those whose injury included a traumatic brain injury.

The individuals who participated in this study shared that returning to work entailed a range of challenges beyond physical and functional tasks. However, the population under study had to contend with more than physical limitations that arose while recovering from a traumatic injury. The goal of this study was to gain an in-depth understanding of the experiences of traumatic brain injury survivors as they returned to work. This is the driving force behind the research question *“The experience of returning to work after a traumatic injury.”* This deep understanding of this experience was gained via the individual portraits. A significant grasp of their situation may lead to a greater awareness when interacting with them as individuals. This goal of gaining deep insights into the experience of returning to work after a traumatic injury is what lead to the decision of this researcher to explore this question via heuristic methodology as suggested by Moustakas (1990).

In the previous chapter, this researcher presented the data collected via the individual portraits of all participants. The qualitative design of Moustakas’ (1994) heuristic method provided the guidance and structure for the collection and analysis. This process included the steps Moustakas recommends. These steps include initial engagement consisting of the awareness of the topic and immersion where the investigator makes the question the center of the experiential world. This is then followed by incubation involving all deliberate focus on the phenomenon and allowing the information to be processed on a subconscious level. Moustakas’s next step is illumination, the step in which discovery occurs. The researcher then engages in explication where themes arise, leading to essential meanings. Finally, synthesis occurs, by which the experience as a whole is captured.

Data collection and analysis were begun by conducting open-ended interviews. These interviews were allowed to take on a conversational quality, as each participant recounted his or her experience in an unrestricted manner. This encouraged each participant to speak to their experience in their terms, describing the many varied nuances of the experience. This ensured each participant the autonomy to decide for him or herself what aspects of the experience were most important in their own eyes. These open-ended interviews were recorded, but case studies of participants were not verbatim. Many of the interviews were long as the participants tended to verbally meander, at times getting off-topic, but returning to the topic when prompted. This researcher took copious notes while listening to each participant tells his or her story. The participants’ experiences were presented as individual portraits to obtain insights relating to the phenomenon under study and led to the discovery of emerging themes from their stories. The themes that emerged included physical aspects such as pain, balance and coordination issues, or loss of sensations. Themes of psychological issues such as anxiety, grief, and depression also became evident. Social issues such as issues with friends and family members, coworkers and supervisors, many of which did not understand the trauma survivor’s challenges or found them difficult to tolerate were also common. All participants also experienced administrative issues such as those that arose from dealing with insurance agents and adjusters, medical personnel, occupational and physical therapists and others with whom they had to interact as they navigated the necessary administrative aspects following their accidents.

# Discussion of the Results

The intent of this study was to discover the experiences of people who have returned to work after a traumatic injury. Some aspects of the experience might be common to all individuals who the experience of traumatic injury. However, in answer to the research question, some themes emerging from the study appear to be unique, or at least more pronounced, about the type of injury, or the method of acquisition. Some other factors that may affect the direction in which the experience goes include age, type of job or available resources. This researcher experienced several challenges following her injury, including physical, emotional, psychological, social and economic issues. These were consistent with those expressed by participants as their experiences. These effects distilled down to themes that were consistent with each. These themes follow.

**Multiple Concurrent Losses and Their Impact**

 The participants expressed the impact their injuries had in many areas of their lives. The traumatic injuries varied in scope and severity, but all experienced changes in employment status directly related to their injuries. All participants found that their injuries interfered with their ability to perform to standards before their traumatic injuries. Many individuals found that limited mobility, sleep disturbance, fatigue, and pain limited their ability to perform well on the job. While some participants were able to remain in the same job after their accidents, this was more the exception rather than the norm. Nearly all participants eventually either changed jobs or stopped working altogether.

 Because of the impact participant’s injuries had on their employment status, multiple losses developed concurrently. For example, one participant who could not perform his job survived on disability insurance for a time. Over time, as his symptoms did not resolve, he was eventually let go from his position, which led to a loss of his medical insurance coverage. Unable to work, he was forced to move in with his mother, putting added strain on an already difficult relationship. This participant also found that his injuries affected his ability to enjoy social events and activities such as concerts, clubs or sports. In time, his social network was reduced, and he lost friends and others who had provided support.

**Difficulty Finding and/or Retaining Employment**

 Some participants found it necessary to seek employment that was different from the job they held before their accidents. For some, this meant seeking a different position within the same company. For others, this meant entering the job market to seek employment at a different company. Those who were unable to continue in their previous line of work due to their injuries found they were forced to seek employment in an alternative line of work. All participants expressed anxiety related to this process. Work is a significant element of an individual’s life. It provides more than a paycheck and a means of support. It often serves to provide a sense of purpose, a source of intellectual growth and actualization, socialization in the form of workplace camaraderie, and a source of affirmation of personal value and worth. This researcher, as well as all the participants, experienced a traumatic injury that they believe rendered them no longer viable in their jobs. Many experienced cognitive effects are resulting from their brain injuries. These included lost skills, time and special recognition abilities, memory issues, PTSD, loss of reasoning and communications skills, and other abilities associated with executive functioning, and mental and physical fatigue. Participants explained that they experienced fear and anxiety on many levels, including loss of identity and self-doubt, fear of loss of income, anxiety about whether they would be able to perform successfully at a new job, and other issues.

 Seeking employment is often a difficult and arduous process, even under the best of circumstances. The participants consistently reported that seeking work was especially difficult when the added doubt, fear and anxiety of performing well on a new job was compounded by trying to recover from a traumatic injury. These anxieties were also exacerbated by the realization that taking on a new job also means learning new skills, becoming comfortable within a new organizational culture and work environment, and finding one’s place in an existing workforce.

**Perception of Bias and Discrimination**

Participants held a common perception that bias regarding disability influenced those in the workplace. They each reported noticing changes in interactions with both supervisors and co-workers that emerged after returning to work following their traumatic injury. Those who experienced separation from their work because of their injuries reported that they felt individuals within a work environment treated them differently than they were treated before their accidents. Many discussed how these biases seemed to prompt the individual to place limitations on the injury survivor, as they often assumed that the injured worker was not as capable as previously viewed. Those who sought work in a different field, different company or different work environment as their previous employment was no longer available to them reported that they experienced frustration when they discovered that these limitations had been placed on them. Because of this perception, participants often found that they were allowed to work with less limitation if they kept their injuries hidden.

 This researcher, for example, found that although she brings a high level of technical skill and experience to the table for employers, the knowledge of her traumatic brain injury prompts others to assume a lowered level of performance, reduced intelligence and lack of skill. This researcher is still capable of performance of technical skills at a higher than average level. Neuropsychological testing found a reduction in information processing speed and mental exhaustion. Other participants with similar injuries report similar challenges, but express frustration that it is often assumed that TBI results in loss of intelligence, skill, or even mental illness. All participants agreed that bias, lack of education, and misinformation were the greatest challenges they encountered when returning to work after their injuries.

 Several of the participants expressed feelings that they still had most or all of their capabilities and that they could still contribute a great deal to a company. This sense of having the potential to make significant contributions, yet encountering limitations stemming from bias and assumptions based on misinformation, created a sense of frustration for this researcher as well as all participants.

**Emotional and Psychological Changes**

Participants consistently spoke of the emotional toll their injuries took on their well-being as they worked to regain normalcy. They discussed the anxiety that resulted from the doubt they each felt about being able to do their job. Some experienced the additional challenges of losing the ability to perform the tasks of their jobs at levels of performance that they had experienced before their accidents.

One theme that emerged as participant’s stories were collected was that there seemed to be a noticeable similarity between the stages of emotional and psychological recovery commonly associated with the grief process of the loss of a loved one and those experienced by traumatic injury survivors. It was noted that those who have survived a traumatic injury tend to go through a series of emotions that includes denial, anger, bargaining, depression and finally, acceptance. This theme becomes understandable when one considers that a traumatic injury, especially a traumatic brain injury, can have a lasting impact on the injury survivor’s life. All participants told of coming to a realization that the person they were before their traumatic injury was forever changed. That person no longer existed, was gone. Because of this, a TBI survivor often experiences loss, similar to the death of a loved one. They grieve the loss of their former self, the person they were before their traumatic injury.

The stages of grief and mourning are universal. These emotional stages are experienced by people from all walks of life, regardless of culture. Mourning occurs in response to an individual’s own terminal illness, the loss of a close relationship, or to the death of a valued being, human or animal. There are five stages of grief that were first proposed by Elisabeth Kübler-Ross in her 1969 book *On Death and Dying.* One of the most important psychological studies of the late twentieth century, *On Death and Dying,*grew out of Dr. Elisabeth Kübler-Ross’s famous interdisciplinary seminar on death, life, and transition. In her book, Dr. Kübler-Ross first explored the now-famous five stages of death: denial and isolation, anger, bargaining, depression, and acceptance (Kubler-Ross & Byock, 1969).

Each individual is unique in his or her bereavement, spending different lengths of time working through each step and expressing each stage with different levels of intensity. The five stages of loss do not necessarily occur in any specific order. As one grieves, one often moves between stages before achieving a more peaceful acceptance of death. The time required to achieve this final stage of grief is unique to the individual and may vary from person to person (Axelrod, 2017). This can make the acceptance of the loss that occurs due to traumatic injury more difficult.

*Denial –* several participants reported during the initial stages of recovery from their injuries, they had difficulty accepting the impact the injury might have on many areas of their lives. Several tried to return to work in the same capacity, and with the same ability to perform as before their accidents. One participant told about how she returned to work, believing that she was fully capable of doing her job and that she would be able to continue her duties as wife, homemaker, and mother without limitations or delays. This was consistent among participants, even those with debilitating physical injuries. Those who had the most difficulty were those who experienced a concussion or traumatic brain injury. For many, the first reaction to learning they have a traumatic brain injury is to deny the reality of the situation. “I’m fine. I’ll soon be as good as I ever was.” is what many of my participants told themselves. This is a normal reaction to rationalize overwhelming emotions and a defense mechanism that buffers the immediate shock of the loss (Axelrod, 2017).

*Anger –* participants also reported experiencing anger upon discovering that their injuries resulted in limitations and changes in capabilities. This anger was often directed inward, as in inability to accept one’s limitations, or outward, as in lashing out at others who placed limitations upon the traumatic injury survivor. Those who experienced externally directed anger also found frustration and anger against the person or circumstance that caused their injuries. As the masking effect of denial begins to wear, reality and its pain re-emerge. The intense emotion is deflected from the trauma survivor’s vulnerable core. It is often redirected and expressed instead as anger (Axelrod, 2017).

*Bargaining –* The normal reaction to feelings of helplessness and vulnerability is the need to regain control. Although the bargaining component of the recovery process was not as pronounced with traumatic injury as it often is with the loss of a loved one, bargaining was not uncommon for those participants who sought understanding and reconciliation that was based on help from a higher power entity. Some participants reported that they found themselves praying for change or recovery, or attempting to bargain with God for the ability to return to pre-trauma status.

*Depression –* all participants, as well as this researcher, experienced depression of varying degrees when finally recognizing that the limitations and changes resulting from their injuries had a real and undeniable effect on many areas of their lives. For some participants, the depression was of so severe as to render the trauma survivor unable to function or to require pharmacological support. Dr. Kubler-Ross explains that two types of depression are associated with mourning. The first is a reaction to practical implication relating to the loss and stems from the realization of such issues as economic stress, relationship issues, or inability to cope. The second type is more subtle and private. It is the quiet preparation to separate and bid the loved one, in this case, the former self, farewell (Kubler-Ross & Byock, 1969).

*Acceptance –* it was noted that the most effective recovery process began to take place upon acceptance of the traumatic injury by the survivor. This researcher surmises that true recovery is only possible when acceptance of the impact and changes occurs and the traumatic injury survivor is no longer disbursing recovery energy on denial, anger, bargaining or depression.

**Social Impact**

 Participants reported experiencing social effects resulting from their traumatic injuries. None of the participants reported that their injury had little or no effect on their social functioning. The traumatic injuries affected all aspects of social interaction from friends and family members to co-workers and supervisors. Several participants experienced frustration and exhaustion resulting from what they felt was a constant need to present a positive persona, a pretense that the trauma survivor was doing better than they were. One participant shared how her husband, who was initially patient and understanding after her car accident, later became impatient as her recovery took longer than he had assumed was reasonable. She reported the conflict that began to characterize their marriage. She also shares how difficult this was, as she saw their relationship changing, and how this added to her anxiety as she made efforts to recover from the traumatic brain injury she had sustained in the accident. Also, as she was no longer able to maintain the high-paying job she had before the accident, she reported that economic issues also plagued the marriage. She told of feeling shame when she realized she was not meeting the expectations of family, friends, and work associates.

 Participants also told of experiencing social changes related to their jobs. Many individuals develop social relationships as a result of interactions with co-workers. Several participants explained that when forced to take leave or change jobs due to their traumatic injuries, they discovered that their social base was also compromised. Several participants discussed how they began to feel isolated as they spent less time among co-workers. Those whose recovery extended through longer periods or experienced permanent injuries that greatly changed their lifestyles expressed frustration as the isolation took a large hold on their lives, some expressing feelings of abandonment by friends and co-workers. Participants consistently reported that the perception of isolation and abandonment or even the fear of impending isolation or abandonment greatly increased the anxiety that accompanied the trauma of the injury and subsequent recovery efforts. Many reported symptoms of posttraumatic stress disorder following anxiety, further exacerbating efforts to achieve recovery. For some, this anxiety and fear tended to encourage further isolation as avoidance of social situations became a means of coping. Those participants who experienced traumatic brain injury who suffered memory issues, issues with speech, hearing, and communication or other symptoms of cognitive or executive functioning issues reported additional issues and felt that avoidance was their best or only social option under already trying circumstance.

**Economic impact**

 All participants reported effects on the economic aspects of their lives. While some experienced economic impact of greater severity than others, all consistently reported that their traumatic injuries tended to change their lives in various ways. For some, the impact in this area was not catastrophic. Some participants had their financial needs were adequately covered by insurance or lived with a spouse who shouldered the financial burden while the trauma survivor recovered and to returned to work. For some, however, the effects of their traumatic injury resulted in catastrophic changes. All participants reported having to make significant lifestyle adjustments because of reduced income or inability to find work commensurate with their previous employment. One participant who was unable to work at his previous job reported that his inability to provide for his family affected his self-esteem. He shares that felt inadequate and eventually succumbed to depression that prompted him to leave his marriage. Today he worked a job at a pay rate below his previous earnings and said that he has not been able to recover the potential or the status that he had before his accident. Another participant stated that over time he depleted his savings, but that his marriage also ended in divorce. This researcher’s marriage also suffered adverse effects because of the injuries sustained in her accident, leading to the loss of a household contributor. The economic impact and extreme stress exacerbated the cognitive, memory and other issues resulting from her traumatic injury. Eventually, she was forced to leave the job she held at the time of the accident and later made a major move to another state. At the time of this writing, she was still recovering economically from this series of events.

 The characteristics of the participants varied widely, regarding the age, type of career, nature of a traumatic injury, and time since the trauma occurred. The youngest participant was a young man in his early 20s, and the oldest participant was a woman in her 70s. While all participants experienced varying economic impact directly related to their traumatic injuries, the ability to recover seemed to be closely related to the trauma survivor’s support system. Those who had well established legal or financial support regarding insurance appeared to have the best chance of achieving recovery and returning to work. Also, those who had emotional support in the form of friends or family also appeared to recover faster and more easily than those who did not. This appeared to be consistent among participants, irrespective of whether that support system existed before the injury, or was developed later. Some individuals were able to develop support systems after their accidents by joining support groups. This researcher found support by connecting with other individuals who have also suffered traumatic brain injuries in a motor vehicle accident, or other causes. That support system, which included both emotional support of friends and family, as well as administrative support found through the Brain Injury Alliance of Washington, proved significant in impacting the path the recovery has taken for this researcher. Several participants expressed similar experiences and did not seem to be influenced by age, gender, or type of accident or injuries. All participants expressed that the various types of support helped to mitigate the impact their injuries had on their economic stability after their accidents.

 In summary, all participants found their lives impacted in various ways by the emotional, physical, and psychological issues resulting from their traumatic injuries. No participant felt untouched economically by the effects of their injuries.

**Physical Impact**

 Although all participants experienced physical injuries resulting from their traumatic injuries, only three reported experiencing physical injuries that affected their work. All but one participant experienced traumatic brain injuries that affected their ability to work, but TBI is often referred to as an “invisible injury.” In contrast to physical injuries such as broken bones, bruises or other types of physical injuries, the effects of a traumatic brain injury are internal, often with little to no outward manifestation of trauma. While psychological symptoms often accompany traumatic brain injury, the most notable outward symptoms of TBI include balance and coordination issues, sensory issues such as changes or loss of vision, hearing, touch sensitivity, taste or smell, and physical exhaustion and mental exhaustion (symptoms).

Physical injuries and traumatic brain injuries also tend to result in sleep disturbances, and several participants reported experiencing changes in circadian rhythms. For this researcher, the changes in circadian rhythms resulted in increased exhaustion, exacerbating the already existing mental exhaustion that accompanied the TBI. Pain resulting from the fractured bones and other internal injuries also interfered with this researcher’s ability to reach deep and restful sleep, often waking due to discomfort. This disturbance in sleep cycles added to the stress already resulting from the physical pain and interfered with her body’s ability to heal, increasing recovery time.

Some participants shared that they experienced pain so severe that they felt compelled to try to control the pain with drugs. Four participants reported developing addictions to the opiates prescribed by their doctors for pain. Three of the four told of resorting to illegal drugs to control pain. Cannabis was the drug of choice for two of the four participants. The two other participants reported addictions to Vicodin and Oxycodone, obtained through illegal sources. One participant reported his addiction to Vicodin lasted over three years. Both addicted participants eventually resolved their addictions, and remain sober.

Pain management continues to be an issue for the four participants.

**Coping Strategies**

 Participants who participated in this study utilized a variety of coping strategies to manage the effects of their traumatic injuries. Each participant described coping strategies postulated by Leana and Feldman (1988), during which individuals utilized either problem-focused or symptom-focused coping strategies. The coping strategy for this researcher, for example, was to immerse herself in her art. Discovering that sitting at a computer, typing for long periods was a painful and exhausting experience due to the physical injuries and that concentrating for long periods was also exhausting due to the traumatic brain injury, she opted to spend time in those activities that always brought her pleasure. She found she could paint watercolors for several hours with steady energy and very little pain. As the work produced during this period was sold, this presents an excellent example of both symptom-focused (pain management) and problem-focused (relief of economic stresses) coping strategies. Also, this researcher’s immersion into the subject of traumatic injury, and specifically into that of traumatic brain injury, has resulted in the discovery of a talent for mentoring TBI survivors.

As returning to work was of critical importance to several of the co-workers, re-employment strategies such as problem-focused activities such as job searching, training or retraining were utilized by those participants who felt returning to work was a viable option for them (Leana & Feldman, 1988). Participant’s choices of coping strategies appear to be influenced by age. One participant, a man in his mid-20s, found that video games helped to relieve not only the boredom and loneliness of being home-bound and isolated but helped him to manage the pain of his injuries by helping him temporarily turn his focus to other activities. Another participant had long enjoyed a passion for writing, and while she had been working as a journalist and photographer before her accident, she found that her traumatic brain injury ignited a passion for writing about the subject of TBI, hoping to help educate others about the unique challenges that accompany TBI. Today she works as a TBI advocate, speaker, and writer, currently working on publishing her second book on the subject.

While not all participants found coping strategies that resulted in positive growth, those that do express how doing so helped them manage pain, find acceptance of the changes that occurred as a result of their accidents, and helped them focus energy toward recovery.

**Resilience, Self-Efficacy, and Posttraumatic Growth**

All participants reported finding positive growth upon finally accepting the changes, limitations, and effects of their traumatic injury. It was noted that resilience and self-efficacy are directly related to one’s perspective of believing one can recover. Several participants reported discovering previously unknown levels of strength after acceptance. Posttraumatic growth (PTG) is a positive change experienced because of the struggle with a major life crisis or traumatic event. It is the premise that human beings can be changed by their encounters with life challenges, sometimes in radically positive ways, and is not new. The theme is present in ancient spiritual and religious traditions, literature, and philosophy. What is reasonably new is the systematic study of this phenomenon by psychologists, social workers, counselors, and scholars in other traditions of clinical practice and scientific investigation (What is PTG?, 2014). This researcher found this to be a very real and recognizable positive phenomenon, one that warrants deeper investigation.

# Discussion of the Conclusions

The results of this study are significant in that they provided complex and illuminating depictions of the experiences of life after traumatic injury. Although the focus of the study was the experience of returning to work after a traumatic injury, as the study progressed, it became evident that work is intrinsically intertwined with all other aspects of one’s life. Participants who participated in the study revealed deep insights into how one feels, behaves and adjusts after experiencing a traumatic injury. The body of literature on the subject, while extensive, found that researchers have studied the experience from an external perspective. This researcher discovered a void within the existing literature in that no heuristic studies were available on the topic. The literature was informative on the physical aspects of traumatic injury, on some of the challenges of providing for recovery and accommodations provided by organizations to assist traumatic injury survivors in their return to work, but information on the internal struggles and challenges experienced by trauma survivors was missing from the body of literature. This study helps to fill these voids and will, perhaps, serve to prompt additional studies exploring the experience of returning to work after a traumatic injury, as experienced from the trauma survivor’s perspective. The heuristic methodology provides a deep, intimate perspective of the essence of the experience that other methodologies, those from an external perspective cannot duplicate. As explained by Douglas and Moustakas (1985) the power of heuristic inquiry lies in its potential for disclosing the truth. Through exhaustive self-search, dialogues with others, and creative depictions of experience, a comprehensive knowledge is generated, beginning as a series of subjective musings and developing into a systematic and definitive exposition (Douglass & Moustakas, 1985).

Heuristic inquiry intensely reveals the insights and perspectives of the individuals who have suffered a traumatic injury, how their lives are changed and the challenges of finding normalcy again by returning to the workforce. It illuminates the depth with which work is intertwined with every aspect of one’s life, and how experiencing a traumatic injury can vastly change the course of that life. A heuristic inquiry reveals the emotional and psychological effects that such an injury can place upon one’s well-being, the effort, and energy required to find one’s way back to a normal life, and the internal characteristics one discovers from experience. Industrial/Organizational psychologists, human resource professionals, counselors and others who help individuals return to the workforce may benefit from the enriched understanding that this study provides. Information about the experience one has not only in recovering from a traumatic injury, but in the entire process of returning to work, or rebuilding a normal life after such an experience will inform and support their work.

# Limitations

This study included participants from a wide variety of jobs, locations, ethnicities, and backgrounds. However, the study is not without limitations. The research included only individuals from the United States. Every participant reported issues with insurance and medical personnel that resulted in increased anxiety while attempting to recover from their injuries. Those individuals who are returning to work after a traumatic injury who live in countries where medical insurance is easier to obtain may report different experiences. Also, only two of the participants were adults in their 20s, and one was a woman in her thirties. The rest of the study involved individuals over the age of 55. The older adults reported long-term effects that may or may not be exacerbated by age. A study that focuses on younger adults vs. older adults may illuminate whether age or time since injury may be a factor in how the individual responds to treatment or how they handle administrative issues such as insurance, legal issues or other administrative issues.

Also, this study involved a sampling of convenience. Individuals are distributed throughout the United States but were engaged via social media and other groups. All participants were members of urban demographics but jobs varied widely.

 **Recommendations for Future Research or Interventions**

While conducting this research, this researcher discovered consistent themes throughout the study, but the sample was relatively small. Would a larger sampling produce similar results, with themes remaining consistent among traumatic injury survivors, or would different themes emerge from a wider spectrum from which to gather data? Future research might benefit from a broader range of individuals. This researcher also suggests that multiple studies involving larger samples from more concentrated areas may produce different themes.

Finally, this study did not involve any organizations or corporations. This researcher also suggests that organizational involvement might produce different results as well.

# Conclusion

A significant proportion of the population will experience at least one traumatic event in their lifetime. Many will go on to develop adverse psychological outcomes. Traumatic events are ranging from motor vehicle accidents (the number one cause of trauma in the world today) to sexual abuse and childhood or domestic violence, to natural disaster to combat; the likelihood that one will experience trauma within their lifetime is high. Also, with today’s prevalence of media exposure to trauma around the world, the risk of indirect trauma, witness trauma, and secondary trauma are very real types of trauma that until more recently were not considered. Exposure to mass trauma is common. In the United States, 15% of women and 19% of men have reported lifetime exposure to natural disasters alone. Since the advent of 24-hour television news, exposure to mass violence and natural disasters through the media is even more widespread (Neria & Sullivan, 2011). These types of trauma, both experienced directly as in traumatic injury, or indirectly as in that which is experienced via media exposure, witnessing a trauma, or proximally, as in a threat to a loved one, all have the effect of significantly affecting an individual’s ability to function in daily life. One’s ability to work can suffer greatly.

Many who experience traumatic injury find that their ability to function well in a work environment is also significantly challenged. Individuals with posttraumatic stress disorder (PTSD) have been reported to have difficulty returning to employment (Brenneman, Redelmeier, Boulanger, McLellan, & Culhane, 1997). Individuals with anxiety disorders such as PTSD were significantly less likely than individuals without to return to employment (Burton, Polatin, & Gatchel, 1997). Symptoms of PTSD and lowered functionality resulting from a trauma experience can lead to changes in employment such as placement into a different job, underemployment as in being relegated to light duty or periods of non-employment. Employment gaps can present hiring issues for many, but for those who have experienced a traumatic injury, periods of underemployment or non-employment can compound and exacerbate an already stressful situation. Following a traumatic event, the average time off work was reported to be 34.7 weeks (Jaquet et al., 2005). Individual’s work status one-year post trauma was linked to symptoms of PTSD (Michaels, Michaels, & Moon, 1998). Another study on the long-term effects of trauma found that if individuals did not return to work after a traumatic occurrence, psychological symptoms increased (Mason, Wardrope, Turpin, & Rowlands, 2002).

Corporations today invest millions in their employees. Intellectual capital is today considered by many to be among a business’ most valuable assets. Helping individuals who have experienced trauma regain normalcy and a level of functioning that is similar or equal to that which was achieved before the injury is often in a company’s best interest regarding profitability. Corporate officers, managers, and human resources directors now understand the value of helping a traumatically injured worker return to work.

REFERENCES

Altuntas, C. (2010). Çalışan destek programları (Employee assistance programs). *Dokuz Eylul University Journal of Social Sciences, 12*(1), 57-75.

Amen, D. (2015). Change your Brain, Change your business at Amen Clinics. *Amen Clinics*. Retrieved from http://www.amenclinics.com/changeyourbusiness

Amen, D., Wu, J., Taylor, D., & Willeumier, K. (2011). Reversing brain damage in former NFL players: Implications for traumatic brain injury and substance abuse rehabilitation. *Journal of Psychoactive Drugs, 43*, 1-5.

Americans with Disabilities Act. (2016). *United States Department of Labor.* Retrieved from https://www.dol.gov/general/topic/disability/ada

Anderson, K. M., Renner, L. M., & Danis, F. S. (2012). Recovery: Resilience and growth in the aftermath of domestic violence. *Violence Against Women, 18*(11), 1279-1299.

Andries, F., Wevers, C., & Wintzen, A. (1997). Vocational perspectives and neuromuscular disorders. *International Journal of Rehabilitation Research, 20*, 255-73.

Anke, A., Stanghelle, J., Finset, A., Roaldsen, K., Pillgram-Larsen, J., & Fugl-Meyer, A. (1997). Long-term prevalence of impairments and disabilities after multiple trauma. *Journal of Trauma and Acute Care Surgery, 42*, 54-61.

Asmundson, G., Norton, G., Allerdings, M., Norton, P., & Larsen, D. (1998). Post-traumatic stress disorder and work-related injury. *Journal of Anxiety Disorder, 12*(1), 57-69.

Axelrod, J. (2017). The 5 stages of grief and loss. Psych Central. Retrieved from https://psychcentral.com/lib/the-5-stages-of-loss-and-grief

Baldwin, D. (2014, July). *About Trauma*. Retrieved from http://www.trauma-pages.com/trauma.php

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Basic Information about Traumatic Brain Injury and Concussion. (2016, January). *Centers for Disease Control and Prevention*. Retrieved from http://www.cdc.gov/traumaticbraininjury/basics.html

Belmont, A., Agar, N., Hugeron, C., Gallais, B., & Azouvi, P. (2006, July). Fatigue and traumatic brain injury. *Annales de Readaptation et de Medecine Physique, 49*(6), 370-374.

Berg, B. (2004). *Qualitative research methods for the social sciences* (5th ed.). Boston: Pearson Education.

Bergeron, E., Rossignol, M., Osler, T., Clas, D., & Lavoie, A. (2004). Improving the TRISS methodology by restructuring age categories and adding comorbidities. *Journal of Trauma and Acute Care Surgery, 56*, 760-67.

Bisson, J. L., Ehlers, A., Matthews, R., Pilling, S., Richards, D., & Turner, S. (2007). Psychological treatments for chronic post-traumatic stress disorder: Systematic review and meta-analysis. *British Journal of Psychiatry, 190*, 97-104.

Blanchard, E., & Hickling, E. (1998). *After the crash: Assessment and treatment of motor vehicle accident survivors.* Washington, DC: American Psychological Association.

Blanchard, E., & Hickling, E. (2004). *After the crash: Psychological assessent and treatment of survivors of motor vehicle accidents* (2nd ed.). Washington, DC: American Psychological Association.

Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: A research note. Qualitative Research, *8*(1), 137-152. doi:10.1177/1468794107085301

Boyd, B., Rodgers, C., Aupperle, R., & Jak, A. (2016, May). Case report on the effects of cognitive processing therapy on psychological, neurological, and speech symptoms in cormorbid PTSD and TBI. *Cognitive and Behavioral Practice, 23*(2), 173-183.

Bradley, R., Greene, J., Russ, E., Dutra, L., & Weaten, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. *American Journal of Psychiatry, 162*, 214-227.

Brenneman, F., Redelmeier, D., Bjoulanger, B., McLellan, B., & Culhane, J. (1997). Long-term outcomes in blunt trauma: Who goes back to work? *Journal of Trauma and Acute Care Surgery, 42*, 778.

Breslau, N. (2002). Epidemiologic studies of trauma, posttraumatic stress disorder, and other psychiatric disorders. *Canadian Journal of Psychiatry, 47*(10), 923-929.

Bridgman, P. (1950). *Reflections of a physicist.* New York: Philosophical Library.

Britten, N. (2007, Nov 1). Gerry McCann returns to work. *The Telegraph*.

Bronowski, J. (1965). *Science and human values.* New York: Harper and Row.

Bronowski, J. (1978). *The origins of knowledge and imagination.* New Haven, CT: Yale University.

Bryant, R. (2003). Acute stress reactions: can biological responses predict posttraumatic stress disorder? *CNS Spectrum, 8*, 668-674.

Bryant, R., O'Donnell, M., Creamer, M., McFarlane, A., Clark, C., & Silove, D. (2010). The psychiatric sequelae of traumatic injury. *The American Journal of Psychiatry, 167*, 312-320.

Buber, M. (1961). *Tales of Hasidim: The early masters.* New York: Schocken.

Buber, M. (1965). *The knowledge of man.* New York: Scribner (Original work published 1858).

Burmeister, E., & Aitken, L. M. (2012). Sample size: How many is enough? *Australian Critical Care,* 25, 271-274. doi:10.1016/j.aucc.2012.07.002

Burton, K., Polantin, P., & Gatchel, R. (1997). Psychosocial factors and the rehabilitation of patients with chronic work-related upper extremity disorders. *Journal of Occupational Rehabilitation, 7*(3), 139-153.

Carchietta, G. A. S. (2015). Five steps to increasing utilization of your employee assistance program. *Workplace Health and Safety, 63*(3), 132.

Chadda, B. (2015, Sep 1). *The 5 coping stages after a traumatic injury*. *Spinal Cord Injury Journal*. Retrieved from : http://www.spinalcord.com/blog/the-5-coping-stages-after-a- traumatic-injury

Craig, J. (1978). *The heart of the teacher: A heuristic study of the inner world of teaching.* Ann Arbor, MI: University Microfilms International.

Cresswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches.* Thousand Oaks, CA: Sage Publications, Inc.

Cresswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.

Crisp, R. (1992). Return to work after traumatic brain injury. *Journal of Rehabilitation*, 27-33.

Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview based on qualitative research. *Social Science Information, 45*, 483-499.

Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness.* New York: Harcourt Brace.

Davis, H. (1999). The psychiatrization of post-traumatic distress: Issues for social workers. *British Journal of Social Work, 29*, 755-777.

*Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.)*.* (1987). Washington, DC: American Psychiatric Association.

Disability. (2017, September). *Merriam-Webster*: Retrieved from https://www.merriam-webster.com/dictionary/disability

Douglass, B. G., & Moustakas, C. (1985). Heuristic inquiry. *Journal of Humanistic Psychology, 25*(3), 39-55.

Eakins, J. (2009, Nov). Blood Glucose Control in the Trauma Patient. *Journal of Diabetes Science and Technology, 3*(6), 1371-1376. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2787037/

Epoche (2015, September 12). *Encyclopaedia Britannica.* Retrieved from https://www.britannica.com/topic/epoche

Fadyl, J., & McPherson, K. (2008). Return to work after injury: a review of evidence regarding expectations and injury perceptions, and their influence on outcome. *Journal of Occupational Rehabilitation, 18*, 362-74.

Furnham, A., Hyde, G., & Trickey, G. (2013). The values of work success. *Personality and Individual Differences, 55*, 495-489.

Gendlin, E (1962). *Experiencing and the creation of meaning.* Chicago: Free Press.

Get the Stats on Traumatic Brain Injury in the United States. (2016, January 22). Centers for *Disease Control and Prevention.* Retrieved from http://www.cdc.gov/traumaticbraininjury/data/

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research.* New York, NY: Aldine Publishing Company.

Gordi, A. (1970). *Psychology as a human science: A phenomenologically based approach.* New York, NY: Harper and Row.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods,* *18*(1), 59-82. doi:10.1177/1525822X05279903

Harms, L. (2001). After the accident: Survivor's perceptions of recovery following road trauma. *Australian Social Work, 57*(2), 161-174.

Harvey, A. G., Bryant, R. A., & Tarrier, N. (2003). Cognitive behaviour therapy for posttraumatic stress disorder. *Clinical Psychology Review, 23*, 501-522.

Herman, J. L. (1992). *Trauma and recovery.* New York, NY: Basic Books.

Hiles, D. (2002, October). *Narrative and heuristic approaches to transpersonal research and practice.* Centre for Counselling and Psychotherapy Education. London, United Kingdom

Holtslag, H., Post, M., van der Werken, C., & Lindeman, E. (2007). Return to work after major trauma. *Clinical Rehabilitation*, 373-83.

Homberg, C. (2010). *The lived experience of self-trust in women during mid-life, aged 40-60: A phenomenological heuristic study* (Doctoral dissertation). Capella University, Minneapolis, MN.

Hororwitz, M. (1992). *Stress response syndromes.* Northvale: Jason Aronson Inc.

Hovda, D., Wojtys, E., & Landry, G. (1999). Current concepts: Concussion in sports. *American Journal of Sports Medicine, 27*, 676-687.

Huber, J., & Whelan, K. (1999). A marginal story as a place of possibility: Negotiating self on the professional knowledge landscape. *Teaching and Teacher Education, 15*, 381-396.

Hynes, L. M., & Dickey, J. P. (2006, Feb). Is there a relationship between whiplash-associated disorders and concussion in hockey? A preliminary study. *Brain Injury, 20*(2), 179-188.

Hyperbaric Oxygen Therapy. (2016). *Mayo Clinic.* Retrieved from http://www.mayoclinic.org/tests-procedures/hyperbaric-oxygen-therapy/basics/definition/prc-20019167

Hyperbaric Oxygen Therapy: Don't Be Misled. (2015, July 25). *U.S. Department of Health and Human Services*. Retrieved from http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm364687.htm

Hypersmolar Hyperglycemic Nonketotic Syndrome (HHNS). (2016, March). *American Diabetes Association.* Retrieved from : http://www.diabetes.org/living-with-diabetes/complications/hyperosmolar-hyperglycemic.html

*International classification of impairments, disabilities, and handicaps: A manual of classification relating to the consequences of disease.* (1980). Geneva: World Health Organization.

Jaquet, J., van der Jagt, I., Kuypers, P., Schreuders, T., Kalminjn, A., & Hovius, S. (2005). Spaghetti wrist trauma: Functional recovery, return to work, and psychological effects. *Plastic and Reconstructive Surgery, 115*(6), 1609-1617.

Jette, A. M. (1994). Physical disablement concepts for physical therapy resesarch and practice. *Physical Therapy, 74*(5), 380-386.

Johnson, D. G. (2010). *Traumatic Brain Injury Survival Guide.* Traverse City, MI: Dr. Glen Johnson.

Jones, C., Harvey, A., & Brewin, C. (2005, Jun). Traumatic Brain Injury, dissociation, and posttraumatic stress disorder in road traffic accident survivors. *Journal of Trauma Stress, 18*(3), 181-91.

Jourard, S. (1968). *Disclosing man to himself.* New York: Van Nostrand.

Jourard, S. (1971). *Self-disclosure: An experimental analysis of the transparent self.* New York: Wiley-Interscience.

Juni, J., Waxman, A., Devous, M., Tikofsky, R., Ichise, M., & Van Heertum, R. (2009, Sep.). Procedure guideline for brain perfusion SPECT using (99m) Tc radioparmaceuticals 3.0. *Journal of Nuclear Medical Technology, 37*(3), 191-5.

Kausch, O., & Marks, M. (2013). Reactivation of PTSD symptoms. *Psychiatric Times, 30*(7), 24G, 24H.

Kleining, G., & Witt, H. (2000, Jan). The qualitative heuristic approach: A methodology for discovery in psychology and social sciences. rediscovering the method of introspection as an example. *Forum: Qualitative Sozialforschung/Forum: Qualitative Social Research, 1*(1), 1438-5627.

Kessler, R., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General Psychiatry, 52*(12), 1048-1060.

Kivioja, A., Myllynen, P., & Rokkanen, P. (1990). Is the treatment of the most severe multiply injured patients worth the effort? A follow-up examination 5 to 20 years after severe multiple injury. *Journal of Trauma, 30*, 480-83.

Krause, J., Kewman, D., & DeVivo, M. (1999). Employment after spinal cord injury: an analysis of cases from the Model Spinal Cord Injury Systems. *Archives of Physical Medicine and Rehabilitation, 80*, 1492-500.

Kubler-Ross, E., & Byock, I. (1969). *On death and dying: What the dying have to teach doctors, nurses, clergy and their own families.* New York, NY: Scribner.

Li, G., & Baker, S. P. (2012). *Injury research: Theories, methods, and approaches.* New York : Springer.

Lin, K., Guo, N., Shiao, S., Liao, S., Hu, P., Hsu, J., . . . Guo, Y. (2013). The impact of psychological symptoms on return to work in workers after occupational injury. *Journal of Occupational Rehabilitation, 23*(1), 55-62.

MacKenzie, E., Morris, J. J., & Jurkovich, G. (1998). Return to work following injury: the role of economic, social, and job-related factors. *American Journal of Public Health, 88*, 1630-37.

Mackenzie, E., Shapiro, S., Smith, R., Siegel, J., Moody, M., & Pitt, A. (1987). Factors influencing return to work following hospitalization for traumatic injury. *American Journal of Public Health, 77*, 329-34.

Marshall, C., & Rossman, G. (2011). *Designing qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

Maslow, A. (1956). Self-actualizing people: A study of psychological health. In C. Moustakas, *The self* (pp. 160-194). New York: Harper and Brothers.

Maslow, A. (1966). *The psychology of science.* New York: Harper and Row.

Maslow, A. (1971). *The farther reaches of human nature.* New York: Viking.

Maslow, A. (1998). *Maslow on management* (1st ed.). New York, NY: John Wiley and Sons, Inc.

Maslow, A. (1943, 2013). *A theory of human motivation.* Eastford, CT: Martino Publishing.

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum: Qualitative Social Research, 11*(3).

Mason, S., Wardrope, J., Turpin, G., & Rowlands, A. (2002). Outcomes after injury: A comparison of workplace and nonworkplace injury. *Journal of Trauma-Injury Infection and Critical Care, 53*(1), 98-103.

Mayou, R., Bryant, B., & Duthie, R. (1993). Psychiatric consequences of road traffic accidents. *British Medical Journal, 307*, 647-651.

McClelland, D. C. (1961, 2010). *The achieving society.* New York, NY: D. Van Nostrand Company, Inc.

Mertens, D. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Michaels, A., Michaels, C., Smith, J., Moon, C., Peterson, C., & Long, W. (2000). Outcome from injury: general health, work status, and satisfaction 12 months after trauma. *Journal of Trauma, 48*, 841-48.

Morris, J., Sanchez, A., Bass, S., & MacKenzie, E. (1991). Trauma patients return to productivity. *Journal of Trauma, 31*, 827-33.

Moustakas, C. (1968). *Individuality and encounter.* Cambridge, MA: Doyle.

Moustakas, C. (1981). *Rhythms, rituals and relationships.* Detroit, MI: Center for Humanistic Studies.

Moustakas, C. (1988). *Phenomenology, science, and psychotherapy.* Sydney, Nova Scotia, Canada: Family Life Institute, University College of Cape Breton.

Moustakas, C. (1990). *Heuristic Research: Design, Methodology, and Applications.* Newbury Park, CA: SAGE Publications, Inc.

Murray, G., Teasdale, G., Braakman, R., Cohadon, F., Dearden, M., & Iannotti, F. (1999). *The European Brain Injury Consortium survey of head injuries.* Acta Neurochirurigica (Wien).

Nagi, S. (1991). Disability concepts revisited: Implications for prevention. In A. Pope, & A. Tarlov, *Disability in America: Toward a national agenda for prevention.* Washington, DC: National Academy Press.

Neria, Y., & Sullivan, G. M. (2011, September 28). Understanding the mental health effects of indirect exposure to mass trauma through the media. *Journal of the American Medical Association, 306*(12). Retrieved from http://jama.jamanetwork.com/

Neuman, W. L. (2003). *Social research methods: Qualitative and quantitative approaches.* Boston: Allyn and Bacon.

Norris, F. (1992). Epidemiology of trauma: Frequency and impact of different potentially traumatic events on different demographic groups. *Journal of Consulting and Clinical Psychology, 60*, 409-418.

Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology, 11*(4).

Oppermann, J. (2004). Interpreting the meaning individuals ascribe to returning to work after traumatic brain injury: a qualitative approach. *Brain Injury, 18*, 941-55.

Ownsworth, T., & McKenna, K. (2004). Investigation of factors related to employment outcome following traumatic brain injury: a critical review and conceptual model. *Disability and Rehabilitation, 26*(13), 765-784.

Patton, M. (2002). *Qualitative evaluation and research methods* (3rd ed.). Newbury Park, CA: Sage.

Pinnegar, S., & Daynes, J. (2006). Locating narrative inquiry historically: Thematics in the turn to narrative. In J. Daynes, *Handbook of narrative inquiry.* Thousand Oaks, CA: SAGE Publications, Inc.

Polanyi, M. (1962). Tacit knowing: Its bearing on some problems of philosophy. *Reviews of Modern Physics, 34*(4), 601-616. doi:10.1103/RevModPhys.34.601

Polanyi, M. (1964). *Science, faith, and society.* Chicago: University of Chicago Press.

Polanyi, M. (1966). *The tacit dimension.* Garden City, NY: Doubleday.

Polanyi, M. (1969). *Knowing and being.* (M. Grene, Ed.) Chicago: University of Chicago Press.

Polanyi, M. (1974). *Personal knowledge: Towards a post-critical philosophy.* Chicago: University of Chicago Press.

Polanyi, M. (1983). *The tacit dimension.* Gloucester, MA: Peter Smith.

Polanyi, M. (Personal Knowledge). *1962.* Chicago: University of Chicago Press.

Polanyi, M., & Sen, A. (2009). *The Tacit Dimension* (Reissue ed.). Chicago, IL: The University of Chicago Press.

Polkinghorne, D. (1989). Phenomenological research methods. In R. Valle, & S. Halling, *Existential-phenomenological perspectives in psychology* (pp. 41-60). New York: Plenum Press.

Polya, M. (1945). *How to solve it: A new aspect of mathematical method.* Princeton, NJ: Princeton University Press.

Pope, A. M., and Tarlov, A. R. (1991). *Disability in America: Toward a national agenda for prevention.* Washington, DC: Institute of Medicine Committee on a National Agenda for the Prevention of Disabilities, Division of Health Promotion and Disease Prevention.

Redmill, D., McIlwee, A., McNicholl, B., & Templeton, C. (2005). Long-term outcomes 12 years after major trauma. *Injury, 37*, 243-46.

Reeves, W. (1993). *Cognition and complexity: The cognitive science of managing complexity*. (Unpublished doctoral dissertation). : Saybrook Graduate School, San Francisco

Ritchie, J., Lewis, J., & Elam, G. (2003). Designing and selecting samples. In J. R. (Eds.), *Qualitative research practice. A guide for social science students and researchers* (pp. 77-108). Thousand Oaks, CA: Sage.

Robertson, M. F., Humphreys, L., & Ray, R. (2004). Psychological treatments for posttraumatic stress disorder: Recommendations for the clinician based on a review of the literature. *Journal of Psychiatric Practice, 10*, 106-118.

Robson, C. (2002). *Real-world research: A resource for social scientists and practitioner-researchers* (2nd ed.). Cambridge, MA: Blackwell.

Rogers, C. (1985). Toward a more human science of the person. *Journal of Humanistic Psychology, 25*(4), 7-24.

Ruth A. Lanius, M., & Hopper, J. (2008). Reexperiencing/hyperaroused and dissociative states in posttraumatic stress disorder. *Psychiatric Times*.

Ryan, L. M., & Warden, D. L. (2003). Post concussion syndrome. *International Review of Psychiatry, 15*(4).

Saltychev, M., Eskola, M., Tenovuo, O., & Laimi, K. (2013). Return to work after traumatic brain injury: Systematic review. *Brain Injury, 27*(13-14), 1516-1527.

Schouten, K. A., de Neit, G. J., Knipscheer, J. W., Kleber, R. J., & Hutschemaekers, G. J. (2015). The effectiveness of art therapy in treatment of traumatized adults: a systematic review on art therapy and trauma. *Trauma, Violence, and Abuse, 16*(2), 220-228.

Sela-Smith, S. (2000). The Ullman method of dream analysis: Context and content. *Dream Network Journal, 19*(1), 36-40, 42.

Sela-Smith, S. (2001, June 12). *Heuristic Self-Search Inquiry: Clarification of Moustakas's Heuristic Research*. (*Dissertation).* Saybrook Graduate School and Research Center. San Francisco, CA.

Sela-Smith, S. (2002, Summer). Heuristic research: A review and critique of moustakas's method. *Journal of Humanistic Psychology, 42*(3), 53-99.

Sigurdardottir, S., Andelic, N., Roe, C., & Shanke, A.-K. (2009). Cognitive recovery and predictors of functional outcome 1 year after traumatic injury. *Neuropsychological Society, 15*(5), 740-50.

Simmel, G. (1908). *Soziologie. Untersuchungen über die formen der vergesellschaftung sociology: Studies on the forms of socialization.* Berlin: Duncker and Humblot.

Sleep and Traumatic Brain Injury. (2016, May 26). *Model Systems Knowledge Translation Center (MSKTC).* Retrieved from http://www.msktc.org/tbi/factsheets/Sleep-And-Traumatic-Brain-Injury

Spinazzola, J., Blaustein, M., & van der Kolk, B. A. (2005). Posttraumatic stress disorder treatment outcome research: The study of unrepresentative samples? *Journal of Traumatic Stress, 18*, 425-436.

Stork, A. D., van Haeften, T. W., & Veneman, T. F. (2006, August). Diabetes and driving: Desired data, research methods and their pitfalls, current knowledge, and future research. *Diabetes Care,* *29*(8), 1942-1949. doi:10.2337/dc05-2232

Tedeschi, R., Park, C., & Calhoun, L. (1998). *Posttraumatic growth: Positive transformations in the aftermath of crisis.* Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Tennessee Coal Co. v. Muscoda Local No. 123. (1944, March 27). *321 U.S. 590*. United States Supreme Court.

The Fair Labor Standards Act of 1938, as Amended (2011, May). *United States Department of Labor.* Retrieved from www.dol.gov/whd/regs/statutes.

Todd Buckley, P. (2016, Feb 23). *PTSD: National Centere for PTSD: Traumatic stress and motor vehicle accidents*. Retrieved from U.S. Department of Veterans Affairs: http://www.ptsd.va.gov/professional/trauma/other/traumatic-stress-vehicle-accidents.asp

Traffic Safety Facts - Research Note: 2012 Motor Vehicle Crashes: Overview. (2013, November). *U.S. Department of Transportation National Highway Traffic Safety Administration Publications*. Retrieved from http://www-nrd.nhtsa.dot.gov/Pubs/811856.pdf

Trauma. (2016, Mar 16). *American Psychological Association.* Retrieved from http://www.apa.org/topics/trauma/index.aspx

Trauma. (2017, September). Merriam-Webster. Retrieved from : https://www.merriam-webster.com/dictionary/trauma

Ullman, M. (1996). *Appreciating dreams: A group approach.* London: Sage.

Ullman, M., & Zimmerman, N. (1979). *Working with dreams: Self-understanding, problem solving, and enriched creativity through dream appreciation.* New York: Putnam.

van der Sluis, C., Eisma, W., Groothoff, J., & ten Duis, H. (1998). Long-term physical, psychological and social consequences of severe injuries. *Injury, 29*, 281-85.

Verbrugge, L., & Jette, A. (1994). The disablement process. *Social Science and Medicine, 38*(1), 1-14.

Vles, W., Steyerberg, E., Essink-Bot, M., van Beeck, E., Meeuwis, J., & Leenen, L. (2005). Prevalence and determinants of disabilities and return to work after major trauma. *Journal of Trauma, 58*, 126-35.

Vogele Welch, D. (1998). *Reflective Leadership: The stories of five leaders' successfully building generative organizational culture* (Doctoral Dissertation). Graduate School of The Union Institute, Cincinnati, Ohio

Watts, R., & Horne, D. (1994). *Coping with trauma: The victim and the helper.* Brisbane: Australian Academic Press.

Watts, R., Anson, D., & Battistel, L. (1997). Social work intervention in acute care after road trauma. *Australian Social Work, 50*(2), 29-34.

Wilber, H. (1995). *Sex, ecology, and spirituality.* Boston: Shambala.

Wilber, K. (1996). *A brief history of everything.* Boston: Shambala.

Wilber, K. (1997). *The eye of spirit.* Boston: Shambala.

Wild, J., & Gur, R. C. (2008). Verbal memory and treatment response in post-traumatic stress disorder. *British Journal of Psychiatry, 193*, 254-255.

Witt, H., & Kleining, G. (2000, January). The qualitative heuristic approach: A methodology for discovery in psychology and the social sciences: Rediscovering the method of introspection as an example. *Forum: Qualitative Social Research, 1*(1).

Wrona, R. M. (2010, May). Disability and return to work outcomes after traumatic brain injury: Results from the Washington State Industrial Insurance Fund. *Disability and Rehabilitation, 32*(8), 650-655.

Wu, T., Alt, R., & Legome, E. (2016, June 5). Postconcussive Syndrome. *Medscape.* Retrieved from http://emedicine.medscape.com/article/828904-overview

Yasuda, S., Wehman, P., Targett, P., Cifu, D., & West, M. (2001). Return to work for persons with traumatic brain injury. *American Journal of Physical Medicine and Rehabilitation, 80*, 852-64.

APPENDIX A. STATEMENT OF ORIGINAL WORK

# Academic Honesty Policy

Capella University’s Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person’s ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others’ work through proper citation and reference. Use of another person’s ideas, including another learner’s, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else’s ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University’s Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

# Statement of Original Work and Signature

I have read, understood, and abided by Capella University’s Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

|  |  |
| --- | --- |
| TypeLearner name and date  | Elizabeth R. York, September 24, 2017 |
| Mentor nameand school | Dr. Antonio Santonastasi, Capella University |

APPENDIX B. TABLE OF RECURRING THEMES

|  |  |  |
| --- | --- | --- |
| *Theme type* | *Theme* | *Characteristic* |
| Physical | Physical injuries | Limits mobility |
|  |  | Limits ability to do requirements of job |
|  |  | Recovery time |
|  |  | Employer accommodations required |
|  | Sleep disturbance | Changes in circadian rhythms |
|  |  | Nightmares, PTSD symptoms |
|  |  | Sleep deprivation leading to exhaustion, inability to think clearly |
|  |  | Pain interfering with sleep |
|  | Balances/coordination | Weakness in extremities affecting balance/coordination |
|  |  | Vestibular disturbance |
|  |  | Dizziness or vertigo |
|  | Fatigue | Physical and mental activities take more effort and energy than before |
|  | Exhaustion | Running out of energy to do daily simple tasks |
|  |  | Brain requires more energy to create new neural pathways |
|  |  | Energy required to recover, maintain positive attitude |
|  | Pain | Short term and long-term pain management |
|  |  | Side effects: grogginess, lethargy, euphoria, hallucinations, balance and coordination control, impulse control, mood and emotional control |
|  |  | Drug addiction |
|  | Sensory  | Changes or loss of vision, hearing, touch sensitivity, taste, smell |
|  | Masking | Symptoms taking priority in care or treatment, while others are not addressed |
|  |  | Unresolved symptoms surfacing as symptoms are resolved |
|   | PCS | Post-concussion syndrome: new or returning symptoms months or years later |
| Psychological | Fear and anxiety | Fear of loss of income, not being able to return to work or find new work, anxiety about future |
|  |  | Self-doubt |
|  |  | Loss of identity |
|  |  | Generalized anxiety-defined/undefined |
|  |  | Anxiety about disappointing friends/family, not meeting expectations |
|  | Denial | Denying depth/breadth of injuries |
|  |  | Refusing to accept that person is different, won’t be the same |
|  | Anger | Anger at self for getting injured |
|  |  | Anger at cause of injury |
|  | Bargaining | Promises to self about what will change/do/become when recovered |
|  | Depression | Identifying as victim |
|  |  | Giving up on trying to get better or do tasks for self |
|  |  | Resorting to self-medication |

|  |  |  |
| --- | --- | --- |
| *Theme type* | *Theme* | *Characteristic* |
|  | Acceptance | Acceptance that life is changed |
|  |  | Beginning healing process |
|  | Emotional flattening | PTSD/Complex PTSD symptom: dissociation  |
|  |  | unable to feel emotions |
|  | Masking | Symptoms treated in order of priority-physical symptoms treated first, psychological effects left untreated for weeks/months/years |
|  |  | Untreated symptoms occurring suddenly/without warning |
|  | PTG | Positive traumatic growth: new skills, new life perspective |
|  | Self-efficacy | Resilience/Ability to recover related to one’s personal perspective |
|  | PTSD | Post-traumatic stress disorder symptoms |
| Cognitive | Lost skills | Lost work skills needing retraining |
|  |  | Memory issues temporarily interfering with work skills |
|  | PCS | Symptoms not recognized or treated earlier occurring or recurring months/years later |
|  | Time/special recognition | Inability to recognize time or space |
|  |  | Changes in time/special recognition |
|  | PTSD | Hypersensitivity, fear, anxiety interfering with cognitive functioning |
|  |  | Reliving trauma, flashbacks, nightmares |
|  | Fatigue | More energy needed to rebuild neural pathways than for physical activities |
|  | Neuroplasticity/Found skills | Undeveloped or unknown talents or skills discovered after traumatic injury |
|  |  | Brain’s ability to relearn skills  |
|  | Memory | Short-term/long term memory issues |
|  | Reasoning | Inductive/deductive reasoning skills changed or lost due to either brain injury or anxiety from trauma, including math, reading comprehension, logic |
|  | Communication | Alexithymia (inability to express/communicate emotions) |
|  |  | Aphasia (word finding) |
| Social | Exhaustion | Maintaining façade of being “ok”, secrets about level of limitations |
|  |  | Inability to maintain energy for social interaction |
|  |  | Lost mojo |
|  | Anger  | Friends/family express anger that “not the same person as before trauma” |
|  |  | Friends/family having to act as caregivers |
|  | Denial  | Friends/family/supervisors/coworkers refusing to recognize depth of injury |
|  |  | Friends/family/supervisors/coworkers denying person can recover |
|  | Bargaining | Friends/family believe they can motivate person toward recovery with promises/rewards |
|  | Expectations | Realistic or unrealistic expectations from friends/family/supervisors/coworkers  |
|  | Bias/assumptions | Assumptions regarding trauma or recovery from friends/family/supervisors/coworkers  |

|  |  |  |
| --- | --- | --- |
| *Theme type* | *Theme* | *Characteristic* |
|  | PTSD | Social anxiety from PTSD symptoms resulting in anxiety, isolation, vulnerability |
|  | Misinformation | Need for education re: trauma and recovery |
|  | Shaming | Expectations about what and how person ‘should’ be able to recover from trauma |
|  | Identifying as victim | Giving up, losing motivation to recover |
|  | Recognizing symptoms in others | Trauma survivors recognize symptoms in others  |
|  | PCS | Symptoms thought resolved recurring months/years later |
|  |  | New symptoms developing |
|  | Avoidance | Impulse control: may lead to lack of tact |
|  |  | Vulnerability leading to isolation |
|  |  | Lack of or changes in emotional control leading to discomfort and anxiety in social situations |
|  | Communication | Inability to express/speak properly |
|  |  | Speaking too loudly/too softly |
|  |  | Saying wrong words, not remembering what was said |
| Administrative | Medical issues | Medical personnel not understanding depth of trauma symptoms |
|  |  | Symptoms minimized going untreated |
|  |  | Incorrect diagnoses, wrong treatment, not enough treatment |
|  | Insurance issues | Medical insurance unwilling to pay for treatment |
|  | Vocational training | Needing to relearn skills or learn new skills |
|  | Self-advocacy | Inability or unwillingness to self-advocate |