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Social Workers' Role in Treating Individuals with Neurological Impairments from Brain Trauma

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Abstract

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by

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MSW, Stephen F. Austin State University, 2012

BSW, Northwestern State University, 2011

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Nearly 1 billion individuals worldwide are diagnosed with a neurological condition. Neurological conditions might harm an individual’s overall mental state and quality of life. This qualitative action research project examined the social worker’s role in treating individuals with neurological impairments due to brain trauma. Information was gathered using a focus group of 4 rehabilitation social workers in Dallas, Texas, about their experiences related to utilizing social work practice with patients who have neurological conditions. Data from this action research project revealed an understanding of the psychosocial benefits of social work services for individuals with neurological impairments due to brain trauma by increasing knowledge related to a social worker’s role in treating individuals within this population. Medical social workers, communities and health care settings can benefit from this study by gaining a deeper understanding of the importance of incorporating social work services to aid in the rehabilitation of this population.

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Dedication

This action research project is dedicated to my mother, Joyce Marie. Throughout this tedious journey, my mother has served as my prayer warrior, my teacher, my best friend, and my number one fan. My mother's unconditional love and support have caused me to be the amazing woman I am today. Throughout this project, I have endured many rainy days; however, I remained victorious as it was my mother who taught me early on in life that I could conquer the rain if I allowed my smile to be my umbrella. The success of this project is a direct result of the life lessons and prayers of my mother.

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Years ago, God allowed me to see a snippet of what he had in store for my life. He then provided me with several individuals who served as my support system and assisted me along the way. It was through their investments of time, grace, understanding and love that this dream has become a reality. I acknowledge those that walked the earth before me, my ancestors as they guided me during moments when this goal seemed unobtainable. I acknowledge my mother, who has been continuously consistent in believing that I can achieve anything. I acknowledge my sisters, nieces, and bonus children, each whom expected me to finish. I acknowledge my pastor Alfred, who confirmed God’s vision for my life and provided ample spiritual support. I acknowledge my dear friend Dr. Mitchell who started the journey with me, finished before me, and pulled me to the other side. Lastly, I acknowledge Brantley, thank you for straightening my crown as often as necessary, for seeing me as “Doctor” through my uncertainty, for manifesting on my behalf, and for speaking this into existence until it existed.

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Section 1: Foundation of the Study and Literature Review

Introduction

Individuals who are victims of brain injuries may suffer from neurological impairments that can cause long-term complications (Adams and Dahdah, 2016). Social workers play a crucial role in treating individuals with brain injuries. Therefore, social workers and other healthcare professionals must address the needs of this population. The use of social work services is a key component to aid in the rehabilitation of individuals with traumatic brain injuries. To be most effective, there must be a clear understanding of a social worker's role in treating individuals with neurological impairments due to brain injuries to ensure the enhancement of knowledge and improve healthcare services to this underserved population.

Traumatic brain injuries affect individuals of all races and ages. When considering age, statistics show there are three primary age groups in which traumatic brain injuries are prevalent. The age groups of 0-4 years, 15-24 years, and 75 years and older are believed to be more likely to sustain a traumatic brain injury (Bay, Blow, & Yan, 2012). The primary causes of brain injuries include motor vehicle accidents and falls (Bay et al., 2012). Falls were the primary cause of traumatic brain injuries for both age groups 0-4 years and 75 years and older while being struck either by or against an object was the leading cause of traumatic brain injuries for individuals who were between the ages of 15 and 25 years (Bay et al., 2012).

In addition to age, statistics also show that race and gender are also indicators of the likelihood of sustaining a brain injury. When examining gender, research shows that males are more likely prone to a brain injury than females (Bay et al., 2012). Males develop brain injuries at a rate that is nearly four times higher than females (Bay et al., 2012). While females are less likely than males to experience a traumatic brain injury in their lifetime, female patients report higher percentages in manifesting symptoms (Munivenkatappa et al., 2016). An individual’s socioeconomic status factors into the possibility of suffering a traumatic brain injury, as individuals living in poverty have a higher risk of suffering brain injury (Kisser, Waldstein, Evans, & Zonderman, 2017).

Traumatic brain injuries are defined as a nondegenerative insult to the brain from an external mechanical force that can lead to significant functional changes that affect an individual’s thinking, language, ability to learn, emotions, and behaviors (Bay et al., 2012). According to Bay et al. (2012), there are various levels of traumatic brain injury, ranging from mild to severe; however, research shows that each severity level can lead to significant dysfunctions within the brain. Psychological disorders are a typical dysfunction of the brain that is evident in individuals who have a traumatic brain injury (Bay et al., 2012).

According to Adams and Dahdah (2016), individuals who have suffered neurological impairment due to physical trauma often suffer from psychological effects that may result in being undetected or untreated. For this study, neurological impairments is defined as limitations within the nervous system that impairs an individual’s basic life functions such as memory, ability to process, sensory as well as cognitive and social skills (Adams and Dahdah, 2016). The psychological consequences that typically occur in individuals with neurological impairments due to physical trauma can impact personal relationships, cognitive functioning, behavior, and overall mental health. Research supports the notion that individuals with neurological impairments due to physical trauma are at an increased risk of developing mental illnesses such as anxiety and depression (Hellmann-Riger et al., 2013).

Individuals with traumatic brain injuries often experience neurological impairments that may lead to long-term psychological problems. They also experience reduced quality of life and difficulties with both family and community integration. This action research project aims to increase the knowledge related to a social worker's role in treating individuals with neurological impairments due to physical trauma, as well as to improve the effectiveness of the services that social workers provide to this population.

Problem Statement

According to Jackson et al. (2014), nearly 1 billion individuals worldwide have been diagnosed with a neurological condition. Neurological conditions typically result in an array of ailments, including physical, cognitive, and behavioral impairments, and may cause one to experience on-going psychosocial disabilities (Jackson et al., 2014). Calvert et al. (2013) reported that neurological conditions might harm an individual's emotional wellbeing and quality of life. In addition to a decrease in quality of life, individuals with neurological conditional are at an increased risk for developing a mental illness such as major depression (Hellmann et al., 2013).

Purpose Statement and Research Questions

Researchers have found individuals who have neurological impairments are likely to experience a decrease in their emotional wellbeing, which can significantly impact their recovery (Calvert et al., 2013). The involvement of a social worker in the treatment of individuals with neurological impairment may increase that individual's emotional wellbeing. The purpose of this research project is to utilize a qualitative research design to assess a social worker's role in treating individuals with neurological conditions due to physical trauma. Qualitative research attempts to understand the targeted population in their natural settings in ways that reflect how that population views their experiences (Ravitch and Carl, 2016). The research question I posed in this action research project was: What is a social worker's role in treating individuals with neurological impairment due to brain trauma?

Nature of the Doctoral Project

The focus of this action research project is to understand a social worker's role in treating individuals with neurological impairments due to trauma to the brain. A qualitative design had several benefits for my study, including aiding to understand the importance of incorporating social work practice in the treatment of patients with neurological conditions due to trauma to the brain. I was the primary instrument for data collection in this research project.

A focus group consisting of social workers who have treated individuals with neurological impairments was the primary source of data collection. During the focus group, I asked the participants a series of open-ended interview questions. The data analysis process consisted of data organization and management, immersive engagement with data, and writing and representation. I provide an elaboration of these methods in Section 2 of this document.

Significance of Study

Research shows that individuals who have neurological impairments due to physical trauma may suffer from critical psychological effects. Many individuals who have neurological impairments due to physical trauma often physically recover from the physical impairments yet demonstrate cognitive and emotional problems that can cause them to experience psychological disabilities (Gould, Ponsford, Spitz, 2014). This study intends to increase insight into the critical role that a social worker plays in treating an individual with a neurological impairment due to trauma to the brain.

The findings from this study will contribute to the overall social work knowledge base by showing the various psychosocial effects that one experiences because of a neurological impairment due to physical trauma. Research indicates that many doctors underestimate the emotional, behavioral, and cognitive effects of trauma to the brain (Gould et al., 2014). Social workers who gain in-depth insight into the psychosocial impact that individuals with neurological impairments face due to physical trauma will likely be more effective at addressing the effects than social workers who do not.

Theoretical Conceptual Framework

To better understand the importance of social work practice when treating patients with neurological conditions, I utilized the person-centered theory in this action research project. The person-centered theory was developed by Carl Rogers more than 60 years ago (Walsh, 2009). Person-centered theory suggests that all individuals can grow beyond the limitations of their experiences (Rogers, 1979).

Person-centered theory is useful when social workers create affirmative, positive relationships with their clients that empower them to push beyond their challenges to gain a more exceptional quality of life (Walsh, 2009). Person-centered theory focuses on improving the counselor's ability to show consistent acceptance of their client's feelings and assist clients in doing the same. Rogers believed that counselors are more effective in treating clients when they assist clients in openly recognizing and admitting their true feelings (Zimring and Raskin, 1992).

According to Lux (2010), person-centered theory approach is recommended in the field of neuroscience as research supports the connection of the comprising of an individual's mental health and the incongruence in their brain. Social workers who practice from a person-centered approach facilitate congruence in the individual's brain by assisting them in being open to their experiences, as well as acceptance of everything that is occurring in their brain. Person-centered theory promotes openness and acceptance as crucial to the fully functioning brain (Lux, 2010).

Person-centered theory places emphasis on assisting the person in growing beyond their experiences, which can aid in their rehabilitation. According to person-centered theory, all people have the means to grow beyond the limitations of their experiences with the intervention and supportive relationship of an empathetic and skilled practitioner (Walsh, 2009). This theory aligns with a social worker's roles in providing patients with empathy and maintaining support while utilizing evidence-based practices to their patients (Cooper and Lesser, 2014).

Values and Ethics

Social workers work in connection with other healthcare professionals in treating individuals with traumatic brain injury. In this study, I examine a social worker’s role in addressing individuals with neurological impairments due to trauma to the brain. The values and principles of the National Association of Social Workers (NASW) code of ethics suggest that competent social workers should work collaboratively with other professionals within an interdisciplinary team and promote social welfare through research and evaluation (NASW, 2008).

The treatment of individuals with neurological impairment due to brain trauma is a clinical social work problem that is supported by the National Association of Social Worker Examiners (NASW). The National Association of Social Workers Examiners supports and promotes the exploration of a social worker’s role, competence, and relationships within healthcare settings (NASW, 2008). Gaining knowledge relating to a social worker’s role in treating individuals with neurological impairments also meets the core competencies of the NASW code of ethics. Social workers should engage in research and gather evidence to inform their practice. In addition to utilizing research to inform practice, social workers should also apply knowledge of human behavior and the social environment (CSWE, 2015).

Review of the Professional and Academic Literature

The literature review process began with a comprehensive search of articles that were published no later than 5 years ago in the Walden University library database system; the resultant review provided relevance for the need to conduct this study. I utilized electronic data searches to classify and identify articles that provided research that explored neurological impairments due to brain injuries. In the Walden Library, these databases included: Thoreau Multi-Database Search, psychARTICLES, and Academic Search Complete.

In addition to searching for the terms *neurological impairments in victims of brain injuries*, I also searched for concepts such as *mental-health conditions in individuals with brain injuries, challenges faced by individuals with brain injuries,* and many other terms that show the relationship between neurological impairments and traumatic brain injuries relating to mental health. During the initial stages of this search of the literature, I selected the time frame of the year 2013 to 2017. Due to the limited amount of research for the target population within this time frame, I decided to broaden my search dates. I primarily used psychology-related databases to gather material.

Literature Review Related to Concepts

Depression

Research indicates that individuals who develop neurological impairments due to trauma to the brain are susceptible to experiencing a variety of psychological problems, including depression, major depression, or depressive symptoms (Patterson and Staton, 2009). It is essential for clinicians, such as social workers, to recognize major depression in individuals. Patients who have major depression are at risk for poor outcomes if left untreated (Rapoport, 2012).

Mental health illnesses, such as major depression, are known to be the most common diseases following a traumatic brain injury (Fann et al., 2015; Fleminger, 2013). Statistics show that nearly 50% of individuals who experience a traumatic brain injury experience depression within a year of the injury (Fann et al., 2015). The numbers tend to increase to 66.7% over 6 years (Fann et al., 2015).

Conditions such as major depression impair the individual’s ability to function appropriately in day-to-day tasks. The negative impact that major depression has on individuals with brain injuries includes a decrease in their working memory, verbal memory, processing speed, and executive functioning (Fann et al., 2015). Major depression is known to be the most common psychiatric complication (Fann et al., 2015). Signs of major depression and depression symptoms typically surface as early as the first 6 months following a traumatic brain injury and continue to show up as much as 6 years after the injury (Fleminger and Oliver, 2003).

Depression following a brain injury has a critical impact on an individual’s social wellbeing. According to Rapoport (2012), an individual's psychosocial functioning declines in the first year of experiencing depression following a traumatic brain injury. Fleminger and Oliver (2003) identified depressive symptoms as frustration, fatigue, poor concentration, and irritability. These symptoms occur as a direct result of trauma to the brain. Fleminger and Oliver (2003) found that 20 to 40% of individuals who experience a brain inquiry showed signs of depression within the first year following their injury, and nearly 43% of individuals with brain injuries met the criteria for major depression 2-1/2 years after their injury.

Fleminger and Oliver (2003) explored the presence of depressive symptoms following brain injuries. They concluded the development of depressive symptoms following a brain injury links to the level of insight the patient has regarding his or her injury. This study showed that depressive symptoms typically increases as the patient's insight into his or her condition increases. According to Patterson and Staton (2009), depression accompanies a brain injury as clients begin to process the extent of the implications that accompany their injury. Waldron, Casserly, and O'Sullivan (2013) also found that the likelihood of depression following a traumatic brain injury increases according to the patient's perception of the severity of his or her injury, suggesting that cognitive ability plays a role in this condition.

According to Waldron et al. (2013), depression often follows a brain injury due to a variety of factors that are altered by the brain following the trauma. The factors that are altered by the brain are known to be both psychological and social. Depression following a brain inquiry can significantly affect cognition, mood, and motivation (Waldron et al., 2013). Research by Hellmann et al. (2013) indicated that individuals with neurological disorders due to the trauma of the brain are likely to experience depressive syndromes. Additional studies by Rapoport (2012) revealed that nearly 53% of individuals that present with a diagnosis of brain injury met the diagnostic criteria for major depressive disorder.

Hellmann et al. (2013) reported that depressive syndromes are a common characteristic in an increasing number of neurological disorders. Post-stroke depression is an example of a depressive syndrome that is prominent among individuals with brain trauma. This form of depression is known to be one of the most common post-stroke complications, as it has the potential to be disabling to the victim (Hellmann et al., 2013).

Over the past decade, research has shown that depression is known to be one of the most common complications that individuals experience after a brain injury. Amongst the various types of depression, Ashman, Cantor, Tsaousides, Spielman, and Gordon (2013) identified post-traumatic brain injury depression as one of the most common psychiatric diagnoses in individuals with brain injuries.

There are significant variations in the estimates of depression following a brain injury (Ashman et al., 2013). Despite the difference, the authors emphasized the consensus that exists amongst clinicians and researchers that depression following a brain injury continues to be a significant issue that remains unaddressed. Additionally, the researchers examined systematic reviews published within the past 5 years related to outcomes for depression across various methods of intervention (Ashman et al., 2013). Furthermore, the researchers sought to understand the complexity of factors related to depression following a brain injury, as well as to provide insight into interventions that have been utilized to treat depression following a brain injury. An exploration of the interventions included pharmacological, biomedical, and behavioral interventions.

Pharmacological interventions, which consists of the administration of typical antidepressant medications such as selective serotonin reuptake inhibitors, have been shown to reduce symptoms of depression (Ashman et al., 2013). Serotonin reuptake inhibitors are typically the first-line pharmacological treatment after diagnosis of traumatic brain injury depression (Ashman et al., 2013). Biomedical interventions such as electroconvulsive treatment assisted in helping researchers understand the link between a decrease in depression in individuals with brain injuries (Ashman et al., 2013). Researchers found biomedical interventions are effective in reducing depression in individuals who did not have a brain injury but did not appear to be effective in reducing depression in individuals with brain injuries (Ashman et al., 2013). Behavioral intervention such as cognitive behavioral therapy also decreases depression in individuals with traumatic brain injuries (Ponsford et al., (2017). Furthermore, the researchers evaluated the efficacy of a 9-week cognitive behavioral therapy program. They discovered a reduction of depression symptoms within three sessions of using cognitive behavioral therapy in the treatment of individuals with neurological impairments due to trauma to the brain.

The effectiveness of cognitive-behavioral therapy in the treatment of individuals with neurological impairments was explored through the results of two controlled studies (Ashman et al., 2014). One of the studies involved 11 weeks of both intensive cognitive-behavioral therapy and cognitive rehabilitation that was administered three times a week to 20 patients. Each participant in the study reported persisting emotional and cognitive complaints following a traumatic brain injury before the administration of cognitive behavioral therapy. However, participants showed significant improvements in emotional functioning as a result of treatment involving cognitive behavioral therapy when compared with a wait-list control group. The second controlled study that Ashman et. al reported on consisted of 20 randomized subjects with emotional distress in the context of acquired brain injury, including but not limited to traumatic brain injury. Research participants reported an overall improvement in depressive and anxiety symptoms in a group that consisted of 11 sessions of cognitive-behavioral therapy.

The findings of Ashman et al. (2014) are parallel to the results of Ponsford et al. (2017) as both studies support the notion that cognitive-behavioral therapy is one of the most effective treatments of depression in individuals who have brain trauma. A social worker must utilize best practices when working with patients (NASW, 2008); therefore, it is appropriate that social workers use cognitive behavioral therapy when treating individuals with neurological impairments. Cognitive-behavioral therapy is one of the most effective intervention models used by social workers (Ashman et al., 2014; Early & Grandy, 2017; Ponsford et al., 2014).

Early and Grandy (2017) reported that cognitive-behavioral therapy is a model used by theories to explain human behavior. When working with individuals with neurological impairments due to brain trauma, it is a social worker's role to apply skills and techniques to assist the patient in gaining an understanding of how events and experiences are interpreted, as well as identifying and changing the deficits that occur during cognitive processing (Early and Grandy, 2017).

Cognitive-behavioral therapy is effective in helping social workers, as well as their patients, make the connections between why they behave, feel, and think as they do (Early & Grandy, 2017). Research by Early and Grandy (2017) demonstrated that when patients and social workers have a shared understanding of the connection between their presenting issue and the course of action used to resolve it, clients report greater satisfaction with the intervention itself and report better outcomes.

Anxiety

Osborn, Mathias, and Fairweather-Schmist (2016), along with Hielmblink and Holmstom (2006) reported that individuals who have trauma to the brain are susceptible to experiencing an increase in anxiety. Brain injuries are believed to lead to an individual experiencing a range of difficulties, such as managing social interactions, cognitive changes, and the ability to regulate his or her emotions. Each of these difficulties is known to promote an emotional consequence, as nearly 30% of individuals who experience a brain injury also develop mental health conditions such as anxiety (Ashworth, Gracey & Gilbert, 2011).

It is common for individuals who have brain trauma to experience anxiety due to the uncertain future they face (Hielmblink and Holmstrom, 2006). The anxiety experienced is believed to be a result of biological, social, and psychological factors that are often altered by trauma to the brain (Waldron et al., 2013). When examining anxiety in individuals with neurological impairments due to trauma of the brain, post-traumatic stress disorder is likely to emerge as the brain's exposure to trauma can lead to high levels of anxiety as well an inability to cope with typical living conditions (Tyagi, Agrawal, Abad, Waschek & Gomez-Pinilla, 2013).

Anxiety after a brain injury is known to be universal amongst those affected (Osborn et al., 2016; Waldron et al., 2013). Research reveals that several forms of anxiety impact this population. According to Waldron et al. (2013), the types of anxiety that are most prevalent among individuals with brain trauma include post-traumatic stress disorder, panic disorder, and obsessive-compulsive disorder. McAllister, Hiott, and

Labbate (2002) discovered although many anxiety disorders are shared among the general population, individuals who have trauma to the brain are at an increased risk of developing certain anxiety disorders. These disorders may include generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, and post-traumatic stress disorder.

Jackson et al. (2014) reported that individuals with neurological conditions due to brain injuries are known to have long-term physical disabilities as well as long-term cognitive disabilities that are often hidden or undiagnosed. According to Gregorio, et al. (2015), individuals with brain injuries experience deficits in their executive functioning. Individuals who experience deficits to their executive functioning suffer as they typically do not have the cognitive ability to use coping strategies that require problem-solving, thus causing them to rely primarily on emotion-focused coping skills (Gregorio, 2015).

Alderman and Wood (2013) reported that neurocognitive impairments are common among individuals with brain injuries. Neurocognitive impairments include but are not limited to severe memory impairment and executive dysfunction. Alderman and Wood (2013), as well as Osborn et al. (2016), indicated that neurocognitive impairments could lower an individual’s ability to respond effectively to environmental stimuli, which can, therefore, influence an individual’s ability to adapt to changes in their social environment.

The various impairments that surface following a brain injury is believed to be contributed to anxiety. Anxiety following a brain injury is a common problem that adds to the patient’s inability to effectively cope and adapt to the extensive changes that he or she experiences following a brain injury (Osborn et al., 2016). When considering anxiety following a traumatic brain injury, data from 41 studies were examined (Osborn et al., 2016). Osborn et al. (2016) noted the incidence of both generalized anxiety and clinically significant cases of self-reported anxiety, as nearly 11% of the participants were diagnosed with generalized anxiety, while 37% of the participants reported clinically significant cases of self-reported anxiety (Osborn et al., 2016).

The presence of cognitive impairments may contribute to increased anxiety in individuals with neurological impairments due to trauma to the brain (Jackson et al., 2014). Jackson et al. (2014) defined cognitive impairments after brain injury as hidden disabilities that are best treated within community rehabilitation services as these issues often go unaddressed in in-patient care. Supporting evidence for the effectiveness of community-based rehabilitation is growing and implies that there are benefits to community-based rehabilitation relating to a patient’s function and wellbeing (Jackson et al., 2014).

Based on the culmination of data, individuals reported that typical methods of treatment after brain injury, such as physical therapy, do not address critical cognitive factors they encounter (Guernsey, 2016). Physical therapy intends to assist individuals in completing daily mobility tasks such as standing and walking (Guernsey, 2016). Aside from physical rehabilitation, there is a need to address the additional neurological impairments that surface because of injury to the brain as they may aid in the presence of anxiety in individuals with trauma to the brain (Guernsey,2016).

According to Guernsey (2016), there are a series of cognitive issues that may surface following a brain injury. These cognitive issues include impairments in completing necessary activities such as difficulty eating, dressing, and frequent memory lapses. The listed impairments have shown to decrease a patient's ability to take care of themselves effectively, which has also shown to increase the patient's level of anxiety (Guernsey, 2016).

Counseling by social workers proves to be effective in decreasing anxiety as well as other cognitive issues in individuals with trauma to the brain (Patterson & Staton, 2009). Patterson & Staton (2009) suggests that social workers play a crucial role in decreasing anxiety in individuals with neurological impairments due to trauma to the brain (Patterson and Staton, 2009). Counseling is a therapeutic process that is known to assist the brain in reorganizing pathways to compensate for the loss of brain function (Dorfzaun et al., 2015). Although mental health counseling is believed to enhance the treatment of individuals with neurological impairments due to trauma to the brain and decrease their level of anxiety, Patterson and Staton (2009) suggested that working with individuals with the trauma of the brain can be "daunting" for mental-health counselors such as socials workers. They also stated that mental health counselors, including social workers, lack the necessary education and training to work with this population effectively.

Decreased Quality of Life

Sounza et al. (2007) defined the quality of life as a subjective feeling of wellbeing in the physical, psychological, and social dimensions. There are four attributes that are considered to be critical in one’s quality of life, which includes 1) overall satisfaction with one’s life; 2) the mental capacity to assess one’s life as being satisfactory or not; 3) an acceptable state of physical, mental, social, and emotional health as determined by the individuals themselves; and 4) the objective as it consists of a third-party evaluation about whether the conditions of the patient’s life are adequate.

Injuries to the brain correlate to sudden and unexpected disruption of the normal development process that can cause a decrease in their quality of life (Norup and Montensen, 2015). Norup and Mortensen (2015), along with Sounza et al. (2007), suggested that such trauma can cause individuals to experience deficits and delays in many areas of their life including cognitively, physically, emotionally, and behaviorally. Individuals who suffer trauma to the brain may experience more persistent complications that can hinder their ability to socialize appropriately and communicate with their family and friends (Norup & Mortensen, 2015). Additionally, studies by Norup and Mortensen (2015) and by Fortune, Rogan, and Richards (2016) suggested that aspects of an individual’s personality may become altered as a result of the injury, leading to additional challenges in the individual’s home and community settings. Sonza et al. (2007) suggested that the deficits and complications that are present following trauma to the brain link to an overall decrease in quality of life.

Quality of life is significantly affected when an individual experiences neurological impairment due to trauma to the brain (Bennett, Sampath, Christophen, Thennarasu, & Rajeswaran, 2018). Bennett et al. (2018) reported that people who sustain trauma to the brain might present with a series of symptoms and complications. In addition to the initial symptoms and complications, there is a host of both primary and secondary issues that a person may face following a brain injury (Bennett et al., 2018). Each of the problems identified tends to have a deleterious effect on the person's overall quality of life.

Brain injuries can produce permanent changes in one's behavioral, cognitive, and emotional functioning (Kelly, Ponsford, & Couchman, 2013; Ponsford, Kelly, & Couchman, 2014). Due to these permanent changes, it is common for those that suffer from brain injuries to struggle to find meaning in their life, post-injury. Kelly et al. (2013) reported that one of the factors that influence one's quality of life is their level of self-esteem. Self-esteem relates to one's opinion about themselves in the areas of cognitive competence, physical appearance, academic performance, and social acceptance (Ponsford et al. 2014).

Ponsford et al. (2014) showed that one's self-esteem provides a representation of their evaluation of self. The researchers further explained that individuals with brain injuries are known to report poor evaluations of themselves, reported discrepancies between their pre- and post-injury selves, and experienced a loss in their sense of self Ponsford et al. (2014). In addition to a change related to representation of self, Ponsford et al. (2014) also suggested that there is an imminent need to provide cognitive, behavioral, and emotional ramifications to preserve a person's quality of life following a brain injury.

Findings by Patterson and Staton (2009) indicated that it is common for individuals with brain injuries to experience irreparable harm that surpasses physical and neurological effects. Brain trauma is known to create an intense experience that causes patients to confront existential givens such as freedom, isolation, death, and the overall meaninglessness of existence, all of which suggests the need for clinical help (Patterson & Staton, 2009). According to Hlemblink and Holmstrom (2006), people who experience trauma to the brain are susceptible to experiencing distress that will decrease psychological wellbeing and overall quality of life.

Gregorio et al. (2015) suggested that individuals who sustain brain injuries experience impairments in their coping styles. There is a direct relationship between an individual's executive functioning, coping, and quality of life (Gregorio et al. 2015). Critical findings from the study identified impairment in the copy abilities of individuals following trauma to the brain, which suggested that coping influences the association between executive functioning and quality of life (Gregorio et al. 2015).

Impairments of coping styles due to trauma to the brain typically affect executive functioning, which connects to a patient's ability to have a satisfying quality of life (Gregorio et al. 2015). Executive functioning is critical. Individuals who report difficulties with executive functioning after an injury to the brain may be more likely to utilize maladaptive coping styles. The authors noted that maladaptive coping methods negatively impact an individual's quality of life, while problem-focused coping strategies prove to be more effective (Gregorio et al. 2015).

In efforts to examine the coping styles of individuals with brain injuries, Gregorio et al. (2015) examined 93 individuals admitted to outpatient mental health clinics. This group displayed characteristics of passive coping styles, low quality of life, and depressive symptoms. Findings by Gregorio et al. (2015) further identified that 31% of the participants had impaired executive functioning, and 63% of the participants reported executive dysfunction in daily life. Final analyses showed that self-reported executive dysfunction increased the use of passive coping styles. Methods of passive coping, in turn, had a negative influence on the participants' quality of life.

Studies by Calvert et al. (2013) and Lozano and Badenes (2017) also reported a decrease in quality of life following an injury to the brain. Calvert et al. (2013) and Gregorio et al. (2015) suggested that typically individuals who experience brain trauma experience an increased level of distress that leads to a decrease in their overall physical and psychological wellbeing. Data supports the idea that individuals who have experienced brain injuries show an increase in clinical distress such as anxiety and depression that can impact their quality of life (Fortune et al., 2016).

Increasing a patient's self-awareness is widely acknowledged as a primary goal of treating individuals with neurological disorders due to brain injury (Azouvi et al., 2017; Patterson and Staton, 2009). Improving self-esteem is a means for obtaining additional desirable outcomes in individuals with brain injuries, which includes but is not limited to an improvement in social interactions, coping skills, and self-awareness (Caplan et al., 2016; Kelly et al., 2013;). Social workers play a role in providing vital services such as teaching coping skills and effective communication, all of which offer links to improving patient self-awareness.

A social worker's role is essential in addressing a patient's needs to improve their self-esteem following trauma to the brain (Kelly et al., 2013). Failing to address and enhance an individual’s self-awareness following a brain injury could lead to adverse outcomes (Caplan et al., 2016; Kelly et al., 2013). Notably, the adverse outcomes with this population that includes but is not limited to violence, depression, poor social functioning, academic failures, and an overall decrease in their quality of life (Caplan et al., 2016; Kelly et al., 2013).

Behavioral

Brain injuries typically lead to long-term consequences for the victim. Long-term effects that result from trauma to the brain may affect all aspects of an individual’s functioning and may cause behavioral concerns. Research by Young, Hobbs, and Bailes, (2016), as well as work by Wade, Cassedy, Walz, Taylor, Stancin, and Yeates (2011) indicated that the majority of individuals who experience trauma to the brain also suffer behavioral impairments.

Wade et al. (2014) expressed the importance of addressing traumatic brain injuries in children by highlighting some of the impairments that are likely to surface in children who have brain injuries, including secondary ADHD and difficulties with emotional control. Traumatic brain injuries are the most common cause of acquired disabilities in childhood (Wade et al., 2014). Children with traumatic brain injuries are likely to develop significant behavioral problems. The extent of the behavioral issues that surface in children following trauma to the brain depends upon the nature of the injury (Young et al., 2017).

Brain injuries during childhood are particularly concerning as the child’s brain is still developing (Ilie et al., 2014). Furthermore, researchers found that children who experience brain injuries are likely also to suffer behavioral problems such as suicidality, bullying, and conduct problems such as damaging property, running away, and fire setting (Ilie et al., (2014). In addition to examining the behavior problems that surface in children who have brain injuries, it is equally as essential to explore the behaviors of their peers. Traumatic brain injuries in children may also correlate with victimization. Children with brain injuries are twice as likely to be a victim of bullying, which may trigger behavioral issues in children with brain injuries (Ilie et al., 2014).

According to Wade et al. (2011), 10 to 21% of children who have mild brain injuries experience behavioral problems, while 62 to 71% of individuals that have severe traumatic brain injuries experience behavioral problems. Behavioral problems in individuals who have brain injuries are known to surface internally, such as depression, and externalized, including displaying aggressive behavior (Kurowski, Wade, Kirkwood, Brown, Stancin, & 2014).

There are a variety of disruptive behaviors that may surface in individuals with trauma to the brain. These behaviors link to the presence of depression, anxiety, and attention-deficient disorders. Wade et al. (2011) reported in addition to the common behavioral problems seen in individuals with trauma to the brain; there was an increase of 20 to 40% in disruptive behaviors such as oppositional defiant behavior that includes episodes of aggression and destructiveness. Incidents of aggression and destructive behaviors in children with brain injuries have been shown to surface in the form of physical assault or threats to others, fire setting, and breaking into buildings (Kurowski et al., 2014).

Children who experience trauma to the brain are 67 to 78% more likely to show signs of behavioral problems within the first six months following a brain injury (Llie et al., 2014). Early intervention is found to decrease the presence of behavioral problems in individuals with brain injuries (Llie et al., 2014). This is the most opportune time for social workers to intervene in treatment as it is a critical period for identifying social, environmental factors that will influence the emergence of new problems (Wade et al., 2011). Counselor-assisted problem-solving intervention is effective in treating children with brain injuries (Kurowski et al., 2014).

Delivery of counselor-assisted problem-solving intervention has proven to provide long-term improvement of behavior in children who have suffered a brain injury (Kurowski et al., 2014). Counselor-assisted problem-solving intervention is typically a family-centered intervention that focuses on problem-solving, communication, and self-regulation. This intervention incorporates the entire family and targets crucial family issues such as healthy communication, handling crises effectively, and sibling issues (Kurowski et al., 2014).

Intervention by trained clinicians such as social workers may be useful in preventing deterioration in behavior following trauma to the brain (Kurowski et al., 2014). A social worker’s role in treating behavioral problems in individuals with brain injuries should include psychoeducation classes for parenting and caregivers. Educating parents and caregivers on skills that will increase their warmth, contingent responsiveness, and scaffolding is beneficial in improving behavior problems in individuals with trauma to the brain (Kurowski et al., 2014; Wade et al., 2011).

When examining interventions, Wade et al. (2011) suggested that family environmental variables such as family functioning, parenting style, and positive and negative parent-child interaction have shown to influence behavioral outcomes. Parenting behaviors are critical determinants of behavioral adjustment, as well as the development of self-regulatory skills. Wade et al. (2011) suggested that salient dimensions of parent behaviors should fit the category of either sensitive or hostile.

Parental behavior has shown to either promote or hinder an individual’s ability to regulate his or her expression. According to Wade et al. (2011), hostile parental behaviors such as low warmth, low contingent responsiveness, and high negativity associated with the likelihood of an individual developing internalizing and externalizing behavioral problems. Sensitive parental behaviors such as showing warmth and contingent responsiveness have been shown to decrease the presence of internalizing and externalizing behavioral problems in individuals with brain injury (Wade et al., 2011).

There is limited research showing a significant difference in the behavior of children with traumatic brain injuries and adults with traumatic brain injuries. Research shows that the primary difference between the behavior of children with traumatic brain injury and adults with traumatic brain injuries is the settings that comprise as a result of inappropriate behavior (Young, Hobbs, Bailes, 2016; Treble-Barna, A., Zang, H., Zhang, N., Taylor, H. G., Stancin, T., Yeates, K. O., & Wade, S. L., 2016). Behavioral concerns in adults with traumatic brain injuries have shown to impact an individual’s ability to thrive in both their personal lives and their careers (Young et al., 2017). Alderman and Wood (2013) reported that aggression and anger outburst is the most common forms of behavioral challenge seen in adults with brain injuries, and this puts them at risk of losing personal relationships as well as employment.

Factors such as physical disabilities and cognitive impairments are known to serve as a direct trigger for aggressive acts (Levenson, 2017; Young et al., 2017). In addition to aggression, inappropriate sexual behaviors are another behavioral change seen in adults with traumatic brain injuries. This implies the need for clinical intervention as such acts can be both alarming and distressing. Research relating to inappropriate sexual behavior in individuals with brain injuries is limited, as although it is a concern, inappropriate sexual behavior did not appear to be a universal characteristic of the rehabilitation participants (Alderman and Wood, 2013). Furthermore, the researchers found individuals who experience a brain injury are susceptible to developing a neurobehavioral disability (Alderman and Wood, 2013).

Research by Alderman and Wood (2013) shows that neurobehavioral disability serves as an implication for both rehabilitation and community reintegration. Neurobehavioral disability is the result of an interaction between neural systems that are damaged, environmental factors, and neurocognitive impairments (Alderman and Wood, 2013). Also, neurobehavioral disability can cause individuals to experience a variety of deficits that impact their behavior (Alderman and Wood, 2013). These deficits include but are not limited to poor insight, a lack of awareness and social judgment, poor impulse control, and a range of personality changes.

Social workers frequently encounter clients with a history of trauma (Levenson, 2017). Levenson (2017) defined trauma as exposure to an extraordinary experience that presents a physical or psychological threat to themself or others and generates a reaction of helplessness and fear. Traumatic events take many forms and typically involve an unexpected event outside of a person’s control, such as a physical accident (Levenson, 2017).

When addressing neurological impairments such as behavioral problems in individuals with trauma to the brain, a social worker’s role would be to utilize trauma-informed interventions. Levenson (2017) showed that social workers often rely on their knowledge about trauma to respond to clients in ways that convey a sense of respect and compassion and honors the patient’s right to self-determination when treating individuals who have experienced trauma. Utilizing trauma-informed skills will enable the rebuilding of strong interpersonal skills and coping strategies in patients with brain injury, which may decrease behavioral problems (Levenson, 2017).

Intervention

Data gathered by Folzer (2001) showed that individuals who encounter psychological impairments due to brain trauma do so because of grieving the loss of self and making efforts to recreate themselves. Alderman and Wood (2013) supported the notion that it is essential for professionals treating individuals with trauma to the brain to have a clear insight into how a person’s behavior is affected by trauma to the brain. According to Adams and Dahdah (2016), mental health professionals such as social workers should facilitate the grief process as well as the rediscovery process for individuals after a traumatic brain injury. Adams and Dahdah (2016) reported that it is appropriate for mental health professionals to show patience and support while teaching effective coping strategies for victims of brain injury.

A social worker's role in treating individuals with neurological impairments due to trauma to the brain is to utilize practices that will enhance the treatment of the patient. Strengths-based approaches are useful in treating individuals with neurological impairments due to trauma to the brain. Research by Gan and Ballantyne (2016) indicated that strengths-based approaches are common approaches in the social work profession.

An example of a strengths-based approach that is utilized by the social worker when treating this population is solution-focused brief therapy. Gan and Ballantyne (2016) identified solution-focused brief therapy as an evidence-based approach to intervention. Solution-focused brief therapy is future-oriented, and goals directed as it focuses on solutions for this population such as resources and competence rather than the impairments, disabilities, and complications resulting from the injury.

Gan and Ballantyne (2016) highlighted that the medical model is traditionally known to be the paradigm underlying rehabilitation programs for individuals with brain injuries. However, social workers are useful in enhancing the treatment of individuals with injuries to the brain. Data gathered by Gan and Ballantyne indicated that a social worker's expertise in treating individuals with trauma to the brain is gaining authority as there is merit in considering the benefit of using a strength-based approach to treatment.

Limitation

Theordore et al. (2013) reported that the prevalence of neurological impairments, such as mental health issues, had been documented in numerous studies. However, this issue continues to be a significant and unaddressed problem. Evidence regarding proper treatment for neurological impairments following a brain injury remains inconsistent. Insufficiency of evidence surrounding this issue makes the development of treatment guidelines for this population rely more on the observations of a clinician and less on empirical support. Awareness surrounding the prevalence of neurological impairments following a brain injury is reportedly increasing; however, the evidence regarding effective treatment for this population remains to be limited and inconclusive (Theordore et al., 2013)

Summary

In conclusion, the above literature explored the neurological impairments and psychological effects due to brain injuries, as well as methods for addressing those psychological needs. Addressing mental health issues is a core concern in treating individuals with brain injuries (Simpson and Tate, 2013). Fortune et al. (2015) stated that individuals typically encounter a variety of neurological impairments following a brain injury.

Neurological impairments that individuals suffer from due to brain injuries are known to affect him or her physically, socially, cognitively, and emotionally. Regarding the neurological impairments following a brain injury, the existing research suggests that individuals with brain injuries lack the resources to manage both their deficits and needs (Andruszhow et al., 2014). Mental-health professionals, such as social workers, play a crucial role in the recovery from a brain injury. Social workers possess knowledge and skills that can enhance the treatment of individuals with a brain injury by contributing to the person’s developing strategies, making emotional adjustments, and improving the functioning of both the individual and his or her family members (Adams and Dahdah, 2016).

Literature concerning the goal and objectives of this action research project revealed a gap in the literature related to a social worker’s roles in treating individuals with neurological impairments due to trauma to the brain. Craig et al., (2016) indicate that social workers are known to provide treatment for cognitive, behavioral, social, and mental health issues that affect individuals. A social worker’s role in providing treatment to address cognitive, behavioral, social, and mental issues in individuals with neurological impairments due to trauma to the brain appears to be understudied.

Traumatic brain injuries are known to cause psychological issues that can lead to a decrease in a person’s quality of life (Adams and Dahdah, 2016). There is a gap in the literature related precisely to how the involvement of social workers in the treatment of individuals with neurological impairments can address psychological issues and enhances one’s overall quality of life. Due to the gap in the literature, further exploration is needed to increase knowledge related to understanding the role of a social worker, as well as the benefits associated with incorporating social work practices in the treatment of individuals with neurological impairments. The focus of this action research project is to understand the social worker’s roles in the treatment of individuals with neurological impairments through the lens of the person-centered theory. In Section 2 of this action research project, the following topics entail: (a) background and context, (b) methodology, (c) sources of data, (d) data collection, (e) instruments, and (f) data analysis.

Section 2: Research Design and Data Collection

Traumatic brain injuries affect individuals of all races, ages, and ethnicity (Kisser et al., 2017). Individuals who suffer from brain injuries may experience neurological impairments that may cause them to also experience long-term psychological conditions (Kisser et al., 2017). Social workers play a crucial role in addressing psychological complications; therefore, social work services should be provided in conjunction with other healthcare services when treating this population.

The purpose of this action research study is to increase the current body of knowledge relating to a social worker's role in treating individuals with neurological impairments due to trauma to the brain. Increasing awareness begins with a clear understanding of the following research question: What is a social worker's role in treating individuals with neurological impairments due to brain trauma? With this research question in mind, in this section I discuss the context and statistical information related to this population, as well as sources of data, methodology, and ethical procedures.

This action research study focused on gaining a deeper understanding of a social worker's role in a healthcare and rehabilitation setting. This research aimed to learn how current medical social workers are utilizing their services to enhance the treatment of individuals with neurological impairments due to brain trauma. Information from this action research study may contribute to social work education and enhance social-work services for individuals with neurological impairments due to brain trauma. The information in this action research project will ideally inform future social work education and improve social-work practice in healthcare and rehabilitation settings.

The need to improve social work practice in healthcare and rehabilitation settings is apparent as efforts have been made by both the National Association of Social Work Examiners and the Society for Hospital Social Work Directors to enhance social work services in healthcare settings (Voulerkis, 1990). Research by Voulerkis (1990) reflected that the Society for Hospital Social Work Directors has developed clinical indicators for monitoring and evaluating the quality of social work services provided in healthcare settings, which are evaluated by four dimensions. The dimensions included the relevance of practice, clarity, meaningfulness concerning the quality of care, and feasibility of implementation.

Individuals with brain injuries typically experience a variety of neurological impairments that can affect their overall wellbeing (Sherer, Poritz, Tulsky, Kisala, Leon-Novelo, & Ngan, 2020). Interventions by social workers in the treatment of individuals with neurological impairment can likely improve the psychological impairments that individuals with brain injuries experience (Adams and Dahdah, 2016). This research project utilized a qualitative research design to assess a social worker’s role in treating individuals with neurological conditions due to physical trauma.

Research Design

Individuals with neurological impairments due to brain trauma may experience a series of complications. This action research study aimed to answer the following research question: What is a social worker’s role in treating individuals with neurological impairments due to brain trauma? The objective of this research project was to learn how social workers who have either worked in or are currently working in healthcare or rehabilitation settings use their services to address the needs and treatment of individuals with neurological impairments due to brain trauma. Information contained in this project aims to inform the future of social work education, as well as enhance social work services provided to individuals with neurological impairments due to brain trauma.

A qualitative design was used to understand the importance of incorporating social work practice in the treatment of patients with neurological conditions due to physical trauma. Qualitative research attempts to understand the targeted population in its natural settings in ways that reflect how members of that population view their experiences (Ravitch & Carl, 2016). Qualitative data was collected using a focus group.

Focus groups provide researchers with a means of acquiring information in a group setting (Stringer, 2007). A focus group is a popular method for collecting qualitative data. The focus group consisted of a semistructured group process that was conducted and moderated by the researcher. During the focus group, four participants shared their experiences and perspectives on the identified issue. Participant’s experiences and perspectives acquired in the focus group assisted to either identify new information or reinforce existing evidence related to a social worker’s role in treating individuals with neurological impairments due to brain trauma.

In qualitative research, the use of focus groups assists in acquiring information about a topic. Participants of focus groups are encouraged to describe their personal experiences and perspectives on the research topic (Stringer, 2007). This action research project explored a social worker’s standpoint relating to their role in treating individuals with neurological impairments. Therefore, a qualitative design was appropriate as it examined the participants’ subjective interpretations of their experiences (Ravitch and Carl, 2016).

Methodology

By conducting this qualitative research study, I needed to identify a facility that met the criteria that addressed the needs for this action research project. The first step in selecting an appropriate site was to ensure the facility staff had the following qualifications: (a) were social workers, (b) had the education requirement of a minimum of a master’s level degree (MSW), (c) needed to be willing to engage in focus group sessions with the other participants, and (d) must have provided services to individuals with neurological impairments due to brain trauma. The site profile criteria included hospitals, clinics, and rehabilitation centers.

A maximum of 10 healthcare social workers was expected to be included in the focus group. Healthcare social workers include all social workers who work in or have worked in healthcare settings such as hospitals and rehabilitation centers. Ten social workers received invitations to participate in the study. Of the 10 participants who received invitations, five of them responded to the invitation and reported interest in the study. In efforts to follow up with participants who did not respond, I contacted the administrator of the participating agency who agreed to send another copy of the letters of participation out to each participant. This did not increase the number of individuals who responded. I utilized information made available to the public at two healthcare organizations to locate medical and rehabilitation social workers. Staff directories from two medical and rehabilitation centers in Dallas, Texas, were used to obtain participants' information. I used the staff directory to identify participants' email and telephone numbers to solidify participant participation in this action research project.

Introductory emails explaining the project were sent to those who previously expressed interest in participating either by email or telephone. Next, I followed up by contacting the potential participants via telephone using the telephone script as a guide for the conversation (see Appendix A). Eligibility for the study required that the participants (a) be a social worker in the state of Texas; (b) be currently providing services to individuals with neurological impairments due to brain trauma, or to have provided services to this population in the past; (c) be willing and available to participate in a focus group scheduled to last approximately 1 hour; and (d) review the informed consent agreement, with willingness to maintain confidentiality, and consent to being audiotaped.

Data Collection

I collected data by facilitating focus group sessions, which included an interview with four healthcare social workers. Potential participants who expressed interest in participating in this action research project notified me, either by email or telephone, to learn more about the research and consent before participating in the focus group. I conducted the focus group after receiving Institutional Review Board (IRB) permission. This action research project reported the self-reflection of social worker's roles in treating individuals with neurological impairments due to trauma to the brain.

Data collected from the focus group sessions was qualitative. This form of data collection allowed participants to share information in a semi-structured group process. Typically, researchers facilitate focus groups as a means for identifying new information with the intention of furthering research or reinforcing existing evidence (Stringer, 2007). This method of data collection aligns with this research study, which is focused on understanding a social worker's role in treating individuals with neurological impairments due to trauma to the brain. I audiotaped the focus group, which allowed me to be fully present while conducting the focus group. Two electronic audiotaping devices were used as a precaution in the event there is a malfunction with one of the audiotaping devices. Audiotaping the focus group allowed me to make nonverbal observations. I transcribed the data that was collected from the focus group recording. Any identifying information was deleted so that the participants remained anonymous. I then compared the transcribed data with the recording from the focus group three times to ensure accuracy.

Qualitative research instruments allow the researcher to contribute to the development of theories and examine processes that increase knowledge related to the topic (Adams & Dahdah, 2016). In this action research project, I utilized a series of open-ended research questions related to a social worker's role in treating individuals with neurological impairments due to trauma to the brain (see Appendix B). Open-ended interview questions are intended to gather information about the participants' personal experiences (Maxwell, 2013). These questions are beneficial in qualitative studies as they allow the respondents to include more information such as their feelings and understanding of the subject (Maxwell, 2013).

Before the initial focus group session, I ensured that participants reviewed and agreed to the informed consent document. I provided each participant with an informed consent form. After each participant had an informed consent in their hands, I read the content of the informed consent to the participant. Participants where then given time to review the informed consent form in its entirety. After reviewing the informed consent, the participants were encouraged to sign and turn the informed consent over as a way of notifying me that they agreed and ready to begin participating in the focus group. After the informed consent was signed, I collected the consents and proceeded to begin the focus group.

On the day of the initial focus group session, I set up the audio recorders to record the interview. I welcomed participants and proceeded to pass out their copy of the informed consent document and briefly review key points from the consent. Expectations of confidentiality will be discussed at this time. Participants were also be allowed to ask any questions they might have and will be provided with a copy of the research questions which they will be allowed to reference during the focus group. I made attempts to establish rapport with the participants to promote a level of comfort with the participants (Rubin and Rubin, 2012). Next, I proceeded with the focus group questions.

In a focus group, each participant was allowed the opportunity to describe their personal experience while providing their perspective on the issue (Stringer, 2007). Before facilitating the focus group, I explained the set ground rules to the participants (see Appendix B). The ground rules for the focus group included that each participant had equal opportunity to express their opinion and that participants were nonjudgmental towards each other.

The discussion within the group focused on questions related to a social worker's role in treating individuals with neurological impairments due to trauma to the brain. These questions were intended to gather the perspectives of social workers who work in rehabilitation or healthcare settings regarding the importance of social work services in treating individuals with neurological impairments due to brain trauma. An example from the research questions (see Appendix B) that was used to collect data for this study is as follows: "What is a social worker's role in treating individuals with neurological impairments due to trauma to the brain?"

Data Analysis

After the data was collected it was organized and sorted by using categories based on keywords. Data analysis is a critical component of the action research process. The process of data analysis can be extensive, as it includes a variety of structured methods that assist the researcher in making sense of the data that he or she has collected. This process identified and constructed findings that supported the researcher in answering the research question (Ravitch and Carl, 2016). I approached the data analysis process in a way that is structured, yet fluid and flexible.

The data was analyzed utilizing qualitative data analysis. Qualitative data analysis is the intentional and systematic scrutiny of data that occurs continually throughout the process. Research shows that qualitative research is beneficial in gathering vital information from the targeted population by using techniques that encourage the participants to share information that reflects how members of that population view their experiences (Ravitch and Carl, 2016). When using qualitative data analysis, it is essential that the researcher engages with the related theory that challenges one's thinking while aiming to conceptualize what is happening in the data. It is also appropriate for the researcher to participate in reflective and collaborative processes that challenge interpretations and analytical procedures (Ravitch and Carl, 2016).

I critically approached the data analysis process as the process has a cyclical nature that commences at the beginning of data collection and continues throughout the process of collecting data while transitioning into summative data analysis (Ravitch and Carl, 2016). There are several aspects involved in critically approaching data analysis. To critically approach the data analysis process, I first acknowledged the iterative, recursive, and ongoing nature of data analysis. Secondly, I had a clear understanding of the relationship between the various data collection processes and the nature, content, and scope of the data set. Also, it was important that I engaged with the participants during the investigation into the data, as well as the various influences on data interpretation while being mindful of the researcher's identity, positionality, and assumptions (Ravitch and Carl, 2016).

Analysis of data included data organization and management, immersive engagement with data, and writing and representation. In accordance with Stringer (2007), there was series of steps that was used to analyze the data in this action research process. The first step included categorizing and coding. Categorizing and coding consist of several steps with the intention of developing a reporting framework.

The next process consisted of detecting and collecting key experiences (Stringer, 2007). This approach to data analysis focuses on critical events that had a significant impact on the participants. Individuals are more likely to share experiences that have a special impact on their lives. Writing reports was also an essential step in data analysis. The last step in the data analysis process is the presentation of findings (Stringer, 2007).

Microsoft Word was the software that was used to transcribe the audio recording. I read the Microsoft word document line by line and compared it to the audio recording to ensure that the data that is collected on the audio recorder is accurately reflected in the transcription. The transcript was then examined by using thematic analysis coding. Thematic analysis is a qualitative research method used for identifying, analyzing, and interpreting themes in qualitative research (Braun, Clarke, & Terry, 2014). A six-step process was utilized to identify, analyze, and report qualitative data (Braun et al., 2014).

Thematic analysis coding included me familiarizing myself with the data that set the foundation for the data analysis process. Transcripts from the data was read several times to allow me to gain a clear understanding of the data. Once a clear understanding of the data was gathered, I proceeded to the second step which consisted of identifying preliminary codes. Preliminary codes are features within the data that appear interesting and meaningful. During the third step, I searched for themes. Once the themes were identified, I proceeded to the fourth step which consists of reviewing the themes. Reviewing the themes helped me to decide whether there is a need to combine, redefine, separate, or discard the initial themes. Step five included defining and naming the themes, which will include providing theme names and clear working definitions (Braun et al., 2014). During the last step, I transformed the analysis into a Word document that relayed the results of the focus groups.

When engaging in qualitative research, it is essential for me to achieve rigor in the study. There are several components related to achieving rigidity. These components include credibility, transferability, dependability, and confirmability. Credibility refers to the integrity of the study. Participants are more likely to make personal comments related to the study if they find that they can trust the integrity of the process. It is appropriate to provide all participants with an opportunity to express their experience, insight, and opinions on the identified issue. To ensure credibility, I paraphrased and repeated the information that was shared by participants to ensure accuracy during the focus group.

Transferability in qualitative action research suggests that the outcome of the study applies only to the people that were part of the study. To ensure transferability, I utilized journaling to summarize my interpretation of the responses to each question. At the end of the focus group, I verbally summarized the responses that the participants provided to each question in efforts to check-in and ensured that the researcher’s interpretation accurately reflected the participants’ feedback. I provided the participants with detailed descriptions of the context reported as part of the outcome in this study (Stringer, 2007).

Reflexive journaling was used throughout the focus group. Before beginning the focus group, I journaled my expectations for the focus group as well as my thoughts and feelings. Throughout the focus group, I practiced mindfulness by making notes of my observations as wells as my thoughts and feelings concerning the participants' feedback, presentation, and interaction with other group members. Dependability in research relates to the possibility for other researchers to follow the same procedures and obtain a result that replicates the previous results (Stringer, 2007). Dependability is also related to the researcher's ability to protect the integrity of the research.

To ensure dependability and preserve the integrity of the research, I will keep all materials from the focus group, such as audio tapes from the interviews, informed consent, and interview notes, in a locked file cabinet. Future researchers should be able to confirm that the procedures described took place. To confirm that the described method took place, I will keep an audit trail. An audit trail enables an observer to view the data that is collected, the instruments, field notes, tapes, and other artifacts that are related to the study (Stringer, 2007).

Ethical Procedures

Before beginning the study, I received approval from Walden's Internal Review Board. After I received authorization to conduct the research, I asked that each participant sign an informed consent document that explained the study's procedures for this action research project. The social work practice problem that I have addressed is the significance of social work services to individuals who have neurological impairments due to trauma to the brain. Typically, individuals who have neurological impairments due to trauma to the brain experience a variety of challenges that affect their overall wellbeing. The NASW code of ethics suggests that competent social workers should work collaboratively with other professionals within an interdisciplinary team and promote social welfare through research and evaluation (NASW, 2017).

It is common for individuals who have neurological impairments due to brain trauma to experience deficits that may affect their decision-making processes. The NASW Code of Ethics states that a social worker's primary responsibility is to promote the wellbeing of their clients (NASW, 2017). Ethical principle 1.14 states that social workers have a responsibility to safeguard the interests and rights of individuals who cannot make appropriate decisions (NASW, 2017).

Ethical procedures are a critical component of action research. Researchers have rules and regulations regarding their approach to action research. Rules and regulations regarding how to conduct action research are vital as a means of preventing subjects or participants from being put at risk of harm. In conducting this research study, I delineated specific steps taken to ensure that the participants do not experience harm as a result of participating in the research project.

In this study, I have included precautions to ensure the protection of the participants. This researcher did not collect any information that was deemed to be sensitive. Each participant was informed of their right to refuse to answer any of the questions without having to explain their reasoning**.**

Before initiating the focus group, each participant completed an informed consent. This tool is the appropriate method for gaining written acknowledgments of the participant's willingness to participate in the study. Informed consent is a principle tool in ensuring that a participant has a clear understanding of the purpose, aim, use of results, and possible consequences of participating in this study (Ravitch and Carl, 2016).

Informed consent included statements that explain the participant’s rights. The informed consent further detailed the right to refuse to participate and the right to withdraw from the study at any time without explanation. Participants were made aware through the informed consent that the data relating to their participation will be returned to them. As I will submit a one-page of findings via email to the agency. Research participants completed the informed consent in a one-on-one meeting with me before participating in the focus group. They briefly reviewed key topics amongst the focus group participants. In addition to informed consent, a letter was provided to the participants (see Appendix A) about the aims, purpose, and processes of the study.

The protective factors considered during the focus group entailed the assurance of confidentiality, maintaining privacy, and displaying respect for each participant. I utilized professional communication throughout the entire process. Professional communication included providing the participants with accurate information related to the study, aimed to make the research process convenient for the participants, and addressing their concerns.

To ensure confidentiality for each participant, I did not collect any identifying information from the participants. Data collected from the participants was only used for the research project purposes. Use of a laptop computer with an encrypted code allowed for storage of the data and was kept in a locked cabinet at the researcher’s home office. This researcher is the only individual that has access to the locked cabinet. Per Walden’s

IRB procedures, the data will be kept for a minimum of 5 years. Data collected from the study will only be shared with the researcher's committee members.

Summary

As mentioned above, individuals with brain injuries typically experience a variety of neurological impairments that can affect their overall wellbeing (Sherer, Poritz, Tulsky, Kisala, Leon-Novelo, & Ngan, 2020). Interventions provided by social workers in the treatment of individuals with neurological impairment can likely improve the psychological impairments that individuals with brain injuries experience (Adams and Dahdah, 2016). This research study utilized a qualitative research design to assess a social worker's role in treating individuals with neurological conditions due to brain trauma.

In this action research project, this research aids in efforts towards understanding how services provided by social workers in rehabilitation and healthcare settings impact the treatment and rehabilitation of individuals with neurological impairments due to brain trauma. It is the researcher's personal belief that social workers are both competent and highly skilled in providing services that will enhance the treatment of this targeted population.

Section 3 will consist of data analysis techniques, validation and legitimation processes, and findings of this action research question: *What is a social worker's role in treating individuals with neurological impairments due to brain trauma?*

Section 3: Presentation of the Findings

The purpose of this study was to utilize a qualitative research design to develop an understanding of a social worker's role in treating individuals with neurological impairments due to trauma to the brain. This action research project allowed medical social workers to explore social workers' roles in treating individuals with neurological impairments. The study participants were given the opportunity to share insight and knowledge related to servicing the identified population. Conducting a focus group that consisted of four medical social workers from an agency located in Texas led to the data collection process. The medical social workers possessed clinical skills and expertise in treating individuals with neurological impairments. Social workers have the responsibility to apply skills and techniques to assist their patients in gaining insight into their deficits when treating individuals with neurological impairments (Early & Grandy 2017).

During the focus group, the participants responded in a manner that suggested that they followed the NASW code of ethics when treating patients. The participants indicated that they were working within their area of competence and presented with the desire to enhance their current practice skills for better serving their patients. Social workers are taught to utilize best practices when working with patients (NASW,2008). Through seeking to employ best practice when working with individuals with neurological impairments due to trauma to the brain, social workers learn interventions that will aid them in the treatment of emotional, behavioral, and cognitive effects that may surface following trauma to the brain.

One of the intervention techniques that social workers are taught is cognitive behavioral therapy. Research supports that cognitive behavioral therapy is one of the most effective treatments for addressing psychological issues in individuals with neurological impairments due to trauma to the brain (Ashmon et al., 2014). Early and Grandy (2017) suggested that when patients and social workers have a shared understanding between their presenting issue and methods to address them, clients report greater outcomes of treatment. This section includes a description of recruitment methods, data collection, and data analysis. I also discuss limitations and validation procedures. Last, I report the findings and provide a summary.

Data Collection

Medical social workers were recruited for this study. As a method of recruitment, I researched agencies in the Dallas area that both provided treatment to individuals with neurological impairments due to trauma to the brain and had a treatment team that consisted of medical social workers. After identifying two health care agencies that had a treatment team that included social workers that have provided social work services to individuals with traumatic brain inquires, I sought IRB approval by completing and submitting the IRB application as well as supplemental documents.

While going through process of obtaining IRB approval, IRB initially granted me conditional approval. Conditional approval was granted with the expectation that I submit signed letters of cooperation from the agencies that I would be inviting to participate in the study. I then placed a call to two agencies that both served the targeted population and had a treatment team that consisted of medical social workers. One of the agencies that I attempted to contact was no longer in business. I removed that agency from my IRB application.

After placing a call to the second agency, I was able to speak with the administrator who reported interest in my study. The letter of cooperation was emailed to the administrator at that agency for review and signature. By the end of the day, the administrator had signed and returned the letter of cooperation to me via email. The letter of cooperation was then sent to IRB which satisfied the requirements of IRB and allowed me to obtain IRB approval on January 14, 2020.

After receiving IRB approval,01-07-20-0622501 I emailed a letter of invitation to the administrator at the health care agency to recruit participants for this study. I asked the administrator to distribute the invitation to individuals within the medical social work department. The invitation provided detailed information concerning potential participants' qualifications that should be met to be a subject matter for this study. I included my contact information in the letter with how the potential participants could connect with me either via telephone or email. Within 1 week, five social workers expressed their interest in participating in the focus group. Ten participants were originally invited to participate in the study. Of the 10 that were invited, three declined the invitation and two did not respond.

Of the five participants who expressed interest, each of them showed up with the intention of participating in the focus group however, only four participated in the focus group. One of the medical social workers received a work-related phone call which required her exit prior to engaging in the focus group. The remaining four medical social workers who were in attendance participated in the focus group in its entirety. Prior to beginning the focus group, I welcomed the participants and thanked them for coming. Informed consent was then provided to them (see appendix B) Participants were asked to review the informed consent, sign, and then place the consent form face down once they had signed it.

I asked the participants if they had any questions about the informed consent document and allotted time for questions and answers. Participants declined to ask questions related to the informed consent and displayed an understanding of its contents. Each participant signed the informed consent, turning it face down afterward, signifying that they were ready to participate in the focus group.

I collected data by facilitating one semistructured focus group session. During the focus group, I served as the facilitator by asking open ended questions to the participants. Participants were provided with a copy of the focus group questions. Focus group questions were provided in writing in efforts to give them the opportunity to refer to questions in writing during the focus group (see Appendix B). Each participant reported appreciation for having a copy of the research questions in front of them to review.

I facilitated the focus group on January 24, 2020. Each participant chose this date as their schedule permitted time allotted for us to meet. The agreed-upon location for the focus group was at a local library inside a secured meeting room. There were no windows meeting rooms, and the walls were soundproof. The focus group session lasted roughly 45 minutes. I utilized two electronic audio recording devices to record the focus group session. Also, I observed the participants’ gestures and presentation during the group in efforts to identify participants’ nonverbal communication.

While serving as the facilitator, I facilitated the group in a manner that encouraged all participants to participate. Each participant was provided with the ability to have ample opportunity to share their input. Focus group participants openly engaged in the group sharing their thoughts, expertise, and perceptions. At the end of the focus group, I extended the offer to hold one-on-one interviews with any participant that had the desire to share any additional information related to the study. Each participant declined the offer to meet one-on-one.

The research question that guided this study was as follows: What is a social workers’ role in treating individuals with neurological impairments due to brain trauma? The focus group session lasted 45 minutes of discussion time. I had evidence of data saturation when participants appeared to be repeating the same statements. Data saturation is reached when no new information is derived from the participants, and responses become replicated and redundant (Saunders, B. et al., 2018). Additionally, I manually transcribed the data that was collected in the focus group by using the Microsoft Word software on my laptop computer. Further explanations about the techniques used to analyze the data were provided in Section 2.

Obtaining an appropriate location to hold the focus group was an obstacle. In making efforts to accommodate all participants served as a limitation. Initially, the focus group was set to take place at a public library in Dallas county; however, the participants expressed that Kaufman county was more convenient for them. There was one library in

Kaufman county that was within a reasonable radius for most of the participants that confirmed their interest in the study. This location had limited hours available for reservation of the meeting room. Available meeting times at this location was within working hours. While having to schedule the focus group within working hours posed as a limitation as it required participants to be available during times that they would likely be scheduled for work.

The participants in this study each have their Master's in Social Worker degree. There was a total of two participants who have worked for the agency for over 15 years. These two participants have also been social workers for more than three decades. Another participant in this study has worked for the agency for three years and has been a social worker for a total of five years. The final participant has less than six months with the agency and has been a social worker for less than three months. There was a total of three participants who are credentialed Licensed Clinical Social Workers (LCSW). The other participant held a Master's in Social Work Degree (MSW). The study participants each confirmed that they had provided services to individuals with neurological impairments due to brain trauma.

I facilitated the focus group by asking open-ended questions regarding a social workers role in treating individuals with neurological impairments by using the "Research Questions" document (see Appendix B) as a guide for the interview. I encouraged conversation among the participants and provided them with the ability to contribute as much as they desired. The focus group participants contributed to the obtainment of qualitative data regarding social workers' roles in treating individuals with neurological impairments due to brain trauma. Data that was collected from participants during the focus group indicated that some of the primary roles of social workers who treat individuals with neurological impairments is to support the patient and family, identify psychological impairments, and determine the appropriate services to provide to those patient's. I facilitated one focus group session at the local library with four medical social workers. I used the interview questions provided in appendix B as a guide for interviewing medical social workers.

There was a total of nine questions asked during the focus group. Questions asked during the focus group is as follows:

1. What is your role in treating individuals with Neurological Disorders due to Brain Trauma?
2. What are the types of Social Work services needed to address this population?
3. What are the kinds of mental health issues have you noticed in individuals with neurological disorders due to brain trauma?
4. How prevalent is anxiety among individuals with neurological impairments due to brain trauma?
5. What types of behavior do you notice in individuals with neurological impairment due to brain trauma?
6. How do neurological impairments due to brain trauma affect a person's quality of life?
7. How common is depression among individuals with neurological impairments due to brain trauma?

8. What have you noticed about a patient’s cognitive performance following a brain injury?
9. How does social work services impact the lives of individuals with neurological impairments due to brain trauma?

All participants provided insight to the focus group questions. Participants used the handout of focus group to reference the questions that were being asked during the focus group. Each participant answered in a manner that suggested that they had a clear understanding of the questions that were being asked during the focus group. Participants did not appear to have any challenges during the focus group however, I provided participants with her contact information and encouraged them to reach out should they have the need or desire to discuss issues related to items related to the focus group.

Data Analysis Techniques

In this study, I used a series of steps to analyze the data carefully. After researching various data analysis techniques, I chose to use the thematic analysis coding technique to analyze the data collected for this action research project. According to Braun and Clarke (2006), “Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data” (p. 6). Next, I will explain the process used to categorize and code the data set.

I began by categorizing and coding the data set by concentrating on data material. Categorizing and coding is the process used to link analytic meaning to segments of data. Coding data poses as a symbolic meaning to the data. There are many benefits to categorizing the data as this process allows for the data withing the categories to be presented in a manner that is concrete and visible. A system of color coding and data reduction was used to analyze data from the focus group identity common themes that were derived from participants perceptions of a social workers role in treating individuals with neurological impairments due to trauma to the brain.

The next process consisted of detecting and collecting essential experiences (Stringer, 2007). This approach to data analysis focuses on critical events that had a significant impact on the participants. Writing reports is also an essential step in data analysis. The last step in the data analysis process is the presentation of findings (Stringer, 2007). Data from the focus group was analyzed by linking similar phrases to identify themes that are present in the data.

One example of linking similar phrases to identify themes is as follows: In response to focus group question two "What types of social work services are needed to address this population." In response to that question, researcher one used the term "long term treatment", the second participant used the term "continuum of care", and the third participant used the term "long term needs". The theme that was identified in relation to this data was "Lack of long-term intervention". Another example of linking phrases to identify themes related to focus group question five "What types of behaviors do you notice in individuals with neurological impairments due to trauma to the brain?" Participant 1's response consisted of the phrase "impulse control", Participant 2's response consisted of the phrase "lack of impulse control", and Participant 3's response consisted of the term emotional control". The theme that was identified in relation to data gather for question five was "insufficient treatment for mental health issues".

I listened to the audio recordings a total of three times and transcribed the data that was coded and organized to identify themes within the data within a word document. After listening to the audio recording and transcribing the data, I read the Microsoft word document line by line one sentence at a time. Each time that I read the word documents, I compared it to the audio recording. to ensure that the data that is collected on the audio recorder accurately reflects the transcription. The transcript was examined by using thematic analysis coding. Thematic analysis is a qualitative research method used for identifying, analyzing, and interpreting themes in qualitative research (Braun, Clarke, & Terry, 2014). A six-step process was utilized to identify, analyze, and report qualitative data (Braun et al., 2014).

Thematic analysis coding included me familiarizing myself with the data as this set the foundation for the data analysis process. Transcripts from the data were read three times to allow me to gain a clear understanding of the data. Once a clear understanding of the data was gathered, I proceeded to the second step, which consists of identifying preliminary codes. Once I identified the initial codes, I searched for themes. After the themes were identified, I proceeded to the fourth step, which consists of reviewing the themes. Reviewing the themes helped me decide whether there is a need to combine, redefine, separate, or discard the initial themes. Step five includes defining and naming the themes, which included providing theme names and clear working definitions (Braun et al., 2014). During the last step, I transformed the analysis into a Word document that displayed the results of the focus groups.

Validation Procedures

Credibility was one of the validation procedures that was used during this focus group as it refers to the integrity of the study. When using credibility as a validation procedure, the researcher is expected to clearly link the study’s findings with relation in efforts to demonstrate the truth of the study’s findings (Creswell 2013). Member checking was used to assure credibility. Participants were allowed to review the transcript of their comments to ensure that the collected data accurately represented the participants’ responses to the questions that were asked in the focus group. Each participant confirmed that the information in the transcript was accurate.

There was an expectation that each participant expressed their experience, insight and opinions on the identified issue. Expression of experience and insight of the topic was encouraged as it was essential that information that was relevant to the study was shared. I practiced attentive listening by maintaining eye contact and utilizing nonverbal gestures such as head nodding to ensure the participant knew that their feedback was of importance. It was also important that I accounted for possible researcher bias.

My biases were accounted for through the process of reflexive journaling. Before beginning the focus group, I made journal entries documenting my thoughts and feelings towards my expectations of the focus group. Journal entries were also made after the focus group in which I processed my thoughts and feelings regarding the information that was shared in the focus group. Reflexive journaling increased my ability to remain transparent, process information the participants shared, and gain an understanding of my thoughts, opinions, or biases.

Dependability relates to the possibility for other researchers to follow the same research procedures and obtain results that replicate the previous results (Stringer, 2007). It also refers to a researcher's ability to protect the integrity of the research. To ensure dependability and preserve the integrity of the study, I stored all material from the focus group, including audio tapes from the interview, informed consent, and interview notes in a locked file cabinet. The future researcher will be able to confirm that the procedures described took place in this study. I will also keep an audit trail which enables an observer to view the data that is collected, the instruments, audio tapes, and other items related to the study (Stringer, 2007).

In this section, I will explain the steps taken to ensure personal validation. Personal validation is the process of using one's own experiences to compare research findings (McNiff & Whitehead, 2009). One finding of this research project suggested that it is necessary for social workers to be involved in the treatment of individuals with neurological impairments. Social Workers have the skill sets and abilities to recognize the mental health components of the brain injuries while other professionals may overlook those components. From a social work perspective, I understood the participants view on the necessity of including social workers in the treatment of individuals with neurological impairments as social workers are trained and qualified to recognize mental health components in treatment.

Limitations

This action research project involved medical social workers who have treated individuals with neurological impairments due to brain trauma. The participants in this study are all employed by the same agency. A limitation identified in this study includes choosing one healthcare agency to recruit participants. This single component posed as a limitation as there is a chance that these participants have shared experiences that may limit variation of responses regarding servicing this population.

Limitations of this study involved the sample size of four participants. In this study, the sample size could potentially limit the amount of data that was gather on this population. A low turnout of participants is likely due to the location of focus group as it took place in a rural area in Texas. Another limitation includes the lack of cultural diversity amongst the participants. Each participant identified as being of Caucasian ethnicity. Furthermore, the lack of cultural diversity amongst the participants limits perspectives related to treating this population from medical social workers who are of other cultural background.

Transferability of the findings may pose as a limitation as results of a study that strictly relies on perceptions or lived experiences of the participants may limit nonparticipating reader’s ability to relate to the suggestions of the findings (Creswell, 2014). This study explored medical social workers role in treating individuals with trauma to the brain.

Findings

The purpose of this study is to understand the roles social workers play in treating individuals with neurological impairments due to brain trauma. The study participants included medical social workers in the proximity of Dallas, Texas. The participants had each provided social work services to individuals with neurological impairments. Each of the participants shared similar demographics, such as having a master’s degree in social work. A total of three participants were Licensed Clinical Social Workers (LCSW), and one participant was a Licensed Masters Social Worker (LMSW). Two of the participants have been medical social workers for over 30 years, while one participant had been a medical social worker for more than seven years, and another had been a medical social worker for less than a year.

Focus group participants possess the experience needed to maintain dialog on the topic that is being studied (Creswell 2013). I sought to include participants that were medical social workers who have worked with individuals with brain trauma. Considering these traits, the participants were able to engage in dialog related to the study and convey the needed insight regarding a social workers’ role in treating individuals with neurological impairments.

The summary and analysis of data was conducted in an unbiased and organized manner that addresses the research question regarding a social workers’ role in treating individuals with neurological impairments due to trauma to the brain. The following research question guided this action research study: What is a social worker’s role in treating individuals with neurological impairments due to trauma to the brain. There was a total of nine focus group questions that were asked to focus group participants.

I used information that was gathered during the focus group questions to locate significant themes. Furthermore, there were a total of five themes identified in this group. The themes that became evident in the data were as follows: insufficient of long-term interventions, a lack of understanding regarding mental illness, the importance of including social workers in the treatment of individuals with neurological impairment. Focus group questions, participant responses and themes are as follows:

Theme 1: Lack of Long-Term Interventions

Throughout the focus group, the data shared that supported the need for long-term interventions for individuals with neurological impairments due to trauma to the brain. Participants noted that social work services that are provided to individuals with neurological impairments are typically short term. Each participant expressed that incorporating long-term interventions for individuals with neurological impairments due to trauma to the brain would be beneficial for this population. Participant 1 stated , “I believe that wrap around services would probably help them be successful with treatment long term, possibly residential treatment centers for patients that do not have family that are able to be successful in supporting them effectively.” Participant 2 agreed while adding “there is a need for a continuum of care for this population as their needs are typically long-term. “Participant 3 nodded their head while stating “our time with the patient are simply not enough”. Participant 4€ agreed with the need for long-term intervention for this population by stating “I agree.”

Theme 2: Conducting Proper Testing to Identify Mental Health Issues

Theme 2 was established by combining the responses to questions four and seven of the interview questions. Interview question four was “How prevalent is anxiety among individuals with neurological impairments due to trauma to the brain and interview question five was “What type of behavior do you notice in individuals with neurological impairments? “The participants provided responses that suggested that there was a need for social workers to conduct proper testing in efforts to identify mental health issues in this population. The participants implied that there was a need for social workers to conduct proper testing to identify mental health issues by suggesting that there are times that a patients may present risky behaviors when in reality they have an underlying mental health issue such as anxiety or depression. When asked about some of the behaviors that noticed when providing services to this population, participant one immediately responded by saying "impulse control issues. "Participant 4 agreed by adding, "I think that lack of impulse control will come across as something else, but it's sometimes brain trauma that comes to light after further testing." Participant 1 confirmed the need for proper testing for mental health issues such as depression by adding " as well as monitoring their emotional control reactions to what is going on around them, you may think that its rage reactions and so on, which might be related to the anxiety that we spoke of, and of course it can be a great loss to the person who has brain trauma, so I think depression is certainly to be looked for." Participant 1 provided an example that supports the need to conduct testing for mental health issues when working with this population by adding " When working at a [psychiatric] hospital, there are… people who have behaviors that are dangerous to self or others, and if anxiety was identified as the primary response, they probably would not have come to the state hospital."

Theme 3: Need to Address Quality of Life Issues

Quality of life was mentioned several times throughout the focus group. Participants implied that that it is critical that social workers work to enhance the quality of life for individuals with neurological impairments due to trauma to the brain. The following responses from participants suggested that it is common for individual with neurological impairments due to trauma to the brain to experience a decrease in their overall quality of life. Participant 1 stated “They wake up, and their life is different than it was, it’s really different.” Participant 1 went on to provide an example of someone who experienced a decrease in their quality of life following a brain inquiry by stating stated, “I’m thinking of a college professor who had a stroke and was not able to keep her job anymore… think of long it may have [taken] her and all it took for her to become a doctor and [then to] become a professor and then having that effectively taken away from her I guess part of the beauty of that is that the full impact didn’t quite occur to her over time, but you know it had to occur to her at some point she might have had to think about how hard that was that she had worked and now she can’t do that anymore”. Participant 3 indicated that social workers should aim to provide services that enhance a person’s quality of life by stating “ this is something they are going to have to live with, and they need to have the skills that will increase their quality of life.” Participant 2 agreed that it was important to provide services to enhance the quality of life in this population by saying “yes quality of life is important.”

Theme 4: Lack of Services for Family

The fourth theme that was developed by using data from the focus group was the participant’s perception that a lack of services for the family of individuals with neurological impairments due to trauma to the brain. Each participant indicated that there is a need for extending services to the family member of individuals with neurological impairments due to brain trauma. Participant 1 stated, “being a sounding board for the family and to help the family adjust to the new normal I think that is a really important role for the social worker… to help that family and that patient to try to figure out a plan and work that plan for how they are going to move forward.” Participant 3 agreed while adding, “… and there is that thing about motivation, being able to help [the] patient and the family together to figure out what can I do, and how we are going to go about making that happen?” I think that’s a real important piece because this is something they are going to have to live with and they are going to be able to have a quality of life as good as they can get it. Participant 4 agreed that there is a need to extend services to the family members of individuals with neurological disorders due to trauma to the brain by adding “yes the family members of these patient need support as well.”

Theme 5: Significance of Social Workers

The final theme was identified by combining the responses to the following focus group questions: “ What is your role in treating individuals with neurological impairments due to trauma to the brain?” and “ How does social work services impact the lives of individuals with neurological impairments due to trauma to the brain?”. The participants appeared to share the belief that social workers have a vital role in treating individuals with neurological impairments due to trauma to the brain. Study participants also made comments that showed that they each agreed that it is essential to incorporate social worker services when treating individuals with neurological impairments due to brain trauma. Participant 2 made the following comment “If the social worker is working as part of a team then obviously part of it would be helping another team members to be working together and sensitive to the needs that might not be as understood as the needs of somebody who has not had the brain trauma." Participant 3 agreed while adding, "I think as a social worker you are able to connect people to services that they may not otherwise know about and can get special types of funding to help with different kinds of therapy or long-term care, I think just being the gateway to some of those kinds of therapy." Participant 4 made the following statement that implied that social workers play an important role in treating this population by advocating "Just advocating… because sometimes needs can be presented as something else, but advocating… no this is related to the brain trauma and this is what the patient needs, so I think just being willing to work on behalf of your patient to get what they need to be successful."

One unexpected finding was the lack of guidance that the participants reported having when treating individuals with neurological impairments due to trauma to the brain. Each of the participants indicated that they did not have any specialized training to provide treatment to this population. This was unexpected due to the fact social workers have an ethical obligation to take steps including but not limited to obtaining appropriate education, training and supervision needed to ensure that they are competent in their work (NASW, 2017).

Summary

Section 3 displayed findings of this action research project that explores a social workers' role in treating individuals with neurological impairments due to trauma to the brain. Each participant had a master's degree in social work and was working as medical social workers. The participants reported to that each had provided social work services to individuals with neurological impairments due to trauma to the brain. There were five themes of this study: lack of long-term interventions, a need to address quality of life issues, insufficient treatment for mental health issues, lack of services for family member, and the significant of social workers in treating individuals with neurological impairments due to trauma to the brain. Section 4 addresses how the findings of this study are related to the social worker code of ethics, application for professional practice, ways in which the data can inform social work practice and the overall implication of social change.

Section 4: Application to Professional Practice

The purpose of this action research project was to utilize a qualitative research design to assess a social worker’s role in treating individuals with neurological impairments due to brain trauma. Popular treatment for this population is geared towards physical rehabilitation, however, research shows that individuals with neurological impairments due to brain trauma experience difficulties that fall within a social worker’s scope of practice. To date there is a gap in research relating to a social worker’s role in treating individuals with neurological impairments.

To understand a social worker’s role in treating individuals with neurological impairments due to trauma to the brain, a qualitative research approach was used. Qualitative research allows a researcher to gather insight to a targeted population in their natural settings in ways that reflect how that population views their experiences (Ravitch and Carl, 2016). I acquired information from medical social workers who have provided social work services to individuals with neurological impairments due to trauma to the brain. In this study, I explored medical social workers’ experiences in treating individuals with neurological impairments due to trauma to the brain, learned about techniques that are beneficial when working with the population, and discovered ways that these particular social workers provide treatment to individuals with neurological impairments due to brain trauma. Participants reported utilizing techniques such as supportive counseling, advocacy, empathetic listening, and developing a therapeutic relationship to treat individuals with neurological impairments due to trauma to the brain. These techniques were reported to be successful in treating individuals with neurological impairments due to trauma to the brain. The participants did not list techniques that they found to be ineffective.

With this study, I attempted to answer the following question: What is a social worker's role in treating individuals with neurological impairments due to brain trauma? In this study, I explored the medical social worker's experiences in providing services to individuals with neurological impairments due to brain trauma. Findings from this study concluded that the social worker is equipped with the skills needed to improve the quality of life in individuals with neurological impairments as the feedback from the participants support the research that is included within the literature review. This study suggests that individuals with neurological impairments are likely to experience significant benefits when a social worker is involved in their treatment process.

Based on the findings from this study, it is recommended that social workers be involved in the treatment of individuals with neurological impairments due to brain trauma. Themes gathered based on the theoretical approach included: Long term intervention, lack of understanding loss, insufficient treatment for mental illness, lack of resources for family members, and the importance of social workers. The findings of this action research study could increase knowledge in the social work field by enhancing awareness regarding social worker roles in treating individuals with neurological impairments due to brain trauma.

Application for Professional Ethics in Social Work Practice

Medical social workers commonly work in conjunction with other healthcare professions in treating individuals with traumatic brain injuries. The purpose of this study is to understand a social worker's role in addressing individuals with neurological impairments due to trauma to the brain. Values and principles of NASW code of ethics suggest that competent social workers should work collaboratively with other professionals within interdisciplinary teams and promote social welfare through research and evaluation (NASW, 2017). Treatment of individuals with neurological impairments due to brain trauma is a clinical social work problem that is supported by the National Association of Social Work Examiners.

The National Association of Social Work Examiners supports and promotes the exploration of a social worker's role, competence, and relationships within healthcare settings (NASW, 2017). By gathering knowledge relating to a social worker's role in treating individuals with neurological impairments also meets the core competencies of the NASW code of ethics. There is an expectation for social workers to engage in research and gather evidence to inform their practice. The social worker is also expected to apply knowledge of human behavior and social environments in their work with clients (CSWE, 2015). Findings from this study can impact social work practice by building upon the knowledge that will improve services that social workers provide to this population.

Involvement of social workers in the treatment of individuals with neurological impairments are essential as one of the social work values to recognize the central importance of human relationships. Relationships among people including professions on a treatment team is considered to be a vehicle for change, the National Association of Social Work Examiners encourages social workers to make efforts to strengthen relationships in efforts to enhance the wellbeing of individuals, families, and groups (NASW, 2017). The National Association of Social Work Examiners supports and promotes the exploration of a social worker’s role, competence, and relationships within healthcare settings (NASW, 2017). Gathering knowledge relating to a social worker’s role in treating individuals with neurological impairments also meets the core competencies of the NASW code of ethics.

Adequately assessing a treating individual with neurological impairments due to brain trauma requires clinical skills. Social workers who provide treatment to vulnerable populations such as individuals with neurological impairments due to trauma to the brain trauma should do so in a manner that is professional, ethical and research based. The NASW code of ethic serves as a guide to the way in which social workers should conduct themselves daily (NASW, 2017).

This qualitative study provided opportunities to share knowledge and experience related to social workers’ role in treating individuals with neurological impairments due to trauma to the brain. The findings from this study may impact social work practice by providing insight to the importance of including social workers in the treatment of individuals with neurological impairments due to brain trauma. Findings from this study may also allow other social workers to gain an increased understanding of some of the challenges that individuals with neurological impairments due to brain trauma face.

These findings ethically impact social work practice. Ethical standards that show how the findings impact social work practice are integrity ethical standard and ethical competence standard. Integrity ethical standard relates to when the findings can assist individuals by targeting critical issues such as mental health issues. Social workers are utilized to provide contributions to social work related ethic, practice, and research which addresses a social workers role in treating individuals with neurological impairments due to trauma to the brain(NASW, 2017). Ethical competence standards relate to when the findings influence social work practice by building on the knowledge to improve relationship between social workers and other professionals who treat individuals with neurological impairments due to brain trauma (NASW, 2017).

Recommendation for Social Work Practice

The study findings contributed to the following recommendation of action steps to be implemented by the medical social worker who provides services to individuals with neurological impairments due to trauma to the brain. The first action steps consist of medical social workers examining the long-term intervention for individuals with neurological impairments and utilizes those methods in efforts to continue to enhance the individual's quality of life even after they are not receiving services from the medical social worker.

Practice Recommendations

- Action Step 1: Incorporate mental health screening for individuals with neurological impairments due to trauma to the brain.
- Action Step 2: Build relationships with individuals and families of individuals with neurological impairments to identity appropriate resources for the individuals as well as the families.

- Action Step 3: Establish a long-term treatment plan for individuals with neurological impairments due to trauma to the brain.

Research Recommendations

- Action step 1: Promote knowledge and intervention techniques that will assist social workers in providing treatment to individuals with neurological impairments.
- Action step 2: Participate in trainings that will enhance services that are provided in treating individuals with neurological impairments due to trauma to the brain.

Policy Recommendations

- Action step 1: Preform program evaluation to strengthen and establish policies that promote both assessment and treatment strategies for individuals with neurological impairments due to trauma to the brain.
- Action step 2: Programs will maximize the potential for individuals with neurological impairments to lead healthy, productive and fulfilling lives. Programs will continually address issues that pose as barriers for this population both locally and globally.

Findings from this study will impact me regarding social work practice by increasing my ability to understand the perceptions of other social workers who provide services to individuals with neurological impairments due to trauma to the brain. With this increase in understanding, I can assist other professionals in utilizing an ethnically based approach to treating individuals with neurological impairments to the brain. In addition, I now have increased insight to trainings and research that would be beneficial to enhance treatment of individuals with neurological impairments due to trauma to the brain. The findings will allow me to target the key needs that individuals with neurological impairments struggle with such and mental illness as cognitive and behavioral deficits.

The results of this study are useful in understanding how neurological impairments due to brain trauma affects both the individuals and their families. It is beneficial to understand the need for continued training to improve practice and enhance the quality of life individuals with neurological impairments due to trauma to the brain. Findings of this study has increased my insight regarding the need for training for social workers who provide treatment to individuals with neurological impairments due to trauma to the brain. By obtaining additional training, practitioners can incorporate research-based interventions to enhance the lives of individuals with neurological impairments due to trauma to the brain. Through increased insight and intervention techniques, professionals more effectively address the problems of individuals with neurological impairments due to trauma to the brain.

Findings from this study will have a positive impact on the services provided by human services professionals, including medical social workers, when working with individuals with neurological impairments. After conducting this action research project, the medical social workers and I are more aware of the components that contribute to the gaps in services of this population. Furthermore, I will continue to explore and address the needs of individuals with neurological impairments due to brain trauma. The findings have also enhanced the knowledge of medical social workers when providing services to this population. Bringing awareness to this issue can spark change throughout the region and globally.

When considering the broader field of clinical social work practice, the findings of this study could be useful in assisting agencies, and health care centers that service this population to use research to develop policies for treating individuals with neurological impairments due to trauma to the brain.

According to (Creswell, 2012) transferability relates to the validity and reliability of the study. Reliability and validity are referred to as methods to ensure trustworthiness in qualitative studies. Transferability related to findings could pose as a limitation as the results of such studies rely fully on the perceptions of the participants of the study. This may impact readers who were not participants' ability to relate to the suggested findings (Creswell, 2012).

Limitations

This study explored a medical social workers' perception in their role in treating individuals with neurological impairments due to trauma to the brain. An opportunity to share clinical insight that will enhance social work services provided to individuals with neurological impairments due to trauma to the brain was provided through this study. There was some limitation in this study. One limitation of the study is related to the method of sampling that was utilized. Purposeful sampling was utilized for this study as it targets a specific selection of participants that are associated with the purpose of the study (Creswell, 2013).

In this case only medical social workers who are currently working with individuals with neurological impairments were invited to participate. Inviting only participants that are medical social workers who are providing social work services to individuals with neurological poses as a risk as limitation as it is likely that social worker who work with populations that differ from individuals with neurological impairments may have valuable insight to the topic. Another limitation was the time in which the focus group took place as it occurred during working hours. There is a possibility that the time of the focus group posed unvoiced inconvenience to either the participants that attended, or participants who may have attended should the focus group had occurred at a different time. All participants were employed by the same agency which also poses as a limitation. There is a chance that the participants have similar care plans for treating this population, therefore their feedback could have been based on shared experiences considering that they are from the same agency.

Trustworthiness could also be a limitation as the study was based on the participants views and perspective. Due to the data being collected in a group setting, I could not assure that the participants were disclosing their true perspectives or views. There is a chance that participants responded in a way they thought would be more acceptable. Qualitative studies that utilize open ended questions are they are subject to participant bias therefore the researcher cannot assure that the participant's responses are truthful (Malterus, 2001).

In efforts to enhance trustworthiness, I asked participants to provide feedback that was reflective of their experiences and perceptions. As the researcher, I utilized a reflexive journal to foster understanding and critical thinking throughout the action research project. According to Janesick (2015), the use of reflexive journaling is a useful technique used to document the researcher’s experiences, values, biases, and emotional state of the researcher. The reflexive journal provided me the opportunity to record my thoughts, perceptions and reactions before, and after the focus group session.

Diversity could have also posed as a limitation for the study. Each participant identified within the same cultural background. The lack of diversity could place limits relating to the perception of a social workers role in treating individuals with neurological impairments due to trauma to the brain. There is a possibility that social workers of other cultural backgrounds may have different perceptions of a social workers role in treating individuals with neurological impairments that were not represented in this study. Individuals of different cultural backgrounds may have perceptions of a social worker’s role in treating individuals with neurological impairments that were represented in this sample.

Dissemination refers to a planned process that involves consideration of target audiences and the settings for which the findings of a research study are received. This process involves determining who your targeted audience is, the location of your audience and how to reach your audience. During this project, my goal was to ensure that the project was disseminated in a manner that would be received and accepted by the social work profession. While keeping the target group in mind, scholarly articles were utilized as a method for dissemination. Professional in-services are another method that I used for dissemination. Presenting the findings from this study regarding a social worker's role in treating individuals with brain trauma in medical settings through professional in services is an appropriate method for dissemination.

Implication for Social Change

Potential impacts for social change at the micro-level of practice includes the medical social workers gaining a greater understanding of their role in treating individuals with neurological impairments. The effect at the mezzo level of practice is the ability to provide education to individuals within the community who may not be aware of the services that social workers can contribute to this population. On a macro level, there is a potential for an increase in employment for medical social workers as it can increase knowledge among agencies, national hospital, and health and rehabilitation centers. Furthermore, this may assist others in recognizing the importance of having a medical social worker involved in the treatment of individuals with neurological impairments. It is important to consider potential impacts of the micro, mezzo, and macro level of practice surrounding this study as they pose as opportunities for medical social workers to bridge gaps, enhance treatment, and increase resources for individuals, families and communities (Ersing, R., & Loeffler, D. (2008).

Summary

Nearly 1 billion individuals world-wide have been diagnosed with a neurological impairment due to trauma to the brain (Jackson et al., 2014). Brain trauma ranges from a severity scale of mild to severe however, each severity level can lead to significant dysfunctions within the brain. Physical rehabilitation has been the most popular form of treatment for this population in the past, however, research shows that individuals with neurological impairments due to brain trauma experience difficulties that fall within a social worker's scope of practice.

According to (Gould, Ponsford, & Spitz, 2014), it is common for individuals with neurological impairments due to trauma to the brain to recover from their physical impairments. Although it is common for individuals with neurological impairments to recover from their physical impairments, they may continue to experience complications due to cognitive and emotional impairments. It is common for doctors to underestimate the emotional, behavioral, and cognitive effects of trauma to the brain. The cognitive and emotional impairments that individuals with neurological impairments due to trauma to the brain often impacts their overall quality of life (Gould, Ponsford, & Spitz, 2014).

Individuals who have trauma to the brain are likely to suffer from neurological impairments that can lead to them having long term or permanent complications (Adams and Dahdah, 2016).Complications of neurological impairments due to trauma to the brain have commonly been known to surface in the form of cognitive and behavioral deficits in addition to physical deficits. In relation to cognitive and behavioral deficits, individuals with neurological impairments due to trauma to the brain struggle with understanding and coping with their deficits. Social workers can assist this population in making connections between why they behave, feel, and think as they do by utilizing interventions such as cognitive behavioral therapy.

Cognitive behavioral therapy is known as one of the most effective treatment for this population (Ponsford et al. 2017). When treating individuals with neurological impairments due to brain trauma, it is the social workers role to utilize skills and techniques that will assist the patient in identifying and changing the deficits that occur during cognitive processing (Early and Grandy, 2017).

Long-term psychological impairments are also prevalent amongst this population. Psychological consequences that typically occur in individuals with neurological impairments due to trauma to the brain can compromise an individual's overall mental health. Compromised mental health can put individuals within this population at an increased risk of developing mental illnesses such as anxiety and depression. Anxiety after a brain injury is common (Osborn et al. 2016).

Mental health issues such as depression is amongst the most common diagnosis following trauma to the brain (Fann et al. ,2015). Depression, when left untreated in individuals with neurological impairments due to trauma to the brain impairs an individual's ability to perform the necessary day to day functions. It is necessary for clinicians such as social workers to recognize and facilitate treatment for major depression within this population as patient's with major depression are at risk of poor outcomes.

Research supports that individuals with neurological impairments due to trauma to the brain also experience a decrease in their emotional well health. Emotional health can significantly impact a person's recovery. Social workers are known as experts in providing treatments to enhance an individual's emotional health. Mental disorders can impact an individual's ability to live a fulfilling life and achieve personal goals (Heisler & Bagalman, 2015). According to (Heisler & Bagalman, 2015), social workers are the largest group of mental health professionals in the United States. Social workers contributed to the development of psychosocial interventions for people living with mental health issues such as those that surface in individuals with neurological impairments (Heisler & Bagalman, 2015).

Including social workers, in addition to other health care professionals when treating individuals with neurological impairments can likely improve the emotional health of this population which can ultimately enhanced their recovery. Counseling by social workers has been known to be effective in decreasing cognitive issues as well as anxiety in individuals with neurological impairments due to brain trauma (Dorfzaun et al.,2015.Counseling is a therapeutic process that has been shown to reorganize pathways within the brain which in terms increases the brains ability to function (Dorfzaun et al., 2015).

This action research contributes to the social work profession by increasing medical social workers knowledge of the treatment of individuals with neurological impairments due to trauma to the brain. The finding from this study highlights opportunities to increase resources and skills for social workers who work with this population. Findings from this study can also be used to enhance the treatment of individuals with neurological impairments due to trauma to the brain.

In conclusion, social work services are expected to aid in the rehabilitation of individuals with traumatic brain inquires. Social workers can significantly enhance the treatment of individuals with neurological impairment due to brain trauma. Additionally, social workers have the skillsets and ability to identify and provide interventions to address mental health concerns that may otherwise go unrecognized. Services provided by a social worker can address underlining issues of an individual with neurological impairments, which can ultimately improve their overall quality of life.

References

Adams, D., & Dahdah, M. (2016). Coping and adaptive strategies of traumatic brain injury survivors and primary caregivers. *Neurorehabilitation*, *39*(2), 223-237. doi:10.3233/NRE-161353

Alderman, N., & Wood, R. L. (2013). Neurobehavioral approaches to the rehabilitation of challenging behaviour. *Neurorehabilitation*, *32*(4), 761-770. doi:10.3233/NRE-130900

Andruszkow, H., Deniz, E., Urner, J., Probst, C., Grun, O., Lohse, R . . . Hiderbrand, F. (2014). Physical and psychological long- term outcome after traumatic brain injury in children and adult patients. *Health & Quality of Life Outcome, 12*(1), 1-17. doi:10.1186/1477-7525-12-26

Ashman, T., Cantor, J. B., Tasaosides, T., Spielman, L., & Gordon, W. (2014). Comparison of cognitive behavioral therapy and supportive psychotherapy for the treatment of depression following traumatic brain injury: A randomized controlled trial. *Journal of Head Trauma Rehabilitation, 2,* 467-478. doi:10.1097/HTR.0000000000000098

Ashworth, F., Gracey, F., & Gilbert, P. (2011). Compassion focused therapy after traumatic brain injury: Theoretical foundations and a case illustration. *Brain Impairment*, *12*(2), 128. doi:10.1375/brim.12.2.128

Azouvi, P., & Vallat-Azouvi, C. (2014). Rehabilitation of cognitive deficits after traumatic brain injury. *Traumatic Brain Injury*, 163-17. doi:20.1002/9781118656303.ch9

Bay E. H., Blow, A. J., & Yan, X. (2012). Interpersonal relatedness and psychological functioning following traumatic brain injury: Implications for marital and family therapist. *Journal of Martial & Family Therapy, 38*(3), 556-567. doi:10.1111/j.1752-0606.2011.0023.x

Beadle, E. J., Ownsworth, T., Fleming, J., & Shum, D. (2016). The impact of traumatic brain injury on self-identity. *Journal of Head and Trauma Rehabilitation, 31*(2). doi:10.1097/htr.0000000000000158

Bennett, C., Sampath, S., Christophen, R., Thennarasu, K., & Rajeswaran, J. (2018). Effect of electroencephalogram neurofeedback training on quality of life in patients with traumatic brain injury: In context of spontaneous recovery. *Indian Journal of Neurotrauma, 14*(2/3), 129-134. doi:10.1055/s-0038-1649280

Braun, V., Clark, V., & Terry, G. (2015). Thematic analysis. *Qualitative Research in Clinical and Health Psychology,* 95-113. doi:10.1007/978-1-137-29105-9_7

Calvert, M., Pall, H., Hoppitt, T., Eaton, B., Savill, E., & Sachley, C. (2013). Health-related quality of life and supportive care in patients with rare long-term neurological condition. *Quality of Life Research, 22*(6), 1231-1238. doi:10.1007/s11136-012-0269-5

Caudwell, J., & Sugden, J. (2017). “You should see me on the inside”. Researching the post-stroke mental health of a male professor of stroke. *Sociology of Sport Journal, 34(2*), 176-184. doi:10,1123/ssj.2016-006

Chesnel, C., Jourdan, C., Bayen, E., Ghout, I., Darnoux, E., Azerad, S., Vallat-Azouvi, C. (2017). Self-awareness four years after severe traumatic brain injury: Discordance between the patient’s and relative’s complaints. Results from the PariS-TBI study. *Clinical Rehabilitation,32*(5), 692-704. doi:10.1177/0269215517734294

Cooper, M., & Lesser, J. (2014). Clinical Social Work Practice: An Integrated Approach. Pearson.

Counsel on Social Work Education. (2015) *Education Policy and Accreditation Standards.* Retrieved from http://www.cswe.org/getattachement/Accrediation /Accrediation-Process/2015-EPAS/2015EPAS_Web_Final.pdf.aspx

Craig, S., Frankford, R., Allan, K., Williams, C., Schwartz, C., Yaworski, A., Janz, G., & Malek-Saniee, S. (2016). Self-reported patient psychosocial needs in integrated primary health care: A role for social work in interdisciplinary teams. *Social Work in Health Care,* 1–20. doi:10.1080/00981389.2015.1085483

Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative research (4th Ed.). London, England : Pearson Education.

Dorfzaun,I., Feurstein, T., Ovadia, W., Ettinger, S., Loewinger, Y., Tvito, H., & Hadass, N. (2015). An innovative model for the dynamic neurocognitive rehabilitation for individuals with acquired brain injury. *Transylvanian Journal of Psychology, 16*(1), 3-30. https://doi.org/10.1007/978-0-387-37575-5_14

Early, B., & Grandy, M. (2017). Embracing the contribution of both behavioral and cognitive theories to cognitive behavioral therapy: Maximizing the richness. *Clinical Social Work Journal,* 45(1), 39-48. doi:10.1007/s10615-016-0590-5

Ersing, R., & Loeffler, D. (2008). Teaching Students to Become Effective in Policy Practice: Integrating Social Capital into Social Work Education and Practice.

Journal of Policy Practice, 7 (2/3), 226-238. http://doi-org.ezp.waldenulibrary.org/10.1080/15588740801938076

Fann, J. R., Bombardier, C. H., Vannoy, S., Dyer, J., Ludman, E., Dikmen, S.,Temkin, N. (2015). Telephone and In-Person Cognitive Behavioral Therapy for Major Depression after Traumatic Brain Injury: A Randomized Controlled Trial. *Journal of Neurotrauma,32*(1), 45-57. doi:10.1089/neu.2014.3423

Fleminger, S., Oliver, D. L., Williams, W. H., & Evans, J. (2003). The neuropsychiatry of depression after brain injury. *Neuropsychological Rehabilitation, 13*(1/2), 65. https://doi.org/10.1080/09602010244000354

Fleminger, S., (2013). Mental health is central to good neurorehabilitation after TBI. *Brain Impairment, 14*(1), 2-4. doi:10.1017/Brlmp.2013.14

Folzer, S. M. (2001). Psychotherapy with 'mild' brain-injured patients. *American Journal Of Orthopsychiatry*, (2), https://doi.org/10.1037/0002-9432.71.2.245

Fortune, D. G., Rogan, C. R., Richards, H. L., (2016). A structured multicomponent group programme for carers of people with acquired brain injury: Effects on perceived criticism, strain, and psychological distress. *British Journal of Health Psychology*, *21*(1), 224. doi:10.1111/bjhp.12159

Gan, C., & Ballantyne, M. (2016). Brain injury family intervention for adolescents: A solution-focused approach. *NeuroRehibilitation, 38*(3), 231-241.doi:10.3233/nre-1601315

Gould, K. R., Ponsford, J. L., & Spitz, G. (2014). Association between cognitive impairments and anxiety disorders following traumatic brain injury. *Journal of Clinical and Experimental Neuropsychology,36*(1), 1-14.

Gregorio, G. W., Ponds, R. M., Smeets, S. J., Verhey, F. R., van Heugten, C. M., Pouwels, C. G., & Jonker, F. (2015). Associations between executive functioning, coping, and psychosocial functioning after acquired brain injury. *British Journal of Clinical Psychology*, *54*(3), 291-306. https://doi.org/10.1080/13803395.2013.863832

Guernsey, D. T., Leder, A., & Yao, S. (2016). Resolution of Concussion Symptoms After Osteopathic Manipulative Treatment: A Case Report. *The Journal of the American Osteopathic Association,116*(3). doi:10.7556/jaoa.2016.036

Heisler, E. J., & Bagalman, E. (2015). The mental health workforce: A primer (CRS Report No. R43255). Washington, DC: Congressional Research Service. Retrieved from https:// fas.org/sgp/crs/misc/R43255.pdf

Hellmann-Regen, J., Piber, D., Hinkelmann, K., Gold, S., Heesen, C., Spitzer, C., & Otte. C. (2013). Depressive syndromes in neurological disorders. *European Archives of Psychiatry & Clinical Neuroscience, 26*(3),123-136. doi:10.1007/s00406-013-0448-6

Hielmblink, F., & Holmstrom, I. (2006). To cope with uncertainty: stroke patients' use of temporal models in narratives. *Scandinavian Journal of Caring Sciences, 20*(4), 367-374. doi:10.1111/j.1471-6712.2006.00415x

Ilie, G., Mann, R. E., Boak, A., Adlaf, E. M., Hamilton, H., Asbridge, M., & Cusimano,

M. D. (2014). Suicidality, bullying and other conduct and mental health correlates of traumatic brain injury in adolescents. *PLoS ONE, 9*(4). doi:101.1371/ journal.pone.0094936

Jackson, D., McCrone, P., Mosweu, I., Siegert, R., & Turner-Stokes, L. (2014). Service use and costs for people with long-term neurological conditions in the first year following discharge from in-patient neuro-rehabilitation: A longitudinal cohort study. *Plos ONE, 9*(11), 1-12. doi:10.1371/journal.pone.0113056

Janesick, V. J., & Abbas, N. (2011). “stretching” exercises for qualitative researchers. *Sociological Research Online, 16*(4), 1-2.doi:10.1177/136078041101600402

Janesick, V.J. (2015). Journaling, Reflexive. In The Blackwell Encyclopedia of Sociology, G. Ritzer (Ed.). doi:10.1002/9781405165518.wbeosj007.pub2

Kelly, A., Ponsford, J., & Couchman, G. (2013). Impact of a family-focused intervention on self-concept after acquired brain injury. *Neuropsychological Rehabilitation,23*(4), 563-579.doi:10.1080/09602011.2013.795903

Kisser, J., Waldstein, S. R., Evans, M. K., & Zonderman, A. B. (2017). Lifetime prevalence of traumatic brain injury in a demographically diverse community sample. *Brain Injury, 315*(5), 620-623. doi:10. 1080/02699052.2017.1283057

Kurowski, B. G., Wade, S. L., Kirkwood, M. W., Brown, T. M., Stancin, T., & Taylor, H. G. (2014). Long-term benefits of an early online problem-solving intervention for executive dysfunction after traumatic brain injury in children. *JAMA Pediatrics, 168*(6), 52. doi:10.1001/jamapediatrics.2013.5070

Lozano, A., & Badenes, R, (2017). Predictors of outcome in traumatic brain injury.

Challenging Topics in Neuroanesthesia and Neurocritical Care, 43-54. doi:10.1007/978-3-319-41445-4_3

Lux, M. (2010). The magic of encounter: The person-centered approach and the neurosciences. *Person Centered and Experiential Psychotherapies,9*, 274-289. doi:10.1080/147797.2010.9689072

Malterus, K. (2001). Qualitative research: standards, challenges, and guidelines. *Lancet,*358(9280), 483. https://doi-org.ezp.waldenulibrary.org/10.1016/S0140-6736(01)05627-6

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage.

McAllister, T. W., Hiott, D. W., & Labbate, L., (2002). Anxiety disorder associated with traumatic brain injuries. *Neurorehabilitation, 17*(4), 345. https://doi.org/10.3233/nre-2002-17408

Munivenkatappa, A., Agrawal, A., Shukla, D., Kumaraswamy, D., & Devi, B. (2016). Traumatic brain injury: Does gender influence outcomes? *International Journal of Critical Illness and Injury Science,6*(2), 70. doi:10.4103/2229-5151.183024

National Association of Social Workers. (2017). *NASW Code of Ethics.* Retrieved from http://www.naswdc.org/pubs/code.asp

Norup, A., & Mortensen, E. (2015) Prevalence and predictors of personality change after severe brain injury. *Archives of Physical Medicine and Rehabilitation, 96*(1), 56-62.https://doi.org/10.1016/j.apmr.2014.08.009

Osborn, A. J., Mathis, J. l., & Fairweather-Schidt, A. K. (2016). Prevalence of anxiety following adult traumatic brain injury: A meta-analysis comparing measures, samples and postinjury intervals. *Neuropsychology, 30*(2), 247-261. https://doi.org/10.1037/neu0000221

Patterson, F. L., & Staton, A. S. (2009). Adult-acquired traumatic brain injury: Existing implication and clinical consideration. *Journal of Mental Health Counseling, 31*(2),149-163. https://doi.org/10.1037/ne00000221

Ponsford, J., Kelly, A., & Couchman, G. (2014). Self-concept and self-esteem after acquired brain injury: A control group comparison. *Brain Injury,28*(2), 146-154. doi:10.3109/02699052.2013.859733

Ponsford, J., Lee, N. K., Wong, D., Mckay, A., Haines, K., Alway, Y., & Odonnell, M. L. (2015). Efficacy of motivational interviewing and cognitive behavioral therapy for anxiety and depression symptoms following traumatic brain injury. *Psychological Medicine, 46*(05), 1079-1090. doi:10.1017/s0033291715002640

Pouwels, C. G., & Jonker, F. (n.d.). Associations between executive functioning, coping, and psychosocial functioning after acquired brain injury. *British Journal of Clinical Psychology*, *54*(3), 291-306. https://doi.org/10.1111/bjc.12074

Rabinowitz, A. R., & Levin, H. S. (2014). Cognitive sequelae of traumatic brain injury. *Psychiatric Clinics of North America, 37*(1), 1-11. doi:10.1016/j.psc.2-13.11.004

Rapoport, M. J. (2012). Depression following traumatic brain injury. Epidemiology, risk factors and management. *CNS Drugs, 26*(2), 111-112. https://doi.org/10.2165/11599560-000000000-00000

Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual,* *theoretical, and methodological.* Los Angeles, CA: Sage. https://doi.org/10.1080/00131941003782437

Rogers, C. R. (1979). The foundations of the person-centered approach. *Education, 100*(2), 98. https://doi.org/10.5840/dialecticshumanism19818123

Sammi, K., Adam, M., Sloan, S., & Ponsford. (2015) The experience of challenging behaviors following severe TBI: A family perspective. *Brain Injury, 29*(8), 813-821. doi:10.3109/0269052.2015.1005134

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., ... & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & quantity*, *52*(4), 1893-1907. https://doi.org/10.1007/s11135-017-0574-8

Sherer, M., Poritz, J. M., Tulsky, D., Kisala, P., Leon-Novelo, L., & Ngan, E. (2020). Conceptual structure of health-related quality of life for persons with traumatic brain injury: confirmatory factor analysis of the TBI-QOL. *Archives of physical medicine and rehabilitation*, *101*(1), 62-71. https://doi.org/10.106/j.apmr.2017.04.106

Simpson, G. K., & Tate, R. (2013). Introduction to special issue: State of the art reviews on mental health in traumatic brain injury. *Brain Impairment*, *14*(1), 1. doi:10.1017/BrImp.2013.13

Souza, L. M., Braga, L. W., Filho, G. N., & Dellatolas, G. (2007). Quality-of-life: Child and parent perspectives following severe traumatic brain injury. *Developmental Neurorehabilitation,10*(1), 35-47. doi:10.1080/13638490600822239

Stringer, E. T. (2007). *Action research* (3rd ed.). Los Angeles, CA: Sage.

Treble-Barna, A., Zang, H., Zhang, N., Taylor, H. G., Stancin, T., Yeates, K. O., & Wade, S. L. (2016). Observed parent behaviors as time-varying moderators of problem behaviors following traumatic brain injury in young children. *Developmental Psychology,52*(11), 1777-1792. doi:10.1037/dev0000208

Tyagi, E., Agrawal, R., Abad, C., Waschek, J., & Pinilla, F. (2013). Vulnerability imposed by diet and brain trauma for anxiety-like phenotype: Implications for post-traumatic stress disorders. *PLOS One, 8*(3), 1-12. doi:10.137/ journal.pone 0057945

Wade, S. L., Cassedy, A., Walz, N. C., Taylor, H. G., Stancin, T., & Yeates, K. O. (2011). The relationship of parental warm responsiveness and negativity to emerging behavior problems following traumatic brain injury in young children. *Developmental Psychology,47*(1), 119-133. doi:10.1037/a0021028

Wade, S. L., Stamcin, T., Kirkwood, M., Brown, T. M., Mcmullen, K. M., & Taylor, H. G. (2014). Counselor-assisted problem solving (CAPS) improves behavioral outcomes in older adolescents with complicated mild to severe TBI. *Journal of Head Trauma Rehabilitation, 29*(3), 198-207. doi:10.1097?htr.0b013e31828

Waldron, B., Casserly, L. M., & O'Sullivan, C. (2013). Cognitive behavioral therapy for depression and anxiety in adults with acquired brain injury. What works for whom? *Neuropsychological Rehabilitation*, *23*(1), 64. doi:10.1080/09602011.2012.724196

Walsh, J. (2009). *Theories for direct social work practice*. Australia: Wadsworth Cengage Leaning

Young, J., Hobbs, J., Bailes, J. (2016). The Impact of Traumatic Brain Injury on the Aging Brain. Curr Psychiatry Rep. 18(9):81. doi: 10.1007/s11920-016-0719-9.

Zimring, F. M., & Raskin, N. J. (1992). Carl Rogers and client/person-centered therapy. https://doi.org/10.1037/10110-018

Appendix A: Telephone Script

Research Study on Social Workers Role in Treating Individuals with Neurological Impairments due to Brain Trauma

Hello, my name is Kimberly Thompson from the department Walden University's Doctor of Social Work Program. I am conducting an action research project to examine social worker's roles in treating individuals with Neurological Impairments Due to Brain Trauma. May I have your permission to ask you a few questions that will determine whether you are a good fit for this study?

I will be collecting information about you during this call. Your participation in this call is completely voluntary. The information collected from you will only be seen by myself, as I am the researcher of the project. I will ensure that the information that is collected from you is kept private and used solely for this study's purpose. There are no consequences for you deciding not to continue with this call. Your information will not be recorded or used if you decide not to enroll in the study, or if you do not qualify for the study. The following questions will be used to determine whether you meet this study's qualifications.

- Are you a Social Worker?
- Are you currently treating, or have you treated individuals with neurological impairments due to brain trauma in the past?

There is no potential risk for this study. There is no cost for participating in this research. Thank you for your consideration. You do not have to make a decision at this time.

Appendix B: Focus Group Questions

A Social Workers Role in Treating Individuals with Neurological Disorders Due to Brain Trauma

1). What is your role in treating individuals with Neurological Disorders due to Brain Trauma?

2) What are the types of Social Work services needed to address this population?

3) What are the kinds of mental health issues have you noticed in individuals with neurological disorders due to brain trauma?

4) How prevalent is anxiety among individuals with neurological impairments due to brain trauma?

5) What types of behavior do you notice in individuals with neurological impairment due to brain trauma?

6) How do neurological impairments due to brain trauma affect a person’s quality of life?

7) How common is depression among individuals with neurological impairments due to brain trauma?

8) What have you noticed about a patient’s cognitive performance following a brain injury?

9) How does social work services impact the lives of individuals with neurological impairments due to brain trauma?