

Traumatic Brain Injury: What Counselors Need to Know

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Abstract

This paper, which draws on the current literature and extant knowledge involving the epidemic of traumatic brain injury (TBI), explores what counselors should know on this topic to be skillful and prepared mental health providers in a variety of treatment settings. As TBI becomes a more common clinical phenomenon, counselors will need to better understand it, to help in treating clients directly and indirectly impacted by TBI. It is imperative that counselors be aware of and knowledgeable about the basic characteristics and presentation of TBI, particularly if they intend to provide care and support for military personnel and/or amateur athletes. Learning more about TBI will provide counselors with a rewarding opportunity to enrich their professional skills and to broaden their professional identities.

Traumatic Brain Injury: What Counselors Need to Know

The negative effects of traumatic brain injury (TBI) on the mental and physical health of Americans have become increasingly evident. As suggested in the statistics summarized below, TBIs are widespread in America. Yet several subgroups have received increased attention recently in terms of TBI risk. This has helped the public to become more aware of at least certain aspects of TBI, but may have misled some to believe that TBI is not as issue of concern in the general population. For instance, many Americans have become aware of the higher risk of TBI in professional athletes and military personnel due to greater media coverage on these topics. In other situations, TBI survivor stories have been presented to the public in media forums. One particularly clear example of this involves the shooting of former Arizona House Representative Gabrielle Giffords and her continued recovery from the effects of this incident.

However, as is detailed below, TBI is not a rare occurrence and its impact can be severe and persistent. Concussions, once thought to be minimal risk events for children and adults, have recently been re-conceptualized as instances requiring greater concern and care than previously thought (Kirkwood et al., 2008). With an estimated 300,000 sport-related concussions each year in the US (Ambler & Shaughnessy, 2009), the effects of these frequent events are therefore probably significant. As TBIs are so common, counselors working in school, family and community mental health settings are likely to encounter and provide services to individuals who have sustained a TBI, whether they are aware of it or not.

The rationale for describing some of the basic knowledge about TBI in this paper stems from the increasing relevance of this phenomenon to counselors and their clients. As professional counselors move toward providing direct care for military personnel and veterans, awareness of and familiarity with TBI will be essential. Counselors with knowledge of TBI and PTSD will have a distinct advantage in this and other treatment

settings.

As counselors assume a more active role in veteran and military treatment settings, they should be aware of the prevalence of TBI in these environments. Several investigators refer to TBI as the “signature injury” of the military operations in Iraq and Afghanistan (Military TBI Task Force, 2008, p. 11). A study by Campbell, et al. (2009) summarizes 2008 survey data, which noted that 19 percent of soldiers in Iraq and Afghanistan reported a probable TBI, and 14 percent also met the criteria for post-traumatic stress disorder (PTSD). While these missions might soon be ending, it is essential to recall that the effects of even mild TBIs on soldiers’ personal lives and families often persist well beyond the duration of actual military service.

Even away from the military treatment settings, counselors are likely to encounter clients at some point who have sustained a TBI, and who may still be coping with the effects of this injury. The frequency of TBI and persistence of its aftermath make this probable. Sheedy, Geffen, Donnelly and Faux (2006) report for instance that TBI is among the most common injuries sustained, and that it tends to specifically impact young men and boys. The authors also note that regrettably, the aftereffects of TBI are often lifelong and significant. In support of this position, a 2009 investigation by Stein and McAllister suggests that an estimated 1.5 million TBIs occur each year in the US, and that at least 5 million Americans are living with disabilities from TBIs. Given the commonness of TBIs, and that individual who sustain TBIs are more likely to struggle with depression, anxiety, substance use, and other mental health concerns (Brenner et al., 2010), it is essential that counselors in school and clinic settings also become acquainted with the issues and concerns that challenge clients who have experienced TBIs. Furthermore, many events that result in a TBI may also be psychologically traumatic in nature (e.g., assault, motor vehicle accident), and so TBI may often co-occur with a diagnosis of post-traumatic stress disorder (PTSD) (Brenner et al., 2010), which would likely be well managed by mental health professionals, such as counselors.

It is crucial to recognize that TBI is not an occurrence specific to adult or elder clients. Kirkwood et al. (2008) report an estimated 400,000 hospital visits in the US each year for pediatric TBIs alone. When one considers that many pediatric TBIs do not require medical attention, these frequencies are remarkable. Moreover, a study in 2000 by the Centers for Disease Control (CDC), as cited in Babikian and Asarnow (2009), found that TBI was the leading cause of death and disability in children and adolescents.

Among children, adolescents and adults, sport-related TBIs are gaining greater attention, such that mild TBIs (sometimes called concussions) are now typically handled with far greater care during and after athletic events. These precautionary measures tend to remain in place at least until normal cognitive, emotional and physical functions appear to resume for the athlete (Ambler & Shaughnessy, 2009). The National Football League (NFL) has also recently begun to accept the empirical evidence for chronic traumatic encephalopathy (CTE), a progressive, dementia process, that eventually occurs in some athletes who sustained repeated mild concussion events (Kirkwood et al., 2008; Ambler & Shaughnessy, 2009).

TBI is not a singular event so much as an evolving process (Masel & DeWitt, 2010). The immediate medical care for the physical effects of a TBI is often just the first step in a sometimes continuous and extensive set of medical and psychological interventions that are required for the individual. Sometimes the negative consequences of a TBI may last

for years or even decades. In some cases, specialized interventions are most appropriate (e.g., physical and occupational therapy for left-sided motor weakness). However, in many situations individuals who have sustained TBIs experience problems with mood, impulse regulation, strained relationships, inattention, memory inconsistencies, and formidable challenges in returning to work. Counselors are particularly skilled in effectively addressing these concerns.

The literature reveals that TBI is common and that it often results in obstinate negative aftereffects. While some of these concerns might be best addressed by specialists in specific areas of functional skill (e.g., speech therapy), many of these enduring problems are emotional or behavioral in nature. Millions of Americans are experiencing depression, anxiety, relationship strain, failed attempts at returning to work, substance use, loss of self-esteem, and PTSD related to a TBI. Counselors may be instrumental in assisting these clients in the family, school, work, and social milieus to remediate and eventually overcome these challenges. In order to do so, counselors must have a sound basis for conceptualizing and understanding TBI. To facilitate this, the next section of this paper provides a basic overview of TBI, explaining what it is, how it may present, and what unique issues and factors tend to occur in conjunction with TBI.

TBI: What is it?

TBI Defined

In rather encompassing terms, a traumatic brain injury (TBI) involves damage or physical assault to the head, which results in at least mild interference of normal brain functions (Ambler & Shaughnessy, 2009; Jones, Young, & Leppma, 2010). Even this description might not totally capture all TBIs though, as certain types of TBIs resulting from blasts of air in Iraq and Afghanistan are now being documented which do not necessarily fit this more traditional definition of TBI. The military situations in these countries have resulted in novel forms of TBI due to combat exposure to explosive devices and powerful air blast forces without actual physical contact with an object (Military TBI Task Force, 2008). The latter situation, termed a blast injury, has to some extent challenged conventional classification systems for TBI and military management of such injuries. Evans (2008) clarifies that there are three types of blast injuries: “A primary blast injury is the direct result of a blast wave-induced change in atmospheric pressure (barotrauma). A secondary blast injury is objects put in motion by the blast hitting people (ballistic trauma). A tertiary blast injury is people being forcefully placed in motion by the blast” (p. 1216). The inclusion of blast injuries into traditional TBI classifications remains to be done by scholars and clinicians working in this area.

Using the traditional conceptualization of TBI described above (excluding blast injuries for the moment) however, TBIs may be roughly classified as open or closed head injuries. These manifest somewhat differently in terms of their initial physical injuries and their effects on cognitive and emotional functioning. In closed head injuries, which account for the majority of all traditionally-defined TBIs, the protective layers encompassing the brain (the meninges) and the skull basically remain preserved (Kirkwood et al., 2008). There may be bruises on the meninges or a crack in the skull, but these have not been compromised to the extent that a penetrating wound occurs. Ambler and Shaughnessy (2009) state that “no penetration of the skull into the brain” (p. 299) occurs in a closed head injury. Closed head injuries often occur from events such as falls, motor vehicle accidents,

sport injuries, and non-bullet assaults. Open head injuries by contrast involve penetration of the protective outer layers, and particularly the skull. This situation is rarer, but it might result from a head injury due to a bullet, piece of shrapnel, or other high-impact object (Ambler & Shaughnessy, 2009). The brain injury sustained by Representative Giffords, caused by a bullet wound to the head, is an example of an open head injury.

Common Effects of TBI

The effects of TBI are broad-reaching and often affect not only cognitive and physical aspects of functioning, but also the emotional, behavioral, relational and even spiritual components of a client's life. The literature documents the effects of TBI on a range of domains including behavior, cognition, and personality. After a TBI a client may manifest changes in mood (usually as depression), as well as anxiety, impulsivity, reduced personal insight and social judgment, degraded motivation, changes in sleep, poor memory and inattention (Langeluddecke & Lucas, 2005; Rapoport et al., 2005; Sheedy et al., 2006; Kirkwood et al., 2008; Ambler & Shaughnessy, 2009).

Open and closed head injuries tend to yield different kinds of problems for clients. In very general terms, closed head injuries tend to result in problems that are less specific, or more diffuse in nature. This reflects the type of damage that occurs in conjunction with a closed head injury. Closed head injuries often result in inattention, poor memory, reduced processing speed, depression and impulse control. By contrast, open head injuries usually exhibit very specific (focal) problems (e.g., right sided motor loss). This occurs because less overall area of the brain is impacted, but the areas that have been impacted are often extensively damaged (Ambler & Shaughnessy, 2009).

In working with these clients, counselors should note that TBIs disproportionately affect certain demographic groups, most notably young males between the ages of 15-25 years (Draper & Ponsford, 2008). Because medical care for TBI has greatly improved, such that more individuals now survive TBI than ever before, they survive to face a lifetime of difficulties in the management of their lives and mental well being (Editorial, 2007). For young men who have yet to establish their relationship and work identities, these problems can be quite daunting.

The increased incidence of TBI in young males may be the result of greater risk-taking behaviors in that demographic group and their frequent participation in organized athletics. Ambler and Shaughnessy (2009) note that while cycling resulted in the greatest number of TBIs in 2007, the next sports ranked by frequency of TBI were football, baseball, and basketball. Moreover, these authors describe data indicating that perhaps up to 70 percent of high school football players had at some point experienced symptoms of mild concussion, but that only 20 percent of the players knew that they had sustained a concussion.

Given how young many individuals are when they sustain a TBI, their personal and professional lives in adulthood are often quite affected. For instance, Lippert-Gruner, Kuchta, Hellmich and Klug (2006) find that some elements of social cognition, such as self-appraisal skills and conceptual organization, do not improve and may even worsen as long as one year after participants sustain a severe TBI. Similarly, continued problems with memory, attention, and behavioral regulation, which all frequently occur after a TBI, may result in long-spanning deficits in a client's management of his/her daily life activities (Campbell, et al., 2009).

As might be expected, depression is a frequent experience for many who have

sustained a TBI. It is not entirely clear if depression results mainly from the physical changes in the brain after a TBI, or in reaction to the difficult challenges and life stressors, which occur because of the TBI. Both are likely involved to some degree. Major depressive disorder episodes are estimated to occur in 14 to 29 percent of individuals following a TBI, making it an extremely common experience which requires ample professional attention and support (Rapoport, McCullagh, Shammi, & Feinstein, 2005).

TBI Severity

TBI has been described thus far in a general manner, but it is vital for counselors to understand that the intensity and duration of the symptoms tend to reflect the initial severity of the TBI itself. Several early behavioral markers prove to be fairly reliable correlates for predicting subsequent problems following a TBI (Sheedy et al., 2006). Therefore, it is important for counselors to be aware of the classification groupings of TBI, and how these might inform the expectations for problems in coping and functioning even long after a TBI.

In the most general scheme, TBI may be divided into three or four groupings: mild, moderate, severe, and sometimes profound. The increasing rank in severity of these groupings correlates with greater functional impairments and problems in life functioning for clients. Draper and Ponsford (2010) report for instance that individuals who sustained severe TBIs continue to manifest observable problems with memory, processing speed, and a range of higher-order cognitive functions (executive functioning), even 10 years after the injury when compared to healthy controls!

For counselors, the classification of mild TBI (sometimes called a concussion) is of particular interest, since its symptoms may endure well beyond expectation for a significant minority of individuals who have sustained a mild TBI. For this group of individuals, counseling methods may be effective in remediating their symptoms. Additionally, individuals who have suffered mild TBIs may not mention it to their counselors, or may not even be aware of the injury themselves. Before mild TBI is detailed however, a brief explanation of the classification system for TBIs would be helpful.

TBI severity is inferred chiefly from the amount of time an individual loses awareness or consciousness following the precipitating event (sometimes called a blackout or in more severe instances a coma), and the duration of time that an individual remains in a confused, unfocused state following the TBI (or after the blackout/coma when they occur) (Sheedy et al., 2006). This latter state, referred to as a post-traumatic amnesia (PTA), is operationally defined as the amount of time that a client is unable to consistently learn new information and to store new memories after a TBI according to Sheedy et al. (2006). Some subjectivity occurs in the determination of TBI severity, but several standardized measures, such as the Glasgow Coma Scale (GCS) (Jennett, 2002), may be employed to assess TBI severity more precisely. Although it is beyond the scope of this paper, it is important to note that sometimes other factors, such as the presence of a ruptured blood vessel or bruising of the brain surface, are considered in the determination of TBI severity.

TBI symptom severity roughly corresponds with the extent of initial damage that occurs to the brain. In the case of open head injuries, this damage is typically concentrated to certain areas of the brain, and so some behaviors or functions may be highly impacted, while others may be totally spared (Sheedy et al., 2006). In the case of closed head injuries, the damage tends to be more pervasive and less focused. This damage may result from peculiar forces acting on the brain tissue (e.g., acceleration-deceleration forces, rotational

forces), and this frequently manifests as twisted or sheared white matter fibers in the brain (Ambler & Shaughnessy, 2009). The literature has referred to the phenomenon as diffuse axonal injury or diffuse axonal shearing (Ambler & Shaughnessy, 2009). The damage is tiny, such that it is not usually observable on imaging techniques like MRI or CT scans, but it is nonetheless often quite widespread, resulting in the kinds of diffuse problems associated with closed head injuries mentioned above.

Mild TBI and Post-Concussion Syndrome (PCS)

As noted mild TBI may be an area of particular concern for counselors given its sometimes unrecognized symptoms, and the role that counseling methods may play in the remediation of enduring symptoms in a post-concussion syndrome (PCS). Although the criteria for mild TBI vary by source, a common definition for it developed by the World Health Organization (WHO) involves, among other symptoms: loss of consciousness for less than 30 minutes following the TBI; duration of post-traumatic amnesia for less than 24 hours; and a Glasgow Coma Scale score of 13-15, which indicates minimal problems in basic orientation and cognitive functioning immediately after the injury (Holm, Cassidy, Carroll, & Borg, 2005).

The term concussion refers to a type of mild TBI that involves either no loss of consciousness or just momentary loss of consciousness following the event (Kirkwood et al., 2008). Ambler and Shaughnessy (2009) define a concussion as, “a disturbance in brain function that occurs following either a blow to the head or as a result of violent shaking of the head. Sport-related concussions are closed-head injuries” (p. 299). Mild TBIs may result in symptoms such as headaches, nausea, and fatigue, but they usually resolve days or weeks following the TBI event (Kirkwood, et al., 2008). For some individuals though, the symptoms of a mild TBI linger long past expectation. In these circumstances, it is often the work of mental health care providers, such as counselors, to provide care for these individuals.

Sheedy et al. (2006) indicate that most individuals who have sustained a mild TBI experience complete resolution of their symptoms within a year of the event. However, between 7 and 40 percent of individuals who have had a mild TBI – depending on the source cited – experience persistent symptoms related to the mild TBI for uncertain reasons (Sheedy et al., 2006; Brenner et al., 2010). This has been described as a post-concussion syndrome (PCS). Definitions and conceptualizations of PCS vary by author, in part because of conceptual confusion about the phenomenon and lack of clarity about effective treatment methods for it. The DSM-IV-TR provides a stringent working definition of PCS, in which the individual has not only signs of loss of consciousness and PTA, but also subpar performance on formal cognitive tests, and other neurologic signs, such as seizures (APA, 2000). In confirming the diagnosis of PCS by DSM-IV-TR criteria, a counselor must also report the presence of common mild TBI symptoms, such as headache, dizziness, fatigue, sleep disruption, anxiety and depression, lasting for at least three months, which cause significant impairment in areas of personal functioning, such as school, work and social situations for the client (APA, 2000). Brenner, Vanderploeg, and Terrio (2009) similarly characterize PCS as a set of ongoing symptoms from a mild TBI, which affect the individual’s cognitive, emotional, and physical functioning. Some experts question however if the symptoms of PCS overlap so much with those of PTSD, that it may be difficult to distinguish them from each other (Editorial, 2007). What is known about PCS

is that supportive counseling has resulted in better outcomes and symptom resolution than more medically focused approaches.

Counselors and TBI

Research and practice are beginning to demonstrate the tangible benefits of counseling for clients recovering from a TBI. With this in mind, PCS may be an area of particular interest and opportunity for counselors, as medical methods have mostly failed to achieve success for this group of clients. The literature on PCS is nascent and complex, but it suggests that counseling methods that provide clients with supportive education on their post-TBI experiences and on the interaction of psychological and physical elements of the TBI in their PCS experience are beneficial (Military Task Force, 2008). Some authors note that directive cognitive-behavioral methods may also be beneficial in working with clients experiencing PCS (Military Task Force, 2008).

Another area where counselors can assist clients who have sustained TBIs is in the complex treatment of comorbid TBI with mood disorders and other conditions. Stein and McAllister (2009) reported that PTSD often co-occurs with TBI. They state that the symptoms and difficulties relating to these disorders (e.g., insomnia, mood changes, and irritability) may be amenable to treatment with a counselor. Treatment may also be protective for poorer outcomes in the longer term. A 2005 study by Rapoport et al. indicates that six months after mild or moderate TBIs, individuals who were not treated for their major depression performed worse on standardized measures of attention, memory, and executive functions.

For counselors who work with children or in the school setting, education and age-appropriate explanations for children and their families during the weeks to months following a TBI may result in better longer-term outcomes (Kirkwood et al., 2008). These authors note that validating a client's experience and symptom-related distress may be particularly helpful for the client, and that structured problem-solving family techniques may help address the chronic stress and unique barriers faced by families in which a child or adolescent has sustained a TBI. Similarly, Ashworth, Gracey, and Gilbert (2011) report a successful outcome in their use of cognitive-behavioral methods combined with a focus on the emotional elements of the client's experiences (compassion focused therapy). They reduced chronic low self-esteem and augmented self-soothing skills in a 20-year-old woman who had sustained a severe TBI. Finally, counselors' rich and unique training in vocational counseling and assessment skills may be of considerable benefit in assisting clients who have sustained TBIs in the often difficult and complex process of attempting to return to work following a TBI (Kissinger, 2008). Counselors thus have a wide range of skills and sources to work with clients following a TBI to address the behavioral, emotional, and relational challenges that frequently occur for them. Rapp et al (2011) encourage counselors and other mental health providers to modify and adjust their approaches to meet the individual needs of the client as they recover from the effects of a TBI.

Working with Clients with TBI

Counselors employ a variety of clinical techniques and interventions when working with clients with TBI. Many approaches are directive in nature, and draw upon psychoeducational, behavioral, and cognitive-behavioral methods. In this section, some

of current treatment models are described along with their empirical support from the literature where available. This is intended to provide the reader with information about how counselors might work with clients with TBI.

Adults and children with TBI are in significant need of counseling. The enduring problems and entrenched symptoms of TBI are resistant to change. Additionally, they may not even be noticed by many clients due to their limited personal insight post-TBI. Counseling is well-suited to support clients and to help them address and remediate their symptoms. Most counseling methods for TBI currently involve behavioral, cognitive behavioral (CBT), and other directive methods. The helpful effects of these counseling approaches may positively impact not only the clients themselves, but also their families and social support systems.

Similar to dementia and stroke, families are quite directly impacted by one of its members suffering from a TBI. Backhaus, Ibarra, Klyce, Trexler and Malec (2010) indicated that a TBI significantly influenced not only the client, but also his/her family and caregivers. In particular, family members and caregivers experience their own symptoms of increased stress, emotional suffering, and strained coping as a result of the TBI. Some evidence suggests that family dynamics and perceptions of the client might also influence the counselor-client relationship itself. Sherer et al. (2009) for instance found that family dysfunction and unrealistic perceptions of a client's TBI symptoms were negative predictors of therapeutic alliance. For these reasons, explicit inclusion of a client's family and greater support network is usually a standard part of comprehensive treatment plan for clients with TBI.

Working with Children

Counseling children with TBI involves not only direct intervention and support with the client, but also assistance and management for the child's greater support system, including the family and school personnel. As part of this process, the counselor often helps the child and his/her family to understand the impact and expected effects of the TBI with psychoeducation appropriate for the age and cognitive development of the individuals involved (Glang, Tyler, Pearson, Todis, & Morvant, 2004). Additional counseling strategies that may be employed when working with a child impacted by a TBI and his/her family involve: the development of more effective communication strategies; the reduction of problematic behaviors and their replacement with more effective and appropriate ways for the child to get his/her needs met; and facilitating success in the school setting (Glang et al., 2004). These aims are intended to assist not only the child in his/her recovery process after a TBI, but also to support and educate the family and school systems about optimal ways to help the child grow and develop.

Counselors should be aware that the number of children with TBI may be under-recognized in the school setting. This likely results in at least some of these children not receiving additional support and modifications in the academic setting for which they might qualify (Glang et al., 2004). Increased awareness and training in the signs and common aftereffects of TBI in children might help to reduce this problem in the future, but it appears to be an issue at this time. As noted above, there are common signs of possible TBI in children and adults that involve behavioral, cognitive, and emotional functioning. Frequent behavioral effects of TBI include aggression, disinhibition, and poor social judgment. Cognitive problems related to TBI often involve deficits in attention, processing

speed, anterograde memory, and executive functions. Emotional concerns following TBI tend to include apathy, depression, and anxiety (Rapoport et al., 2005; Kirkwood et al., 2008). In children, development is an additional complicating factor in the expression of TBI symptoms. Cortical development in children is incomplete, and so the effects of TBI in young children may not be immediately evident, but may only surface later in their brain development (Glant, et al., 2004; Kirkwood et al., 2008).

Given this constellation of concerns, counseling methods for children with TBI have a number of general and specific aims. The general counseling goals as might be practiced in most agencies and clinics tend to focus on addressing the emotional and behavioral sequelae of TBI. Cognitive issues tend to be addressed by more specialized workers, such as rehabilitation counselors, and with computer-based programs focused on skill development in a specific area of functioning, such as CogMed® for working memory deficits (Lundqvist, Grundstrom, Samuelsson, & Ronnberg, 2010).

The more specific counseling aims in working with children with TBI may include: enhancing communication and social skills; expanding social support and perhaps encouraging participation in support groups; managing and reducing problematic behaviors while augmenting more adaptive behaviors; teaching about the mechanisms, short-term effects, and long-term expectations of TBI; facilitating and helping to develop adequate social skills; strategizing for optimal academic performance; and building skills and creating organizational strategies to compensate for persistent deficits in memory, attention, and working memory (Glang et al., 2004; Kirkwood et al., 2008). Most of these goals are accomplished with CBT and behavioral intervention approaches.

Feeney and Ylvisaker (2008) studied the effectiveness of CBT on behavioral problems in children with TBI. They employed a number of CBT approaches similar to those described above, including positive behavioral interventions to minimize challenging behaviors and replace them with more functional approaches; and structural tools and strategies, such as organizational methods and task plans for goal completion. These authors used a single case design with two individuals with TBI. Both participants demonstrated a reduction in problem behaviors associated with TBI. While the study design and small sample limit the generalizability of its findings to other samples and populations, the outcome does provide some optimism about the use of these methods with children with TBI.

While the majority of the counseling literature for TBI focuses on behavioral and CBT approaches, Plotts, Laser, and Prater (2008) and others have documented case material to support the possible use of sand-tray therapy techniques for adolescents and young adults with TBI. In contrast to the CBT methods mentioned above, this intervention may have greater potential to allow clients to process their losses and to make sense of the experiences in a more holistic and relational manner. Plotts et al. (2008) stated that the low verbal requirements and high level of interpersonal support in sand-tray therapy may be particularly helpful for many clients with TBI. While this method may show promise as an alternative or perhaps adjunctive treatment with CBT, more empirical investigation of it is needed.

In summary, behavioral and CBT methods, including psychoeducation, skills training, and goal development and attainment, have been employed most often when working with children with TBI. In some instances more purely behavioral methods have been used to manage problematic behaviors, particularly when there is limited insight

and/or cognitive impairment. Inclusion of the family and school systems in the child's counseling process appears to be very helpful. A few other methods, such as sand-tray therapy, have been discussed in the literature but more empirical investigation into the beneficial effects of these techniques is currently needed.

Working with Adults

Similar issues of TBI occur in adults as with children, but primary relationship and work challenges are typically more core concerns for adults. Because development has largely stabilized in the adult lifespan, the effects of a TBI are seen more immediately in adults compared with children (Glant et al., 2004).

In adults, personality changes and problems with social judgment are common after a TBI. These may directly impact the interpersonal, family, educational, and work experiences of the client (Ylvisaker, Turkstra, & Coehlo, 2010). A variety of directive methods have been used to address or mitigate these concerns. Intensive behavioral training programs, such as applied behavior analysis (ABA) and positive behavior supports, have been used to manage these problems. Ylvisaker et al. (2005) noted that these methods may be helpful in the reduction of problematic behaviors for individuals with limited personal insight, or who have difficulty with the abstract cognitive conceptualization needed in a CBT approach.

Some of the literature suggests that problem-solving may be beneficial for clients with TBI in terms of stress and anxiety symptoms. A 2000 study by Curran, Ponsford, and Crowe, for instance, noted that among adult clients with TBI, those who used problem-solving techniques as part of their treatment and who were more optimistic about their own recovery experienced less anxiety overall. Backhaus et al. (2010) also observed that caregivers of clients with TBI were less likely to experience depression or anxiety when they had used stress management and problem-solving skills as part of their supportive counseling.

The utility of mindfulness for adults with TBI is not completely settled. McMillan, Robertson, Brock, and Chorlton (2002) noted that several early small-scale studies suggested possible benefits of mindfulness for clients with TBI. However in their own larger randomized controlled trial in the United Kingdom, which included 130 total participants in three conditions, they found less support for mindfulness (McMillan, et al., 2002). They compared participants with TBI who were randomly assigned to one of three conditions for four weeks: brief mindfulness training; regular exercise; or a control condition. When compared with clients in the other two conditions, those trained in brief mindfulness did not demonstrate statistically- or clinically-meaningful differences in their reduction of cognitive symptoms or their performance on a variety of tests measuring aspects of attention and executive functioning.

Group counseling for clients with TBI has been used extensively. It allows for counselor and peer support, peer-based skill development, and directive problem-solving approaches to be used with a number of clients simultaneously. The appeal of group counseling for clients with TBI might also be due to the cost-efficiency of the group modality, as well as the putative interpersonal and social benefits of the group approach. Areas of focus in TBI treatment groups tend to involve management of problematic behaviors and enduring symptoms, social support, and skills training. Specific symptoms or problems may be a primary area of concern for a group. Delmonico, Hanley-Peterson, and

Englander (1998) for instance focused on the management of substance use and frustration intolerance – two common problems following TBI – in individuals with TBI in a group format. Social learning, peer support, and personal identification may be additional benefits for individuals struggling with a common problem in a group modality. As with individual counseling, the literature suggests that behavioral, CBT, and other directive methods are commonly used in group counseling of individuals with TBI.

In one recent investigation, Backhaus et al. (2010) explored the benefits of a coping skills group in 20 survivors of TBI and their caregivers. Their intervention involved 12 sessions of group CBT of two hours duration each, in which participants received psychoeducation, general support, and coping skills training. The authors also included instruction, which was combined with regular group discussions and interactions. Participants and their caregivers were provided with a skills workbook designed by Anson and Ponsford (2006). Anson and Ponsford's (2006) modules in their approach (called the Brain Injury Coping Skills Group) involved such topics as: clients processing and understanding what happened to them; clients exploring their expectations for recovery; clients developing coping skills for TBI-related deficits overall and in stressful situations, when these symptoms might be exacerbated; psychoeducation about post-TBI depression; and clients developing communication skills (Anson & Ponsford, 2006; Backhaus, et al, 2010). While there was higher attrition in the control group than in the experimental treatment group, Backhaus et al (2010) found that three months after treatment, control participants experienced more emotional distress relative to the clients who completed the Brain Injury Coping Skills Program (experimental condition). Controls also reported lower feelings of self-efficacy overall than did experimental participants immediately following treatment (Backhaus, et al, 2010).

In a different application of group counseling, Walker et al. (2010) utilized a 12-week group CBT approach to address the common behavioral symptoms of anger and aggression following TBI. In their outpatient group they included psychoeducation and anger management skill development. Their results suggested a reduction of anger and aggression as measured by the self-report measure, the State-Trait Anger Expression Inventory (STAXI; Spielberger, 1988).

Hawley and Newman (2010) described another group approach for clients with TBI called the Group Interactive Structured Treatment (GIST) for Social Competence. This intervention addressed diminished social skills after TBI. Similar to the other models, it involved a directive group CBT approach. However, the treatment focus for GIST for Social Competence was to identify and remediate the cognitive, affective, and communicative elements of functioning, which specifically challenge clients with TBI to behave in a socially competent and effective manner.

GIST for Social Competence involved a 13 week group therapy structure, in addition to skill development with homework assignments, workbook material, regular feedback, and counselor interaction with the client's family system. The approach was empirically supported in a small randomized-controlled study, but like many counseling interventions developed for TBI, it could benefit further from empirical support with larger sample sizes and direct comparisons to other usual treatment approaches for these symptoms.

Finally, the issue of depression should be mentioned, as it is such a pervasive experience among clients with TBI. As noted previously, depression is an extremely

common symptom following TBI. Treatment of depression has taken a number of different paths, including counseling and/or medication. A review of the literature by Fann, Hart, and Schomer (2009) found that while post-TBI depression was typically treated with medication and/or counseling, few randomized controlled studies were available for review in the scholarly literature. Among those that the authors did review, counseling methods incorporating CBT were considered to be at least partially supported empirically in the treatment of depression following TBI. Rapoport (2010) noted that the presence of depression with TBI suggested a poorer functional outcome for clients. He argued that a multifocal approach to treating depression after TBI, including regular physical activity and exercise, CBT, and antidepressant medication when needed, might be optimal for symptom reduction.

Overall, counseling for adults with TBI has largely involved the use of behavioral, CBT, and other directive methods in the group and/or individual modalities. It tends to focus on skill development, symptoms management and reduction, social and interpersonal competence, and mood regulation. The counseling tends to be part of a larger treatment plan for the clients, as they struggle to re-attain proficiency in multiple areas of their lives, involving relationships, work, and self-efficacy.

Conclusion

The purpose of this paper is to provide counselors with the basic knowledge to understand and to work effectively with clients who have sustained a TBI. While much of the early course interventions and treatments for TBI are medical, the subsequent support for individuals with residual TBI problems is often behavioral, emotional, and social in focus and nature. Counselors have a unique set of skills and treatment methods to help individuals who have sustained TBIs. They appear to be quite qualified to work with clients who may be experiencing the ongoing effects of PCS, as well as providing education and structured support to clients impacted by TBIs and their families.

As counselors move toward greater representation in the military and veteran treatment settings, solid working knowledge of the effects and factors involved in TBI symptom presentation and duration is clearly needed. This paper is an attempt to help provide some of this information to a wide audience of counselors, such that they may come to see the fruition of their hard work and excellent training in expanding their professional acumen and identity as helping professionals.

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