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## Psychotherapy and Outcome Research in PTSD: Understanding the Challenges and Complexities in the Literature

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### ABSTRACT

The author reviews the existing literature on posttraumatic stress disorder (PTSD) as it relates to outcome research and psychotherapy. An initial examination of the issues involved in outcome research includes the issue of assessment and diagnosis, followed by the issue of measurement. The article is meant to assist those counsellors who are interested in the treatment of PTSD and understanding the complexities and challenges involved in determining what works and what does not. The author makes suggestions regarding how to approach the literature on PTSD, as well as issues in treating clients suffering from PTSD.

### RÉSUMÉ

L'auteur de la présente étude examine ce qu'on a écrit sur la névrose posttraumatique (PTSD), surtout ce qui touche à l'impact des recherches et à la psychothérapie. A propos de l'impact des recherches l'auteur traite l'analyse, la diagnostique, et l'évaluation. Cet article a pour but d'aider le socio-psychologue à comprendre la complexité du problème qui consiste à déterminer ce qui marche et ce qui ne marche pas comme traitement. L'auteur fait des remarques pour ceux qui abordent la littérature sur la névrose posttraumatique et pour ceux qui s'intéressent à la question du traitement.

Posttraumatic stress disorder (PTSD; American Psychiatric Association, 2000) occurs when a person has experienced a traumatic event and reacts with intense fear, helplessness, or horror. Following exposure to such events, PTSD is further characterized by four main categories of symptoms: (a) reexperiencing, (b) avoidance, (c) numbing, and (d) hyperarousal. The treatment of PTSD has become a prominent issue for mental health professionals, as more sophisticated research begins to uncover the multidimensionality of the disorder, and as professionals begin to understand the challenges and difficulties that arise in treating clients with PTSD. Although much of the literature on PTSD comes from the disciplines of clinical psychiatry and clinical psychology, the counselling psychologist can ill afford to ignore the issue of trauma and its debilitating effects on clients. Part of ethical practice involves being informed as to which interventions and therapies are effective, which are not effective, and those that could potentially cause harm.

This article is designed to offer an introduction to some of the more recent research literature that has reported on the various psychotherapies being used to treat PTSD. In doing so, the author will introduce the reader to the

complexities and challenges that are an inherent part of understanding the literature on what is most effective in the treatment of PTSD. The use of psychotherapeutic drugs has not been included in this paper, as they are often used in conjunction with conventional therapies, and a detailed discussion of medications would require its own examination, beyond the scope of this article. The current review will focus on psychotherapies that have empirical support, as well as on promising and, perhaps, controversial new areas in the treatment of PTSD, such as Eye Movement Desensitization and Reprocessing (EMDR; Shapiro, 1995). The review of the literature is not meant to be exhaustive but rather to attune the reader to some of the more salient issues in the areas of outcome research and psychotherapy in the treatment of PTSD. The article will first address the issues involved in measuring outcome in PTSD research, including the issues of assessment and diagnosis, followed by a review of two meta-analyses of PTSD treatment research. The final section examines the use of EMDR as a treatment for PTSD and the some of the issues existing in the literature on its effectiveness.

#### MEASURING OUTCOME IN POSTTRAUMATIC STRESS DISORDER

One of the most important issues when surveying the clinical literature in outcome studies of therapeutic interventions with PTSD is the issue of measurement. The question of how PTSD is measured in each particular study is of the utmost importance when interpreting such research findings. In the Consensus Statement on PTSD from the International Consensus Group on Depression and Anxiety (ICOAD), Ballenger et al. (2000) state that PTSD is measured by improvement in: symptoms (all and specific to PTSD), functional disability or quality of life, comorbidity, and global assessment of patients. These factors are inextricably linked to the instruments used to assess those areas outlined by the consensus group. As such, the consensus group provides a short list of some of the more commonly used instruments in the PTSD literature. They are: the Clinician Administered PTSD Scale (CAPS; Blake et al., 1995), the PTSD Symptom Scale Interview (PSS-I; Foa, Riggs, Dancu, & Rothbaum, 1993), the TOP-8 (Davidson & Colket, 1997), and the Posttraumatic Diagnostic Scale (PTDS; Foa, Cashman, Jaycox, & Perry, 1997). The authors state that the TOP-8, PTDS, and PSS-I are fully developed instruments, which are simpler and shorter (i.e., 20 minutes or less to perform), but which show a high degree of correlation with longer interviews, such as the CAPS, which can take 45 minutes to complete (Ballenger et al., p. 64). Unfortunately, Ballenger et al. do not include in their statement the statistics indicating what a “high degree of correlation” with longer interviews might mean in statistical terms. However, even the most sophisticated instrument will have the tendency to represent a reduction of the highly complex reality of PTSD and its effects on the individual.

Shalev (2000) states that outcome measurements that are limited to core PTSD symptoms, such as re-experiencing, avoidance, and hyper-arousal, may not capture

many other clinically relevant effects of treatment. As well, measuring the reduction or change in symptoms ignores the effect of treatment of disabilities associated with PTSD such as social avoidance and low tolerance of frustration (p. 33). Shalev goes on to mention that beyond the core symptoms, a number of clinically relevant phenomena are often associated with PTSD. These include comorbidity for major depression, affective dyscontrol (i.e., numbing and detachment as well as bursts of anger and violence), biased stimulus recognition (i.e., difficulties discriminating between threatening stimuli and innocuous ones), and comorbidity for substance abuse (p. 34).

When one examines the research on PTSD that measures only the change in core PTSD symptoms, it must be kept in mind that a reduction in these symptoms may not necessarily translate into improved functioning in the client's life. This point is especially salient for the counselling psychologist who is treating clients with PTSD or treating clients recovering from PTSD who are no longer diagnosable. Much of the work done by the counselling psychologist involves working with the difficulties clients experience when adjusting to the challenges of day-to-day living. Once the client's symptoms are reduced, the counsellor must pay attention to the everyday difficulties experienced by clients. The world that the client has created, as a PTSD sufferer, will still exist when their symptoms are reduced and the counselling psychologist must bear this fact in mind. Shalev (2000) goes on to discuss the confounding factors in the measurement of PTSD.

Shalev (2000) states that the measurement of PTSD symptoms may be confounded by three factors: (a) non-specific and uncontrolled effect of treatment interventions, (b) intercurrent environmental demands on the patient, and (c) factors related to the natural course of the disorder (pp. 34–35). In reviewing the literature on the outcome of treatments, readers must be aware that changes in PTSD symptoms can occur for reasons that are unrelated to the actual interventions. For example, just being enrolled in a group and receiving attention can reduce symptoms, which is akin to the placebo effect in medical research. Also, the patient/client is in treatment usually for only a short period of time and, as mentioned earlier, must inevitably return to the outside world. In the case of residential treatment programs, the patient can make considerable gains that may be thwarted upon returning to the same environment that, in many cases, may have been a contributing factor to the development of the disorder. The Vietnam-era veteran who enters a residential treatment program for comorbid PTSD and substance abuse might be another example. Significant gains are made while in treatment, but if the veteran is released back into the world that he left, one of chronic unemployment, violence, substance abuse, and hopelessness, the gains can be quickly lost.

Outcome research that focuses only on a dichotomous scale of PTSD versus non-PTSD diagnosis may fail to reveal the often-serious problems associated with the effects of sub-syndromal PTSD. Sub-syndromal PTSD is defined here as posttraumatic symptoms that fall below the diagnostic criteria for a diagnosis of PTSD. As Shalev (2000) mentions, formal "recovery" from PTSD is often

associated with the loss of only the avoidance criteria (p. 35). Meanwhile, the intrusive memories and hyperarousal remain, accompanied by the same problems as full-criteria PTSD sufferers. Finally, Shalev states that the course of PTSD is often one that fluctuates, is unstable, and includes “spontaneous” recovery in more than 60% of patients with PTSD between one and six years after trauma (p. 35). Therefore, knowing the demographic information on the subjects in studies becomes extremely important. A patient coming into treatment between one and six years after the trauma has a 60% chance of “spontaneous” remission of symptoms (i.e., the reduction of symptoms in the absence of formal treatment), which may potentially inflate the results of treatment research. The term “spontaneous” remission is actually a misnomer, as remission of symptoms in the absence of formal treatment is attributed to naturally occurring events in the person’s life (e.g., reduction in life stressors or benefits of social support) (S. Taylor, personal communication, 2001). Likewise, the combat veteran of 50 years who is experiencing late-onset PTSD may be extremely resistant to any kind of treatment due to the length of time with the disorder, and the fact that the patient may represent part of the 40% that did not recover “spontaneously.”

Another key element in being able to critically review the literature on PTSD outcome requires the assessment of which instruments are associated with which targets for treatment. When critically reviewing the articles on outcome in PTSD, one must keep in mind that the study may involve much more than a simple evaluation of the outcome of treatment on a one-dimensional basis such as a PTSD formal diagnosis. Knowing the purpose of an instrument is critical in being able to review the clinical research. For example, if a study on the outcome of a particular intervention reports that there were significant reductions in the Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez, 1979) scores for all participants, one might erroneously assume that the individuals in the study no longer suffer from PTSD. However, the IES is a single-event assessment scale that does not generalize to more than one traumatic occurrence. Also, it only targets symptoms in the previous seven days. The IES also has a high correlation with other PTSD diagnostic tools, but it is not a diagnostic tool in and of itself. So a reduction in IES scores may indicate a reduction in symptoms but may not necessarily reflect the elimination of a PTSD diagnosis. This is a rudimentary example, but counselling psychologists must inform themselves in these areas so that they can continue to conduct informed practice. Regarding assessment instruments for PTSD, the interested reader is directed to Shalev (2000), who provides a comprehensive table listing the different rating scales for use in studies of PTSD.

The issues that one must bear in mind when examining the literature on outcome studies in PTSD are many and they can seem overwhelming, especially for the counsellor who may lack a background in measurement and assessment. What is important is that the counsellor is aware that these issues exist. This awareness will subsequently serve as a guide for the reader when critically reviewing the PTSD literature on outcome and efficacy.

## META-ANALYSES OF TREATMENTS FOR PTSD

The literature on what is effective in the treatment of PTSD points to several broad classes of psychotherapeutic treatments that have gained empirical support. The main classes of treatments fall into the categories of cognitive-behavioural therapies, exposure techniques, flooding, anxiety management programs, and EMDR. According to the literature reviewed for this article, it would seem that cognitive-behaviour therapy, exposure techniques, and EMDR have garnered the most support as effective treatments for PTSD. The following section examines two meta-analyses of the literature on treatments for PTSD.

Van Etten and Taylor (1998) examined PTSD treatment studies, which used pharmacotherapy, psychological therapies, and control conditions. The authors present a thorough and comprehensive meta-analysis of the research reported in the literature on PTSD using the following inclusion/exclusion criteria: English-language articles published, unpublished, or presented at conferences from 1984 to 1996, located through Medline, the PILOTS Database, Psychological Abstracts, Current Contents, conference programs, recent journal issues, secondary sources such as book chapters or narrative reviews, and contacting PTSD researchers. Articles were included if all of the following criteria were met: (a) all participants were diagnosed with PTSD according to DSM-III, DSM-III-R, or DSM-IV criteria, as assessed by structured or unstructured clinical interviews; (b) five or more participants were included in the trial; (c) sufficient information was provided to compute effect sizes (or necessary information was supplied by the authors); (d) outcome was presented in terms of self-report or observer rated measure for one of five variables—intrusions, avoidance, total PTSD severity, depression, and anxiety; and (e) the outcome measures had acceptable levels of reliability and validity, as reported in the outcome study or in previous studies (pp. 128–129).

The Van Etten and Taylor (1998) meta-analysis includes 61 outcome trials for post-traumatic stress disorder consisting of drug therapies, psychological therapies, and control conditions. Outcome research on PTSD and pharmacotherapy contain sufficiently complex issues that go far beyond the scope of this article and so will not be addressed in any detail herein, except to report on which classes of drugs were demonstrated to be effective. The psychological therapies that were included are: 13 behaviour therapy trials, 11 EMDR trials, 1 relaxation therapy trial, and 1 psychodynamic therapy trial. The control trials that were included are: 4 pill placebo trials, 5 wait-list control trials, 1 non-saccade EMDR trial, and 5 supportive psychotherapy trials (pp. 129–132). The results showed that for intrusion symptoms (self-reported and observer-rated), selective serotonin reuptake inhibitors (a class of antidepressant medications called SSRIs), EMDR, and behaviour therapy were the most effective. For symptoms of avoidance, SSRIs, EMDR, and behaviour therapy were also most effective on both measures, and for total PTSD symptoms, EMDR was the most effective on self-report measures, while behaviour therapy was most effective for observer-rated symptom changes (pp. 134–136).

On the measure of self-reported anxiety, SSRIs and behaviour therapy were equal in efficacy, while EMDR and behaviour therapy showed the biggest effect sizes for all psychotherapies. Too little information was available on observer-rated anxiety measures. Self-reported depression was most affected by SSRIs, even more so than behaviour therapy and EMDR and, again, too little information was available on observer-rated depression. Van Etten and Taylor (1998) summarize the results by stating that psychological therapies tended to be more effective than drug therapies, while both tended to be more effective than controls. They also state that behaviour therapy was more effective than all other treatments on total observer-rated PTSD symptoms (pp. 136–138). At follow-up, it was reported that across all self-report and observer-rated measures of PTSD symptoms, depression, and anxiety, behaviour therapy and EMDR showed maintenance of treatment effects at follow-up (p. 138). Based on the information provided by this meta-analysis, it would seem that SSRIs are the most effective drug therapy treatment, and that behaviour therapy and EMDR represent the most effective psychological therapies.

Sherman (1998), in another meta-analysis, focused solely on controlled, clinical trials of psychotherapy. Sherman states that the purpose of the meta-analysis was to review the empirical evidence for the efficacy of psychotherapeutic treatments for PTSD (p. 417). Studies were identified using computerized databases including Psyclit, ERIC, Medline, Cinahl Nursing Database, Dissertation Abstracts, and the PILOTS Traumatic Stress Database from Dartmouth College. Inclusion criteria for the studies were: (a) clinical trials performed predominantly on participants who met DSM-III, III-R, or IV criteria for PTSD; (b) use of a comparison group; (c) provision of inferential statistics utilized to calculate relevant effect sizes; and (d) use of objective measures of outcome taken before and after treatment (pp. 418–419). This analysis contained only 17 studies, 11 with combat-related PTSD and 6 with non-combat-related trauma, a total number considerably smaller than the number included in the Van Etten and Taylor (1998) study.

According to Sherman (1998), the meta-analysis represents a review and a quantitative synthesis of the results of psychotherapeutic treatment modalities for the treatment of PTSD. The results suggest that the magnitude of improvement due to psychotherapeutic treatments is moderate and that the treatments in the studies are effective in reducing PTSD symptoms, depression, and anxiety (p. 426). The design of the study did not permit references to which type of psychotherapy was most effective, but the authors state that all but two studies used some form of exposure technique such as flooding, desensitization, implosion, EMDR, or psychodrama. This, Sherman suggests, lends general support for exposure-based therapies as an effective treatment for both combat- and non-combat-related PTSD (p. 427).

To summarize, according to the only two meta-analytic studies examining the efficacy of treatments for PTSD, there is evidence to support the use of cognitive behavioural therapies, exposure techniques, behaviour therapy, and

EMDR. However, in addition to the two meta-analytic studies on the outcome literature for PTSD, this author found it curious that a controversy may exist in the research literature regarding the use of EMDR as a treatment for PTSD.

#### PSYCHOTHERAPY IN THE TREATMENT OF PTSD AND THE EMDR “CONTROVERSY”

Controversy is inevitable any time there is a paradigm shift in a professional discipline or academic field. Developed by Francine Shapiro in the late 1980s, EMDR (Shapiro, 1989, 1995) arguably represents one such paradigm shift in the psychological community. In 1999, the *Journal of Anxiety Disorders* dedicated an entire volume to EMDR and the research being done on it by various practitioners and researchers. The following section attempts to examine the possible controversy surrounding the research literature on EMDR as a treatment for PTSD.

Foa (2000), in her review of the literature on psychosocial treatments for PTSD (those not involving the use of psychopharmacological agents), chose to include only those studies that have gained empirical support. Foa did not provide any more specific criteria as to the reasons she chose particular literature to review in her article. She states that the vast majority of treatment-outcome studies for PTSD have focused mainly on cognitive-behavioural therapy programs that involve some kind of exposure, and she reports that there is support for the use of cognitive-behavioural therapies, such as stress-inoculation training (SIT), prolonged exposure, and cognitive-behavioural therapy (CBT), as well as combined therapy approaches (pp. 43–45). This is consistent with the literature reviewed in the meta-analytic studies cited in the previous section. Foa also reviewed three studies using EMDR, which she considered to be “well-controlled,” although no definition was provided for her conception of what “well-controlled” implies.

Foa (2000) reviews the first EMDR study, which used four sessions of EMDR on female rape victims with PTSD, and found it to be effective in reducing PTSD symptoms. The second study compared EMDR with a “well-established” cognitive-behavioural therapy for PTSD, and it was found that the combination of stress inoculation training and exposure therapy was significantly more effective at reducing PTSD symptoms than EMDR. Finally, a third “dismantling” study is mentioned, which compared two groups of veterans receiving EMDR: one group with eye movements, and one group without eye movements. There was no difference between the two groups (pp. 45–46).

It is evident that psychosocial treatments, namely cognitive-behavioural treatments, have demonstrated effectiveness in improving PTSD symptomatology. However, one might be misled about the research that has been conducted on EMDR if one were only to rely on Foa’s (2000) brief review of the EMDR literature. Foa’s review of the EMDR literature is far from comprehensive, owing to the fact that more than 100 studies have been done on EMDR (David Baldwin’s Trauma Information Pages, EMDR Bibliography 1989 through 2003, <<http://www.trauma-pages.com/emdr-2003.htm>>), of which she chose to review only three.

Shapiro (1995) stated that, at the time her book was published, more controlled studies on EMDR had been done than on any other method used in the treatment of PTSD. Shapiro cited 45 controlled studies of EMDR investigating PTSD symptomatology. All of the studies reported decreases in self-reported distress (Subjective Units of Disturbance or SUDS), while several others reported decreased scores on the IES, global symptomatology, physiological measures, and behavioural indicators (p. 329). Given that Shapiro is the creator and chief proponent of EMDR, it is not surprising that she would cite studies in which positive change did occur. However, Shapiro also includes those studies that demonstrated no changes or that demonstrated mixed effects for the treatments.

Cahill, Carrigan, and Frueh (1999) attempted to organize the most recent literature evaluating EMDR by examining whether EMDR works compared to no treatment, compared to non-validated alternative treatments, and compared to validated treatments. The authors report that 10 studies comparing EMDR to no treatment with PTSD/trauma populations revealed mixed results: two studies found no difference between the two groups; two studies found EMDR was superior to no treatment; and two studies found, at best, limited evidence for the effectiveness of EMDR. The remaining four studies found EMDR to be more effective than no treatment; they are distinguished from other two “EMDR was superior to no treatment” studies because these four studies demonstrated not only a reduction in the SUDS ratings but also demonstrated positive results on psychometrically sound self-report instruments such as the PTSD Symptom Scale (Foa et al., 1993, p. 12).

In comparing EMDR to other non-validated treatments, Cahill et al. (1999) report that EMDR has been found to be as or more effective than image habituation training (IHT), relaxation (alone and assisted by biofeedback technology), and active listening. They also found that EMDR was more effective than a “hodgepodge” of treatments considered “standard care” in an HMO (Health Maintenance Organization) setting (p. 16). Finally, comparing EMDR to other validated treatments, the authors report that only one study was available: that done by Devilly and Spence (1999). Cahill et al. elected to reserve their own conclusions regarding the merits of that particular study, and to let the reader draw their own conclusions (p. 18). It is of interest to note that this is the same study that Foa (2000) cited as her empirical evidence regarding EMDR’s effectiveness, or lack thereof. I decided to review the Devilly and Spence article at the recommendation of Cahill et al.

After personally reviewing the Devilly and Spence (1999) study, I found that several issues arose regarding the reported outcomes. Although it may be beyond the scope of this article to discuss all of the problems with the Devilly and Spence study, there is one issue that might be considered a “fatal flaw” threatening the validity of the findings. This issue centres on the delivery of the treatment. The authors state that two therapists administered treatment, but in reality only one therapist treated all but three of the participants in both of the treatment conditions (p. 134). In a study with  $n = 23$ , this is not an insignificant factor.

Any bias by this particular therapist in favour of one treatment over the other would confound the treatment effects due to therapist expectancy. Furthermore, the fact that the therapist was trained in the advanced EMDR protocol says nothing of that therapist's competence as an EMDR practitioner. Being trained in the advanced EMDR protocol does not make one an expert in using EMDR in therapy (M. Wilensky, personal communication, 2000). The authors do not address this issue. They also state that, although all videotaped sessions were rated for treatment integrity, only six EMDR sessions and eight Trauma Treatment Protocol (TTP) sessions were given a rating of acceptability. The EMDR sessions had a mean rating of 4.83 (considered acceptable) (p. 150), which means very little when only six sessions are being evaluated. The reader is given no indication as to the ratings given for the remaining three EMDR sessions. The treatment protocol in EMDR is constructed such that even minor deviations from the protocol can negatively affect the results of a session (M. Wilensky, personal communication, 2000). As previously mentioned, these factors are not inconsequential in a study with such a small  $n$ , and potentially pose serious risks to the validity of the reported results.

Taylor, Thordarson, Maxfield, Fedoroff, and Ogrodniczuk (2003) studied the comparative efficacy, speed, and adverse effects of three different PTSD treatments, including EMDR. In a detailed study involving 45 participants, the authors examined outcomes on the dimensions of diagnosis/no-diagnosis for PTSD, on the four diagnostic dimensions of PTSD, and on clinically significant dimensions of PTSD. The authors found that, for the proportion of participants no longer meeting the criteria for a PTSD diagnosis, exposure was superior to relaxation at each of the post-treatment, follow-up, and sustained (post and follow-up) variables. They found that EMDR and relaxation did not differ from each other on any of the three assessments, and they found that there were trends for exposure to be superior to EMDR but that the trends were not statistically significant.

On the four dimensions of PTSD, Taylor et al. (2003) found that CAPS (Blake et al., 1995) scores were reduced for all treatment modalities across each time variable. For each of the four dimensions of PTSD and each treatment condition, the reductions were reported to be statistically significant. When examining the individual variables, it was found, however, that the experience of numbing declined across the three assessments whereas re-experiencing, avoidance, and hyperarousal remained stable. For re-experiencing and avoidance symptoms, exposure therapy was significantly more effective than both relaxation training and EMDR. Taylor et al. reported a general trend for exposure therapy to have the highest percentage of participants with clinically significant change (defined as a reduction of two or more standard deviations in CAPS scores for each of the four symptoms), some of which reached statistical significance. Although the three treatments were similar in several of their effects, the authors concluded that, compared with EMDR and relaxation training, exposure therapy tended to be most efficacious in reducing re-experiencing and avoidance symptoms and

worked more rapidly in reducing avoidance. They also stated that exposure therapy tended to yield the highest proportion of participants who no longer met DSM-IV-TR (American Psychiatric Association, 2000) criteria for PTSD.

#### DISCUSSION

The literature on outcome in PTSD must be studied with a critical eye focusing on the issues of diagnosis, assessment, and measurement. Given the complexities and challenges inherent in reviewing outcome research on the efficacy of treatments for PTSD, some guiding questions may be helpful. First, one may ask whether the outcome being measured is a dichotomous existence/non-existence of a PTSD diagnosis. It is my contention that studies focusing only on diagnosis do not sufficiently address the multidimensionality of the disorder. Due to the nature of PTSD and its comorbidity with other disorders, such as substance abuse, research studies that do not acknowledge these and other factors may be ignoring clinically significant data. Second, one may ask what measurements have been used to assess and/or diagnose PTSD, and if they are valid measures that address the multidimensionality of the disorder. Some researchers may prefer shorter tests that take less time to administer, but do shorter tests adequately capture the complex nature of the disorder? Finally, does the research describe or address the specific symptoms that are most and least affected by the intervention being studied? The literature reviewed in this article indicates that different symptom clusters may respond differently to various interventions, and mention should be made of this in research being done at this point in the history of treatments for PTSD.

According to the literature reviewed, there is demonstrated support for the use of SSRIs (antidepressant medications), cognitive-behavioural therapies, EMDR, and exposure therapy. On a practical level, counsellors must decide what their main goals are when working with clients suffering from PTSD. As mentioned earlier, counsellors focusing only on the existence, or absence, of a diagnosis of PTSD may overlook the suffering and adjustment issues that people with sub-syndromal PTSD (symptoms falling short of a formal diagnosis of PTSD) and comorbid PTSD may face. Each of the four dimensions of PTSD—re-experiencing, avoidance, numbing, and hyperarousal—must be attended to by the counsellor, as the extent to which each of these symptoms affects various individuals may vary. For example, the existence of only one of five symptoms is required for the re-experiencing criteria to be met (American Psychiatric Association, 2000). One person may have all five and another person may have only one symptom, yet both people will meet the DSM-IV-TR (American Psychiatric Association) criteria for re-experiencing symptoms. The degree of severity of each of the symptoms may also vary across individuals, and certain symptoms may prove more difficult to alleviate than others. Re-experiencing that persistently occurs during dreams will be experienced differently than dissociative flashbacks that occur on a daily basis, while riding the bus. Finally, each of the

symptom clusters may respond differently to certain treatments, as previously stated.

Developing awareness regarding which treatments have empirical support, as well as the specific symptoms each of the treatments target, is essential for the counsellor working with clients suffering from PTSD. Definitive answers regarding what is most effective for each PTSD symptom are rare. Due to the multidimensionality of the disorder and the complex nature of outcome research, counsellors working with clients suffering from PTSD will benefit from continually apprising themselves of the empirical literature, as more is discovered about how to help those with this debilitating disorder. Assessment, diagnosis, and the measurement of PTSD are three areas that need to be considered. Becoming aware of the challenges of doing research on outcome and PTSD and the complexities that exist in the literature on treatments for PTSD is the first step toward ensuring that counsellors continue to practise in a competent and ethical manner.

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