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HOW COPING, PTSD, AND TREATMENT PREFERENCES INTERACT?

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MARTHA M. GOLUBSKI

ABSTRACT

Posttraumatic Stress Disorder (PTSD) is a mental disorder characterized by symptoms of intrusive recollection, avoidance or numbing, and hyper arousal following being exposed to a traumatic event involving threatened or actual death or serious injury (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000). Those with PTSD, employ a variety of coping strategies to deal with the symptoms following their trauma exposure. Across studies, it has been found that coping styles which are active have a positive effect on both physical and psychological health (Gil & Caspi, 2005; Lazarus & Moskowitz, 2004; Olf, Langeland, & Gersons, 2005). However, avoidance coping styles are common in those with PTSD and avoidant coping strategies positively relate to hassles, negative physical symptoms, and negative affect while negatively related to uplifts, life satisfaction, and positive affect (Amirkhan, 1990). Exposure therapy for PTSD is seen as highly effective as it addresses the avoidance symptoms of PTSD. A patient who chooses a therapy which does not involve facing the trauma memory may be doing so because of their tendency towards avoidant coping behaviors. It is the goal of the current study to 1) examine coping behaviors in a student population (sample 1) and a sample seeking treatment for PTSD (sample 2), 2) identify how these behaviors relate to treatment preference, and 3) how these behaviors relate to PTSD. The results revealed use of three styles of coping behavior: *adaptive*, *maladaptive*, and *other coping*. The use of coping did not significantly relate to treatment preference however it did relate to PTSD diagnosis in Sample 1.

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CHAPTER I

INTRODUCTION

The current study aims to support the utilization of the Brief-COPE as a measure of coping strategies in those with PTSD. Based on support from previous literature, we suggest a three factor structure of this measure. The three proposed factors are maladaptive coping behavior which aids in the morbidity of PTSD, adaptive coping behavior and strategies which could be both adaptive and maladaptive but may vary by patient. The last factor of other coping behavior should be carefully looked at on an individual level. The purpose of this paper is to examine if a tendency towards maladaptive coping deters the endorsement of exposure based interventions for treatment of PTSD, as they may be viewed as distressing.

1.1 REVIEW OF CURRENT LITURATURE

Posttraumatic Stress Disorder (PTSD) is a mental disorder characterized by symptoms of intrusive recollection, avoidance or numbing, and hyper arousal following being exposed to a traumatic event involving threatened or actual death or serious injury. The event may also be a threat to physical integrity such as being sexually assaulted. The person's response to the event must have involved intense fear, helplessness, or horror (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000). It is estimated that about half (39-53%) the general population will have exposure to a traumatic event in their lifetime, while studies show only about 7.5-9.2% of those go on to develop PTSD (Breslau, Davis, Andreski, & Peterson, 1991; Kilpatrick, Saunders, Veronen, Best, & Von, 1987). This is partly due to the fact that the stressful reaction and the distressing symptoms which occur after a traumatic event must be present for at least a month in order to qualify for a diagnosis of PTSD. Distressing symptoms such as flashbacks are common after a traumatic event and these symptoms naturally dissipate over time for some people. For others, symptoms persist and psychological treatment may be necessary to help extinguish symptoms of PTSD.

People who suffer from PTSD employ a variety of coping strategies. Coping can be considered any response to external life strains that serves to prevent, avoid, or control emotional distress and people have a natural tendency to cope in a variety of ways (Pearlin & Schooler, 1978). The common coping strategies in those with PTSD are often grouped as being either problem focused strategies vs. emotion focused strategies or as active vs. avoidant coping strategies (Aldwin & Revenson, 1987; Blake, Cook, & Keane, 1992; Carver et. al. 1989; Lazarus & Moskowitz 2004; Schnider et al. 2007; Valentiner et al., 1996). Coping strategies which involve direct action towards managing the stressor or

threat, or are aimed at doing something to alter the source of the stress are considered problem focused strategies. There are many examples of coping strategies considered to be problem focused such as seeking out social support, using instrumental action (finding a solution to the problem), turning to religion, or planning (Aldwin & Revenson, 1987; Schnider et al. 2007; Carver et. al. 1989). However, not all coping strategies are problem focused. A person might also utilize emotion focused strategies, where the aim is reducing the emotional distress which accompanies the event rather than action towards the event itself (Carver et. al., 1989). Examples of these strategies would be venting, denial, acceptance, or positive reinterpretation (Carver et. al. 1989; Gil & Caspi 2006; Schnider et al. 2007).

Coping can also be viewed as either being active or avoidant. Problem focused strategies tend to be viewed as active coping strategies where some emotion focused strategies are labeled as active and some are avoidant. Self-distraction, denial, substance use, or self-blame are all considered to be avoidant coping behaviors and are often used more often by people with PTSD, as avoidance is one of the main symptoms associated with this disorder (Carver et. al., 1989; Schnider et al. 2007). The use of avoidant coping strategies is associated with higher rates of PTSD symptoms. Further, coping styles which are active have a positive effect on both physical and psychological health (Gil & Caspi, 2005; Lazarus & Moskowitz, 2004, Olf, Langeland, & Gersons, 2005). Studies have also shown problem focused coping styles are related to fewer psychological problems while emotion focused coping strategies are related negatively to psychological adjustment. Emotion focused strategies which are seen as contributing to psychological distress are the strategies also viewed as avoidant, such as self blame and denial coping

(Blake, Cook, & Keane, 1992; Valentiner, et al. 1996). Amirkhan found active coping strategies significantly correlated with more favorable life outcomes, with significant scores on life satisfaction, positive affect, and uplifts, and significant negative correlation with hassles, physical symptoms, and negative affect (Amirkhan, 1990). Avoidance was positively related to hassles, negative physical symptoms, and negative affect while negatively related to uplifts, life satisfaction, and positive affect. Therefore, to determine whether people have a tendency towards maladaptive or adaptive coping techniques, it is better to look at their use of active or avoidant versus their use of emotion or problem focused strategies. The emotion focused strategies are both active and avoidant and therefore some will be maladaptive while others are adaptive.

According to a cognitive-behavioral model of the development and maintenance of PTSD, when a traumatic event occurs, the trauma itself and also the sounds, smells, and sensations which occur with the trauma can be conditioned such that the material is associated with a fear response. Generalization to other material as well often occurs such that material that is not directly related to the trauma will also cause an increased fear response. When a person is triggered by a stimulus, either external (sensory stimuli) or internal (sensations), which has been linked to the traumatic event, they may act or feel as if the trauma is re-occurring which produces intense psychological distress (Ehlers & Clark, 2000). Avoiding reminders of the trauma and the trauma memory itself relieves this psychological distress in most cases. Alleviated stress through avoidance or escape then reinforces these behaviors (Rothbaum, et. al.). However, the efforts to avoid or suppress thoughts about the trauma actually can cause the intrusive thoughts to occur more frequently (Brewin & Holmes, 2003; Ehlers & Clark, 2000). Efforts to not think

about the traumatic event prevent individuals from elaborating the trauma memory and linking their experience with its context in other biographical information. Avoiding reminders of the trauma prevents both a change in the problematic appraisals and a change in the nature of the memory. After the traumatic event, a person might also engage in avoidant activities like avoiding places or people that remind them of the trauma. However, avoiding the place where the trauma occurred also prevents correction of appraisals about the event or how it could have been avoided (Brewin and Holmes, 2003; Ehlers & Clark, 2000).

One psychosocial treatment for PTSD, exposure therapy, addresses avoidance directly as it involves the patient focusing on the traumatic material. These therapies have been known to be highly effective in the treatment of PTSD (Foa et al., 2008; Friedman, Keane, & Resick, 2007). Exposing a patient to frightening stimuli in a safe environment will diminish anxiety by promoting habituation. The person was previously relieving their anxiety through avoidance or escape of trauma reminders and this therapy corrects through a variety of techniques (Rothbaum & Schwartz, 2002). Exposure therapy asks the patient to relive their experience in a safe environment which helps the patient to incorporate safety information to realize remembering the trauma is not dangerous. Exposure therapy corrects the globalization of traumatic material and corrects beliefs of an incompetent self through focusing on the trauma for a long period of time and learning to differentiate between the trauma and non-traumatic events. Several studies have demonstrated exposure therapy as a highly effective treatment for those with PTSD (Foa, et. al. 2008; Rothbaum & Schwartz, 2002). These studies compared exposure therapy to stress-inoculation training, supportive counseling or waitlist control. Although most

treatments were seen as effective in these studies, exposure therapy was demonstrated to have superior outcomes on PTSD symptoms at follow up and was shown to be more efficient (Rothbaum & Schwartz, 2002).

Prolonged Exposure (PE), is an individual therapy which is trauma focused. This therapy uses breathing (relaxation) training as well as repeated exposure to trauma memories. While in session with their therapist, a client is asked to recall and say out loud the trauma memory repeatedly and rate their level of distress. The client is also asked to do in life exposure (in vivo), such as visiting the location where the trauma occurred or to other places the client is avoiding because of the trauma, outside of therapy sessions.

Cognitive Processing Therapy (CPT) is an individual therapy which uses exposure techniques as well as addresses negative thoughts a person is having about themselves, the trauma or the world. In CPT, clients receive training to challenge problematic cognitions, such as irrational beliefs around self blame, power, trust, intimacy, control and esteem. The exposure component of this treatment involves writing a detailed account of the trauma and about the personal meaning of the trauma and then reading it with the therapist and at home. Both CPT and PE, also help to teach a patient that their symptoms are not a sign of personal failure and allow them to focus on the negative evaluations of themselves and how to modify these evaluations to be more realistic.

Currently exposure techniques are being under utilized by mental health professionals for treatment of clients with PTSD. Studies report rates of utilization of exposure for clients with PTSD anywhere from 1-20% (Becker, Zayfert, & Anderson,

2004; Feeny, Hembree, & Zoellner, 2003; Van Minnen, Hendriks, & Olf, 2010).

Although exposure techniques have been demonstrated to work, there are commonly held views these methods can be potentially dangerous because they involve facing painful memories and may make people feel worse before they feel better (Tarrier, Liversidge, & Gregg, 2006). However, Tarrier, Liversidge and Gregg (2006), found that only a minority of patients have an increase in symptoms, and those who do have an increase often see those symptoms soon dissipate. They also found no difference in terms of premature drop out from treatment when compared with non exposure interventions. Another reason to explain the under utilization of exposure interventions is from lack of training or comfort ability with conducting the therapy (Van Minnen, Hendriks, and Olf, 2010). Other factors are ease, cost, and availability of training, willingness to receive training, availability of supervision, general clinical myths about exposure for PTSD as a whole, and personal beliefs about the specific contexts and conditions for its use. A patient's level of avoidance or fear of initial worsening of symptoms may also play a large role in the under utilization of exposure therapy (Becker, 2004). The patient's preference for a particular treatment over another highly impacts the therapists' utilization of that treatment. Van Minnen, Hendriks, and Olf (2010) found patients who expressed a preference for trauma-focused treatment were offered exposure therapy significantly more than when the patient preferred non-trauma-focused treatment. A meta-analytic study supports matching treatment to patient preference as a best practice by showing that patients who received their treatment of choice had greater improvements and half the drop-out rate of those who were not matched (Swift & Callahan, 2009). This suggests that increasing a patient's preference for empirically supported treatments can play a

pivotal role in increasing the use of evidenced based therapy (Swift & Callahan, 2009). In order to increase a patient's preference for a specific type of treatment by targeting specific variables, we need to better understand the variables that predict their preferences.

A study which used a university student population looked at treatment preference for PTSD (Tarrier, Liversidge, & Gregg, 2006). It is important to note that this study did not look a population with previous exposure to trauma but rather used a "what if" scenario. The top five ranked treatments were: cognitive therapy, cognitive therapy with exposure, imaginal exposure, psycho-education, and in vivo exposure. The lowest ranked were psychodynamic psychotherapy, computer-based therapy, Eye Movement Desensitization and Reprocessing, and e-therapy. The treatments which were rated as the having the most discomfort were imaginal exposure, in vivo exposure, group therapy, family therapy, and cognitive therapy with exposure. This suggests that exposure therapies were seen as worth the distress (Tarrier, Liversidge, & Gregg, 2006). However, those who suffer from PTSD, have much higher rates of avoidance and the use of other maladaptive coping techniques than those in the general population. The use of avoidance coping techniques by those with PTSD may make them less likely to endorse exposure interventions. The patients who endorse supportive therapy over exposure techniques may be doing so in an effort to continue to engage in these maladaptive avoidant coping behaviors (Carver & Scheier, 1994; Folkman & Lazarus, 1985; Holahan & Moos, 1987). An example of a non-exposure based intervention is Present Centered Therapy (PCT). PCT focuses on current life problems and stressors and involves daily monitoring of current stress and active problem solving of day to day activities. The patient is not asked

to discuss the details of the trauma and therefore avoids distress and anxiety which may come from the treatments which involve exposure (CPT and PE).

The current study first aims to look at coping within a sample of students and a sample of adults seeking treatment for PTSD, in order to see if there is a clearly identifiable tendency towards use of maladaptive coping or adaptive coping strategies. The first hypothesis is we will be able to validate a three factor structure of the brief COPE and the resulting factors will be *maladaptive coping*, *adaptive coping* and *other*. Literature supports the brief COPE factoring in a variety of ways within different populations. In many trauma populations the brief COPE factored into three factors: two factors labeled active and support seeking and a third factor of avoidant coping in one study and denial coping in another (Bodernhorn et al., 2008; Fillion et. al., 2002; Prado et al., 2004). The second aim is to identify whether coping relates to treatment preference. The second hypothesis is that participants who engage in active, adaptive coping behavior will be more likely to endorse exposure therapy (PE or CPT), where as participants who engage in avoidant, maladaptive coping behavior will endorse a non-exposure intervention (PCT). The tendency towards one style of coping over another may also be a result of the presence of PTSD. Therefore, the third hypothesis of the current study is that those with PTSD will have higher maladaptive coping scores than those without PTSD. PTSD will be looked at as an interaction with treatment choice. By better understanding what impacts a patient's endorsement, or lack thereof, of empirically supported treatments, we can help to facilitate their use.

CHAPTER II

METHOD

2.1 PROCEDURE

The data to be used for the current study were collected as part of a larger study which examined treatment preference for PTSD. As part of the larger study, data were collected from two samples: Sample 1—Undergraduate students, who were recruited from psychology research pools at two large Midwestern universities, as well as via outreach through email and flyers (these participants were compensated with one hour of research participation credit); and Sample 2—Treatment-seeking adults, who were recruited from a hospital-based, trauma-focused clinic staffed with psychologists and psychiatrists (these participants were compensated \$20 for their participation). Relevant

to the current study, after providing informed consent, all participants completed a battery of measures. Participant demographic information for each sample is reported in table 1.

2.2 MEASURES

Each participant completed a battery of self-report assessments. For this study, we will be using participants' sociodemographic information, treatment choice, history of PTSD and coping style.

2.2.1 SOCIODEMOGRAPHIC INFORMATION

Sociodemographic information was collected via self report questionnaire. Participants were asked to identify their gender, age, race, Hispanic descent, relationship status, and income.

2.2.2 TREATMENT CHOICE

Participants in Sample 1 were first asked to read a first person scenario of a mugging where they are to imagine as if this happened to them. The scenario describes the situation and subsequent reactions they had after the mugging took place which results in a diagnosis of PTSD. The scenario ends with the person reporting to counseling where they have a variety of treatment options (see appendix for presented scenario). Sample 2 was not presented with the scenario as this sample was already seeking treatment for PTSD.

The participants were then presented with brief description of cognitive processing therapy (CPT), prolonged exposure (PE) therapy and present-centered therapy (PCT). Each therapy has some advantages and disadvantages listed. Participants are then asked to rate each therapy on *familiarity*, *credibility* (Credibility Scale CS; Addis & Carpenter, 1999) and *personal reactions* (Personal Reactions to Rationale PRR; Addis &

Carpenter, 1999) using a seven point Likert-type scale from 1 (not at all) to 7 (extremely). *Familiarity*, comprised of two questions, asked about previous knowledge of the therapy presented with questions such as, “Before reading this description, how familiar were you with PCT?” The *credibility* scale was comprised of seven questions such as, “How logical does this therapy seem to you?” and “How scientific does this therapy seem to you?” Lastly, the *personal reactions* scale was comprised of five questions and asked “How helpful do you think this therapy would be for you...” and “How likely would you be to choose this therapy...” Participants are then asked to choose between PE, CPT and PE, how confident they feel in that choice on a scale from 0 (not at all) to 6 (extremely) and what five factors they feel influenced their choice (see appendix for presented treatments). For the present study, the variable of treatment choice will be based on the question which asked participant to choose between the three therapies. This process was similar to that used by Zoellner and colleagues (2003) as well as Tarrier, Liversidge and Gregg, 2006.

2.2.3 TRAUMA HISTORY

The Traumatic Stress Schedule (TSS) (Norris, 1990) was used to assess lifetime and past year exposure to nine different types of traumatic life events. Since this is a life time event scale, no indicators of internal consistency are available (Ortlepp, & Friedman, 2002). These include: robbery: “Did anyone ever take something from you by force?”, physical assault: “Did anyone ever beat you up or attack you?”, sexual assault: “Did anyone ever make you have sex by using force...?”, tragic death: “Did a close family member or friend die because of an accident, homicide or suicide?”, fire: “Did you ever suffer injury or property damage in a fire?”, other disaster: “Did you ever suffer

injury or property damage because of severe weather either natural or human made disaster?”, motor vehicle crash: “Were you ever in a motor vehicle crash serious enough to cause injury to one or more passengers?”, injury non motor vehicle: “Have you ever suffered from physical injury as a result of a non motor vehicle accident?”, other: “Did you ever have some other terrifying or shocking experience that is not covered above?”. Participants were asked if they experienced the event and then asked five follow up questions if they said yes; “How many times has this happened to you?” and “How old were you the first time it happened?” and asked to rate on a scale from one to seven, “To what extent did you fear for your life during this event?”, “To what extent were you physically injured during the event?” and “To what extent were you distressed by the event?”

To assess for PTSD symptoms participants were asked to complete the self-report version of the PTSD Symptom Scale (PSS-SR, Foa et. al., 1993). This is a seventeen item scale which measures the presence and severity of DSM-III-R symptoms. Participants rate the severity of each symptom over the past two weeks using a 4 point Likert-type scale. The severity is measured from 0 (not at all), 1 (a little), 2 (moderately), and 3 (very much). They are asked to reference the trauma indicated from the TSS which is most distressing to them. The questions are clustered into three symptom categories to measure *re-experiencing* using four questions, *avoidance* with seven questions and *arousal* symptoms with six questions. *Re-experiencing* included symptoms of intrusive thoughts, nightmares, flash backs (reliving), and being emotionally upset when reminded of the trauma. *Avoidance* asked about avoiding thoughts and feelings, avoiding places and activities, psychogenic amnesia (memory loss), loss of interest in activities, detachment

from others, restricted affect (emotionally numbing) and a sense of a foreshortened future (plans or hopes will not come true). Lastly, *arousal* symptoms included sleep disturbances, irritability, difficulty concentrating, hyper-alertness, increased startle response and physical reactivity. A symptom is considered present when an item has a score of 1 or greater. In those who have experienced a traumatic event, endorsement of one *re-experiencing* symptom, three *avoidance* symptoms and two *arousal* symptoms qualifies them for a PTSD diagnosis. The PSS-SR has highly satisfactory psychometric properties. Internal consistency of the total symptom scale is .91 with the three clusters being .78 for re-experiencing, .80 for avoidance, and .81 for arousal. Test-retest reliability was moderate over a month period (.74 overall, .66 re-experiencing, .56 for avoidance, and .71 arousal). A Kappa score of .86 is achieved when compared to the SCID. The specificity and positive predictive power was 100% and the negative predictive power was 82%. The PSS-SR identified the status of 86% of subjects (Foa et. al. 1993; Foa et. al. 1997). The PSS-SR was used in conjunction with the TSS to determine PTSD diagnosis in the present study. Participants will be coded as having PTSD if they indicated they experienced a traumatic event on the TSS as well as a score of 28 or higher on the PSS-SR. Multiple studies support the use of using 28 as a conservative cut off score (Coffey et. at., 1998; Foa et.al., 2002; Luce et. al., 2002). There is also support for counting a score of 2 or higher a presence of a symptom rather than one. This would also result in a cut off score of at least 28 (Brewing et. al. 2001).

2.2.4 Brief COPE

The Brief COPE (Carver, 1997) consists of 28 statements and is used to measure a person's coping style. Participants respond to each statement by rating it on a scale from

one to four: 1 “I haven’t been doing this at all in the past month,” 2 “I’ve been doing this a little bit in the past month,” 3 “I’ve been doing this a medium amount in the past month,” and 4 “I’ve been doing this a lot in the past month.” The Brief COPE is designed to measure 14 subscales of coping with two questions intended to measure each style. These 14 sub scale are: self-distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame. *Active* coping is considered increasing the amount of direct action to try and remove the stressor, or to alleviate the stress and avoiding activities in order to focus on the stressor or stressful event. *Planning* coping involves thinking about strategies or formulating a plan to handle the problem. The next two coping strategies involve seeking out social support. The first is *use of instrumental reasons* which involves seeking advice, guidance or information where *use of emotional support* involves seeking sympathy or compassion. *Venting* is considered focusing on distressful feelings and then letting one’s feeling out. *Behavioral disengagement* is related to helplessness in the sense that this strategy involves giving up attempts to achieve goals and reducing efforts to deal with the stressor. *Self-distraction* is similar but refers to distracting one’s self from thoughts about the stressor; daydreaming is an example. *Positive reframing* is managing distressful emotions by putting stressful situations into positive terms. *Denial* is a strategy used when one is denying the reality of the stress or refuses to believe it exists. Alternatively, *acceptance* is a coping style which involves accepting the reality of the stressor. *Substance use* is a coping strategy which involves using substances, alcohol or other drugs, to deal with the stress. *Humor* is using jokes to cope with the stress. *Self-Blame* is yet another strategy measured by the brief

COPE and looks at one blames themselves for the source of their stress. Lastly, *turning to religion* is a style where one turns to their religion or meditation in times of stress. An exploratory factor analysis was previously conducted for the 28 questions of the Brief COPE using a Promax (oblique) rotation on each of the current populations separately. Then, a confirmatory factor analysis was run using a three factor model because of: (a) the percentage of the variance by the first three factors, (b) the leveling off of the scree plot and (c) previous theoretical support for a three factor model. A confirmatory factor analysis was run in order to see how our population best fits a three factor model and was also done using a Promax (oblique) rotation. Each sample emerged as having three factors Sample 1 had the factors of maladaptive and adaptive coping and their third factor was labeled Religion. Sample 2 emerged with the factors of maladaptive coping, adaptive coping and a third separate factor being acceptance/humor. Previous theory and our analysis support a three factor structure of the brief cope. The current study will run a confirmatory factor analysis extracting three factors using the sub scale scores for the brief cope. Variables of maladaptive coping, adaptive coping and other coping were created using the sum of the subscale scores which fell on to each factor for each participant.

2.3 RESEARCH DESIGN

Hypothesis 1) A confirmatory factor analysis using a promax rotation to allow for the variables to co-vary was conducted on the 14 Brief Cope subscales within each population separately.

Hypotheses 2 and 3) The scores for the variables of *maladaptive*, *adaptive* and *other coping* then where used as the dependent variables in a Multivariate Analysis of Variance

(MANOVA) using a factorial design, as it is a dependence technique which measures the difference for two or more metric dependent variables based on a set of categorical non-metric variables. The predictor variables were the non-metric variables of treatment choice and PTSD diagnosis.

CHAPTER III

RESULTS

Sample One

We ran a confirmatory factor analysis using a three factor model because of: (a) the first three factors explained 32.789, 15.527 and 7.841 percent of the variance respectively, (b) the leveling off of the scree plot and (c) previous theoretical support for a three factor model. A confirmatory factor analysis was run in order to see how our population best fits a three factor model. This was done using a Promax (oblique) rotation. An examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested the sample was factorable (KMO = .804), as did Bartlett's Test of Sphericity (sig.= .000). Factor one was labeled *adaptive coping* and consisted of the scales of: *active* (Q2 and Q7;

.730), *planning* (Q14 and Q25; .824), *positive reframe* (Q12 and Q17; .785), *acceptance* (Q20 and Q24; .665), *humor* (Q18 and Q28; .411), *religion* (Q22 and Q27; .479), *use of emotional support* (Q5 and Q15; .666) and *use of instrumental support* (Q10 and Q23; .719). Factor two was labeled maladaptive coping and included *denial* (Q3 and Q8; .716), *behavioral disengagement* (Q6 and Q16; .832) and *self blame* (Q13 and Q16; .851). Factor three was *other coping* and consisted of *self-distraction* (Q1 and Q19; .839) and *venting* (Q9 and Q21; .803). *Substance use* (Q4 and Q11) loaded onto both scale two and three (.430 and .407).

Sample Two

The same procedure was done on the second sample because: (a) the first three factors explained 26.334, 14.572 and 11.741 percent of the variance respectively, (b) the leveling off of the scree plot and (c) previous theoretical support for a three factor model. A confirmatory factor analysis was run in order to see how our population best fits a three factor model. This was also done using a Promax (oblique) rotation. An examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested the sample was factorable (KMO = .695), as did Bartlett's Test of Sphericity (sig.= .000). Factor one was labeled *adaptive coping* and consisted of the scales of: *active* (Q2 and Q7; .702), *planning* (Q14 and Q25; .739), *positive reframe* (Q12 and Q17; .736), *religion* (Q22 and Q27; .614), *use of emotional support* (Q5 and Q15; .694) and *use of instrumental support* (Q10 and Q23; .855). Factor two was labeled maladaptive coping and included *denial* (Q3 and Q8; .629), *behavioral disengagement* (Q6 and Q16; .816) and *self blame* (Q13 and Q16; .811). Factor three was *other coping* and consisted of *acceptance* (Q20 and

Q24; .643), humor (Q18 and Q28; .612), *self-distraction* (Q1 and Q19; .761) and *venting* (Q9 and Q21; .721).

Sample 1

PTSD diagnosis was determined by creating a variable based on the patient's endorsement of a trauma history using TSS scores and a score of 28 or higher on the PSS-SR. Frequencies were calculated which revealed 89.5% (n=512) did not meet criteria to be diagnosed with PTSD based off the current measures while 10.5% (n=60) did. We also calculated frequencies for treatment choice. This revealed 43.9% (n=251) picked PE, 37.1% (n=212) and 18.5% (n=106) picked PCT. Coping scores for each participant were also calculated. *Adaptive coping* score were created by combining the subscale scores of *active, planning, positive reframe, religion, use of emotional support, and use of instrumental support*. *Maladaptive coping* included *denial, behavioral disengagement, and self blame*. *Other coping* consisted of *self-distraction, and venting*. An initial MANOVA tested for the main effects treatment preference and PTSD diagnosis would have on coping styles. Testing for the equality of covariance matrices showed significance ($F=3.694, p=.000$) indicating this assumption is violated however, the sample size was the same across variables. We then examined Pillai's Trace as this test is the least sensitive to the violation of assumptions. This did show a significant multivariate effect for PTSD diagnosis $F= 11.385, df= (3.00), p= .000$ and a non significant effect for treatment preference $F= .608, df= (6.00), p= .724$. Testing the interaction of PTSD diagnosis and treatment preference was also non-significant $F=.470, df=(6), p=.831$. Test of between-subject effects of PTSD diagnosis and coping strategies were significant for *maladaptive* $F=27.126, p=.000$, and *other* $F=19.601, p=.000$ but not

for adaptive coping $F=1.569, p=.211$. Individual t-tests were done to examine difference across coping strategies for those who meet the criteria for a diagnosis of PTSD compared to those without. This revealed significant difference for: *maladaptive* $t=5.852, df= (527), p= .000$, and *other* $t=4.439, df= (528), p= .000$ but not for *adaptive* $t=1.141, df= (523), p= .254$. Mean coping scores across groups are reported in table 2.

Sample 2

PTSD diagnosis was determined by creating a variable based on the patient's endorsement of a trauma history using TSS scores of one or greater and total PSS-SR scores of 28 or higher. Frequencies were calculated which revealed 41% ($n=41$) did not meet criteria to be diagnosed with PTSD based off the current measures while 59% ($n=59$) did. We also calculated frequencies for treatment choice. This revealed 35.4% ($n=35$) picked PE, 39.4% ($n=39$) and 25.3 ($n=25$) picked PCT. Coping scores for each participant were also calculated. *Adaptive coping* scores were created by combining the subscale scores of *active, planning, positive reframe, religion, use of emotional support, and use of instrumental support*. *Maladaptive coping* included *denial, behavioral disengagement, and self blame*. *Other coping* consisted of *acceptance, humor, self-distraction, and venting*. An initial MANOVA using a factorial design examined coping styles as the three dependent variables (DVs) and treatment preference and PTSD diagnosis as independent variables. Testing for the equality of covariance matrices showed no significance ($F=.842, p=.712$) indicating this assumption is not violated. We then examined Pillai's Trace as this test is the least sensitive to the violation of assumptions. This showed a non significant multivariate effect for PTSD $F= .728, df= (3.00), p= .538$ and a non significant effect for treatment preference $F= 1.046, df= (6.00),$

$p = .397$. Individual t-tests were done to examine difference across coping strategies for those who meet the criteria for a diagnosis of PTSD compared to those without. This revealed no significant difference for: *adaptive* $t = 960$, $df = (90)$, $p = .340$, *maladaptive* $t = .889$, $df = (93)$, $p = .377$, and *other* $t = 1.151$, $df = (89)$, $p = .253$. Mean coping scores across groups are reported in table 3.

CHAPTER IV

DISCUSSION

The results supported hypothesis one; there is a clearly identifiable tendency towards use of maladaptive coping or adaptive coping strategies by validating a three factor structure of the brief COPE and the resulting factors being *maladaptive coping*, *adaptive coping* and *other coping*. The samples factored similarly in that the maladaptive coping factor in both samples was comprised of *denial*, *behavioral disengagement* and *self-blame*. These three scales are all seen as avoidant coping strategies. The adaptive coping factor was also very similar between the samples in that *active*, *planning*, *positive-reframing*, *religion*, *emotional support* and *instrumental support* loaded on to this factor for both samples. Sample 1 had the additional scales of *acceptance* and *humor* loading on

to this factor. All the scales which are considered problem focused loaded onto the adaptive factor (*active, planning, instrumental support and religion*). Coping strategies often labeled as active emotional focused strategies (*positive reframing, acceptance, humor, and use of emotional support*) also loaded on to this factor. The third factor which emerged for both samples had the variables of *self-distraction* and *venting* which are an avoidant and active emotional style respectively. For sample 2, *acceptance* and *humor* also loaded onto this factor and are both active emotional styles of coping. *Substance use* as a coping strategy did not load on to any of the factors for either sample. The previous literature supports our findings that a three factor model of coping styles is better to use than strictly dichotomous variables (Fillion et. al., 2002; Prado et al., 2004; Bodernhorn et al., 2008). It has also been encouraged by Carver (1997), to examine the factor structure of the Brief COPE within every sample. Samples vary in the coping styles they use because of inherent differences. The various styles of coping are useful to understand and looking at how the 14 strategies relate can aid in determining specific styles of coping which may be helpful. Because the current literature indicates avoidant, maladaptive coping behavior increases PTSD symptoms and negatively impacts a patient's wellbeing, changing these coping behaviors should be addressed in treatment. A patient engaging in negative coping behavior outside of treatment may not make expected improvements in therapy. This could lead to frustration for both the therapist and patient when progress is halted and it seems the therapy is not working. Therefore, it is necessary to be able to accurately determine who uses mostly maladaptive coping strategies and which strategies fall onto the maladaptive scale in order to give additional support to those individuals. Adaptive coping behaviors may increase the chance of a positive

outcome in therapy. Patients who are engaging in positive, effective coping should be encouraged and reinforced. It may be difficult however to determine which strategies are helping the person and which are hindering using dimensions of emotion focused coping or problem focused coping identified in previous research. Although most strategies identified as problems focused are considered positive, some emotion focused strategies help while others hinder. Using the maladaptive and adaptive coping dimensions proposed by the current study more adequately paint a picture of coping strategies which are hindering progress in treatment. Behaviors the current study found to be maladaptive and would be important to focus on are *behavioral disengagement* which involves giving up attempts to achieve goals and reducing efforts to deal with the stressor, *denial* which is not confronting the reality of the stress or refusing to believe it exists and *self-blame* which is where the client blames themselves for the source of their stress. Decreasing the use of these behaviors and increasing the use of the adaptive coping behaviors should be a focus in PTSD treatment. Behaviors which are on the *other* coping factor could be either maladaptive or adaptive. Therefore, if a client is demonstrating the use of these behaviors it is important to assess how they may be affecting PTSD symptoms. Clinical judgment should be utilized as to whether the coping strategy is helping or hindering the client and therefore whether it should be reinforced or extinguished. *Venting* would be focusing on distressful feelings and then letting one's feeling out and *self-distraction* refers to distracting one's self from thoughts about the stressor for example daydreaming. *Humor* is also a strategy which needs to be assessed and is using jokes to cope with the stress. These strategies might be a means of avoidance in certain cases and contribute to PTSD morbidity.

The results did not support the second hypothesis that participants who engage in active, adaptive coping behavior are more likely to endorse exposure therapy (PE or CPT) while participants who engage in avoidant, maladaptive coping behavior will endorse a non-exposure intervention (PCT). Our results indicate coping style does not significantly relate to treatment choice. I believe this result supports the current literature that although exposure techniques may be seen as distressful or to increase anxiety, people will still chose these techniques when they are seen as the most credible. In both samples participants chose PE the most, followed by CPT and then PCT. It could be that the descriptions of the therapies provided bias in that pros listed for PE and CPT are that these therapies are evidenced based and research supports their use. PCT was presented as having less evidence. This could be seen as a limitation to the study design however, in clinical practice, clinicians may actually say this to their client. Telling a client all treatments are equal would be inaccurate and unethical and doing so in research would not produce generalizable results. The results were not different between samples, which supports the idea that patients will be likely to choose evidence based interventions, despite increased avoidance behaviors seen in those with PTSD. This finding is important because exposure therapies should not be avoided due to notions that clients with PTSD symptoms, using avoiding coping, view it as too distressing. Further research should be conducted exploring other factors which contribute to a patient's endorsement of exposure based interventions.

The third hypothesis in this study was partially supported. The results showed a significant effect for PTSD diagnosis for Sample 1 on coping behavior such that having PTSD increased the utilization of *maladaptive*, and *other* coping techniques. Those who

met the criteria reported using maladaptive and other coping behaviors more frequently than those without. This result was not seen in Sample 2 as those with and without PTSD did not differ in terms of the use of coping behaviors. The results did show that those with and without PTSD had similar scores on the use of maladaptive and other coping strategies as those with PTSD in Sample 1. Those in sample 2 were a group seeking treatment for trauma and in theory would all qualify for a PTSD diagnosis, however only 59% did. The measures used to determine PTSD diagnosis are reported as valid and reliable however, the absence of clinical judgment may be a limitation (Foa et al., 1997). The results seen in sample 1 are supported in previous literature, that those with PTSD will be more likely to utilize avoidance coping strategies. Identifying the coping behaviors being used by those with PTSD may play an important role in therapy. If a patient is using avoidance coping behaviors which reinforce their PTSD symptoms, identifying those behaviors is important. Identification of an increased use of maladaptive behaviors in those with PTSD, further supports the importance of distinguishing which behaviors are maladaptive to then identify and extinguish those strategies.

The current study has a few limitations. The Brief-COPE is a measure of both positive and negative which allowed us to look at many different styles of coping. However the format of the questions may play a role in how participants answered. Carver suggests the questions of the brief-COPE can be written in different formats: retrospective situational format (I've been concentrating my efforts to do something about the situation I am in), a concurrent situational format (I'm doing things to try and take my mind off the situation) or dispositional format which is in the present tense (I do things to try to take my mind off the situation). For the current study, the retrospective

situational format was used. This has an impact on how a person conceptualizes the questions. Also, participants who have not experienced a traumatic event may have a hard time referencing an event where they have had to utilize these coping strategies.

Future research should examine all the other variables gathered in this study but were not reported on. Gender is one of these variables which could play a role in coping strategies utilized, as woman tend to use more emotional and avoidant strategies (Matud, 2004). Other variable related to treatment credibility and previous knowledge should also be looked at and combined with treatment preference. It also may be beneficial to include psychopharmacological as a treatment option. Those with avoidant maladaptive coping may be disinclined towards all forms of psychotherapy. The option was a forced choice between three psychotherapies which did not give the participant an option to say “none of these,” or “medication management.”

The current study supports the utilization of the Brief-COPE as a measure of coping strategies in those with PTSD. Further, we offer suggestions as to which strategies of coping are likely to be maladaptive and aid in PTSD morbidity, which tend to be adaptive and strategies which should be carefully looked at on an individual level to determine where they may fall on the former factors. Results also support that a person’s tendency towards maladaptive coping does not deter the endorsement of exposure based intervention although they may be viewed as distressing. Lastly, those with PTSD may use maladaptive coping strategies more so than those without PTSD.

Table 1
Demographics

	Sample 1	Sample 2
Age	M=21.94 SD= 6.31	M=40.01 SD=12.4271
Race	69.3% White 21.2% Black 3.6% Asian 5.2 % More than one	88.7% White 5.2% Black 5.2% More than one 1.0% American Indian
Gender	33% Male 67% Female	24% Male 76% Female
Criteria for PTSD	89.5% Not Met 10.5% Met Criteria	41.0% Not Met 59.0% Met Criteria

Table 2
Coping Scores Sample 1

	Criteria Met	Criteria Not Met
Adaptive Coping	M= 38.04 SD= 10.07	M= 36.37 SD= 10.41
Maladaptive Coping	M= 11.65 SD= 3.50	M= 8.89 SD= 3.34
Other Coping	M= 11.07 SD= 2.62	M= 8.80 SD= 3.748

Table 3

Coping Scores Sample 2

	Criteria Met	Criteria Not Met
Adaptive Coping	M= 30.58 SD= 8.66	M= 28.82 SD= 8.78
Maladaptive Coping	M= 12.64 SD= 4.17	M= 11.87 SD= 4.042
Other Coping	M= 18.92 SD= 5.43	M= 17.71 SD= 4.22

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APPENDIX

Participant ID _____

Date _____

Student Questionnaire

Six months ago you went on a trip to New York City. After a show you decide to walk back to your hotel. On the way back, you were held up by a man with a knife in a secluded area on the street. He demanded your money, watch, and personal belongings and threatened that if you would not comply immediately, he would kill you. You gave him all that he asked, but he was not satisfied. He then began to beat and stab you violently. The next thing you knew, you woke up in a hospital after enduring several major surgeries. Since the incident, you have been experiencing difficulty sleeping and intrusive flashbacks where you feel as though you are back in that situation. Any time that you are invited out at night you typically refuse because you are afraid it might happen again. Also, you feel that you can't talk to your friends about what happened because they won't understand. In addition, you have felt more on edge lately and are easily startled. Because your relationships and school work have suffered significantly, you decide to seek treatment at a counseling center for your symptoms. At the counseling center you are diagnosed with Post Traumatic Stress Disorder (PTSD). You now have a variety of options in terms of treatment. Referral will depend on which treatment most interests you.

You will be reading descriptions of three different treatments for trauma-related symptoms: Present-Centered Therapy (PCT), Prolonged Exposure Therapy (PE), and Cognitive Processing Therapy (CPT). Below, please read these descriptions and answer the questions that follow each description.

Present-Centered Therapy

Present-Centered Therapy (PCT) is an individual therapy that focuses on current life problems as related to the trauma you experienced. Procedures in this treatment include: (1) education about common reactions to trauma; (2) daily monitoring of your current stressors and problems; and (3) active problem-solving of day-to-day difficulties. In other words, you will be asked to discuss and review general daily difficulties and work with your therapist to develop potential solutions to these difficulties. You will not be asked to discuss the details of the trauma you experienced. Instead you will be helped to understand how your trauma history has affected you so you can recognize more clearly where your vulnerabilities lie and increase your ability to master current stressors and problems. In this program you will be assigned “homework” to help you monitor your daily problems and stressors in preparation for each session.

Advantages: This treatment avoids generating the potentially significant levels of anxiety and distress that can occur with treatments that include exposure to the traumatic memories. It is also practical and provides positive methods of coping.

Disadvantages: There is little scientific research to support that PCT is as effective as PE or CPT. Although PCT will likely result in some improvement, it may not be as effective as either PE or CPT for trauma-related symptoms. Additionally, some people may find it upsetting that they do not have an opportunity to discuss the trauma they experienced with their therapist in PCT.

Before reading this description, how familiar were you with PCT?

<i>Not at all</i>						<i>Extremely</i>
1	2	3	4	5	6	7

If you were familiar with PCT before reading this description, what was your impression of the treatment? If you responded 1 (Not at all) to previous question, please skip this item.

<i>Not at all</i>						<i>Extremely</i>
1	2	3	4	5	6	7

Credibility Scale: Present-Centered Therapy

1. How logical does this therapy seem to you?

Not at all *Extremely*
1 2 3 4 5 6 7

2. How scientific does this therapy seem to you?

Not at all *Extremely*
1 2 3 4 5 6 7

3. How complete does this therapy seem to you? In other words, do you think that this therapy covers all types of people that have symptoms following a traumatic event?

Not at all *Extremely*
1 2 3 4 5 6 7

4. To what extent would this therapy help an individual in other areas of life?

Not at all *Extremely*
1 2 3 4 5 6 7

5. How likely would you be to go into this therapy for your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

6. How effective do you think this therapy would be for most people with trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

7. If a close friend or relative had trauma-related symptoms, would you recommend this therapy to them?

Not at all *Extremely*
1 2 3 4 5 6 7

Personal Reactions to Rationale: Present-Centered Therapy

1. How helpful do you think this therapy would be for you and your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

2. To what extent do you think this therapy would help you understand the causes of your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

2 To what extent do you think that this therapy would help you learn effective ways to cope with the symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

3 How likely would you be to choose this type of therapy for your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

4 If you were to try this therapy, how effective would it be in treating your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

Prolonged Exposure Therapy

Prolonged Exposure (PE) is an individual therapy that has been shown to be effective in the treatment of trauma. Procedures in this treatment include: (1) education about common reactions to trauma; (2) breathing retraining (relaxation training); (3) prolonged (repeated) exposure to trauma memories; and (4) repeated in vivo (i.e., in real life) exposure to situations that you are avoiding due to trauma-related fear. In other words, you will be encouraged to confront the memory of your trauma through repeatedly telling the story to your therapist and to confront things in your life that you are avoiding because they make you afraid (e.g., driving a car, walking on the street at night). In this program, you will be assigned “homework” to encourage you to practice in life the things you learn in therapy.

Advantages: Of the available psychotherapies used for trauma survivors, both PE and CPT have undergone some of the most rigorous scientific evaluation and both are known to be very effective. The concepts, confronting the memory of the trauma and safe situations you’ve been avoiding because they make you feel afraid, are easy to understand.

Disadvantages: This treatment can be quite stressful because it involves facing painful memories, which can be difficult. Some people feel worse before they feel better and a few people find it too difficult. It involves thinking about the trauma for long periods and approaching places or situations which can be time consuming or inconvenient.

Before reading this description, how familiar were you with PE?

Not at all *Extremely*
1 2 3 4 5 6 7

If you were familiar with PE before reading this description, what was your impression of the treatment? If you responded 1 (Not at all) to previous question, please skip this item.

Negative *Positive*
1 2 3 4 5 6 7

Credibility Scale: Prolonged Exposure

8. How logical does this therapy seem to you?

Not at all *Extremely*
1 2 3 4 5 6 7

9. How scientific does this therapy seem to you?

Not at all *Extremely*
1 2 3 4 5 6 7

10. How complete does this therapy seem to you? In other words, do you think that this therapy covers all types of people that have symptoms following a traumatic event?

Not at all *Extremely*
1 2 3 4 5 6 7

11. To what extent would this therapy help an individual in other areas of life?

Not at all *Extremely*
1 2 3 4 5 6 7

12. How likely would you be to go into this therapy for your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

13. How effective do you think this therapy would be for most people with trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

14. If a close friend or relative had trauma-related symptoms, would you recommend this therapy to them?

Not at all *Extremely*
1 2 3 4 5 6 7

Personal Reactions to Rationale: Prolonged Exposure

5 How helpful do you think this therapy would be for you and your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

6 To what extent do you think this therapy would help you understand the causes of your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

7 To what extent do you think that this therapy would help you learn effective ways to cope with the symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

8 How likely would you be to choose this type of therapy for your trauma-related symptoms?

Not at all

Extremely

1 2 3 4 5 6 7

9 If you were to try this therapy, how effective would it be in treating your trauma-related symptoms?

Not at all

Extremely

1 2 3 4 5 6 7

Cognitive Processing Therapy

Cognitive Processing Therapy (CPT) is an individual therapy that has been shown to be effective in the treatment of trauma-related difficulties. Procedures in this treatment include: (1) education about common reactions to trauma; (2) writing about the personal meaning of the trauma; (3) writing a detailed account of the trauma; and (4) learning to identify, challenge, and change beliefs about the meaning of the trauma and the implications of the trauma for your life. In other words, you will be encouraged to identify strong negative beliefs relating to your beliefs about safety, trust, power/control, esteem, and intimacy related to yourself and the world, and then taught how to challenge and modify these beliefs. In this program you will be assigned “homework” to encourage you to practice in life the things you learn in therapy.

Advantages: Of the available psychotherapies used for trauma survivors, both PE and CPT have undergone some of the most rigorous scientific evaluation and both are known to be very effective. The skills learned in CPT can be easily applied to other problems you may have.

Disadvantages: This treatment can be quite stressful in itself because it involves facing up to painful memories and the meaning of those memories. Some people feel worse before they feel better and a few people find it too difficult. Thinking about thinking can be hard for some people. Strong negative beliefs can be difficult to change.

Before reading this description, how familiar were you with CPT?

Not at all *Extremely*
1 2 3 4 5 6 7

If you were familiar with CPT before reading this description, what was your impression of the treatment? If you responded 1 (Not at all) to previous question, please skip this item.

Negative *Positive*
1 2 3 4 5 6 7

Credibility Scale: Cognitive Processing Therapy

15. How logical does this therapy seem to you?

Not at all *Extremely*
1 2 3 4 5 6 7

16. How scientific does this therapy seem to you?

Not at all *Extremely*
1 2 3 4 5 6 7

17. How complete does this therapy seem to you? In other words, do you think that this therapy covers all types of people that have symptoms following a traumatic event?

Not at all *Extremely*
1 2 3 4 5 6 7

18. To what extent would this therapy help an individual in other areas of life?

Not at all *Extremely*
1 2 3 4 5 6 7

19. How likely would you be to go into this therapy for your trauma-related symptoms?

Not at all *Extremely*
1 2 3 4 5 6 7

20. How effective do you think this therapy would be for most people with trauma-related symptoms?

Not at all *Extremely*

1 2 3 4 5 6 7

21. If a close friend or relative had trauma-related symptoms, would you recommend this therapy to them?

Not at all *Extremely*

1 2 3 4 5 6 7

Personal Reactions to Rationale: Cognitive Processing Therapy

10 How helpful do you think this therapy would be for you and your trauma-related symptoms?

Not at all *Extremely*

1 2 3 4 5 6 7

11 To what extent do you think this therapy would help you understand the causes of your trauma-related symptoms?

Not at all *Extremely*

1 2 3 4 5 6 7

12 To what extent do you think that this therapy would help you learn effective ways to cope with the symptoms?

Not at all *Extremely*

1 2 3 4 5 6 7

13 How likely would you be to choose this type of therapy for your trauma-related symptoms?

Not at all

Extremely

1 2 3 4 5 6 7

14 If you were to try this therapy, how effective would it be in treating your trauma-related symptoms?

Not at all

Extremely

1 2 3 4 5 6 7

AFTER READING ALL TREATMENT DESCRIPTIONS ABOVE AND ANSWERING THE ABOVE QUESTIONS, PLEASE ANSWER THE FOLLOWING QUESTIONS:

1. If you had to choose between Prolonged Exposure, Cognitive Processing Therapy, or Present-Centered therapy to help you with trauma-related symptoms (e.g., nightmares, upsetting thoughts, fear) which would you choose? Please circle one.

Prolonged Exposure
Centered Therapy

Cognitive Processing Therapy

Present-

2. Please rate on the scale below how confident you feel that this would be your choice?

0. Not at all
1. Mildly
2. Mildly-Moderately
3. Moderately
4. Moderately-Strongly
5. Strongly
6. Extremely

3. What factors influenced your choice? Please list and RANK all the factors (1 *most important* to 5 *least important*) you considered in making the decision between these therapies.

1.

2.

3.

4.

5.

4. In addition to the information provided, is there any other information about the treatments that would have been helpful to you in making your decision? Please list below.

1.

2.

3.

4.

5.

5. In addition to the information provided, is there any other information about the three treatments described here that would have been helpful to you in making your decision? If yes, please tell us what specific information would have been helpful: