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Pepperdine University  
Graduate School of Education and Psychology

EXPLORING THE RELATIONSHIP BETWEEN PERCEIVED SOCIAL SUPPORT AND  
READINESS TO CHANGE IN THERAPY WITH TRAUMA SURVIVORS

A clinical dissertation presented in partial satisfaction  
of the requirements for the degree of  
Doctor of Psychology

by

Mario Souza

July, 2017

Susan Hall, JD., Ph.D. –Dissertation Chairperson

This clinical dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirement of the degree of

DOCTOR OF PSYCHOLOGY

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## ABSTRACT

The Transtheoretical Model of Change (TTM) and its Stages of Change component has become an influential model helping clinicians understand the process of change in various kinds of treatment. Progression through the stages of change is theorized to be determined by several factors, including social support. Perceived social support has also been related to positive outcomes with clients experiencing psychiatric issues. This study was the first to link these concepts together by investigating whether perceived social support, measured by the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988) was associated with presenting Stage of Change, measured by the University of Rhode Island Change Assessment Scale (URICA; McConaughy, DiClemente, Prochaska, & Velicer, 1983), in a sample of psychotherapy clients who endorsed experiencing a potentially traumatic event ( $N=77$ ) as compared with a sample that did not report experiencing a potentially traumatic event ( $N=47$ ). Mean perceived social support scores for both the history of trauma group and non-trauma group were both in the moderate range. Additionally, the majority of the participants in both groups fell primarily in the Contemplation and Action stages. Perceived social support was not found to be associated with presenting stage of change in either of the samples and there were no significant differences found between perceived social support scores and presenting stage of change between the samples. Limitations related to the operationalization of trauma and construct measurement may have affected null findings. Recommendations for future directions are discussed.

*Keywords:* social support, stages of change, trauma, transtheoretical model

## Introduction

According to Bonnano and Mancini (2012), most people experience at least one potentially traumatic event during their lives (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Norris, 1992). The most common types of potentially traumatic events (PTEs) include natural disasters (50.5%), physical or sexual assaults (53.1%), and death of family or close friend due to violence/accident/disaster (51.8%; Demaray & Kerres, 2003). Also considered a PTE, emotional abuse occurs within the context of relationships characterized as harmful or potentially harmful for the child or adult, and include undesirable interactions or forms of psychological ill treatment (Glaser & Prior, 1997). Of these common PTEs, this dissertation focused on personal experiences of sexual, physical and emotional abuse reported by adult client-participants at a community counseling center

Exposure to PTEs can result in four different trajectories including: (a) a chronic disruption in functioning, (b) a delayed onset of distress that escalates over time, (c) recovery, where there is an initial disturbance in normal functioning that decreases over time and pre-trauma functioning is recommenced, and (d) resilience in individuals who are able to maintain a relatively consistent state of functioning post-trauma (Bonnano, 2008). Distress due to experiencing a potentially could manifest itself as an increased chance of developing mood disorders (e.g., anxiety, depression (Bolton, O'Ryan, Udwin, Boyle & Yule, 2000) and Post-Traumatic Stress Disorder (Agorastos et al., 2014). Reasons for individual differences in post-traumatic trajectories include characteristics of the PTE, ways that people interpret or appraise a stressful event and past encounters with trauma, current life stress and, most relevant to the current study, social support resources (Bonanno, 2008; Brewin, Andrews & Valentine, 2000; Kaniasty & Norris, 2008; Lazarus & Folkman, 1984; Malhotra & Chebiyan, 2016).

Social support is also generally found to be a significant predictor of positive movement in the Stages of Change model (described below) with some populations such as smokers (De Vries, Mudde, Dijkstra, & Willemsen, 1998; Wagner, Burg, & Sirois, 2004), individuals seeking to increase healthy eating habits (e.g., Vallis et al., 2003; Sorensen, Stoddard & Macario, 1998), and individuals seeking to increase exercise behavior (e.g., Walcott-McQuigg & Prochaska, 2000; Courneya, Plotnikoff, Hotz & Birkett, 2001). However, our literature search found that social support and its potential impact on the progression through Stages of Change model has not been studied in individuals who have experienced traumatic events. This dissertation study, therefore, attempted to address the gap in the literature by exploring the relationship between Stage of Change and levels of perceived social support in survivors of trauma when presenting to individual therapy within a community clinic context. Because no literature exists that ties social support and stages of change together with trauma survivors, a brief review of literature on social support and trauma as well as the Transtheoretical Model is presented to set the stage for this dissertation study (see Appendix A for extended literature review).

### **Social Support and Trauma**

Social support research has focused on understanding the role and effects of social support among vulnerable populations such as survivors of childhood abuse, adult traumas, and other significant life stressors (e.g., incarceration; homelessness; Savage & Russell, 2005). Social support coping refers to the action of seeking social support as a recovery strategy following traumatic experiences (Prati & Pietrantonio, 2009). It has been observed that seeking social support in the coping process lends to the quality and quantity of available supports (Prati & Pietrantonio, 2009). Furthermore, seeking social support has been shown to enhance positive appraisals of traumatic events and to spark positive health outcomes following traumatic

experiences (Swickert & Hittner, 2009). Additionally, the use of social support in coping during times of stress provides individuals with chances for dynamic problem solving and processing of traumatic experiences (Prati & Pietrantoni, 2009).

The construct of social support is multifaceted and consists of various components (e.g., received, perceived, extended, seeking support coping). Whereas received social support refers to the actual support that a person obtains from another, perceived social support refers to the belief or expectation that support will be available during times of need, which stems from lived experiences with received social support (Joseph et al., 1994; Norris, Stevens, Pfefferbaum, Wyche & Pfefferbaum, 2007). For example, an individual who was not supported by his or her family during a crisis in the past will have low expectations to receive any support in the present. Experiences with positive and helpful support lead to assumptions that future support will be accessible, and just as importantly, helpful (Clapp & Beck, 2009; Norris & Kaniasty, 1996).

Perceived social support has been studied extensively and has been found to provide many benefits to survivors of traumatic events (Norris et al., 2003). When faced with stressful life events, people's ratings of high levels of perceived social support from a friend, spouse or relative was associated with a significant reduction in the presence of psychological distress (Maulik, Eaton, & Bradshaw, 2010). Specifically pertaining to this study, trauma survivors who believe that social support is available and that others are immediately willing to help experience less symptoms of post-traumatic stress than survivors who feel isolated and neglected (Norris et al., 2003). Perceived social support has also been found to be correlated with decreased PTSD symptoms in different trauma populations including burn victims and veterans (Widows, Jacobsen, & Fields, 2000). Perceived support has been thought to be more effective and more powerful than received social support because the thought that support is available is, in itself,

supportive (Norris & Kaniasty, 1996). In actuality, some received social support may be interpreted as unhelpful, unwanted or critical and thus would in reality be unsupportive (Norris & Kaniasty, 1996).

Given the positive outcomes experienced by those who have experienced traumatic events with perceived social support, perhaps this form of social support can also lead to increased motivation to change problematic behaviors. Since the effects of social support in trauma populations progressing through the Stages of Change has not been investigated (not found in the review of the literature for this study), the concepts of the Transtheoretical Model and the role of social support in other populations are briefly discussed next.

### **Stages of Change and Social Support**

Similar to how social support is integral in the recovery and reduction of symptoms from traumatic experiences, as previously discussed (Brewin et al., 2000; Maulik, Eaton & Bradshaw, 2010; Zimet, et al., 1988), social support is also an integral part of the Stages of Change model and a necessary aspect for successful behavioral change (Walcott-McQuigg & Prochaska, 2000; Wallace, Buckworth, Kirby, & Sherman, 2000). The Transtheoretical Model of Change (TTM) and its stages of change component has become one of the most influential models in helping clinicians understand the process of change. The TTM and its Stages of Change maintains that people (regardless of issue or presenting concern) progress through various motivational stages in an attempt to change their problem behaviors (Derisley & Reynolds, 2000). The transtheoretical model has proved useful in treatment planning (DiClemente, McConaughy, Norcross, & Prochaska, 1986) and for prescribing appropriate interventions for patients at particular times in therapy (Prochaska, DiClemente & Norcross, 1992).

Five core stages describe the temporal and motivational aspects of change in the transtheoretical model, as follows: Precontemplation, Contemplation, Preparation, Action, and Maintenance (DiClemente et al., 1986). In the Precontemplation stage, the client does not have a desire to change and is usually being coerced or feels coerced by an outside entity into therapy. Once a client enters the contemplation stage, she is aware of the distress her behavior is causing and begins to develop interest in whether the problem is solvable. The Preparation stage signifies a clear decision by the client to change the problem behavior and is actively preparing to embark on a healing process. In the Action stage, the client is actively working on changing the problem behavior and is usually seeking help from others in the process. Finally, clients in the Maintenance stage have already made progress in their behavior and seek to develop support strategies to cement any positive change.

While the Stages of Change help us to understand when shifts in attitudes and behaviors occur, a secondary dimension of the Transtheoretical Model, the Processes of Change (PoC), help us to understand how these changes occur. The PoC are covert and overt activities that individuals partake in when they attempt to modify problem behaviors (Prochaska et al., 1992). The 10 processes are divided into two groups, experiential and behavioral processes of change. Generally, the experiential processes of change are used within the first few stages of change and are comprised of emotional and cognitive reconstruction (Prochaska et al., 1992). The behavioral processes of change are more prevalent in the final three SoC as they are comprised of overt behavioral changes people use in an effort to modify problematic behaviors and maintain successful changes (Prochaska et al., 1992).

De Vet, Brug, Nooijer, Dijkstra, & De Vries (2005) found that Stages of Change experts agreed on various determinants for stage transition such as self-efficacy and perceived control;

however, some were very-stage specific and some were not. One determinant that they found was not stage specific but was a universal determinant for forward transition through all stages was social support. Consistent with the opinions of the De Vet et al. (2005) mental health professional experts, social support has been significantly related to advancing stages of change in several studies. Some studies focused on latter / more advanced stages of change; two are noted here and others are included in Appendix A. Citing how social support has long been associated with positive health behavior change, Wagner et al. (2004) found that individuals trying to quit smoking who were in a more advanced Stage of Change (e.g., precontemplation vs. action) reported higher levels of perceived social support as compared to individuals who were in a lower Stage of Change. Additionally, higher levels of social support were found when individuals were making behavioral changes (in later stages of change), which are more likely to be affected by external support, than emotional changes (Wagner et al., 2004).

Another study investigating the effects of social support on smoking cessation also found evidence of the positive influence of social support, but focused on earlier stages of change. De Vries et al. (1998) found that having trust in one's support system and experiencing the acceptance of one's support increased an individual's ability to change in therapy. Specifically, in a study on smoking cessation in the general public, social support was found to have a significant relationship with individuals' capacity to progress from Precontemplation to Contemplation (De Vries et al., 1998). With the understanding that social support is crucial in motivating people to change problematic behaviors, and given that social support has been found to positively affect the trajectories individuals take after experiencing potentially traumatic events, the next step in the investigator's literature review process was to explore whether the

Stages of Change model had been utilized to assist individuals in coping or changing problematic behaviors after experiencing a traumatic event.

### **Stages of Change and Trauma**

Concerning the relationship between trauma and Stages of Change, the literature at the time of review was limited and did not show significant investigation into the use of the Stages of Change model specifically with a population of individuals whose presenting problem was experiencing a traumatic event. However, the two studies located did provide initial information on the relationship between trauma and Stages of Change.

First, Rooney et al. (2005) found that combat veterans felt the pros of entering therapy, but not the cons, were associated with engagement in change behavior (i.e., both cognitive/experiential and behavioral POC usage). Thus, the veterans were more motivated to change by the possible benefits of therapy than by the cons of not entering therapy. Additionally, they discovered that the majority of their sample fell in the Contemplation stage during the preparation program for the study treatment protocol (57.7%) and at the onset of -treatment (64%), while the remainder stages were minimally represented during the preparation program and at the onset of treatment (Precontemplation [2%; 2%], Preparation [8%; 9%], Action [15%; 2%], Maintenance [8%; 7% ]). Lastly, the results indicated that while there may have been some movement throughout the treatment protocol (preparation program, onset of treatment, end of treatment, three-month follow-up) regarding stage transitions specific to a few individual study participants, overall the changes in the Readiness to Change scores of participants (group stage transitions over time) was not statistically significant. One potential reason for the lack of statistically significant results could be due to the significant participant drop-out throughout their study, especially at the end of treatment and at the three-month follow-up. Notwithstanding



these and other limitations of their study (e.g., missing data at several data points due to misplaced questionnaires; participants' refusal to complete measures after agreeing to participate in the study; participant absence on follow-up), the investigators expressed concern that the lack of change over time could indicate that the complex nature of PTSD symptomatology and the manifestation of many different distressing symptoms could be effectively encompassed by the focused nature of the Transtheoretical Model.

Second, Koraleski and Larson (1997) examined a sample of survivors of sexual abuse and measured their stage of change after they had been in therapy for at least one month specifically to treat issues related to childhood sexual abuse. Similar to the Rooney et al. (2005) study, most participants were in the Contemplation stage (53%), followed by the Action stage (36%) and the Preparation stage (9.8%). Results indicated that survivors of childhood abuse in the action stage reported significantly more use of behavioral processes of change when compared to participants in the contemplation stage. These findings support the transtheoretical model and align with prior research with psychotherapy clients (Bellis, 1994). However, Koraleski and Larson (1997) also found that individuals in the contemplation stage did not significantly use more experiential processes of change in the contemplation stage than in the action stage. As noted in the literature review (see Appendix A), transtheoretical theory predicts that, in general, experiential processes of change are used in the earlier stages of the model (precontemplation, contemplation, preparation), while behavioral processes of change are used more often in the action stage (Prochaska et al., 1992). Thus, this study demonstrates the predictive capacity of the Stages of Change model (which processes are used in specific stages) is somewhat applicable to this trauma population by supporting transtheoretical theory, but also

demonstrates that a trauma population may use the processes of change in a different manner than other previously studied populations.

### **Purpose of the Study, Research Questions and Hypotheses for Investigation**

In sum, it is well established that individuals who survive traumatic experiences experience a range of trajectories, many of which include negative sequelae such as depressed mood, anxiety, and isolative behavior, which, at times, may lead to medical and psychological treatment resistance. The amount of social support perceived by survivors of trauma may influence their motivation to seek treatment and change maladaptive thoughts, behaviors and emotions. In order to gain a clearer understanding of the relationship between Stages of Change and perceived social support within individuals who reported a history of experiencing potentially traumatic events and a sample of individuals who did not report a history of experiencing potentially traumatic events, the purpose of the study was to quantitatively examine the perceived levels of social support and Stage of Change reported by these individuals when they initially presented to therapy.

The main hypothesis of this study was that survivors of a potentially traumatic event who reported higher levels of perceived social support at the intake session of individual therapy would present to treatment with an increased willingness to change (measured as a more advanced stage of change) than trauma survivors who reported lower levels of perceived social support. The investigators also hypothesized the same relationship in a group of individuals who did not report being survivors of trauma, as this relationship has been observed in the literature.

## Method

### Participants

The participants included 124 individual therapy clients from two community counseling clinics in Southern California associated with a private graduate school in Southern California. Inclusion criteria for the study included that client-participants be English speaking adults (18 and over) who presented for individual therapy and provided written consent for the use of all written materials in their clinic files, including the Client Information Adult Form, Telephone Intake Summary, Intake Evaluation Summary Form and the Treatment Summary Form (Refer to Appendices C, D & E). In addition, inclusion criteria for the study required completion of the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988) and the University of Rhode Island Change Assessment Scale (URICA; McConaughy, DiClemente, Prochaska, & Velicer, 1989) at the intake session to therapy; these occurred the first or second time they presented at the clinics. Those that were excluded from the study were individuals who sought child/adolescent therapy, couples therapy and family therapy in any of the three community clinics. Additionally, files where the client and the therapist did not both consent to use of written materials were also excluded from the study.

The participants sample was split into two groups: the history of trauma sample and non-trauma sample. The history of trauma sample consisted of 77 participants and included 24 males (31.2%) and 53 females (68.8%). Participants in the history of trauma sample identified with the following ethnic groups: 2 Middle-Eastern (2.6%), 4 Asian (5.2%), 7 African American (9.1%), 43 Caucasian (55.8%), 13 Latino/Latina (16.9%) and 8 as other (10.4%) (see Table 1). Participant age range in the history of trauma sample spanned 20 to 60 years of age ( $M=35.48$ ,  $SD=11.38$ ). This sample consisted of clients who self-reported a history of specific types of potentially traumatic events (PTEs), namely physical, emotional or sexual abuse or assault across

the lifetime. The researcher determined the presence of self-reported PTEs by participant identification on the client demographic adult form or the telephone intake summary. If no PTEs were reported on those forms, the researcher then evaluated the intake evaluation summary and the treatment summary form for treating therapist report of a PTE. All research files that met the above criteria for a PTE within the participant's lifetime (as well as the required MSPSS and URICA measures at intake) were selected for the study (Appendix H for a detailed description of the sample selection process).

The non-trauma sample group, comprised of participant files that contained the completed study measures at intake in the same community clinic, but were not identified to endorse a PTE, consisted of 47 participants which included 17 males (36.2%) and 30 females (63.8%). Participants in the non-trauma sample identified with the following ethnic groups: 11 Middle Eastern (23.4%), 1 Asian (2.1%), 1 (African American, 2.1%), 23 Caucasian (48.9%), 6 Latino/Latina (12.8%) and 5 as other (10.6%). Participant age range in the non-trauma sample spanned 20 to 59 years of age ( $M=32.06$ ,  $SD=9.39$ ; see Table 1).

## **Measures**

The first of the measures used in this study was the University of Rhode Island Change Assessment Scale (URICA), a self-assessment questionnaire developed by McConaughy et al. (1983) to assess a person's readiness to change as he or she progresses through the Stages of Change. The URICA consists of four subscales (i.e., precontemplation, contemplation, action and maintenance), and 32 questions in which each item is answered using a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." Each response is assigned to one of the subscales, which, in turn, is used to calculate a score which indicates the level of readiness to change. To determine the participant's Stage of Change a readiness score was calculated. The

Readiness score was derived by adding the URICA's average Contemplation, Action, and Maintenance raw scores and subtracting its average Precontemplation raw score from the total (Pantalon & Swanson, 2003; Velazquez, Carbonari, & DiClemente, 1999).

The URICA was normed on 155 adult outpatients coming to a community facility, private therapist, military counseling center or university campus counseling center for treatment; 90% of the total 155 subjects came from community facilities (McConnaughy et al., 1983). The URICA was found to have high reliability for each of the four scales: Precontemplation, .88, Contemplation, .88; Action, .89; and Maintenance, .88. Furthermore, analysis showed a clearly defined differentiation between each of the scales. Each item only had high loadings on only one stage of change. Another study by DiClemente and Hughes (1990) was conducted to evaluate the measure with a group of adults seeking outpatient alcoholism treatment. Their analysis found that the URICA consistently produced five distinct and theoretically consistent profiles for each of the stages of change (DiClemente & Hughes, 1990). Thus, the URICA is an appropriate measure to use with the study sample comprised of individuals seeking outpatient treatment in a community counseling clinic.

The second measure used in the study was the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988). The MSPSS is designed to be a quickly and easily administered self-report measure of subjectively assessed, perceived social support. Because it was designed to measure universal beliefs about social support, its designer noted that it should be able to be used with most populations (Zimet et al., 1988). The MSPSS consists of 12-items comprised of three subscales to address three types of support: friends, family and significant others. Response choices for each item range from 1 (very strongly agree) to 7 (very strongly disagree) and employ both positive and negative wording in order to minimize acquiescent

responding. Positively worded items were designed such that a high score indicates a high degree of perceived social support. To find the total score, items are summed and then divided by 12. To find the subscale scores, the 4 items in each are summed and then divided by 4. Therefore, total and subscale scores range from 1 to 7, with a higher score indicating greater perceived social support.

The original MSPSS was normed on undergraduates enrolled in a psychology course. Scale total internal reliability was found to be .88, indicating strong reliability within the whole scale (Zimet et al., 1988). Factor analysis showed that items had high loading on factors for which they were intended to measure (Zimet et al., 1988). Normative data is also available on this measure for the following groups: pregnant American women (Zimet, Powell, Farley, Werkman, & Berkoff, 1990), European adolescents (Zimet, et. al, 1990), American Pediatric Residents (Zimet, et. al, 1990), Pakistani and Nepalese migrants in Hong Kong (Tonsing, Zimet, & Tse, 2012), patients with Schizophrenia (from Singapore; Vaingankar, Abdin, & Chong, 2012) and South African youth exposed to trauma and violence (Bruwer, Emsley, Kidd, Lochner, & Seedat, 2008).

Particularly relevant for the dissertation at hand, Cecil, Stanley, Carrion and Swan (1995) conducted a study on 144 outpatients who were attending a research clinic at a community outpatient facility, relatively similar to the community clinics utilized in the dissertation. They found that the reliability scores (Cronbach's alpha) ranged from .92 to .95 for the Family subscale, .89 to .95 for the friends subscale, .85 to .93 for the significant other subscale and .91 to .94 for the MSPSS total score. These values demonstrate very high internal consistency for the MSPSS with scores that were actually higher for this population than for the

original normative sample. Thus, the MSPSS is an appropriate measure to be used with the dissertation sample.

Several other documents were utilized in the study to collect information for participant selection and identification. As noted above, the selection process involved the researcher looking for an identification of the specific PTEs on the client demographic adult form; specifically, if clients endorsed “yes, this happened” to “self” on the following items (participants who indicated they were “unsure” were not included in the study): “emotional abuse”, “physical abuse,” “sexual abuse” and “rape/sexual assault.” If a history of physical, sexual or emotional abuse or assault was not explicitly indicated on the client demographic adult form, the researchers then examined the Telephone Intake Summary, Intake Evaluation Summary Form and the Treatment Summary Form for participant or therapist report of a reported a history of specific types of PTEs, namely physical, and physical, emotional or sexual abuse or assault across the lifespan. The client demographic adult form was utilized to collect participant age, ethnicity and gender. Refer to Appendix H for further details about this selection process.

### **Procedure and Analysis**

All methods of this experimental, between-subjects study were approved by the Institutional Review Board of Pepperdine University’s Graduate School of Education and Psychology. After receiving full IRB approval, the researcher created an electronic database that included study participants. The participant data was obtained from a larger research project that collected large amounts of archival, de-identified, clinical research data from a private graduate school’s community counseling clinics in Southern California. Clients and therapists both consented to release certain contents of client files for research purposes, including client

demographic information, recorded therapy sessions, intake reports, termination reports, and questionnaires. The therapists were doctoral and master's students who conducted therapy under licensed mental health professionals. The clients were members of the community seeking therapy for various presenting problems.

As noted above, participants for the history of trauma group were selected from the large master database based on their endorsement of experiencing a potentially traumatic event, completion of the URICA at intake and completion of the MSPSS at intake (sessions 0-1). For the non-trauma group, participants were selected based on an absence of endorsed traumatic history, completion of the URICA at intake and completion of the MSPSS at intake. Please refer to Appendix H for further details.

The independent variable measured in this study was perceived social support, which was represented by a total perceived social support score obtained from the MSPSS. Higher MSPSS scores indicate higher levels of perceived social support (described in the materials section). The dependent variable measured in this study was presenting stage of change, which was measured by the Readiness to Change score obtained from the URICA. Higher URICA scores indicated an increased willingness to change and placement in a more advanced Stage of Change (described in the materials section).

The data analyses was conducted in three steps: demographic analysis, descriptive analyses and main analyses. The demographic analyses demonstrated the age, gender and ethnicity of each group, along with providing information on the presence of multicollinearity. The descriptive analysis provided insight into the descriptive research questions: the most frequently endorsed Stage of Change in both groups and the average rating of perceived social support in both groups. The main analyses tested the two hypotheses involving the main study



variables of Stage of Change and perceived social support. First, to test the hypothesis that there is a relationship between perceived social support and presenting Stage of Change in each group, a Pearson Correlation was used. Second, to test the hypothesis that higher levels of perceived social support would predict present Stage of Change in each group, a Regression model was used.

## Results

### Demographic Analysis

Preliminary analyses compared demographic variables (age and gender) with the main variables of interest to determine if there were any correlations that would violate assumptions of the regression model. Multicollinearity, a statistical occurrence when two or more predictor variables are highly correlated, can lead to issues in a regression model because one predictor variable can be linearly predicted from the others with a significant degree of accuracy (Haden, Scarpa, Jones, & Ollendick, 2007). Multicollinearity was not found, as tolerance was greater than .10 for all variables and the inflation factor was less than 2 for all variables. Thus, gender and age did not affect the subsequent analyses, and the other predictor variables (perceived social support and experiencing a potentially traumatic event) were not strongly or significantly linearly correlated with each other.

### Descriptive Analysis

In order to identify the most commonly endorsed Stage of Change and the average levels of perceived social support, descriptive analysis were conducted on both samples. The average perceived social support score for the history of trauma group was 4.95 ( $SD=1.24$ ), and for the non-trauma group was 5 ( $SD=1.32$ ) (see Table 2). Perceived Social Support score was normally distributed, with skewness of .465 ( $SE=.216$ ) and kurtosis of  $-.524$  ( $SE=.428$ ). This places the average of both groups in the range of moderate levels of perceived social support (Zimet et al., 1988).

In order to determine if there was a significant difference amongst the means of perceived social support between both groups, an independent samples t-test was performed. The independent-samples t-test indicated that the scores were not significantly different between the

history of trauma sample ( $M=4.9$ ,  $SD=1.24$ ) and the non-trauma sample ( $M=5.04$ ,  $SD= 1.32$ );  $t(122) = .287$ ,  $p=.774$ . These results suggest that individuals who reported experiencing potentially traumatic events did not endorse significantly different levels of perceived social support than individuals who did not report experiencing potentially traumatic events.

The average Readiness to Change score in the history of trauma group was 10.94 ( $SD=2.18$ ) and for the non-trauma group was 11.15 ( $SD=1.57$ ). Readiness to Change score was normally distributed, with skewness of  $-.048$  ( $SE =.216$ ) and kurtosis of  $-.012$  ( $SE =.428$ ). This places the average of both groups within the Contemplation stage of the Stages of Change model. The two most commonly endorsed Stages of Change in the history of trauma sample were Contemplation (44.2% of sample) and Action (39% of sample). The two most commonly endorsed Stages of Change in the non-trauma sample were similar to that of the history of trauma sample, with Action (55.3% of sample) and Contemplation (42.5% of sample) being most widely endorsed (see Table 2 for full distribution of SOC scores).

In order to determine if there was a significant difference in the Readiness to Change score between both samples, an independent-samples t-test was performed. The test indicated that there was not a significant difference in the scores for history of trauma sample ( $M=10.94$ ,  $SD=2.18$ ) and the non-trauma sample ( $M=11.15$ ,  $SD=1.57$ );  $t(122) = -.556$ ,  $p=.580$  (see Table 3). These results suggest that individuals who reported experiencing potentially traumatic events did not present as more willing to change problematic behaviors than individuals who did not report experiencing potential traumatic events.

### **Relationship Between Social Support and Stage of Change**

To test the hypothesis that higher levels of perceived social support would predict higher Stage of Change scores, a linear regression was conducted to predict Readiness to Change scores

from Perceived Social Support scores in both samples. Results from this analysis indicated Perceived Social Support scores did not predict Stage of Change scores and experiencing a potentially traumatic event did not predict Stage of Change scores,  $F(4, 119) = .706, p > .05, R^2 = .023$  (see Table 5). Additionally, a second regression model was analyzed using an interaction term of Perceived Social Support and experiencing a traumatic event which indicated that experiencing a potentially traumatic event did not influence the relationship between perceived social support and Stage of Change scores,  $F(5, 118) = .562, p > .05, R^2 = .023$  (see Table 5).

Additionally, Pearson Correlations were conducted to explore the specific relationships between the variables of interest. Results of these correlations indicated there were no significant relationships amongst Stage of Change scores, Perceived Social Support scores, and the reported experience of a potentially traumatic event (see Table 4). Thus, these results did not support the main hypothesis that perceived social support would have a relationship with presenting Stage of Change in the current samples. Furthermore, experiencing a traumatic event did not predict a difference in either State of Change or Perceived Social Support.

## Discussion

Given the dearth of literature on the effects of social support on Stages of Change with trauma populations, the investigators sought to explore whether perceived social support had a relationship with or effect on presenting Stage of Change in survivors of trauma presenting to outpatient individual therapy in community counseling clinics. Being that this is the first study of its kind to do so, the results of this study and implications for future research are a valuable addition to the current literature.

The main hypothesis of this study was that survivors of a potentially traumatic event who reported higher levels of perceived social support at the intake session of individual therapy would present to treatment with an increased willingness to change (measured as a more advanced stage of change) than trauma survivors who reported lower levels of perceived social support. The second hypothesis predicted that similar findings would be observed in the non-trauma sample, a finding that has been historically supported in the literature. Regarding these two main hypotheses, statistical analysis indicated that perceived social support scores did not predict nor have a relationship with presenting Stage of Change in the history of trauma sample or in the non-trauma sample. These findings are not consistent with previous findings in the literature on the importance of social support as a crucial factor in progressing through the Stages of Change in non-trauma samples (i.e., Vallis et al., 2003; Wagner et al., 2004; Walcott-McQuigg & Prochaska, 2000). Furthermore, the mental health professionals surveyed by De Vet et al. (2005) believed that social support was a non-stage specific, universal determinant for forward transition through all stages. Regarding trauma populations, it is difficult to compare this study's results with others because no previous studies investigated this relationship specifically in a trauma population. The circumstances within the study that may have led to these null

findings within both groups may be due to construct measurement issues, discussed later in the limitations section.

### **Stages of Change**

Given that no previous studies were found in the literature juxtaposing Stage of Change initial presentation or progression over time between trauma and non-trauma populations, a discussion of the exploratory comparison of initial Readiness to Change scores in the present study was also warranted. In comparing the means of both samples, analysis indicated that there was not a statistically significant difference in the mean Readiness to Change scores. Considering both samples were comprised of individuals presenting to initial therapy sessions, it would be expected and consistent with the Transtheoretical model that most individuals would be in the Contemplation stage (Prochaska et al., 1992), a stage that is characterized by an awareness of distressing life situations and an interest in determining whether the problem(s) are resolvable when presenting to therapy (McConaughy et al., 1989). However, the overall sample was split evenly in half with participants endorsing being in the Precontemplation or Contemplation stages (50% of total sample) and being in the Action or Maintenance Stages (50% of total), and individuals in the non-trauma sample more frequently endorsed being in the Action stage (55.3%) than individuals in the history of trauma sample (39%). Studies in the literature examining individuals presenting to therapy for a variety of issues also have found a pattern of individuals loading in either the Contemplation or Action stages. For example, in a study examining outpatient therapy clients with anxiety disorders, Boswell, Sauer-Zavala, Gallagher, Delgado and Barlow (2012) found that their population was either in Precontemplation or Contemplation (89%) or in the Action Stage (11%) to present in Contemplation or in Action. In another study examining primarily dually diagnosed individuals in a drug treatment program,

Pantaloni, Nich, Frankforter and Carroll (2002) found that Precontemplation and Maintenance scores were quite low and additionally noted that this should be expected given treatment seeking populations are either motivated by others to enter (congruent with Contemplation stage) or already motivated and taking steps to make a change (Congruent with Action Stage)

Moderating variables may have led to these presenting Stages of Change scores. One hypothesis that could explain why such a large portion of the sample presented in more advanced Stages of Change than expected is that they may have had a previous treatment history, a variable not measured by the investigators of this dissertation. This hypothesis would be supported by the Transtheoretical Model, as individuals who are in the more advanced stages (Action and Maintenance) will theoretically already have raised their consciousness on their issues and reevaluated their stance on their issues: two experiential processes of change that occur early on in treatment (Norcross, Krebs, Prochaska 2011).

When considering the pattern of Stages of Change scores for the trauma sample in the present study, results are comparable to the two located studies on Stages of Change with trauma survivors. Koraleski and Larson (2007) found similar distributions Stage of Change in their sample of survivors of childhood sexual abuse, where there was a heavy loading on the Contemplation and Action stages (direct score comparisons cannot be made since they used another measure/scoring system). Of note, their sample consisted of individuals who had been in therapy for at least a month, which could explain the relatively high level of individuals in the Action stage. When comparing to the findings of Rooney et al. (2005), the current study's findings were fairly alike in the heavy distribution of participants in the Contemplation stage; however, the participants in Rooney et al. (2005) endorse being in the Action stages at lower

rates than in the current study: Rooney et al. (2005) Action stage 15% vs. Current Study Action stage: 39% history of trauma, 55% non-trauma.

Additionally, Koraleski and Larson (2007) found that trauma survivors used the experiential processes of change (not measured in our study) across all stages, rather than exclusively in the earlier stages. Given that the process of change related to social support actually loads onto the experiential processes of change assessed with the Processes of Change Questionnaire-Short Form (Bellis, 1994), this study would also suggest the possibility that trauma survivors utilized helping relationships relatively uniformly across all stages in the model. This finding would support some of the results of the current dissertation where perceived social support was not found to be a predictor of presenting Stage of Change.

At the same time, however, the results of the current study could potentially lend credence to hypotheses posited by Rooney et al. (2005). In one of only two studies that examined the Stages of Change model in regards to trauma survivors (a combat-veteran sample exhibiting symptoms of PTSD), they theorized that the Stage of Change model may not be able to translate to complex trauma symptomatology. Considering that the Stage of Change model was modeled on smokers, which takes into consideration only one specific problem behavior, the model may not be as adept in predicting change behavior in a more complex symptomatic pattern that includes several behavioral disturbances requiring modification. Similarly, the history of trauma population sample in this study did not universally identify the same problem to change on the URICA. Not only was trauma not specifically identified by all the participants, the problems identified for change by participants in this study could have been self-produced, suggested by the friends, family or colleagues or suggested by the treating therapist. Thus, given the various desired behaviors to change, the lack of findings in the present study could lend support to the



initial suspicions of Rooney et al. (2005). At the same time, however, without measuring clients' stages of change over time in the present study, such conjectures are premature.

### **Social Support**

In comparing the means of both samples, exploratory analysis indicated that there was not a statistically significant difference in the mean Perceived Social Support score between the non-trauma and trauma groups. The normative outpatient psychiatric sample established by Cecil et al. (1995) found MSPSS total score means of 5, exactly the same as the non-trauma group of the dissertation at hand and .2 greater than the mean of the history of trauma sample. Cecil et al. (1995) found a similar relationship, where their outpatient psychiatric sample had overall lower scores than the original MSPSS sample of college students. However, their findings were statistically significant in their differences while the differences in the means of this dissertation were not statistically significant.

Contrary to the study findings, current literature would suggest that individuals who have experienced a traumatic event would likely report lower level of perceived social support (Hall, Bonanno, Bolton & Bass, 2014). Hall et al. (2014) found that an increase in anxiety and PTSD symptoms led survivors of torture to come in contact with others less frequently. They found that the worsening or improvement of symptoms were associated with changes in frequency of contact, suggesting that social behaviors of their sample or their community members were affected by psychological distress. This fits previous evidence that posits anxiety is strongly associated with behavioral avoidance (Hendriks, Spijker, Licht, Beekman, & Penninx, 2013) and that social behaviors increase as symptoms are reduced in severity (Gorst-Unsworth & Goldenberg, 1998).

Such findings are consistent with the social support deterioration model, which states that stressful events may lead to reductions in social support over time, via changes in individuals' expectations of social support, and decline of interpersonal relationships (Wheaton, 1985). Trauma experienced across the spectrum of the lifetime has been related to behavioral and social problems (Malhorta & Chebiban, 2016), decrease in self-esteem and deficits in interpersonal skills (Cloitre, Miranda, Stoval-McClough & Han, 2005). The social support deterioration model has been supported by some studies that indicate that more severe PTSD symptoms were associated with lower perceived social support among patients in hospital trauma units and Iraq veterans with PTSD (King, Taft, King, Hammond, & Stone, 2006; Nickerson et al., 2017). Similar results regarding the deterioration of social support were observed in incarcerated individuals who reported a history of emotional, physical or sexual trauma. Kao et al. (2014) found that experience of any of the aforementioned potentially traumatic events were associated with significantly lower perceived social support scores. Furthermore, a meta-analysis of individuals in the community found that those who had reported a sexual assault history were associated with relatively low levels of social support, were less likely to be married, reported less frequent contacts with friends and relatives, and reported receiving less emotional support from friends, relatives and spouse (Golding, Wilsnack & Cooper, 2002).

The current study may not have found results consistent with the deterioration model given that the severity of symptoms or presence of diagnoses (e.g., PTSD) associated with a potentially traumatic event were never measured, nor were previous trauma exposure (no timeline was established), trauma characteristics (e.g., repeated or single event) or treatment associated with the potentially traumatic event ; thus making it unclear whether there was a distinct difference in symptom expression between the history of trauma sample and the non-

trauma sample. Furthermore, since the individuals in the history of trauma were not asked to indicate whether their potentially traumatic events were an individual occurrence or recurring in nature, the findings cited in the aforementioned literature may not be generalizable to individuals who experienced different frequency or types of traumatic events.

### **Limitations**

The current study had several limitations that likely contributed to the observed results. First, the trauma group designation may have been too general and may not have effectively captured some of the nuances that arise between different potentially traumatic events. The potentially traumatic event designation was gathered through a self-reported indication on an intake form as something that happened or didn't happen to the client. Because clients did not provide elaboration about their reported event(s), this trauma designation may have led to significant variance in aspects of the trauma experience, including the severity of the reported trauma experience, the frequency of experienced potentially traumatic events, and types of potentially traumatic events. Amongst individual types of trauma experiences, researchers have found that different experiences within these domains can lead to different outcomes. For example, Modestin, Furrer, and Malti (2005) found that individual traumatic experiences were associated with different pathologies, in that sexual abuse predicted borderline pathology, child sexual abuse somatization, dysfunctional family to depression, family with worse overall mental health. Additionally, previous investigators have found that individuals were more resilient to the development of negative symptoms, and consequently possibly PTSD, related to experiencing trauma when they had experienced fewer past traumatic events (Bonanno, Galea, Bucciarelli, & Vlahov, 2007).

Furthermore, the study did not access information related to the participants' experience of any trauma-related symptomatology, which as previously discussed, could vary greatly depending on what trajectory the individual followed after experiencing the potentially traumatic event. As Bonanno (2008) described, individuals who experience traumatic events do not necessarily need to experience a chronic disruption in functioning; in fact, they may in actuality maintain a relatively consistent state of normal functioning post trauma. Thus, it is possible that the variable meant to have determined the difference between both groups (the experience of a traumatic event) may have in actuality not had the intended effect. Consequently, there is a chance that the history of trauma sample may not have been as different as hypothesized because there was no measurement of the actual experiencing of trauma symptomology. This issue may have contributed to the lack of statistically significant differences between the history of trauma sample and the non-trauma sample regarding the variables of perceived social support and presenting Stage of Change.

Additionally, the history of trauma and non-trauma groups were not separated with consideration to the reasons that led them to present to therapy initially. Different presenting issues or differing major diagnosis regardless of experience of trauma may have affected reports of perceived social support. In a study investigating perceived social support in cancer patients, it was found that psychiatric diagnosis was related to lower levels of perceived social support (Costa-Requena, Ballester Arnal, & Gil, 2013). Additionally, levels of psychological distress have also been found to be related to lower levels of perceived social support (Devine, Parker, Fouljadi & Cohen, 2003). Thus, given the absence of diagnostic data analyzed in the current dissertation, perceived social support may have been affected by other psychological variables other than the hypothesized variable of trauma.

Another potential limitation of this study was that it did not analyze the three subscale scores of the MSPSS. Analysis of the three subscales (friends, friend and significant others) may have illuminated some differences relationship of these three different types of perceived social support and the Stages of Change. However, other studies utilizing the MSPSS with populations that have experienced potentially traumatic events have also focused their statistical analysis on the overall perceived support score rather than on the subscales (Fjeldheim et al., 2014; Denis, Parant, & Callahan, 2011; Rabinovitch, Cassidy, Schmitz, Jooper, & Malla, 2013) when the construct they were investigating was a measure of perceived social support not specific to a single source. Such literature supports the current study's focus on overall levels of perceived social support.

In regards to Stage of Change and diagnosis, some findings in the literature suggest that psychiatric diagnosis may not be significantly related to presenting Stage of Change or progression through the stages. In investigating the desire of patients of an inpatient psychiatry unit to cease smoking, Shmueli, Fletcher, Hall, Hall, and Prochaska (2008) investigated the relationship between psychiatric diagnosis and an individual's desire to change smoking behavior in a psychiatric inpatient sample. Within their sample that demonstrated a broad range of psychiatric disorders that included major mood disorders, anxiety disorders, PTSD and psychotic spectrum disorders, they found that psychiatric diagnosis and patient's desire to quit smoking and expectancy of success, as measured by the Stages of Change Scale (DiClemente et al., 1991), were not significantly related.

A second area of limitations concerns characteristics of the sample. The relatively small sample size may have contributed to the lack of significant findings. With regard to the MSPSS, Zimet et al. (1988) when first developing the measured used a normative sample of 275

undergraduate students, with other relevant studies using sample sizes ranging from 144 outpatients (Cecil et al., 1995) to 705 consisting of university undergraduates and outpatients (Clara, Cox, Enns, Murray, & Torgrudc, 2003). With that said, however, the literature on perceived social support and trauma, smaller sample sizes have been published (e.g.,  $n = 39$  Asberg & Renk (2013) [women inmates who experienced childhood abuse];  $N=55$  Zimet et al., (1990) [second-year pediatric residents]) than the sample size used in the present study.

To address issues with sample size in research on the Stages of Change previously mentioned, Courneya et al. (2001) suggested that a sample size of 1000-1500 would be needed to examine all subtle transitions suggested in the Stages of Change model, along with a more in-depth understanding on how the processes of change moderate these transitions amongst different populations. However, a sample size of 1000-1500 participants may not be necessary as several studies utilizing the URICA have had much smaller sample similar to that of the current dissertation. For example, there were 120 participants in a study utilizing the URICA with dual diagnosis inpatient (Pantalon & Swanson, 2003), 132 participants in a study utilizing the URICA with dual diagnosis outpatient participants (Velasquez et al., 1999) and even the original sample used to norm measure, consisted 155 outpatients attending outpatient community facilities (McConnaughy, Prochaska & Velicer, 1983). Given that our study was not focused on stage transitions but rather on one time point at the onset of treatment, a larger sample size did not appear to be necessary. However, it may have provided a broader range of presenting Stages of Change, or led to the earlier stages being more prominent if Transtheoretical theory was to be supported.

Also pertinent to measurement of the Stages of Change, the Stages of Change measure completed by clients in the present study did not require them to specify a problematic behavior

they wanted to change. Problematic behavior clients wanted to change could have included sequelae of potentially traumatic events, but may have also included substance abuse, interpersonal issues and other commonly seen presenting problems in an outpatient clinic. Swanson and Pantolon (2003), who utilized the URICA to measure motivation in dual diagnosed patients, suggested that future studies could have patients complete different URICAs for each individual issue they are experiencing to control for variability in scores. This recommendation complements Rooney et al.'s (2005) suggestion that the URICA may be better utilized with trauma populations if specific problematic behaviors are identified rather than a general diagnostic issue given the complex nature of trauma related disorders. This concern would apply to both the history of trauma and non-trauma sample, as their presenting issues and areas of concern were not measured in this dissertation and were not included as covariates during statistical analysis.

Similarly, the two different groups were not matched by any variables other than completion of the study measures. This fact may have contributed to the lack of statistically significant differences between the two groups. As a way to control for nuisance variables, matched-group designs are typically used. In matched-group designs, hypothesized causal variables are matched on one or more variables in an attempt to control for potential confounding (Schwab, 2005). However, theoretical considerations should determine whether a researcher controls for nuisance variables given that controlling for variables such as demographics can limit the generalizability of results given their artificially constructed natures (Breugh & Arnold, 2007; Meehl, 1970). Though consideration of the potential effects of demographic variables was outside the scope of the current dissertation, further studies could investigate the

potential effect of demographic matching when exploring the relationship between trauma, perceived social support and the Stages of Change.

### **Future Considerations**

Future studies exploring this topic should try to expand sample size and match the samples when possible, on several demographic variables such as age, gender and ethnicity. These variables may affect both support seeking behavior and decisions to change maladaptive behaviors. Social isolation and shrinkage of social networks has been found to be most prevalent in older age groups (Hawton, Green, & Dickens, 2011), indicating that differences in perceived social support may be significant when comparing older aged individuals with younger aged individuals. Research investigating the effects of social support in a population of combat veterans who experienced traumatic events noted significant differences in gender in that the negative effects of limited social support were more prominent in female soldiers than male soldiers (Hourani, Williams, Bray, Wilk, & Hoge, 2016). Lastly, Ben-Zur, Dudevany, and Saffoury Issa (2014) found that ethnicity is an important factor in moderating some of the associations of social support and involvement in decisions with quality of life for individuals with mental illness.

Since this study did not measure whether the participants in the history of trauma sample were experiencing negative symptoms related to experiencing potentially traumatic events. future studies should utilize empirically supported objective measures of trauma to establish clear operationalizations of participants experiencing negative symptoms associated with a potentially traumatic event. For example, the Trauma Symptom Inventory (Briere, 1995), is a self-report measure developed to assess symptoms of PTSD, Acute Stress Disorder and other common trauma-related emotional problems that has been validated in both civilian and military



populations, and is one of the most widely used instruments in the assessment of trauma symptomatology (Elhai, Gray, Kashdan, & Franklin, 2005).

Then, the clinicians and the survivors could identify a specific problematic symptom related to the trauma they would like to modify (i.e. avoidance behavior), complete a URICA specific to this problem and longitudinally measure the potential effects of perceived social support on their Readiness to Change scores. The MSPSS could be administered at several time points during the longitudinal observation to determine if certain changes in the total score or specific subscale scores may affect the manifestation and cessation of trauma-related symptoms. To analyze the outcome of this research, investigators could utilize a repeated-measures ANOVA, a statistical analysis widely used in order to measure changes in means over at least three time points with one independent variable (in this case it would be perceived social support) (Craigie & Nathan, 2009). Additionally, to incorporate mixed methods, a qualitative assessment may also complement quantitative data by highlighting the personal experience and effects of traumatic exposure. A clinically trained qualitative researcher could conduct interviews with survivors that explores potentially traumatic events, perceived social support and SOC.

Future studies investigating the relationship between trauma, perceived social support and the transtheoretical model may find more significant results if participants select one specific area of concern related to their reactions to a potentially traumatic event (Swanson & Pantolon, 2003). Using clinical theory to guide the choice of the behavior to modify may lead to results more grounded in what is already supported in the literature. For example, social isolation could be a target behavior to modify because, according to social deterioration theory (Wheaton, 1985), the experience of a traumatic event could lead to isolative behaviors that decrease one's social support network. Considering that social support has been shown to enhance positive appraisals

of traumatic events and to stimulate positive health outcomes following traumatic experiences (Swickert & Hittner, 2009) and trauma survivors who believe that social support is available experience less symptoms of post-traumatic stress than survivors who feel isolated and neglected (Norris et al., 2007), measuring the desire to modify a problematic behavior such as social isolation will be grounded in trauma theory as well as working into the strength of the Stage of Change model, aiding in the change of one specific behavior.

Kaniasty and Norris (2008) indicated that high levels of positive social support predicted decreases in PTSD symptom severity. Optimistic findings like these prompt for further research exploring the capacity of social support to increase the desire for survivors of trauma to change problematic symptoms and behavioral patterns related to potentially traumatic events. If investigators are able to determine at which Stage of Change social support is best able to motivate individuals with PTSD (or other trauma-related) symptomology to change, interventions could be effectively tailored to avoid the experience individuals with trauma occasionally report of receiving too much or too little positive social support (Declercq & Palamns, 2006). In the future, investigators should seek to utilize the strength of the Transtheoretical Model in determining what interventions should be used and when they should be used when treating individuals experiencing symptoms related to trauma exposure.

## **Conclusion**

In conclusion, this study represents the first investigation of the association between exposure to potentially traumatic events, perceived social support and presenting Stage of Change in a sample of psychotherapy clients. Although its primary hypotheses were not supported, perhaps due to methodological issues, this study provided needed data on the

variables of, and relationship between, perceived social support, trauma and the Transtheoretical model in psychotherapy clients.

As this study observed that individuals may present with moderate levels of perceived social support, treatment providers should not assume that all clients will have low levels of social support. Instead, it is recommended that clinicians evaluate the presence of social support, the extent to which it is being utilized by the client/patient, and ways that it might be bolstered through psychotherapy.

Similarly, assumptions that clients will present in primarily the Contemplation stage need to be further tested. The present study's findings that clients were in both the earlier stages (i.e., Contemplation) and later stages of the model (i.e., Action) at intake complemented the findings of two other studies in the literature looking at SOC and trauma (Koraleski & Larson, 1997; Rooney et al., 2005). While considering the limitations of the present study, such results may suggest that clinicians who conceptualize clients with a Stages of Change model recognize that clients may be in multiple stages for different problem behaviors (e.g., in trauma-related disorders there may be behavioral avoidance, substance abuse, interpersonal violence and self-harm) and consequently should focus their staging efforts on individual problem behaviors rather than on broad clinical constructs such as PTSD or experiencing a potentially traumatic event. Thus, future research is needed to explore whether the Transtheoretical Model, in its current form, is applicable to complex symptom presentations associated with trauma, such as PTSD. Furthermore, future research should explore whether perceived social support, as an individual factor, is a predictor of stage transition in all stages of the Transtheoretical Model with trauma populations.

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Table 1

*Participant Demographics*

Variable	History of trauma	Non- Trauma
	<i>n</i> = 77	<i>n</i> = 47
Average Age ( $\pm$ SD)	35.48 ( $\pm$ 11.38)	32.06 ( $\pm$ 9.39)
Gender (%)		
Male	24 (31.2%)	17 (36.2%)
Female	53 (68.8%)	30 (63.8%)
Ethnicity (%)		
Middle Eastern	2 (2.6%)	11 (23.4%)
Asian	4 (5.2%)	1 (2.1%)
African American	7 (9.1%)	1 (2.1%)
Caucasian	43 (55.8%)	23 (48.9%)
Latino/Latina	13 (16.9%)	6 (12.8%)
Other	8 (10.4%)	5 (10.6%)



Table 2

*Descriptive Statistics of Study Measures*

Study Measures	N	Mean	SD
<u>MSPSS Total Score</u>			
History of trauma Sample	77	4.93	1.24
Non-trauma Sample	47	5.04	1.32
<u>URICA Scores</u>			
History of trauma Sample	77	10.94	2.18
Pre-contemplation	7 (9.1%)		
Contemplation	34 (44.2%)		
Action	30 (39%)		
Maintenance	6 (7.8%)		
Non-Trauma Sample	47	11.15	1.5
Pre-contemplation	1 (2.1%)		
Contemplation	20 (42.5%)		
Action	26 (55.3%)		
Maintenance	0 (0%)		

Table 3

*Independent Samples T-tests and Descriptive Statistics*

	Sample						Sig. (2-tailed)	t	df
	History of trauma			Non-trauma					
	M	SD	n	M	SD	n			
Reading to Change Score	10.94	2.18	77	11.15	1.57	47	-.580	-.556	122
MSPSS	4.93	1.24	77	5.00	1.32	47	.774	-.287	122

Table 4

*Correlations Amongst Variables (including IV and DV)*

	<i>Age</i>	<i>Sex</i>	Readiness to Change Score	Perceived Social Support	Experience of Trauma
Age	-	.067	-.064	.270**	.155*
Sex	.067	-	.124	.098	.052
Readiness to Change Score	.064	.124	-	.049	-.050
Perception of Social Support	-.270**	.097	.049	-	-.026
Experience of Trauma	.155*	.052	-.026	0.052	-

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Table 5

*Regression for Association Between PSS and SoC*

Step	Variable	<i>B</i>	<i>SE</i>	<i>p</i>	$\Delta R$ - <i>Squared</i>
		-			
1	Age	0.011	0.018	0.532	0.003
	Sex	0.539	0.382	0.161	0.016
	Perceived Social Support	0.030	0.147	0.840	0.000
		-			
	Experience of Trauma	0.191	0.372	0.609	0.002
		-			
2	Age	0.011	0.018	0.545	0.003
	Sex	0.542	0.386	0.163	0.016
	Perceived Social Support	0.014	0.224	0.949	0.000
		-			
	Experience of Trauma	0.323	1.508	0.831	0.000
	Perceived Social Support-Presence of Trauma	0.026	0.282	0.928	0.000

## APPENDIX A

## Extended Review of the Literature

## **Introduction**

This study intended to examine how self-reported traumatic experiences may be related to individuals' desire to change behaviors, and in turn, how perceived social support may be related to the desire to change. More specifically, this study sought to investigate whether perceived social support would be associated with presenting stage of change for individuals in therapy with a self-reported history of a traumatic experience of physical abuse, sexual abuse and emotional abuse at least once in their lifetime. To provide context for these goals, this literature review summarizes the current understanding of trauma definitions and sequelae, as well as the research on social support and stages of change. It is followed by a critique of the current status of the research specifically related to perceived social support and the transtheoretical model. This extended review of the literature, revised since the preliminary orals, served as the basis for the final dissertation's brief literature review.

## **Trauma**

The DSM-5 (American Psychiatric Association, 2013) currently defines a traumatic event as one in which "the person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence" (p. 271). Given that people adapt to traumatic events in a variety of ways, the phrase potentially traumatic event or PTE (Bonanno, 2004; Norris, 1992) was used instead of traumatic event in this dissertation to underscore the fact that most people exposed to PTEs evidence resiliency (Bonanno & Mancini, 2012).

Examples of potentially traumatic events that fit the DSM-5 definition include: threatened or actual assault, threatened or actual sexual violence, natural or man-made disasters, and severe motor vehicle accidents (American Psychiatric Association, 2013). Medical incidents that qualify as a traumatic event must be sudden and catastrophic (e.g., waking during surgery,

anaphylactic shock). The exposure to such an event may not only be directly experienced as happening to oneself, but can also be witnessed happening to another person directly or indirectly. Witnessed events include observing threatened or serious injury, unnatural death, physical or sexual abuse of another, or a medical catastrophe in one's child. Indirect exposure through learning about an event is limited to experiences "affecting close relatives or friends and experiences that are violent or accidental (e.g., death due to natural causes does not qualify)" (American Psychiatric Association, 2013, p. 271). According to Kirkpatrick et al. (2013), death of family or close friend due to violence/accident/disaster is one of the most common types of potentially traumatic events (51.8%). Indirect witnessing may also occur for those who are "experiencing repeated or extreme exposure to aversive details of the traumatic event," such as "first responders collecting human remains; police officers repeatedly exposed to details of child abuse" (American Psychiatric Association, 2013, p. 271).

According to Bonnano and Mancini (2012), most people experience at least one and usually several potentially traumatic events during their lives (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Norris, 1992). Of the various types of potentially traumatic events (PTEs), this dissertation focused on sexual, physical and emotional abuse reported by adults that they themselves experienced during childhood or in adulthood. For this reason, this section begins with a description of these types of PTEs and their prevalence rates, followed by a description of their effects.

### **Sexual Assault Trauma Prevalence and Definitions**

Random samples of the general population have shown that at least 5% of adults report being sexually assaulted in childhood (Burnam et al., 1988). A more recent study revealed that in the United States, 16% of men and 25% to 27% of women have a history of childhood sexual

abuse survival (Pérez-Fuentes et al., 2013). In adult clinical populations, clients who were sexually abused as children are prevalent, representing 25-44% of outpatients and 43-50% of inpatients (Courtois, 1988). Clinician-administered instruments such as the Childhood Maltreatment Interview Schedule (Briere, 1995) and the Sexual Assault and Additional Interpersonal Violence Schedule (Resick & Schnicke, 1992) define childhood sexual abuse as at least one episode of sexual contact (attempted or completed vaginal, oral or anal intercourse, fondling) by a caretaker before the age of 18 (Cloitre, Miranda, Stovall-McClough & Han, 2005).

Recent estimates on the prevalence of adult sexual trauma collected from national data in the United States indicated that 1.7% of adults reported experiencing unwanted sexual activity within the past 12 months (Basile et al., 2007). Researchers exploring adult sexual assault use definitions that reflect different points on a continuum of coercion, ranging from verbal persuasion to violent physical force (Peterson, Voller, Polusny & Murdoch, 2011). For example, some researchers define adult sexual assault in a more narrow fashion, including only physical force in their definition of the sexual assault (Cunradi et al., 2005; Rouse, 1988; Tjaden & Thoennes, 2000). On the other hand, some researchers defined sexual assault more broadly focusing more on sexual acts obtained through force, intoxication, threats, verbal pressure or verbal manipulation (Kerbs & Jolly, 2007; Krahe, Scheinberger-Olwig & Schutze, 2001). Following the very broad definition used in the Sexual Experiences Survey (SES) (Koss & Oros, 1982), Fisher (1992) assessed for sexual assault by asking "...did anyone initiate or do anything sexual with you without your wanting to or without your consent" (p.219). Concerning the specific sexual acts that are involved in the definition of an adult sexual assault, research definitions vary. Some researchers inquire only about nonconsensual intercourse (Ratner et al.,



2003, Tjaden & Thoennes, 2000); whereas some researchers considered sexual assault to include any unwilling sexual contact. These acts range from kissing and petting to intercourse, which would all qualify as sexual assault (Banyard et al., 2007). It is important to note, however, that some research suggests unwanted sex is not always forced or coerced (Peterson et al., 2011).

There are situations where an individual may consent to engage in sexual behavior that is not entirely wanted (Peterson & Muehlenhard, 2007). Muehlenhard and Cook (1988) found that individuals in their sample had engaged in unwanted sex that did not qualify as coercive (e.g., individuals agreed to engage in unwanted sex because they were sexually attracted to the other person or because of peer pressure). Consequently, these authors believed that not all unwanted sexual interactions should be considered a potentially traumatic event. Therefore, asking the question “did anyone initiate or do anything sexual with you without your wanting to or without your consent” within the definition of adult sexual assault may increase inclusive accuracy (Fisher, 1992, p. 219).

### **Physical trauma prevalence and definitions**

Finkelhor, Turner, Shattuck & Hamby (2013) attempted to provide updated estimates of childhood exposure to a broad range of trauma in a national sample. They found that 54.5% of adults in their sample reported experiencing some form of physical assault in childhood. The World Health Organization (1999) defined childhood physical abuse as:

[T]hat which results in actual or potential physical harm from an interaction or lack of an interaction, which is reasonably within the control of a parent or person of responsibility, power and trust. (p. 15)

Physical abuse can involve hitting, slapping, pushing, kicking, burning, or giving medication inappropriately (Perez-Fuentes et al., 2013). Possible signs of physical abuse are

fractures, bruising, burns, pain, marks, or signs that the trauma victim prefers not to be touched (Perez-Fuentes et al., 2013). Physical abuse is said to impact the survivor externally, and also leave the physical abuse survivor with the inability to compensate, counterbalance or deflect the injury (Brewin, 2003).

Domestic violence and elder abuse are types of adult physical abuse. Domestic violence has been defined as escalating, repetitive, violent acts towards an intimate partner, used as a way to attain dominance and/or power (Cherlin, Hurt, Burton, & Purvin, 2004). It is estimated that 25-50% of women experience physical abuse by their husbands (Straus, Gelles, & Smith, 1990) and thousands of studies report that women are the preponderant target of violence by men (Kimmell, 2002). In contrast, Kimmell (2002) describes how gender symmetry research in the US also indicates that in heterosexual partnerships women partners can be the perpetrators of physical abuse, and engage in physical aggression at roughly similar rates as men. For example, via a meta-analytic review, Archer (2000) found that men were somewhat more likely ( $d = -0.05$ ) to be victimized by their female partners by means of physical aggression, and women acted with physical aggression more frequently than their male partners. Yet, Johnson (2006) argues that the contribution (violence, control, or both) of each male and female partner to the relationship is only one factor to consider among others that are salient to understanding violence in heterosexual relationships (e.g., reporting source, level of violence, control dimension, defensive action), and therefore, created a set of categories (i.e., intimate terrorism, violent resistance, situational couple violence) to acknowledge the full range and impact of violence on not only female partners, but male partners as well. In addition, intimate violence exists in same-sex and bisexual couples (Messinger, 2011). In comparison to heterosexual individuals ( $M = 0.15$ ), intimate partner violence victimization (utilizing the National Violence Against Women Survey

on 7,257 females and 6,925 males) statistical means were higher among gay, lesbian and bisexual individuals ( $M = 0.31$ ; Messinger, 2011).

### **Emotional Trauma Prevalence and Definitions**

Research is not nearly as comprehensive on emotional childhood trauma as compared to sexual and physical trauma. Stoltenborgh, Bakermans-Kranenburg, Alink, & van Ijzendoorn (2012) conducted a meta-analysis that included the prevalence of psychological abuse reported in 29 studies worldwide (Countries: Africa, Asia, Australia, New Zealand, Europe, North America, South America; Ethnicity: African American, Asian, Caucasian and Hispanic). They found that 363 out of a sample of 1,000 adult informants using self-report measures indicated that they experienced emotional trauma in childhood. This study utilized the definition created by the World Health Organization (WHO, 1999), stating emotional abuse is a caregiver's failure to sustain a developmentally suitable, nurturing environment for the child.

Different than physical and sexual abuse, emotional abuse describes a relationship versus an event (Glaser & Prior, 1997). The relationships are characterized as harmful or potentially harmful for the child, and include undesirable interactions or forms of psychological ill treatment (Glaser & Prior, 1997). Child psychological maltreatment includes but is not limited to: isolating, denying emotional responsiveness, and medical, mental health and educational neglect (Goldman, Salus, Wolcott, & Kennedy, 2003). In general, adult psychological trauma can be considered an event that inundates the survivor's capacity to guard his or her psychological well-being and righteousness (Cloitre et al., 2005). Compared to physical and sexual abuse, some studies with adults denote psychological pain as having a strong association with emotional trauma (Meerwijk & Weiss, 2011). Psychological pain is defined by a long-standing unpleasant feeling that develops from a negative appraisal (Meerwijk & Weiss, 2011). In domestic abuse,

one intimate partner attempts to dominate and have emotional mastery over the other partner (Deaton & Hertica, 2001). Domestic abuse can include, for example, name-calling, blaming, isolation from friends or family or manipulation (Deaton & Hertica, 2001). Employee emotional abuse is defined by “repetitive, targeted, and destructive” communication by more powerful members toward less powerful members in the workplace (Lutgen-Sandvik, 2003, p. 472). Seemingly 90% of the American adult population experience workplace harassment at any given time during the span of their careers (Hornstein, 1996).

### **Effects of Adult and Childhood Trauma**

Trauma has proven to be a robust area of research among professionals in the field, including charting its effects and trajectories in childhood and in adulthood. When people are confronted with actual or threatened death, serious injury, or a threat to a person’s physical integrity, such traumatic exposure can have a wide range of effects.

Traditionally, a diagnostic approach has been used in the child and adult trauma literatures that focusing on negative symptoms, and characterizes PTE effects as either leading to chronic psychopathology (e.g., PTSD) or the absence of psychopathology, which sometimes is referred to as resilience (Bonnano & Diminish, 2013; Bonnano & Mancini, 2012). A common way to classify posttraumatic psychopathology is Posttraumatic Stress Disorder (PTSD). The DSM-5 criteria for PTSD include: “involuntary and distressing memories of the traumatic event(s),” “marked physiological reactions to internal or external cues that symbolize the event,” “avoidance of distress memories or external reminders,” “persistent and exaggerated negative beliefs about oneself, others or the world,” and “hypervigilance” (American Psychiatric Association, 2013, p. 271).

However, the DSM-5 symptoms do not encompass other psychiatric disorders and symptoms that may emerge after a traumatic experience. Such negative symptoms include social withdrawal, sleep problems, difficulty with attention and concentration, and guilt, which are relatively generalized across cultures (Antai-Otong, 2002). Other effects on the child's development related to emotional abuse include depressive symptoms (e.g., hopelessness), low self-esteem, insecure attachment, and diminished satisfaction with life and social support (Stoltenborgh et al., 2012). Culture has also been observed to have significant impact on the expressions of such symptoms. For example, a study that sampled Salvadorian refugees and a variety of other Central American groups, found that somatic expressions of trauma-related distress such as stomach pains, headaches and other body discomfort seemed to be much more acceptable to show than verbally expressed emotions of distress (Tummala-Nara, 2007).

Further, studies on the long-term consequences of trauma have also examined the relation of potentially traumatic life events to subsequent patterns of symptom development across the lifespan. For example, childhood sexual trauma has been correlated with 47% of all childhood-onset psychiatric disorders and 26% to 32% of adult-onset disorders (Pérez-Fuentes et al., 2013). Covering a more comprehensive set of PTEs, Carr et al. (2013) conducted a systematic review of studies that investigated early life stressors (e.g., sexual abuse, emotional abuse, neglect) and determined if certain stressors had a higher chance of being correlated with specific psychiatric disorders and mental disease in adulthood. It was found that: (a) physical abuse, sexual abuse and unspecified neglect were associated with mood and anxiety disorders, (b) emotional abuse was associated with schizophrenia and personality disorders, and (c) physical neglect was associated with personality disorders. Additionally, it was found that trauma survivors experienced heightened levels of panic disorder, specific phobias, anxiety spectrum disorders

and major depression up to 8 years post-trauma when compared to a non-traumatized sample. They also found that trauma survivors experienced physical complaints in decreased self-reported physical-health quality of life. Similarly, Alisic et al. (2011) found that symptoms of acute and short-term posttraumatic stress, depression and anxiety in childhood, along with exposure to parental posttraumatic stress to be significant predictors of posttraumatic symptoms later in life.

Additionally, childhood trauma has been related to behavioral and social problems in adulthood (Malhthora & Chebiyan, 2016), such as a general increase in psychopathology, decreased self-esteem, increased interpersonal problems, sexual difficulties (Davis, Petretic-Jackson, & Ting, 2001), and difficulties in emotion regulation (e.g., hostility, anger management, modulation of feeling) and interpersonal skills (e.g., reactive aggression, bullying, limited social competence; Cloitre et al., 2005).

Although this binary approach has its advantages (e.g., identifying pathological symptoms of PTE, focusing interventions on those most in need), it has substantial disadvantages as well, including the fact that diagnostic entities are mostly conceptual rather than empirical and that the diagnostic approach provides no information on resilience and the distribution of individual differences in reactions to PTE's that may not be entirely pathological or entirely absent of distress (Bonanno & Diminich, 2013). As a result, more recent approaches use sophisticated methodologies (e.g., latent growth curve analysis) that demonstrate the heterogeneity in individual differences in prospective or longitudinal patterns of adjustment (Bonanno & Diminish, 2013). Bonanno (2008) identified four trajectories: (a) a chronic disruption in functioning, (b) a delayed onset of distress that increases over time, (c) recovery, where there is an initial disturbance in stable functioning that decreases over time and pre-trauma

functioning is recommenced, and (d) resilience in individuals who are able to maintain a relatively consistent state of functioning post trauma.

Furthermore, budding literature investigates the potential for important positive changes in personality schema and people's assumptive worlds following a traumatic event (Malhthora & Chebiyan, 2016). Posttraumatic growth is the study of psychological well-being, changes in life philosophy, insight into one's own life and changes in relationships with others (Malhthora & Chebiyan, 2016)

Reasons for individual differences in post-traumatic trajectories (as well as in the earlier lines of binary research) include characteristics of the PTE, social support resources, ways that people interpret or 'appraise' a stressful event and past encounters with trauma, and current life stress. (Bonanno et al, 2004; Brewin, Andrews & Valentine, 2000; Josphe & Linley, 2008; Kaniasty & Norris, 2009; Lazarus & Folkman, 1984). Additionally, demographic variables, such as having higher education, being male, having higher income, and being a member of a majority ethnic group have been related to more favorable outcomes (Bonanno et al., 2007; Norris et al., 2003). For the purpose of this dissertation, there was a focus on the characteristics of the PTE, availability of social support and types of coping with the PTE; each is briefly noted next.

First, characteristics about the potentially traumatic event itself can impact individuals' well-being later in life, including: severity, victim age, use of force and relationship to perpetrator (Malhthora & Chebiyan, 2016). Second, situational factors throughout childhood such as social support from the non-offending caretaker and family functioning seem to be important influences in the determination of the impact of child abuse long-term (Malhthora & Chebiyan, 2016). Factors such as parental warmth, social support and marital quality emerged as elements included in the impact of child trauma later in life (Malhthora & Chebiyan, 2016). Tremblay,

Hebert and Piche (1999) found that behavioral difficulties and evaluations of self-worth were more positive when children felt supported by their parents. Furthermore, a lack of social support is accepted as a potential risk factor for vulnerability to traumatic experiences (Bonanno, 2008). Social support seems to be a significant moderator in that psychological abuse appeared to predict PTSD symptoms in the presence of low social support but not in high levels of reported social support (Babcock et al., 2008). Additionally, Asberg and Renk (2013) found that incarcerated women reported significantly less levels of social support throughout their lives post-abuse when compared to non-incarcerated women post-abuse. In sum, it has been found that those who reported a stronger network showed decreased levels of impairment (e.g., PTSD) when compared to those who reported a weaker peer support network (Morley & Korht, 2013).

Third, coping, defined as cognitive and behavioral efforts to manage stressors (Lazarus & Folkman, 1984), is largely considered to be one of the most important resilience variables (Bonanno, 2004). There are several types of coping, which can lead to different outcomes for the individuals incorporating them into their PTE experience, including: problem-focused coping (dealing with sources of stress), emotion-focused coping (handling feelings and thoughts associated with the stressor), avoidant coping (avoiding dealing with the stressor or associated emotions), and social support seeking (obtaining advice or expressing emotions) (Litman, 2006). Considering that avoidant coping and social support coping are types of coping seen in populations that experienced trauma, they are discussed next.

Avoidant methods of coping have frequently been shown to relate to increased levels of psychological distress and trauma symptoms (Brand & Alexander, 2003). A cross-sectional study using a geographically diverse sample of 99 female undergraduate women (average age, 21; 64% European American, 13% Hispanic/Latina, 7% African American, 4% Asian American)



who indicated they had experienced childhood sexual trauma examined avoidant coping strategies in adulthood (Fortier et al., 2009). Fortier et al. (2009) stated that avoidant, maladaptive coping mechanisms such as physical and emotional detachment and withdrawal, as well as substance use and other self-harm behaviors are used to avoid threatening situations. For example, the trauma survivor may not want to discuss the event, or have a conversation that may remind him or her of that significant event. Nevertheless this avoidance that once served as a stress-reducer initially will become problematic and often heightens one's experience of fear (Fortier et al., 2009). This study came to the conclusion that the more severe the childhood sexual abuse, the more the participant engaged in avoidant coping (Fortier et al., 2009). These participants were also at an increased risk for sexual revictimization in adulthood (Fortier et al., 2009).

Social support coping refers to the process of seeking social support as a coping strategy following traumatic experiences (Prati & Pietrantonio, 2009). It has been observed that seeking social support in the coping process contributes to the quality and quantity of available supports (Prati & Pietrantonio, 2009). Furthermore, seeking social support has been shown to enhance positive appraisals of traumatic events and to stimulate positive health outcome following traumatic experiences (Swickert & Hittner, 2009). Additionally, the use of social support in coping during times of stress provides individuals with opportunities for active problem solving and processing of traumatic experiences (Prati & Pietrantonio, 2009).

### **Social Support with Trauma Survivors and in the Psychotherapy Context**

Of particular interest to this dissertation, social support research has focused on understanding the role and effects of social support among vulnerable populations such as survivors of childhood abuse, adult traumas, and other significant life stressors (e.g.,

incarceration; homelessness) (Savage & Russell, 2005). Throughout history, it has been observed that outpourings of help have rallied to assist those impacted by traumatic, disastrous events (Kaniasty, 2012). Survivors of these events typically seek each other out with a need to talk and process about what they have experienced (Joseph et al., 1997; Lepore, Ragan, & Jones, 2000). For the purpose of this dissertation, this type of human interaction was referred to as social support (Cohen & Willis, 1985). Research conducted over the past 30 years has shown that individuals who have networks of people (e.g., spouses, family, friends) that provide support, either psychological, material or both, typically tend to have better health and well-being than individuals who report smaller or less helpful networks (Cohen & Wills, 1985). After describing social support from general networks of people, this subsection discusses social support with trauma survivors, and in the context of the psychotherapy relationship, with the next subsections focusing on the working alliance, followed by stages of change.

Within the general networks of social support, there are two structures; formal social support and informal social support. Formal support can be defined as support provided for an individual through paid services, such as psychotherapy and other forms of supportive care (Barker & Pistrang, 2002). For the purpose of this study, informal social support referred to unpaid help given by family (including spouse, siblings and relatives), friends, neighbors and co-workers (Chen, Siu, Lu, Cooper & Phillips, 2009). The help provided by formal and informal supports can involve various functions, including support (an action that aims to help or assist an individual cope with stressors), advice (communication aimed at providing instruction towards goal achievement), and feedback (process of evaluation that aims to notify the individual of his or her progress) (Tolsdorf, 1976).

The construct of social support is multifaceted and consists of various models (e.g., unidimensional relationship model, main effect model, multidimensional model) (Cohen & Willis, 1985) and components (e.g., received, perceived, extended, seeking support coping). Whereas received social support refers to the actual support that a person obtains from another, perceived social support refers to the belief or expectation that support will be available during times of need, which stems from lived experiences with received social support (Joseph et al., 1997; Norris et al., 2008). For example, an individual who was not supported by his or her family during a crisis in the past will have low expectations to receive any support in the present. Experiences with positive and helpful support lead to beliefs that future support will be available, and just as importantly, helpful (Norris & Kaniasty, 1996). Studies have observed that survivors of trauma who received increased levels of social support (sources of support not specified) immediately post-trauma showed increased levels of perceived support in the future (Kanaisty, 2011; Norris & Kanaisty, 1996). For the purpose of this study, an emphasis and focus was placed on the investigation of perceived social support.

Perceived social support has been studied extensively and has been found to provide many benefits to survivors of traumatic events (Norris et al., 2008). When faced with stressful life events, people's ratings of high levels of perceived social support from a friend, spouse or relative was associated with a significant reduction in the presence of psychological distress (Maulik, Eaton, & Bradshaw, 2010). Perceived support from informal supports have been found to be of great importance in coping with traumatic events, including in minority communities. A qualitative study of support resources among African-Americans who experienced traumatic grief due to the homicides of family members observed that individuals were more likely to turn to informal support relationships in coping with grief (Sharpe, 2008). Specifically, the main

supports that were desired for coping were primary and secondary kin, close friends and other, more distal friends (Sharpe, 2008). In general, the literature shows that support from family and friends has a positive influence on the ability to cope with trauma (Brewin et al., 2000) and is commonly accepted as a protective factor by aiding in effective coping following exposure to traumatic events (Lyons, 1991). For those who experienced early traumas of war, family support, community support, and peer support were important themes for psychosocial well-being (Morley & Korht, 2013). However, experiencing a potentially traumatic event could actually negatively affect one's levels of perceived social support.

Nickerson et al. (2017) conducted the first longitudinal investigation of the association between PTSD symptoms and perceived social support in a sample of injury survivors recruited from trauma centers across Australia. The investigators measured PTSD symptoms and perceived social support at baseline, 3 months, 12 months, 24 months and 72 months. They found that PTSD symptoms were associated with decreases in perceived social support between 3 to 12 months after the trauma. Contrary to some of the existing literature, they found in their sample that perceived social support was not associated with subsequent changes in PTSD symptom severity. The investigators theorized that the complexity between perceived social support and PTSD may be due issues such as offered vs. experienced social support, symptom severity, personality traits and attachment style.

Trauma survivors who believe that social support is available and that others are immediately willing to help experience less symptoms of post-traumatic stress than survivors who feel isolated and neglected (Norris et al., 2008). Perceived social support has also been found to be correlated with decreased PTSD symptoms in different trauma populations including burn victims and veterans (Widows et al., 2000).

As indicated in the above findings, perceived social support has been assessed through qualitative methods (e.g., Morley & Korht, 2013; Sharpe, 2008). Sharpe (2008) measured social support through a 22-question interview process based on the Ways of Coping Questionnaire (Folkman & Lazarus, 1988) that focused on each participant's approach to seeking social support to cope with the homicide of a family member. Morley and Korht (2013) used inductive thematic analysis of transcribed face-to-face or over the phone interviews to identify and cluster similar themes of perceived social support and the effectiveness of perceived social support amongst their participants. Neither of these studies specifically measured social support within a psychotherapeutic context.

In psychotherapy, self-report measures like the Perceived Social Support Index (PSS; Procidano & Heller, 1983) and The Medical Outcomes Social Support Survey-Abbreviated (MOS; Gjesfield, Greeno, & Kim, 2008) are used for this purpose. Another common self-report measures of perceived social support used in psychotherapy is the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS has been used to measure perceived social support in various different trauma populations including college students (Haden, Scarpa, Jones, & Ollendick, 2007), cocaine-using mothers (Minnes, Singer, Humphrey-Wall, & Satayathum, 2008), injured athletes (Lu & Hsu, 2013), and, similar to the proposed study population, outpatients attending a research and training clinic (Cecil, Stanley, Carrion, & Swann, 1995 [described below]).

Perceived support has been thought to be more effective and more powerful than received social support because the thought that support is available is, in itself, supportive (Norris & Kaniasty, 1996). In actuality, some received social support may be interpreted as unhelpful, unwanted or critical and thus would in reality be unsupportive (Norris & Kaniasty, 1996). As

noted above, formal social support can be provided in the context of psychotherapy. In other words, clients can engage in social support coping by seeking out psychotherapy services. Once in therapy, it can be a place in which to experience received emotional support. Researchers posit that received social support, when suitable to the client's needs, serves as a protective factor against distress after a traumatic experience (Cohen & Wills, 1985; Lyons, 1991). In fact, Gabert-Quillen et al. (2012) stated that emotional support following a traumatic event was deemed more beneficial than other forms of support. Therapy can play an important role in trauma recovery in that it provides a collective process in which the story of the traumatic experience and deep pain is heard, witnessed and shared (Karpelowsky & Edwards, 2005).

### **Stages of change**

The Transtheoretical Model of Change (TTM) and its stages of change component has become one of the most influential models in helping clinicians understand the process of change. The TTM and its Stages of Change maintains that people (regardless of issue or presenting concern) progress through various motivational stages in an attempt to change their problem behaviors (Derisley & Reynolds, 2000). The transtheoretical model has proved useful in designing frameworks for treatment planning (DiClemente, McConaughy, Norcross, & Prochaska, 1986) and for prescribing appropriate interventions for clients at specific times in therapy (Prochaska et al., 1992). It has also been shown to be 92% accurate in discriminating premature dropouts from appropriate terminators of therapy (Medeiros & Prochaska, 1993). Although the transtheoretical model has traditionally been studied in association with populations that suffer from addictive and habitual behaviors (substance abuse, obesity, domestic violence), it has not been specifically studied with a "trauma" sample. Moreover, there has not

been a SoC model created specifically for individuals who have experienced some form of trauma (our population of interest).

Five core stages describe the temporal and motivational aspects of change in the transtheoretical model, as follows: Precontemplation, Contemplation, Preparation, Action, and Maintenance. In the Precontemplation stage, the client does not have a desire to change and is usually being coerced or feels coerced by an outside entity into therapy. Once a client enters the contemplation stage, she is aware of the distress her behavior is causing and begins to develop interest in whether the problem is solvable. The Preparation stage signifies a clear decision by the client to change the problem behavior and is actively preparing to embark on a healing process. In the Action stage, the client is actively working on changing the problem behavior and is usually seeking help from others in the process. Finally, clients in the Maintenance stage have already made progress in their behavior and seek to develop support strategies to cement any positive change.

The Stages of Change have been historically assessed through a variety of means, including self-report questionnaires and staging algorithms. The first measure created to measure the Stages of Change is the The Stages of Change Questionnaire (SCQ; McConaughy et al., 1983). The SCQ is a 32-item 5-point Likert-type scale. A principal components analysis and a replication study (McConaughy et al., 1983; McConaughy, DiClemente, Prochaska, & Velicer, 1989) yielded four subscales that each contain eight items representing four stages of change (Precontemplation, Contemplation, Action and Maintenance). One of the most widely used measures, as well as the measure to be used in the proposed study, is the University of Rhode Island Change Assessment Scale (URICA; McConaughy, DiClemente, Prochaska, & Velicer, 1989). This measure was created by the developers of the transtheoretical model, and

uses a generic format of questions that has allowed it to be used with a variety of problematic behaviors. Other self-report measures commonly used were created for specific problem behaviors, such as the Readiness to Change Questionnaire (RTCQ; Rollnick, Heather, Gold, & Hall, 1992) for alcohol-related problems in medical settings, the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES; Miller & Tonigan, 1996) for drug users, and the Circumstances, Motivation, Readiness and Suitability Scale (CMRS; De Leon, Melnick, Kressel, & Jainchill, 1994) to assess clients' internal motivations that are relevant to participation in residential therapeutic communities.

Staging algorithms are another method that uses self-report to ascertain an individual's stage of change as articulated by formulations of the Transtheoretical Model of Change (Prochaska & DiClemente, 1983). A common algorithm used is the one created by Prochaska and DiClemente (1983) that states that precontemplation smokers are those who did not intend to quit smoking within six months, those in contemplation intended to quit smoking within six months but not within a month, those in preparation indicated their intention to quit within one month, those in the Action stage were subjects who had quit smoking within the last 6 months and had not smoked for seven days, and those in the maintenance stage had completely quit smoking more than 6 months ago. Based on their responses to a series of four to five questions based on these assumptions, individuals are then assigned to a stage of change (Prochaska et al., 1994).

While the Stages of Change help us to understand when shifts in attitudes and behaviors occur, a secondary dimension of the Transtheoretical Model, the Processes of Change (PoC), help us to understand how these changes occur. The PoC are covert and overt activities that individuals partake in when they attempt to modify problem behaviors (Prochaska et al., 1992).



There are a total of 10 processes, each of which is a general category that encompasses different techniques, methods and interventions classically associated with different theoretical orientations (Prochaska et al., 1992).

The 10 processes are divided into two groups, experiential and behavioral processes of change. Generally, the experiential processes of change are used within the first few stages of change, while the behavioral processes of change are more prevalent in the final three SoC. For example, the consciousness raising process is an experiential process that leads to an increase in the client's knowledge about themselves and his or her problem(s), which is behavior typically found in the precontemplation and contemplation stages. Important to the proposed study, a behavioral process of change is the "Helping Relationships" process, which is when the individual actively seeks and uses social support. Thus, social support is an integral component of movement in the SoC model, especially in the later stages.

The most commonly used measure for the processes of change is the Process of Change Questionnaire, a 40-item, 5-point Likert-type scale, self-report questionnaire normed on smokers (PCQ; Prochaska, Velicer, DiClemente, & Fava, 1988). Occasionally, a short-form of the PCQ (22 items) is used (PCQ-SF; Bellis, 1994).

### **Stages of Change and Social Support**

Similar to how social support is integral in the recovery and reduction of symptoms from traumatic experiences, as previously discussed (Brewin et al., 2000; Maulik, Eaton & Bradshaw, 2010; Zimet, et al., 1988), social support is also an integral part of the Stages of Change model and a necessary aspect for successful behavioral change (Walcott-McQuigg & Prochaska, 2000; Wallace et al., 2000). Three studies will be discussed that directly investigated social support and its possible effects on the Stages of Change. First, De Vet et al. (2005) conducted a three-round

study to inventory opinions of Stages of Change experts and examine agreement on determinants of forward transitions through the Stages of Change. In the first round, 10 experts completed an electronic questionnaire about the potential determinants for each stage transition. In the second round, an electronic questionnaire based on the first round results was sent to authors of scientific papers on Stages of Change published between 1995 and May 2002. The third round consisted of participants presented with feedback about the second round, who were asked to re-rate their answers based on the information provided. The results after three rounds showed that participants agreed on various determinants for stage transition such as self-efficacy and perceived control; however, some were very-stage specific and some were not. One determinant that they found was not stage specific but was a universal determinant for forward transition through all stages was social support.

Consistent with the opinions of the De Vet et al. (2005) mental health professionals, social support has been significantly related to advancing stages of change in two studies. Citing how social support has long been associated with positive health behavior change, Wagner, Burg, and Sirois (2004) found that individuals trying to quit smoking who were in a more advanced Stage of Change (e.g., precontemplation vs. action) reported higher levels of perceived social support as compared to individuals who were in a lower Stage of Change. Additionally, higher levels of social support were found when individuals were making behavioral changes, which are more likely to be affected by external support, than emotional changes (Wagner et al., 2004). Another study investigating the effects of social support on smoking cessation also found evidence of the positive influence of social support. De Vries, Mudde, Dijkstra & Willemsen, (1998) found that having trust in one's support system and experiencing the acceptance of one's support increases an individual's ability to change in therapy. Specifically, social support was

found to be especially powerful in increasing an individual's capacity to progress from pre-contemplation to contemplation (De Vries et al., 1998).

Concerning the relationship between trauma and Stages of Change, the literature at time of review was limited and did not show significant investigation on the use of the Stages of Change model specifically on a population of individuals whose presenting problem is experiencing of a traumatic event. Two studies were found that specifically investigated the use of the Stages of Change with individuals who experienced a potentially traumatic event.

First, Rooney et al. (2005) included 50 veterans presenting for treatment with a primary diagnosis of PTSD who were given the University of Rhode Island Change Assessment Scale (URICA), the Processes of Change Questionnaire (POCQ), the Combat Exposure Scale (CES) and the Life Trauma Questionnaire (LTQ). Regarding the URICA specifically, it was administered during preparation for the program, the first day of the program, three weeks into the treatment program, at completion of the program and at a three-month follow-up. Participants were assigned to an SOC on the basis of their highest sub-scale score. If the scores were tied on the contemplation and action scales the participant was allocated to the preparation SOC. Otherwise, when two or more adjacent sub-scale scores were equal, the participant was allocated to the higher of the two SOCs. They discovered that the majority of their sample fell in the Contemplation stage during the preparation program for the study treatment protocol (57.7%) and at the onset of treatment (64%), while the remainder stages were minimally represented during the preparation program and at the onset of treatment (Precontemplation [2%; 2%], Preparation [8%; 9%], Action [15%; 2%], Maintenance [8%; 7%]). In regards to the dissertation at hand, this is an important observation because the dissertation used information collected in sessions 0-1.. Thus, similar skewed distributions across the Stages of Change may be observed.

There was no significant relationship at baseline between SOC and pros of entering therapy, cognitive/experiential POCs or behavioral POCs, nor was there a significant relationship between changes in SOC and changes in these variables over time. There was, however, a significant relationship between SOC and the cons of entering therapy at baseline. Furthermore, participants whose ratings of the cons decreased across time were more likely to progress into one of the preparation/action/maintenance SOCs over time. When responses from all the time-points were combined, the pros of entering therapy, but not the cons, were associated with engagement in change behavior (i.e., both cognitive/experiential and behavioral POC usage). Those individuals who rated highly the importance of entering therapy were more likely to be engaged in the change, while beliefs about the disadvantages of entering therapy appeared to have little effect on SOC.

The second study, by Koraleski and Larson (1997), tested the application of the Stages of Change with 83 adults (6 males, 77 females) who were in therapy for an average of 69 sessions (but in therapy for at least one month) dealing specifically with issues of childhood sexual trauma. The participants were given the questionnaires by their treating therapists and asked to complete the surveys outside of the therapy session. Although the researchers focused specifically on the use of different processes of change reported by these participants who responded to the Processes of Change Questionnaire (PCQ; Bellis 1994) and Stages of Change Questionnaire (SCQ; McConaughy et al., 1983), they found that participants in the contemplation, preparation and action stages reported significant differences in use of behavioral processes of change (higher use of behavioral processes in action stage compared to lower use in the contemplation and preparation stage) but no difference in their use of experiential processes (Koraleski & Larson, 1997). As noted previously in the background section, transtheoretical

theory predicts that, in general, experiential processes of change are used in the earlier stages of the model (precontemplation, contemplation, preparation), while behavioral processes of change are used more often in the action stage (Prochaska et al., 1992). Similarly, previous descriptions of successful sexual abuse therapy indicated that therapists should emphasize experiential processes first and then move to greater use of behavioral processes (Courtois, 1988). Thus, this study demonstrates the predictive capacity of the Stages of Change model (which processes are used in specific stages) is somewhat applicable to this trauma population by supporting transtheoretical theory that behavioral processes are used more frequently in the later rather than the earlier Stages of Change.

### **Critique and Need for Further Study**

Although the literature review revealed a breadth of research on trauma and its relationship to interpersonal dysfunction, less is known in regards to the connection of trauma and social support with willingness to change maladaptive behaviors. This subsection critiques this smaller literature pertaining to perceived social support and the Stages of Change model on a population that has endorsed past experiences of trauma.

#### **Stages of Change, Social Support and Trauma.**

To date, there have been not been any studies conducted investigating the relationship between perceived social support and progression through the Stages of Change with individuals who have experienced trauma. Such work appears needed as past research has involved only parts of this inquiry. This subsection critiques two studies that have applied the Transtheoretical Model with populations that have experienced trauma, followed by aspects of a larger literature that has investigated the relationship between social support and the Stages of Change in samples of people dealing with substance abuse, weight loss and exercise behavior.

## **Stages of Change and Trauma**

As noted previously, there is strong empirical evidence that the Stages of Change model can predict changes in how patients evaluate the pros and cons of change as they progress, or fail to progress, from earlier to later stages (Dunn, Hungerford, Field, & Mccann, 2005). Regardless of the empirical strength and clinical utility of the Stages of Change, there is limited research examining the Stages of Change with individuals with a reported trauma history or PTSD diagnosis during psychological therapy (Rooney et al., 2005). Critiques of the only two studies located in this literature review are discussed next.

First, the study by Rooney et al. (2005) assessed the applicability of the Stages of Change model with a group of individuals presenting with PTSD. They found that, overall, the pros of changing the harmful behaviors were more impactful than the cons of not changing the harmful behavior. This contradicts the transtheoretical model, which posits that the cons of not changing the harmful behavior generally has a more powerful impact on behavior change. It is possible that the cons of entering therapy for people with PTSD (such as the prospect of having to confront triggers of anxiety) differ in nature from the cons of those with addictive or eating disorders (such as having to give up a substance or maladaptive behavior). The investigators believed that endorsing the cons of entering therapy were not associated with behavior change partially due to their hypothesis that the Stages of Change concept might not be as applicable to people with a PTSD diagnosis because motivation might take a lesser role in its maintenance than addictive behaviors (Rooney et al., 2005).

Another reason for why the Stages of Change model may not be completely applicable is because the model was developed from research with smokers, which takes into consideration only one specific problem behavior (Herrick, Stone & Mettler, 1997). Since PTSD and trauma

related disorders are relatively more complex disorders with treatment that involves a relatively large number of behaviors and attitudes, participants may have considered different behaviors and problems when completing the measure. Clinicians who conceptualize clients in terms of a Stages of Change model should recognize that clients may be in multiple SOC's for different problem behaviors (e.g., in trauma-related disorders there may also be substance abuse, interpersonal violence and self-harm). Thus, a clinician should first work with the client on those problems for which the client is in a more advanced stage before progressing to treating the other problem areas.

Although the majority of findings of this study indicate that the Stages of Change may not be applicable to complex clinical presentation with multiple target behaviors, the results do suggest that helping clients to overcome their perception of the disadvantages of change may be an important factor in enhancing their attitude towards change. Thus, some aspects of the Stage of Change model, such as appreciation of the cons, may increase the likelihood for change of maladaptive behaviors rather than solely a focus on the perceived benefits.

Second, Koraleski and Larson (1997) found that individuals in therapy for childhood sexual trauma issues who were in the contemplation, preparation and action stages reported significant differences in use of behavioral processes of change but no difference in their use of experiential processes (Koraleski & Larson, 1997). A possible explanation for non-significant findings on the experiential processes of change with this population may be because this particular population uses similar processes throughout the therapeutic process rather than at specific stages. Previous research with sexually abused clients suggests that the processes described in the experiential processes of change are necessary throughout sexual abuse therapy for effective change (Courtois, 1988). As noted previously in the background section,

transtheoretical theory predicts that, in general, experiential processes of change are used in contemplation change while behavioral processes of change are used more often in the action stage (Prochaska et al., 1992). Similarly, previous descriptions of successful sexual abuse therapy indicated that therapists should emphasize experiential processes first and then move to greater use of behavioral processes (Courtois, 1988). Thus, this study demonstrates the predictive capacity of the Stages of Change model (which processes are used in specific stages) is somewhat applicable to this trauma population.

Some limitations of this study were the relatively small size of the sample (83 participants), an uneven distribution of participants in different stages (38 contemplation, 7 preparation, 26 action), and the lack of male participants. A control or a comparison may have provided further clarity on the differences between a trauma population and general population in regards to its use of the Stages of Change. Important specifically to the dissertation at hand, the study's focus on the processes of change rather than on the individual Stages of Change provides limited applicability of the study findings and model to the current dissertation because the investigators used a questionnaire that does not evaluate the processes of change. Also relevant to the dissertation at hand, this study measured SoC at only one time point.

Although this limits their capability to make predictive statements, the study was able to demonstrate the applicability of the transtheoretical model with a trauma population with only one point of measurement. Furthermore, this study focused only on three stages of the SoC (Contemplation, Preparation and Action stages) due to cell sizes too small for analysis in the other stages, whereas the study at hand will attempt to draw information from participants in all five stages. Due to the limitation of only analyzing three of the five stages, the conclusions drawn from this study must be taken with caution in relation to the study at hand.



## **Social Support and the Stages of Change**

For the purpose of the proposed dissertation, a search of the literature was conducted to understand the effects of social support on trauma populations and their progression through the Stages of Change. Our search found that social support and its potential impact on the progression through Stages of Change model has been understudied in individuals who have experienced traumatic events. However, there have been studies conducted in other populations examining this relationship.

Regarding the relationship between Stages of Change and social support, our review of the research revealed social support is generally found to be a significant predictor of positive movement in the Stages of Change model. In regards to specific population examples, these results were found with smokers (e.g., De Vries et al., 1998; Wagner et al., 2004), individuals seeking to increase healthy eating habits (e.g., Vallis et al., 2003; Sorensen, Stoddard & Macario, 1998), and individuals seeking to increase exercise behavior (e.g., Walcott-McQuigg & Prochaska, 2000; Courneya et al., 2001).

The results of this body of literature has its limitations. In reference to measures used, the six studies employed different measures of SoC and social support, affecting the generalizability of the model across the multiple studies. In regards to social support, some of the studies used one and two item scales to measure this relatively complex construct, which may reduce the reliability and the validity of the measures, as evidenced by the borderline levels of internal consistency seen in Courneya et al. (2001). Future studies would benefit from previously constructed measures of social support that have produced high levels of construct validity and reliability. Although none of the previously mentioned studies used the social support measure to be used in the proposed study (MPSS; Zimet et al., 1988), the MPSS has been found to have

strong levels reliability and validity that can add to the confidence of the findings of a study (Cecil et al., 1995).

Specific to the studies reviewed, De Vries et al. (1998) used a 4-point scale ranging from no support (0) to much support (3) to measure perceived social support. Sorensen, Stoddard and Macario (1998) created a 12 item, 4-point scale to assess social support. Wagner et al., (2004) used a 12-item perceived social support scale (PSSS; Zimet, Powell, Farley, Werkman, & Berkoff, 1990) to measure social support. Walcott-McQuigg and Prochaska (2000) used a discussion guide during focus groups to elicit factors associated with change in exercise behavior such as social support, self-efficacy and barriers to exercise. Finally, Courneya et al. (2001) utilized a self-created single item to assess social support, “How much support do you receive for participating in regular physical activity from the people closest to you?”

Similarly, when measuring stages of change, seven studies used several different types of measurements, including several self-report measures, previously created algorithms, and modified previously created algorithms. Vrier and Mudde (1998) used the algorithm developed by Prochaska and colleagues (Prochaska & DiClemente, 1983). Wagner et al., (2004) assessed SoC per DiClemente et al. (1991) using behavior and intention to assign respondents to one of five stages of change. The pros and cons of decisional balance were assessed using the 6-item short form developed by Velicer, DiClemente, Prochaska, and Brandenburg, (1985). Ten processes of change (five experiential and five behavioral) were assessed with the 20-item form (Prochaska, Velicer, DiClemente, & Fava, 1988). Vallis et al. (2003) determined stage of change by intentional and behavioral criteria as measured by several questions such as “Do you consistently avoid eating high-fat foods?” and behavioral criterion such as dietary fat intake of less than 30% of the participant’s daily caloric intake.

Sorensen, Stoddard and Macario (1998) used a series of questions (measuring current fruit and vegetable consumption and plans to engage in exercise) to create an algorithm to assess stage of change. Walcott-McQuigg and Prochaska (2000) used a Motivational Readiness for Exercise screening instrument adapted from Marcus, Rakowski and Rossi (1992) to assess stage of change and a discussion guide was used in focus groups by the investigators to elicit factors associated with change such as social support. Finally, Courneya et al. (2001) utilized a self-created algorithm with responses in a yes/no format.

Because so many different methods were used to assess Stages of Change, generalizing findings across studies must be done with caution due to the confounds that arise from the use of so many different measures. Also, because these studies did not utilize the SOC measure in the proposed study, the URICA (Prochaska DiClemente, & Norcross, 1992), the direct applicability of their methods and findings to the proposed study is limited.

One major limitation of these studies is that none of the participants were specifically collected from a pool of clients currently in therapy. Another limitation, in regards to the dissertation at hand, is that none of these studies used a matched sample of individuals who did not report experiencing potentially traumatic events. Other reported limitations of these studies involved the power of their statistical analysis due to sample size (e.g., Courneya et al., 2001 [ $N=683$  participants]; De Vries et al., 1998 [918 participants]), the frame of time elapsed in the study (e.g., De Vries et al., 1998 [relatively short 14 month period]), applicability of the study sample to the dissertation sample and diversity of the sample (e.g., Walcott & Prochaska, 2000 [convenience sample of older African Americans]) and a lack of presentation of all the stages (e.g., Wagner et al., 2004 [only contemplation and preparation]).

To address issues with sample size previously mentioned, Courneya et al. (2001) suggested that a sample size of 1000-1500 would be needed to examine all subtle transitions suggested in the SoC model, along with a more in-depth understanding on how the processes of change moderate these transitions amongst different populations. Thus, future studies should aim to have a sample size as large as possible, use a diverse sample, use statistical analysis with significant power and represent as many of the stages as possible if studies are investigating stage transition determinants. However, studies that are not interested in stage transition may not need such a large sample size if they desire to focus on an individual stage and the correlation with other constructs (e.g., social support, trauma, exercise habits). Additionally, there continues to be a need in the literature for future research on the Stages of Change model as it is applied to more complex constructs, such as PTSD, which may involve multiple behaviors that need to be changed (e.g., hypervigilance, substance use, anxiety)

### **Summary**

In sum, although the literature review noted some correlations between social support and progression through the Transtheoretical model, there is still a substantial need for further research on the effects of social support on the stages of change for survivors of trauma. By focusing on perceived social support and progression through the Transtheoretical model, this dissertation project was one of the first to examine social support and willingness to change among survivors of sexual, physical and emotional abuse.

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APPENDIX B

IRB Approval Letter

## NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: August 24, 2016

Protocol Investigator Name: Mario Souza

Protocol #: 15-11-128

Project Title: Exploring the relationship between perceived social support and readiness to change in therapy with trauma survivors  
School: Graduate School of Education and Psychology

Dear Mario Souza:

Thank you for submitting your application for expedited review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. As the nature of the research met the requirements for expedited review under provision Title 45 CFR 46.110 of the federal Protection of Human Subjects Act, the IRB conducted a formal, but expedited, review of your application materials.

Based upon review, your IRB application has been approved. The IRB approval begins today August 24, 2016, and expires on August 23, 2017.

Your final consent form has been stamped by the IRB to indicate the expiration date of study approval. You can only use copies of the consent that have been stamped with the IRB expiration date to obtain consent from your participants.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Please be aware that changes to your protocol may prevent the research from qualifying for expedited review and will require a submission of a



new IRB application or other materials to the IRB. If contact with subjects will extend beyond August 23, 2017, a continuing review must be submitted at least one month prior to the expiration date of study approval to avoid a lapse in approval.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual at [community.pepperdine.edu/irb](http://community.pepperdine.edu/irb).

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Pepperdine University 24255 Pacific Coast Highway Malibu, CA 90263 TEL: 310-506-4000

Judy Ho, Ph.D., IRB Chairperson

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives  
Mr. Brett Leach, Regulatory Affairs Specialist

Pepperdine University 24255 Pacific Coast Highway Malibu, CA 90263 TEL: 310-506-4000

APPENDIX C

Client Consent Form

**Pepperdine University  
Counseling and Educational Clinics  
Consent for Services**

Welcome to Pepperdine University's Counseling and Educational clinics. Please read this document carefully because it will help you make an informed decision about whether to seek services here. This form explains the kinds of services our clinic provides and the terms and conditions under which services are offered. Because our clinic complies with the Health Insurance Portability and Accountability Act (HIPAA), be sure to review the Privacy Rights pamphlet that was also given to you today. It is important that you understand the information presented in this form. If you have any questions, our staff will be happy to discuss them with you.

Who We Are: Because the clinic is a teaching facility, graduate students in either the Clinical Psychology Doctorate Program or the Masters in Marriage and Family Therapy Program provide the majority of services. Our graduate student therapists are placed in the clinic for a time-limited training position, which typically lasts 8-12 months. In all cases, all therapists are supervised by a licensed clinical psychologist or a team that includes a licensed mental health professional. The clinic is housed in Pepperdine University and follows the University calendar. As a general rule, the clinic will be closed when the University is not in session. No psychological services will be provided at those times.

- I understand and agree that my services will be provided by an unlicensed graduate student therapist who will be working under the direct supervision of a licensed mental health professional.
- I understand and agree that, as required by law, my therapist may disclose any medical, psychological or personal information concerning me to his/her supervisor(s).
- I confirm that I have been provided with information on how to contact my therapist's supervisor(s) should I wish to discuss any aspects of my treatment.

I understand and agree with the above three statements.

Services: Based on the information you provided in your initial telephone interview, you have been referred to the professional service in our clinic appropriate to your concern. The clinic provides the following professional psychological services:

*Psychotherapy:* The first few sessions of therapy involve an evaluation of your needs. At the end of the evaluation phase, a determination will be made regarding whether our services appropriately match your mental health needs. A determination will also be made regarding whether to continue with services at our clinic, or to provide you with a referral to another treatment facility more appropriate to your needs. As part of your services, you

will be asked to complete questionnaires during your intake session, at periodic intervals (e.g., every fifth session), and after you have completed treatment. Psychotherapy has both benefits and risks. Risks sometimes include being asked to discuss unpleasant aspects of your life and experiencing uncomfortable feelings like sadness, guilt, anger, frustration, loneliness, and helplessness. Sometimes decisions are made in therapy that are positive for one family member and can be viewed negatively by another family member. On the other hand, psychotherapy has also been shown to have many benefits. Therapy often leads to better relationships, solutions to specific problems, and significant reduction in feelings of distress. But there are no guarantees of what you will experience. In order for therapy to be effective, a commitment to regular attendance is necessary. Frequent cancellations or missed therapy appointments may result in termination of services or a referral to an alternative treatment setting. Unless otherwise arranged, therapy sessions are scheduled once a week for 50 minutes. Educational Therapy is also offered in some of our clinics. This is an intervention that focuses on learning difficulties by addressing how circumstances in a person's life contribute to these difficulties. Educational therapy combines tutoring as well as attention to socio-emotional issues that affect learning.

*Psychological Assessment:* The clinic provides psychological and psycho-educational assessments. These assessments may be initiated by you, your therapist or a third party. Assessment sessions are longer than therapy sessions and can take several hours to complete. The number of sessions required for conducting the assessment will be determined based on the nature and number of tests administered. You have the right to request a copy of your assessment report and test data. You also have the right to receive feedback regarding your assessment results. However, there are some situations in which we may not be able to release test results, including test data, to you: a) When such a disclosure may cause substantial harm or misuse of the test results and test data, and/or b) When you were notified and agreed in advance and in writing that the assessment was ordered and/or paid for by a third party and that we would release your results only to that third party. The benefits of psychological assessment include a clearer understanding of your cognitive and emotional functioning. Although the risks of participating in a psychological assessment are generally no greater than the risks of counseling, test results may reveal information that may be painful and/or difficult to accept. If that is the case, we recommend that you review with the examiner options for addressing your concerns.

*Consent to Video/audio taping and Observations:* It is standard procedure at our clinic for sessions to be audio taped and videotaped for training/teaching and/or research purposes. **It should be noted that videotaping for teaching/training purposes is a prerequisite for receiving services at our clinic.** In addition, sessions may be observed by other therapists and/or supervisors at the clinic through the use of a one-way mirror or direct in-session observation.

- For Teaching/Training purposes, check all that apply:  
I understand and agree to

\_\_\_\_\_ Video/audio taping  
\_\_\_\_\_ Direct Observation

Psychological Research: As a university based clinic, we engage in research activities in order to determine the effectiveness of our services, including client satisfaction, as well as to better understand assessment and therapy practices. Participation in research is totally voluntary and means that the forms you complete as a part of your treatment will be placed in a secure research database. Clinic staff will remove any of your identifying information (e.g., name, address, date of birth) from the written materials before they are placed in the database. You may also consent to have your taped sessions included in the research database, and if so these tapes will be used and stored in a confidential manner. Only those professors and graduate students who have received approval from the Clinic Research Committee, and who have signed confidentiality agreements, will be granted access to the database in order to conduct scholarly research. If any information from the database is involved in a published study, results will be discussed in reference to participant groups only, with no personally identifying information released. Your services do not depend on your willingness to have your written and/or taped materials included in our research database. You may also change your mind about participation in the research database at any time. While there is no direct benefit to you to have your materials placed in the database, your participation may provide valuable information to the field of psychology and psychotherapy.

**Please choose from the following options (confirm your choice by initialing in the margin).**

- I understand and agree that information from my services will be included in the Research Database (check all that apply).

Written Data  
 Videotaped Data  
 Audiotaped Data

OR

- I do not wish to have my information included in the Research Database.

- 
- I understand and agree that I may be contacted in the future about the opportunity to participate in other specific research programs.

OR

- I do not wish to be contacted in the future about the opportunity to participate in other specific research programs.

Fees: The fee for the initial intake is nonrefundable.

Payment for services is due at the time the services are rendered. You're on going fee will be based on your income (for minors: the income of your parents) or upon your ability to pay. Once an appointment is scheduled, you will be expected to pay for it unless you provide 24-hour notice of cancellation prior to the appointment time. Please notify us of your cancellation via phone. Please do not use E-mail since we cannot guarantee a secure and confidential correspondence. Failure to pay for services may result in the termination of treatment and/or the use of an outside collection agency to collect

fees. In most collection situations, the only information released is your name, the nature of services provided and amount due.

*Payment for psychological assessment services:* The intake fee is due at the time of the first appointment. Following this appointment, the full cost of the psychological testing will be determined. Payment in full for the psychological testing is required prior to the completion of the testing. Feedback from the testing as well as a test report will be provided after payment has been made in full. Fees for psychological testing cover: initial interview, test administration, scoring and interpretation, oral feedback of test results, and a written test report. Any additional services requested will be billed separately.

After Hours and Emergency Contact: Should you need to reach your therapist during or after business hours you may leave a message on the clinic's voice-mail. The therapist will most likely return your call by the next day. Should you need to contact your therapist for an urgent matter, you may use the clinic's pager number, provided to you, to get in touch with the on-call therapist. Please be aware that the clinic is not equipped to provide emergency psychiatric services. Should you need such services, during and/or after business hours, you will be referred to more comprehensive care centers in the community.

Confidentiality & Records: All communications between you and your therapist are strictly confidential and may not be disclosed to anyone outside the clinic staff without your written authorization. However, there are some situations in which disclosure is permitted or required by law, without your consent or authorization:

- Your therapist may consult with other mental health professionals regarding your case. The consultants are usually affiliated with Pepperdine University. Your therapist may also discuss your case in other teaching activities at Pepperdine, such as class discussions, presentations and exams. Every effort is made to avoid revealing your identity during such teaching activities.
- If the situation involves a serious threat of physical violence against an identifiable victim, your therapist must take protective action, including notifying the potential victim and contacting the police.
- If your therapist suspects the situation presents a substantial risk of physical harm to yourself, others, or property he/she may be obligated to seek hospitalization for you or to contact family members or others who can help.
- If your therapist suspects that a child under the age of 18, an elder, or a dependent adult has been a victim of abuse or neglect, the law requires that he/she file a report with the appropriate protective and/or law enforcement agency.
- If you are involved in a court proceeding and a request is made for information about the services provided to you, the clinic cannot provide any information, including release of your clinical records, without your written authorization, a court order, or a subpoena.
- If you file a complaint or lawsuit against your therapist and/or the clinic, disclosure of relevant information may be necessary as part of a defense strategy.
- If a government agency is requesting the information pursuant to their legal authority (e.g., for health oversight activities), the clinic may be required to provide it for them.

- If the clinic has formal business associates who have signed a contract in which they promise to maintain the confidentiality of your information except as specifically allowed in the contract or otherwise required by law.

If such a situation arises, your therapist will make every effort to fully discuss it with you before taking any action. Disclosure will be limited to what is necessary for each situation.

Your Records: The clinic keeps your Protected Health Information in your clinical records. You may examine and/or receive a copy of your records, if you request it in writing, except when: (1) the disclosure would physically or psychologically endanger you and/or others who may or may not be referenced in the records, and/or (2) the disclosure includes confidential information supplied to the clinic by others.

HIPAA provides you with the following rights with regard to your clinical records:

- You can request to amend your records.
- You can request to restrict from your clinical records the information that we can disclose to others.
- You can request an accounting of authorized and unauthorized disclosures we have made of your clinical records.
- You can request that any complaints you make about our policies and procedures be recorded in your records.
- You have the right to a paper copy of this form, the HIPAA notice form, and the clinic's privacy policies and procedures statement.

The clinic staff is happy to discuss your rights with you.

Treatment & Evaluation of Minors:

As an un-emancipated minor (under the age of 18) you can consent to services subject to the involvement of your parents or guardians.

- Over the age of 12, you can consent to services if you are mature enough to participate in services and you present a serious danger to yourself and/or others or you are the alleged victim of child physical and/or sexual abuse. In some circumstances, you may consent to alcohol and drug treatment.
- Your parents or guardians may, by law, have access to your records, unless it is determined by the child's therapist that such access would have a detrimental effect on the therapist's professional relationship with the minor or if it jeopardizes the minor's physical and/or psychological well-being.
- Parents or guardians will be provided with general information about treatment progress (e.g., attendance) and they will be notified if there is any concern that the minor is dangerous to himself and/or others. For minors over the age of 12, other communication will require the minor's authorization.
- All disclosures to parents or guardians will be discussed with minors, and efforts will be made to discuss such information in advance.

My signature or, if applicable, my parent(s) or guardian's signature below certifies that I have read, understood, accepted, and received a copy of this document for my records. This contract covers the length of time the below named is a client of the clinic.

\_\_\_\_\_  
Signature of client, 18 or older  
(Or name of client, if a minor)

and/or

\_\_\_\_\_  
Signature of parent or guardian

\_\_\_\_\_  
Relationship to client

\_\_\_\_\_  
Signature of parent or guardian

\_\_\_\_\_  
Relationship to client

\_\_\_\_\_ please check here if client is a minor. The minor's parent or guardian must sign unless the minor can legally consent on his/her own behalf.

\_\_\_\_\_  
Clinic/Counseling Center  
Representative/Witness

\_\_\_\_\_  
Translator

\_\_\_\_\_  
Date of signing



APPENDIX D

Therapist Consent Form

**INFORMED CONSENT FOR THERAPIST PARTICIPATION  
IN PEPPERDINE CLINICS RESEARCH DATABASE PROJECT**

1. I, \_\_\_\_\_, agree to participate in the research database project being conducted under the direction of Drs. Eldridge, Ellis, and Hall, in collaboration with the clinic directors. I understand that while the study will be under the supervision of these Pepperdine GSEP faculty members, other personnel who work with them may be designated to assist or act in their behalf. I understand that my participation in this research database is strictly voluntary.
2. One purpose of research at the Pepperdine University GSEP Clinics and Counseling Centers is to examine the effectiveness of new clinic policies and procedures that are being implemented. This is being done through standard internal clinic practices (headed by the clinic directors and the Clinic Advancement and Research Committee) as well as through the construction of a separate research database (headed by Drs. Eldridge, Ellis, and Hall). Another purpose of this research project is to create a secure database from which to conduct research projects by the faculty members and their students on other topics relevant to clinical practice.
3. I have been asked to participate in the research database project because I am a student therapist or intern at a GSEP Clinic or Counseling Center. Because I will be implementing the new clinic policies and procedures with my clients, my input (or participation) will provide valuable data for the research database.

My participation in the research database project can involve two different options at this point. I can choose to participate in any or neither of these options by initialing my consent below each description of the options.

First, my participation in the research database project will involve being asked, from time to time, to fill out questionnaires about my knowledge, perceptions and reactions to clinic trainings, policies and procedures. In addition, my participation involves allowing questionnaires that I complete about my clients (e.g., treatment alliance) and/or tapes from my sessions with clients to be placed into the database.

Please choose from the following options by placing your initials on the lines.

- I understand and agree that the following information will be included in the Research Database (check all that apply).
  - \_\_\_\_\_ Written questionnaires about my knowledge, perceptions and reactions to clinic trainings, policies and procedures
  - \_\_\_\_\_ Written Data about My Clients (e.g., Therapist Working Alliance Form)
  - \_\_\_\_\_ Video Data of sessions with my clients (i.e., DVD of sessions)
  - \_\_\_\_\_ Audio Data of sessions with my clients (i.e., CD or cassette tapes of sessions)

OR

- I do not wish to have any/all of the above information included in the Research Database.

\_\_\_\_\_

Please choose from the following options by placing your initials on the lines.

- I understand and agree that I may be contacted in the future about the opportunity to participate in other specific research programs at the GSEP Clinic or Counseling Center.

\_\_\_\_\_

OR

- I do not wish to be contacted in the future about the opportunity to participate in other specific research programs at the GSEP Clinic or Counseling Center.

\_\_\_\_\_

4. *My participation in the study will last until I leave my position at the GSEP Clinic or Counseling Center.*
5. I understand that there is no direct benefit from participation in this project, however, the benefits to the profession of psychology and marriage and family therapy may include improving knowledge about effective ways of training therapists and implementing policies and procedures as well as informing the field about how therapy and assessments are conducted in university training clinics.
6. I understand that there are certain risks and discomforts that might be associated with this research. These risks include potential embarrassment or discomfort at having faculty review materials about my clinic practices, which may be similar to feelings about supervisors reviewing my work; however this risk is unlikely to occur since the written materials will be coded to protect your identity. Sensitive video data will be also coded to protect confidentiality, tightly secured (as explained below), and reviewed only by those researchers who sign strict confidentiality agreements.
7. I understand that I may choose not to participate in the research database project.
8. I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the research project at any time without prejudice to my employment in the GSEP Clinics and Counseling Centers. I also understand that there might be times that the investigators may find it necessary to end my study participation (e.g., if my client withdraws consent for participation in the research study).
9. I understand that the investigators will take all reasonable measures to protect the confidentiality of my records and my identity will not be revealed in any publication that may result from this project.

10. The confidentiality of my records will be maintained in accordance with applicable state and federal laws. Under California law, there are exceptions to confidentiality, including suspicion that a child, elder, or dependent adult is being abused, or if an individual discloses an intent to harm him/herself or others. I understand there is a possibility that information I have provided regarding provision of clinical services to my clients, including identifying information, may be inspected and/or photocopied by officials of the Food and Drug Administration or other federal or state government agencies during the ordinary course of carrying out their functions. If I participate in a sponsored research project, a representative of the sponsor may inspect my research records.
11. The data placed in the database will be stored in locked file cabinets and password-protected computers to which only the investigators, research team members and clinic directors will have access. In addition, the information gathered may be made available to other investigators with whom the investigator collaborates in future research and who agree to sign a confidentiality agreement. If such collaboration occurs, the data will be released without any personally identifying information so that I cannot be identified, and the use of the data will be supervised by the investigators. The data will be maintained in a secure manner for an indefinite period of time for research purposes. After the completion of the project, the data will be destroyed.
12. I understand I will receive no compensation, financial or otherwise, for participating in study.
13. I understand that the investigators are willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact Dr. Kathleen Eldridge at (310) 506-8559, Dr. Meshia Ellis at (310) 568-5768, or Dr. Susan Hall at (310) 506-8556 if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact the Chairperson of the Graduate and Professional Schools IRB, Pepperdine University at (310) 568-5600.
14. I will be informed of any significant new findings developed during the course of my participation in this research which may have a bearing on my willingness to continue in the study.
15. I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand. I hereby consent to participate in the research described above.

---

Participant's signature

---

Date

---

Participant's name (printed)

I have explained and defined in detail the research procedure in which the participant has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

---

Researcher/Assistant signature

---

Date

---

Researcher/Assistant name (printed)

APPENDIX E

Client Information Adult Form

ID # \_\_\_\_\_

### CLIENT INFORMATION \*\*ADULT FORM

THIS FORM IS INTENDED TO SAVE YOU AND YOUR INTAKE INTERVIEWER TIME AND IS IN THE INTEREST OF PROVIDING YOU WITH THE BEST SERVICE POSSIBLE. ALL INFORMATION ON THIS FORM IS CONSIDERED CONFIDENTIAL. IF YOU DO NOT WISH TO ANSWER A QUESTION, PLEASE WRITE "DO NOT CARE TO ANSWER" AFTER THE QUESTION.

TODAY'S DATE \_\_\_\_\_

FULL NAME \_\_\_\_\_

HOW WOULD YOU PREFER TO BE ADDRESSED? \_\_\_\_\_

REFERRED BY: \_\_\_\_\_

MAY WE CONTACT THIS REFERRAL SOURCE TO THANK THEM FOR THE REFERRAL?  YES  NO

IF YES, PLEASE PROVIDE CONTACT INFORMATION FOR THIS PERSON/AGENCY

## Personal Data

ADDRESS: \_\_\_\_\_  
 \_\_\_\_\_

TELEPHONE (HOME): _____	BEST TIME TO CALL: _____	CAN WE LEAVE A MESSAGE? <input type="checkbox"/> Y <input type="checkbox"/> N
TELEPHONE (WORK): _____	BEST TIME TO CALL: _____	CAN WE LEAVE A MESSAGE? <input type="checkbox"/> Y <input type="checkbox"/> N

AGE: \_\_\_\_\_ DATE OF BIRTH: \_\_\_\_/\_\_\_\_/\_\_\_\_

MARITAL STATUS:

<input type="checkbox"/> MARRIED	<input type="checkbox"/> SINGLE	HOW LONG? _____
<input type="checkbox"/> DIVORCED	<input type="checkbox"/> COHABITATING	PREVIOUS MARRIAGES? _____
<input type="checkbox"/> SEPARATED	<input type="checkbox"/> WIDOWED	HOW LONG SINCE DIVORCE? _____

LIST BELOW THE PEOPLE LIVING WITH YOU:

NAME	RELATIONSHIP	AGE	OCCUPATION
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PERSON TO BE CONTACTED IN CASE OF EMERGENCY:

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

RELATIONSHIP TO YOU: \_\_\_\_\_

## Medical History

CURRENT PHYSICIAN: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CURRENT MEDICAL PROBLEMS: \_\_\_\_\_

MEDICATIONS BEING TAKEN: \_\_\_\_\_

PREVIOUS HOSPITALIZATIONS (MEDICAL OR PSYCHIATRIC)

DATE

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

OTHER SERIOUS ILLNESSES

DATE

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

PREVIOUS HISTORY OF MENTAL HEALTH CARE (PSYCHOLOGIST, PSYCHIATRIST, MARRIAGE COUNSELING, GROUP THERAPY, ETC.)

DATE

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Educational and Occupational History

HIGHEST LEVEL OF EDUCATION ATTAINED:

- |                                                                         |                                                                           |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> ELEMENTARY/MIDDLE SCHOOL: LIST GRADE _____     | <input type="checkbox"/> VOCATIONAL TRAINING: LIST TRADE _____            |
| <input type="checkbox"/> HIGH SCHOOL: LIST GRADE _____                  | <input type="checkbox"/> COLLEGE: LIST YEARS _____                        |
| <input type="checkbox"/> GED                                            | <input type="checkbox"/> GRADUATE EDUCATION: LIST YEARS OR DEGREE EARNED_ |
| <input type="checkbox"/> HS DIPLOMA                                     |                                                                           |
| <input type="checkbox"/> CURRENTLY IN SCHOOL? SCHOOL/LOCATION:<br>_____ |                                                                           |

CURRENT AND PREVIOUS JOBS:

JOB TITLE	EMPLOYER NAME & CITY	DATES/DURATION
-----------	----------------------	----------------

\_\_\_\_\_  
 \_\_\_\_\_

HOUSEHOLD INCOME:

- UNDER \$10,000
- \$11,000-30,000
- \$31,000-50,000
- \$51,000-75,000

OCCUPATION: \_\_\_\_\_



OVER \$75,000

## Family Data

IS FATHER LIVING?

YES  IF YES, CURRENT AGE: \_\_\_\_\_

RESIDENCE (CITY): \_\_\_\_\_ OCCUPATION: \_\_\_\_\_

HOW OFTEN DO YOU HAVE CONTACT? \_\_\_\_\_

No

IF NOT LIVING, HIS AGE AT DEATH: \_\_\_\_\_ YOUR AGE AT HIS DEATH: \_\_\_\_\_

CAUSE OF DEATH: \_\_\_\_\_

IS MOTHER LIVING?

YES  IF YES, CURRENT AGE: \_\_\_\_\_

RESIDENCE (CITY): \_\_\_\_\_ OCCUPATION: \_\_\_\_\_

HOW OFTEN DO YOU HAVE CONTACT? \_\_\_\_\_

No

IF NOT LIVING, HER AGE AT DEATH: \_\_\_\_\_ YOUR AGE AT HER DEATH: \_\_\_\_\_

CAUSE OF DEATH: \_\_\_\_\_

BROTHERS AND SISTERS

NAME	AGE	OCCUPATION	RESIDENCE	CONTACT HOW OFTEN?
------	-----	------------	-----------	--------------------


LIST ANY OTHER PEOPLE YOU LIVED WITH FOR A SIGNIFICANT PERIOD DURING CHILDHOOD.

NAME	RELATIONSHIP TO YOU	STILL IN CONTACT?
------	---------------------	-------------------


THE FOLLOWING SECTION WILL HELP US UNDERSTAND YOUR NEEDS AND FACTORS THAT MAY IMPACT YOUR LIFE OR TREATMENT. BELOW IS A LIST OF EXPERIENCES WHICH MAY OCCUR IN FAMILIES. PLEASE READ EACH EXPERIENCE CAREFULLY. PLEASE INDICATE WHETHER ANY OF THESE EXPERIENCES HAVE HAPPENED TO YOU OR YOUR FAMILY. SOME OF THESE MAY HAVE BEEN TRUE AT ONE POINT FOR YOU OR IN YOUR FAMILY BUT NOT TRUE AT ANOTHER POINT. IF THE EXPERIENCE NEVER HAPPENED TO YOU OR SOMEONE IN YOUR FAMILY, PLEASE CHECK THE "NO" BOX. IF YOU ARE UNSURE WHETHER OR NOT THE EXPERIENCE OCCURRED FOR YOU OR IN YOUR FAMILY AT SOME TIME, PLEASE CHECK THE "UNSURE" BOX. IF THE EXPERIENCE HAPPENED TO YOU OR IN YOUR FAMILY AT ANY POINT, PLEASE CHECK THE "YES" BOX.

SELF      FAMILY



## Current Difficulties

PLEASE CHECK THE BOXES TO INDICATE WHICH OF THE FOLLOWING AREAS ARE CURRENT PROBLEMS FOR YOU AND REASONS FOR COUNSELING. PLACE **TWO** CHECK MARKS TO INDICATE THE MOST IMPORTANT REASON(S).

- |                          |                                      |                          |                                                            |
|--------------------------|--------------------------------------|--------------------------|------------------------------------------------------------|
| <input type="checkbox"/> | FEELING NERVOUS OR ANXIOUS           | <input type="checkbox"/> | DIFFICULTY WITH SCHOOL OR WORK                             |
| <input type="checkbox"/> | UNDER PRESSURE & FEELING STRESSED    | <input type="checkbox"/> | CONCERNS ABOUT FINANCES                                    |
| <input type="checkbox"/> | NEEDING TO LEARN TO RELAX            | <input type="checkbox"/> | TROUBLE COMMUNICATING SOMETIMES                            |
| <input type="checkbox"/> | AFRAID OF BEING ON YOUR OWN          | <input type="checkbox"/> | CONCERNS WITH WEIGHT OR BODY IMAGE                         |
| <input type="checkbox"/> | FEELING ANGRY MUCH OF THE TIME       | <input type="checkbox"/> | FEELING PRESSURED BY OTHERS                                |
| <input type="checkbox"/> | DIFFICULTY EXPRESSING EMOTIONS       | <input type="checkbox"/> | FEELING CONTROLLED/MANIPULATED                             |
| <input type="checkbox"/> | FEELING INFERIOR TO OTHERS           | <input type="checkbox"/> | PRE-MARITAL COUNSELING                                     |
| <input type="checkbox"/> | LACKING SELF CONFIDENCE              | <input type="checkbox"/> | MARITAL PROBLEMS                                           |
| <input type="checkbox"/> | FEELING DOWN OR UNHAPPY              | <input type="checkbox"/> | FAMILY DIFFICULTIES                                        |
| <input type="checkbox"/> | FEELING LONELY                       | <input type="checkbox"/> | DIFFICULTIES WITH CHILDREN                                 |
| <input type="checkbox"/> | EXPERIENCING GUILTY FEELINGS         | <input type="checkbox"/> | DIFFICULTY MAKING OR KEEPING FRIENDS                       |
| <input type="checkbox"/> | FEELING DOWN ON YOURSELF             | <input type="checkbox"/> | BREAK-UP OF RELATIONSHIP                                   |
| <input type="checkbox"/> | THOUGHTS OF TAKING OWN LIFE          | <input type="checkbox"/> | DIFFICULTIES IN SEXUAL RELATIONSHIPS                       |
| <input type="checkbox"/> | CONCERNS ABOUT EMOTIONAL STABILITY   | <input type="checkbox"/> | FEELING GUILTY ABOUT SEXUAL ACTIVITY                       |
| <input type="checkbox"/> | FEELING CUT-OFF FROM YOUR EMOTIONS   | <input type="checkbox"/> | FEELING CONFLICTED ABOUT ATTRACTION TO MEMBERS OF SAME SEX |
| <input type="checkbox"/> | WONDERING "WHO AM I?"                | <input type="checkbox"/> | FEELINGS RELATED TO HAVING BEEN ABUSED OR ASSAULTED        |
| <input type="checkbox"/> | HAVING DIFFICULTY BEING HONEST/OPEN  | <input type="checkbox"/> | CONCERNS ABOUT PHYSICAL HEALTH                             |
| <input type="checkbox"/> | DIFFICULTY MAKING DECISIONS          | <input type="checkbox"/> | DIFFICULTIES WITH WEIGHT CONTROL                           |
| <input type="checkbox"/> | FEELING CONFUSED MUCH OF THE TIME    | <input type="checkbox"/> | USE/ABUSE OF ALCOHOL OR DRUGS                              |
| <input type="checkbox"/> | DIFFICULTY CONTROLLING YOUR THOUGHTS | <input type="checkbox"/> | PROBLEMS ASSOCIATED WITH SEXUAL ORIENTATION                |
| <input type="checkbox"/> | BEING SUSPICIOUS OF OTHERS           | <input type="checkbox"/> | CONCERNS ABOUT HEARING VOICES OR SEEING THINGS             |
| <input type="checkbox"/> | GETTING INTO TROUBLE                 |                          |                                                            |

ADDITIONAL CONCERNS (IF NOT COVERED ABOVE):

---

## Social/Cultural (Optional)

1. RELIGION/SPIRITUALITY: \_\_\_\_\_
2. ETHNICITY OR RACE: \_\_\_\_\_
3. DISABILITY STATUS? \_\_\_\_\_

APPENDIX F

Intake Evaluation Summary

Pepperdine Psychological and Educational Clinic  
Intake Evaluation Summary

Client: \_\_\_\_\_ Intake Therapist: \_\_\_\_\_  
Intake Date(s): \_\_\_\_\_ Date of Report: \_\_\_\_\_

**I Identifying Information**

(Name, age/D.O.B., gender, marital status, # of children, occupation/employment status, education, ethnicity, and current living arrangements)

**II Presenting Problem/Current Condition**

(Description of client's current difficulties, and why s/he is seeking help at this time; describe symptoms and impact on current functioning, including onset, frequency and duration)

**III History of the Presenting Problem & History of Other Psychological Issues**

(Trace development of present problem, including previous psychological treatment, hospitalizations, medication; discuss other significant psychological difficulties and prior treatment. Address history of substance abuse, suicidal ideation/attempts, & aggressive/violent behavior)

**IV Psychosocial History**

**A Family History**

(Family constellation, family of origin and current family, family dynamics, domestic violence/abuse; Include family psychiatric, medical and substance abuse history)

**B Developmental History**

(Note progression of development milestones, as well as particular strengths or areas of difficulty)

**C Educational/Vocational History**

(Highest grade completed, strengths/weaknesses, learning issues/interventions; Work history, including any work related difficulties)

**D Social Support/Relationships**

(Current social support network; Intimate relationships and their history, especially as related to presenting problem)

**E Medical History**

(When was client last seen by a doctor? Describe current/past medical conditions, injuries, medications, procedures/surgeries)

F      Cultural Factors and Role of Religion in the Client's Life

(Cultural group identification/identity, acculturation issues relevant to presenting problems/therapy)

(Religious affiliations, strength of commitment to and/or involvement in religion, view of spirituality and its role in emotional problems/suffering and intervention)

G      Legal History

(Arrests, incarcerations, parole/probation, current lawsuits, child custody. Is the client court ordered into therapy?)

V      Mental Status Evaluation

Hygiene & grooming:

Interpersonal presentation/behavioral observations:

Orientation (person, place, time, situation):

Speech (pitch, pace, tone):

Motor Activity (calm, restless, agitated, retarded):

Mood (euthymic, dysphoric, elevated, irritable, anxious):

Affect (appropriate/inappropriate to mood, labile, expansive, blunted, flat):

Thought Process (associations may be logical, tight & coherent, or loose & tangential):

Thought Content (appropriate; delusions; odd ideations):

Perceptual Disturbances (hallucinations):

Cognitive Functioning (intellectual functioning, fund of knowledge):

Concentration, Attention & Memory:

Judgment & Insight (intact, good, fair or poor/impaired):

- VI Client Strengths  
(Intelligence, personality, internal resources, coping skills, support system, talents and abilities, motivation, education/vocational skills, health)
- VII Summary and Conceptualization  
(Summarize your understanding of the client's central issues/symptoms, how these developed, and factors that maintain them. Present differential diagnosis, with justification for diagnosis given):
- VIII DSM-IV TR Multiaxial Diagnosis

Axis I:

Axis II:

Axis III:

Axis IV:

Axis V: Global Assessment of Functioning (GAF) Scale:

Current GAF:

Highest GAF during the past year:

IX Client Goals

X Treatment Recommendations

Be as specific as possible. Note: suggested therapy modalities and frequency of contact, issues to be addressed, adjunctive services such as psychological testing or medication evaluation. Recommendations should be connected to presenting problem and diagnoses.

\_\_\_\_\_  
Intake Therapist

\_\_\_\_\_  
Supervisor

\_\_\_\_\_  
Date



## APPENDIX G

### Treatment Summary



**Diagnosis at Termination:**

Axis I: \_\_\_\_\_  
Axis II: \_\_\_\_\_  
Axis III: \_\_\_\_\_  
Axis IV: \_\_\_\_\_  
Axis V: \_\_\_\_\_

**Disposition (state whether the case has been transferred or terminated, and give reasons why):**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

sample

**Recommendations for Follow-Up (If the case is being transferred, list specific treatment recommendations for the next therapist, including what worked and did not work with the client(s).):**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
**Student Therapist**

\_\_\_\_\_  
**Supervisor**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Date**

## APPENDIX H

### Research Assistant Instructions for Participant Selection Criteria

### Measure Identification-Study 1

1. Open hard copy research file and search it for a completed URICA and completed MSPSS at the **point of intake**. A completed assessment requires that there are no blank questions, and that each question has an appropriate answer. For example, sometimes potential participants will circle 2 answers for a question if they are unsure. This makes the measure invalid for the study, and their chart will not be able to be used.
2. Once appropriate assessment measure is identified, score the measure. Scoring procedures are found in the PARC resources binder in the locked research cabinet.
3. Record the Readiness to Change score for the URICA and Total Mean score for the MSPSS in the “PARC Trauma database” excel file for each of these selected research participants.

### Measure Identification-Study 2:

1. Open hard copy research file and identify if it contains a WAI client form completed within sessions 3-7. A completed assessment requires that there are no blank questions, and that each question has an appropriate answer (i.e., only one selection circled per question). As mentioned in Study 1, circling more than one response for each question, or if the participant fails to circle a response for an item, the measure becomes invalid for the study, and the particular participant’s chart will not be utilized for the proposed study.
2. Score the WAI. Scoring procedures are found in the PARC resources binder in the locked research cabinet.
3. Record the WAI score in the “PARC Trauma Database” excel file.
4. Next, record/enter demographic information in the database for each research file:
  - a. Under the “Age” column, enter the age of the client at the time of intake.
  - b. Under the “Education” column, enter the number of years the client attended a formal education (e.g., a high school diploma would equal 12 years of education).
  - c. Under the “Gender” column, enter “1” for Male, “2” for Female, or “3” for Other.
  - d. Under the “Ethnicity” column, enter:
    - i. Middle Eastern / Middle Eastern American=1
    - ii. Asian / Asian American=2
    - iii. African American=3
    - iv. Caucasian=4
    - v. Latino/Latina=5
    - vi. Native American=6
    - vii. Other = 7

- i. Note: If coded as “Other”, please note/list the specific ethnicity or ethnicities in the “Other Ethnicity Notes” column.
- viii. Alaskan native=8
- ix. Pacific Islander=9

### Trauma Identification

1. Open “PARC Trauma Database” excel file that contains all of the research file numbers and completed study measure data. Of note, the “PARC Trauma Database” will contain and identify participants that did not report a history of abuse, those that endorsed a history of abuse or assault in adulthood, and also those that endorsed a history of abuse in childhood.
2. For each research file number that you are looking at, locate the hard copy research file. Specifically, please follow the numerical order of the files so that each file is evaluated for its potential study group (trauma vs. non-trauma).
3. In the redacted hard copy research file, locate the Pepperdine clinic intake packet
4. Find the Client Information Adult Form. Flip to page four where clients check off whether they personally experienced any abuse or assault (has columns of check boxes).
5. Check to see if any of the following boxes were marked off: Physical abuse, Emotional Abuse, Verbal Abuse, Rape/Sexual Assault.
6. Note abuse or assault information in the excel document under the “Trauma” column:
  - PA- Physical Abuse
  - EA- Emotional Abuse
  - SA- Sexual Abuse
  - RSA - Rape/Sexual Assault
  - VA- Verbal Abuse
  - V- Victim
  - P- Perpetrator
    - EXAMPLE: Client was the victim of physical & emotional abuse ->  
PA, EA, V
  - If no abuse or assault is indicated, simply write “no” in the “Trauma” column
7. Locate the Intake Evaluation Report, Telephone Intake Summary and the Treatment Summary Form in the research file.
8. If the client did not report being a survivor/victim or perpetrator of abuse or assault in the demographic form but there is an indication of it in the Intake Evaluation Report and/or the Telephone Intake Summary or the Treatment Summary Form, then include those cases in the “trauma column.”

9. **Timing.** For the cases in which there has been an indication of abuse or assault, read through the Intake Evaluation Report, Telephone Intake Summary, or the Treatment Summary Form to see WHEN the abuse / assault was reported to have taken place (childhood, adulthood, etc.).

Document the timing of abuse / assault using the following 4 categories in the “Trauma Timing” column:

- a. If the client indicated that all abuse or assault occurred during childhood ONLY (defined as occurring up until age 18), write “Child.”
- b. If all the abuse / assault occurred at any time outside of childhood (18 and over) write “Adult”.
- c. If abuse / assault was reported to have occurred during both childhood and adulthood, then write “Both.”
- d. If no specific information is given, write “Unknown.”

Thus, for example, if the client experienced emotional abuse in childhood, the “Trauma” column would read “EA, V”, and the “Trauma Timing” column would state, “Child.” Additionally, if the client experienced physical abuse in adulthood, the “Trauma” column would read “PA, V”, and the “Trauma Timing” column would be marked as “Adult.”

10. **Frequency.** If the information is available, document the amount of times the abuse/assault was said to have happened using the following categories. Indicate if frequency is unknown or unspecified (“unknown”). Only input 0 if this amount was clearly indicated in the research file.

- a. **Overall total frequency.** Tally the total number of times abuse/assault was said to have happened across the lifetime (combining childhood and adulthood) in the “Total Frequency” category. If unknown, enter “unknown.” Note that the total number may underestimate the actual numbers experienced by the client, and may not match the more specific categories below, given variance often found in reports or discussions of abuse and assault.
- b. **Childhood frequency.** If the client endorsed a history of abuse or assault in childhood, count how many times these experiences or incidents happened or were reported, and enter that number (or “unknown”) under the columns “Childhood Abuse Total Frequency”, and the columns representing the specific abuse/assault types abuse: Childhood Frequency SA, Childhood Frequency RSA, Childhood Frequency PA, Childhood Frequency EA, and Childhood Frequency VA.

For example, if the client reported experiencing emotional abuse twice in childhood, the RA should mark “2” under “Childhood Frequency EA.”

- c. **Adulthood frequency.** Similarly, if the client endorsed a history of abuse or assault in adulthood, count how many times these experiences or incidents happened or were reported, and enter that number (or “unknown”) under the columns “Adulthood Abuse Total Frequency”, and the columns representing the specific types of abuse/assault abuse: Adulthood Frequency SA, Adulthood Frequency RSA, Adulthood Frequency PA, Adulthood Frequency EA, and Adulthood Frequency VA.
11. Carefully review how you have documented all indications and reports of abuse accurately, and then re-file the research file in numerical order by research code.
  12. Repeat for next research file.