12-11-2015

Experiential avoidance post-trauma: Investigating predictors of traumatic stress and problematic behavior.

Elise Trim
Western Michigan University, etrim79@gmail.com

Follow this and additional works at: http://scholarworks.wmich.edu/honors_theses
Part of the Psychology Commons

Recommended Citation
Experiential Avoidance Post-Trauma: Investigating Predictors of Traumatic Stress and Problematic Behaviors

by

Elise E. Trim

Honors Thesis

Submitted to the Lee Honors College

Western Michigan University

in partial fulfillments of the requirements

for graduation from the

Carl and Winifred Lee Honors College

Thesis Committee:

Amy E. Naugle, Ph.D., Chair

Meaghan M. Lewis, M.S., Member

Andrew Hale, M.A., Member

December 19, 2015

Kalamazoo, Michigan
Acknowledgment

I would like to thank my honors thesis committee (Dr. Amy Naugle, Meaghan Lewis, M.S., and Andrew Hale, M.A.) for their advice and assistance that helped me formulate this project. I would also like to thank Dr. Naugle for providing me with many opportunities as a research assistant in her lab. These experiences have been crucial in shaping and developing my research abilities. I am thankful for Andrew Hale’s willingness to work with me on this study and for sharing his knowledge and skill. I am also thankful for the graduate students in the clinical psychology program for answering my many questions and helping implement my suggestions for independent research. I want to specifically thank Meaghan Lewis for all of her help, both with this project and in my educational career in general. Her support and encouragement have been invaluable to me. She reflects, in the truest sense of the word, what it is to be a mentor. In addition, I would like to specifically acknowledge my appreciation for her recommendations and feedback while writing this honors thesis. I would also like to acknowledge the help of our research assistants, Summer Chahin and Hannah Dean. Their contributions to this project have been exemplary.

I would also like to thank my mom, Andrea Trim, for her unending support and encouragement during my pursuit of advanced studies. Lastly, I would like to recognize the encouragement and support of my friends and family.
Abstract

Experiential avoidance (EA) is the unwillingness to remain in contact with distressing thoughts, feelings, memories, and other private experiences (Hayes et al., 2004; Hayes, Strosahl, & Wilson, 1999). Although the use of EA may lead to immediate reductions in distress, prolonged use can result in problem behaviors such as substance misuse (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Although a strong temporal relationship has yet to be established, findings suggest a possibility that EA could be a mechanism by which posttraumatic stress disorder (PTSD) symptoms are developed and maintained (Krause, Mendelson, & Lynch, 2003; Rosenthal, Polusny, & Follette, 2006; Dvorak, Arens, Kuvaas, Williams, & Kilwein, 2013).

Undergraduate students ($N = 107; M_{\text{age}} = 20$) were recruited to complete self-report measures regarding EA, childhood trauma history, PTSD symptoms, and problem behaviors using an anonymous online survey. Consistent with predictions and the current literature, EA was significantly associated with childhood trauma exposure, PTSD symptoms, sexual promiscuity, and aggression in the expected directions. EA predicated PTSD symptoms and problem behaviors above and beyond childhood trauma history, strengthening the predictive model as hypothesized. Clinical and research implications are discussed.

Keywords: Experiential avoidance, childhood trauma, problem behaviors, PTSD
# Table of Contents

Acknowledgments ........................................................................................................... i

Abstract ......................................................................................................................... ii

Review of the Empirical Literature ................................................................................ 1

Experiential Avoidance ..................................................................................................... 1

   Experiential Avoidance and Posttraumatic Stress Disorder ......................................... 2

   Childhood Trauma History ......................................................................................... 3

Problem Behaviors .......................................................................................................... 4

   Nicotine, Drug, and Alcohol Use ................................................................................. 4

   Aggression .................................................................................................................. 6

Rationale and Hypotheses ............................................................................................... 7

   Hypothesis 1 ............................................................................................................... 7

   Hypothesis 2 ............................................................................................................... 7

   Hypothesis 3 ............................................................................................................... 8

Method ........................................................................................................................... 9

   Participants ............................................................................................................... 9

   Procedure .................................................................................................................. 9

      Informed consent ................................................................................................. 9

      Method of data collection .................................................................................... 9

   Measures ................................................................................................................... 10

      Demographic questionnaire ................................................................................. 10

      Multidimensional experiential avoidance questionnaire .................................... 10

      Composite measure of problem behaviors ....................................................... 10
Childhood trauma questionnaire .................................................. 11
Posttraumatic stress disorder checklist-civilian version ................. 11
Design .......................................................................................... 11

Results .......................................................................................... 12
Preliminary Data Analyses ............................................................... 12
Bivariate correlations ..................................................................... 12

PTSD symptoms and substance use relationship .......................... 13
Problem behaviors and experiential avoidance relationship .......... 13
PTSD symptoms and experiential avoidance relationship .......... 13
Childhood trauma and problem behaviors relationship .............. 13
Childhood trauma and experiential avoidance relationship .......... 13

Hierarchical Multiple Linear Regression Analyses ....................... 13

Discussion .................................................................................... 15

Limitations and Future Research .................................................. 16
Conclusion ..................................................................................... 16

References .................................................................................... 18

Appendices .................................................................................... 25
A. Informed Consent ........................................................................ 26
B. Demographic Questionnaire .................................................... 29
C. Multidimensional Experiential Avoidance Questionnaire .......... 31
D. Composite Measure of Problem Behaviors ......................... 34
E. Posttraumatic Checklist - Civilian ............................................. 40
F. Childhood Trauma Questionnaire – Short Form .................... 41
G. Recruitment Script .................................................................... 43
H. Recruitment Flyer ...................................................................... 44
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bivariates Correlations of Study Variables .................................................. 23</td>
</tr>
<tr>
<td>2</td>
<td>Summary of Hierarchical Linear Regression Predicting Posttraumatic Stress .......... 24</td>
</tr>
<tr>
<td>3</td>
<td>Summary Hierarchical Linear Regression Predicting Problem Behaviors .............. 24</td>
</tr>
</tbody>
</table>
Experiential Avoidance Post-Trauma: Investigating Predictors of Traumatic Stress and Problematic Behaviors

Review of the Empirical Literature

Experiential Avoidance

Experiential avoidance (EA) is defined as an unwillingness to remain in contact with distressing thoughts, feelings, memories, and other private experiences – even in the event said avoidance results in further harm in the long run (Hayes et al., 2004; Hayes, Strosahl, & Wilson, 1999). EA can also be defined as avoiding (e.g., escaping, suppressing, modifying, or unacceptance of) the experience of negative affective states (Chawla & Ostafin, 2007; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Avoidance, if employed minimally, may be helpful in certain situations. However, it becomes problematic when great effort, time, and energy is devoted to managing and controlling unwanted private events (Kashdan, Barrios, Forsyth, & Steger, 2006). Although avoidance may provide initial reduction of distress, prolonged use of avoidance can result in substance abuse problems, social isolation, and other forms of psychopathology (Hayes, et. al., 1996; Polusny & Follette, 1995).

The Acceptance and Action Questionnaire-II (AAQ-II) is the most commonly used measure of EA (Bond, Hayes, Baer, Carpenter, Guenole, Orcutt, Waltz, & Zettle, 2011). However, recent research is exploring the utility of measuring EA as a multidimensional construct, involving different regulatory strategies such as distress aversion (i.e., negative evaluations toward distress and non-acceptance of distress), distraction and suppression (i.e., attempts to ignore or suppress distress), and repression/denial (i.e., distancing and dissociating from distress and lack of distress awareness) (Gámez, Chmielewski, Kotov, Ruggero, & Watson,
Experiential Avoidance, Trauma Exposure, and Problem Behaviors 2

2011). Measuring EA multidimensionally may provide a more accurate depiction of common forms of EA most strongly linked with psychopathology.

**Experiential avoidance and PTSD.** Most people experience at least one traumatic event in their lifetime (Ozer, Best, Lipsey, & Weiss, 2003). However, not all those who experience a traumatic event will go on to develop PTSD (Kessler, Chiu, Demler, Merikangas, & Walters, 2005). Some individuals ultimately develop symptoms of re-experiencing, avoidance, emotional numbing, and hyperarousal, indicating a PTSD diagnosis (American Psychiatric Association, 2013). Thus, only a proportion of the population will develop PTSD symptoms, leading researchers to question variables that differentiate those who develop PTSD from those who do not. Breslau and Kessler (2001) found that approximately 80% to 90% of the United States general population have experienced at least one traumatic event that would qualify them to meet criteria for PTSD if they develop the relevant symptoms. However, other studies have identified rates of PTSD within the general population in the United States as 1.3% (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995), and 6% to 17% in college students, based on DSM-IV criteria (Lauterbach & Vrana, 2001).

To date, empirical investigations of avoidance and its relationship to traumatic stress are becoming more of a focal area. One study examining EA in adult rape survivors found that cognitive avoidance of rape-related thoughts had small but detrimental effects on post-traumatic stress disorder (PTSD) symptoms (Boeschen, Koss, Figueredo, & Coan, 2001). Past research has found that EA mediated the relationship between trauma exposure and PTSD symptoms (Marx & Sloan, 2002; Merwin, Rosenthal, & Coffey, 2009). There is also evidence to suggest that distress aversion, one potential form of EA, is a mechanism involved in the maintenance of PTSD symptomology (Dvorak, Arens, Kuvaas, Williams, & Kilwein, 2013). Research further
Experiential Avoidance, Trauma Exposure, and Problem Behaviors supports a link between greater inhibition of emotional experience via thought suppression. Specifically, thought suppression has been found to mediate the effect of childhood maltreatment on adult psychological distress in a non-clinical sample (Krause, Mendelson, & Lynch, 2003; Rosenthal, Polusny, & Follette, 2006). Although a strong temporal relationship has yet to be established, these findings suggest a possibility that EA could be a mechanism by which PTSD symptoms are developed and maintained.

**Childhood trauma history.** Childhood sexual abuse (CSA) is a severe problem in this country. The estimated prevalence of CSA in the general female population ranges from 15% to 33% (e.g., Briere & Runtz, 1989; Finkelhor, Hotaling, Lewis, & Smith, 1990; Wyatt, 1985). Even though fewer men report experiencing CSA, research suggests that roughly 13% to 16% of all men in the United States have experienced CSA (e.g., Finkelhor et al., 1990; Fromuth & Burkhart, 1989). There are numerous potentially harmful consequences associated with a history of child sexual abuse. CSA victims are significantly more likely than those who have not experienced CSA to use illicit substances (Simpson & Miller, 2002), to use tobacco (Rodgers, Lang, Laffaye, Satz, Dresselhaus, & Stein, 2004), and to be aggressive (Herrenkohl, Mason, Kosterman, Lengua, Hawkins, & Abbott, 2004).

Preliminary studies examining undergraduate females found that EA mediated the relationship between CSA and psychological functioning in adulthood (Marx & Sloan, 2002; Polusny, Rosenthal, Aban, & Follette, 2004). Childhood trauma is also linked with higher levels of EA (Batten, Follette, & Aban, 2001; Marx & Sloan, 2002; Reddy, Pickett, & Orcutt, 2006). Increased use of avoidance is related to increased severity of PTSD symptomology (Boeschen, et. al., 2001), and substance abuse (Stasiewicz & Maisto, 1993). As such, overemploying an experientially avoidant response style may exacerbate numerous poor mental health outcomes.
Furthermore, use of EA could interact with CSA to predict negative outcomes or render trauma exposed individuals more vulnerable to psychological harm post-trauma.

In attempts to replicate findings that chronic avoidance is associated with a history of CSA, Rosenthal and colleagues (2005) found the tendency to chronically avoid unpleasant internal experiences (i.e. avoidance) mediated the relationship between CSA and trauma-related psychological distress in adulthood. Those who reported a history of CSA were noted to report more trauma-related symptoms of distress when avoidance was used as a primary coping method. Thus, EA may be a key mechanism in understanding the relationship between trauma exposure and trauma-related symptoms. Those who engage in higher levels of EA may be particularly vulnerable to using harmful strategies such as substance use, aggression, or alcohol to minimize contact with aversive private events.

**Problem Behaviors**

Prior research demonstrates that problem behaviors seem to co-occur. For example, those who abuse substances are seven times more likely to develop a second addiction than those who do not abuse substances (Reiger, Farmer, Rae, Locke, Keith, Judd, & Goodwin, 1990). Acceptance and Commitment (ACT) therapy offers a theoretical and empirically based foundation for explaining this pattern. Problem behaviors may share a common function that operates to avoid, escape, or modify exposure to negative private events, such as thoughts and emotions (Hayes, et al., 1996) and the situations that evoke distressing private events. In other words, problem behaviors allow for EA, “providing short-term negative reinforcement through the reduction of aversive experiences” (Kingston, Clarke, & Remington, 2010).
**Nicotine, drug, and alcohol use.** Tobacco dependence and alcohol use disorders carry serious health and social consequences with significant personal and economic costs. The extant research reflects the notion that tobacco and alcohol problems often co-occur with one another (Hawkins, et. al., 2002), and often with other problem behaviors, such as illicit drug use (Bailey, Hill, Oesterle, & Hawkins, 2006; Kanh, Berger, Wells, & Cleland, 2012). In the United States tobacco use has been linked with problem behaviors, including aggression, alcohol use, and drug use (Busen, Modeland, & Kouzekanani, 2001; Unger, Sussman, & Dent, 2003). Lazarus and Folkman (1984) provide one potential explanation for this co-occurrence. These theorists postulate that adolescents who have a well-developed repertoire for effective coping skills will be more apt to use these skills to cope with stressful situations, such as interpersonal conflicts and substance use. Thus, those adolescents who lack sufficient coping skills are less likely to avoid, deescalate, or manage interpersonal conflicts and may resort to substance use as a coping strategy in an attempt to avoid negative emotions associated with these conflicts. Conceptually, when faced with a distressing traumatic event, individuals who lack effective coping skills such as acceptance of negative emotions, will be at a disadvantage and at increased risk of engaging in problematic behaviors that serve an emotion regulatory function.

Busen, Modeland, and Kouzekanani (2001) examined the relationship between several problem behaviors. The sample consisted primarily of Caucasian, older adolescent females. Their results indicated that current cigarette consumption was significantly related to alcohol use, marijuana use, suicidal thoughts, and age at first sexual intercourse. Findings showed that current cigarette consumers were most likely Caucasian, had used alcohol and marijuana, and reported experiencing suicidal thoughts. Although not investigated specifically, these results shed light on the potential avoidant coping function of cigarettes, alcohol, and marijuana and indicate that use
of this regulatory strategy may potentially exacerbate suicidal ideation. In another investigation, Unger, Sussman, and Dent (2003) found that among students more than half of their sample (average age of 16-17), used cigarettes, alcohol and marijuana and that 25% of respondents had done so within the past 30 days.

**Aggression.** Aggression is defined as behavior directed toward another individual where the immediate intention is to cause harm (Roberton, Daffern, & Bucks, 2012). Psychologically and verbally aggressive responses to interpersonal conflicts were associated with substance use in a prior study (Unger, et al, 2003). Unger and colleagues also proposed that the relationship between aggression and substance use may be due to ineffective coping skills and a deficiency in the respondent’s lack of constructive conflict management skills. Adopting an experientially avoidant response style could conceptually take the form of aggression or substance use which may ultimately exacerbate domains of importance such as interpersonal relationships.

Leonard, Quigley, and Collins (2002) examined the prevalence of violence both experienced and perpetrated by community members and college students. Among the sample, 80.4% of all respondents reported observing violence, and 17.5% reported perpetrating violence. It was also found that 31.8% of all respondents reported some sort of experience with violence, such as threatened violence, target of violence, initiated violence, or observed aggression. The majority of respondents reported that when initiating violence, the most common form involved a slap, punch, or kick, while a small proportion admitted to using a weapon. Thus, physical aggression without use of a weapon may be a more common form of aggressive behavior.
Rationale and Hypotheses

Based on the present literature review, the evidence supports an emerging link between EA, trauma exposure, and harmful consequences of trauma exposure such as substance use/misuse, and aggression. Further research to isolate EA as a multidimensional construct is needed to promote isolation of avoidance strategies relevant to trauma in particular. The present study will attempt to bridge this gap through a series of working hypotheses.

A series of hypotheses guided this study:

**Hypothesis 1:** The associations between trauma exposure, engagement in problem behaviors, and level of EA were measured. The following predictions were made:

H1a) There will be positive correlation between PTSD symptoms and substance use and aggression.

H1b) Number of problem behaviors engaged in will positively correlate with level of EA.

H1c) Higher levels of PTSD symptoms will be positively correlated with EA.

H1d) Higher levels of PTSD symptoms will be positively correlated with the distress aversion, distraction/suppression, and repression/denial subscales of the MEAQ.

**Hypothesis 2:** The association between history of trauma exposure and engagement in problem behaviors was measured. The following predictions were made:

H2a) Greater number of traumatic events in the form of childhood trauma exposure experienced will positively correlate with level of engagement in problem behaviors.

H2b) There will be a positive correlation between number of traumatic events experienced and level of EA.
Hypothesis 3: Childhood trauma history will predict PTSD symptoms and problem behaviors.

H3a) EA will predict PTSD symptoms above and beyond a history of childhood trauma exposure.

H3b) Childhood trauma history will predict engagement in problem behaviors.

H3c) EA will predict engagement in problem behaviors above and beyond childhood trauma history.
Method

Participants

This study was conducted at a Midwestern university. Participants ($N = 107$) were recruited through undergraduate courses (Appendix G) and flyers (Appendix H) posted on bulletin boards throughout academic buildings around campus. Participants were enrolled in psychology courses and were age 18 or older. Students were provided with a link to an anonymous online survey, those who were interested in participating in the study were instructed to visit the website for instructions on how to participate.

Procedure

Informed consent. Informed consent (Appendix A) was collected via an online survey using the Survey Monkey website. Participants were presented with the informed consent document before access to study content was granted. This consent document explained the purpose of the study and the risks and benefits, time commitments, a statement that participation was voluntary and answering questions that made them uncomfortable was not required. Participants were required to read through the consent document and check a box at the bottom of the page stating they understood and agreed to the above document before moving forward.

Method of data collection. Data collection occurred entirely online. Participants completed an anonymous online survey through the Survey Monkey website. Anonymity was maintained by requiring participants to create a confidential, unique identification number composed of the last four digits of their phone number, the month they were born, and the first letter of their last name. Once the participant consented to participate and created their unique identification number, they were taken to the assessment section of the survey. After completing
the demographic questionnaire and assessments, participants were directed to a screen thanking them for their time and providing directions for collecting extra credit. Participants were then directed to a second, independent survey in which they entered their information and the name of course instructors and course number to notify them to receive notification of their participation for the purposes of extra credit. All extra credit was awarded at the discretion of course instructors.

**Measures**

**Demographic questionnaire** (Appendix B). Data pertaining to participant demographic characteristics was collected in an investigator established demographic questionnaire.

**Multidimensional experiential avoidance questionnaire** (MEAQ; Gámez, Chmielewski, Kotov, Ruggero, & Watson, 2011; see Appendix C). The MEAQ is a 62-item self-report measure that was developed to address a wide range of EA. The MEAQ presents questions to address six areas of EA: behavioral avoidance, distress aversion, procrastination, distraction and suppression, repression and denial, and distress endurance. A Likert-type scale is used for scoring, ranging from 1 = *strongly disagree* to 6 = *strongly agree*, with higher scores indicating higher levels of EA. The MEAQ has strong internal consistency and discriminant validity.

**Composite measure of problem behaviors** (CMPB; Kingston, Clarke, Ritchie, & Remington, 2011; see Appendix D). The CMPB is a 46-item measure assessing ten different problem behaviors, including: nicotine use, drug use, excessive alcohol use, deliberate self-harm, excessive internet/computer game use, excessive exercise, binge eating, sexual promiscuity, aggression, and restrictive eating. To score the CMPB, a scale is used ranging from, 1 = *very unlike me* to 6 = *very like me*. The CMPB was created and validated based on the common
finding that problem behaviors co-occur. This measure has good internal consistency ($\alpha = .73-.91$) and test-retest reliability (95% CI).

**Childhood Trauma Questionnaire-Short Form** (CTQ-SF; Berstein et al., 2003; Appendix F). The CTQ-SF is a 28-item measure intended to assess childhood traumatic experiences occurring before the age of 17. Participants endorse items using a 5-point scale ($1 = \text{never true}; 2 = \text{rarely true}; 3 = \text{sometimes true}; 4 = \text{often true}; 5 = \text{very often true}$). Five subscales are assessed, including: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. A three item validity scale is also included to measure minimization/denial to capture any underreporting of maltreatment (Berstein & Fink, 1998).

**Posttraumatic stress disorder checklist-civilian version** (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993, see Appendix E). The PCL-C is a 17-item measure assessing for the presence of criterion, B, C, and D DSM-IV PTSD symptoms. Items are endorsed on a scale from $1 = \text{not at all}$ to $5 = \text{extremely}$. Cronbach’s alpha coefficients calculated for the measure have demonstrated high internal consistency for the PCL-C total, re-experiencing, avoidance, and hyperarousal scales (.94, .85, .85, .87, respectively).

**Design**

This study used a cross-sectional design to examine the relationships between several variables of interest. Specifically, the impact of childhood trauma exposure and EA on the engagement in problem behaviors and PTSD symptoms was assessed.
Results

Statistical Packaging for the Social Sciences (SPSS) Version 21 was used to conduct statistical analyses. Data were entered into a computer database using SPSS software and saved and stored on a password protected computer in the Trauma Research Laboratory. Participants (N = 107) had a mean age of 20 (SD = 2.94), ranging from 17 to 43. The majority of participants were female (73.8%), European American or White (73.8%), and had at least some college education (96.3%).

Preliminary Data Analyses

Missing data were minimal and replaced with the mean of the item for the item missing. According to the recommendations of Mertler and Vannatta (2005), log transformations were computed for variables with a skewness and/or kurtosis value below or above -1 or +1, respectively. Log transformations were computed for the CMPB total score, the CMPB nicotine use subscale, the CMPB drug use subscale, the CMPB aggression subscale, the CMPB sexual promiscuity subscale, and the CTQ total score.

Bivariate Correlations

Pearson’s product moment correlation analyses were computed (see Table 1) to discern the direction and degree of the relationships between EA using the composite MEAQ score and the three subscales repression and denial, distraction and suppression, and distress aversion, total engagement in problem behaviors, and nicotine use, alcohol use, sexual promiscuity, and aggression, childhood trauma history, and PTSD symptoms.

PTSD symptoms and substance use relationship. A test of hypothesis (1a) showed that PTSD symptoms did not correlate with substance use.
**Problem behaviors and experiential avoidance relationship.** A test of hypothesis (1b) showed that engagement in problem behaviors moderately correlated with EA ($r = .33, p < .001$).

**PTSD and experiential avoidance relationship.** A test of hypothesis (1c) showed that PTSD symptoms moderately correlated with EA ($r = .36, p < .001$). Further, a test of hypothesis (1d) showed that the three examined EA subscales correlated with PTSD symptoms as expected. The distress aversion subscale moderately correlated with PTSD symptoms ($r = .40, p < .001$), as did the repression and denial subscale ($r = .39, p < .001$). The distraction and suppression subscale also evidenced a small correlation with PTSD symptoms ($r = .12, p < .222$).

**Childhood trauma and problem behaviors relationship.** A test of hypothesis (2a) found that childhood trauma exposure was not associated with problem behaviors.

**Childhood trauma and experiential avoidance relationship.** In evaluating hypothesis (2b), childhood trauma exposure moderately correlated with EA ($r = .20, p < .039$).

**Hierarchical Multiple Regression Analyses**

To assess the predictive contributions of the predictor variables to the criterion variables of interest, hierarchical multiple regression analyses were computed. The first regression equation (see Table 2) involved entering childhood trauma history in block one and total EA in block two. In support of hypothesis (3), childhood trauma history predicted PTSD symptoms, accounting for 17% of the variance in PTSD, $R^2 = .179, F (1, 101) = 22.068, p = .001$. The MEAQ explained an additional 8% of the variance in PTSD symptoms beyond childhood trauma history, $R^2 \Delta = .086, F (1, 100) = 18.038, p = .001$. Thus, hypothesis (3), that childhood trauma exposure would predict PTSD symptoms and (3a) that EA would predict PTSD symptoms above and beyond childhood trauma history were both supported.
The second regression equation (see Table 3) involved entering childhood trauma in block one and total EA in block two. In support of hypothesis (3b), childhood trauma predicted engagement in problem behaviors, accounting for 7% of the variance in problem behaviors, $R^2 = .07$, $F (1, 100) = 7.142$, $p = .009$. In block two, EA explained additional 7% additional variance in problem behaviors above and beyond childhood trauma history, $R^2 \Delta = .075$, $F (1, 99) = 8.625$, $p = .004$, supporting hypothesis (3c).
Experiential Avoidance, Trauma Exposure, and Problem Behaviors

Discussion

The aims of this study were to evaluate the relationship between EA as a multidimensional construct, childhood trauma exposure, and outcome variables including PTSD symptoms, aggression, nicotine use, alcohol use, drug use, and sexual promiscuity. Analyses supported several of the predicted hypotheses. Findings illustrate that EA was significantly correlated with problem behaviors, including sexual promiscuity and aggression. These findings suggest that those who use higher levels of EA seem to be engaging in unhealthy behaviors that may function to avoid distress. More specifically, sexual promiscuity and aggression were more significantly associated with distress aversion and repression/denial. One explanation for this relationship could be that these problem behaviors have both negative and positive reinforcing effects that reduce negative feelings and produce temporary positive emotions. If a person adopts an unwilling stance toward emotion, escaping these uncomfortable feelings may, in the short-term, decrease or eliminate negative emotion.

Experiencing traumatic events in childhood moderately correlated with EA. Those who use EA techniques may have increased instances of re-experiencing thoughts about the trauma, which may be due to the suppression of thoughts, feelings, and memories related to the traumatic experience, possibly leading to the development and maintenance of PTSD. This explanation is further supported by the strongly significant relationship between EA and the use of problem behaviors such as sexual promiscuity and aggression.

These findings have significant implications, particularly clinical implications. Several past studies have established a link between PTSD and avoidance, the findings in this study establish a link between EA and problem behaviors, which are also common among those with PTSD. These findings help elucidate that those seeking treatment for PTSD symptoms should
pay special attention to any engagement in EA techniques in the form of problem behaviors. Additionally, clinicians should recognize that those who seek treatment may be engaging in these problem behaviors and will need to have these issues addressed before treatment can be fully implemented, if treatment protocol stipulates no current substance or alcohol use.

**Limitations and Future Research**

There are limitations to this study that should be acknowledged. First, a cross-sectional design was utilized. This design does not permit establishment of a temporal relationship between the variables of interest. Thus, it is unknown whether EA comes before trauma and makes people more vulnerable to PTSD or if trauma in childhood exacerbates EA. Additionally, a convenience sample of undergraduate students was utilized. It is reasonable to assume that differences might be seen if these variables were examined in a clinical sample, limiting the generalizability of the findings. Finally, this study relied solely on retrospective self-report measures. Thus, participants could have been dishonest with their responses, or may have over- or under-reported experiences. These factors could potentially skew results and impact their reliability. Future research could use behavioral measures to assess behaviors that encourage or maintain dimensions of EA. Future research is needed to establish a temporal relationship between trauma exposure, EA, and engagement in problem behaviors. More research is needed to understand what elements comes first in the trauma exposure, EA, and problem behaviors triad.

**Conclusion**

The present study collected data from a sample of undergraduate students in an attempt to examine the multidimensional nature of EA in relation to problem behaviors, as well as childhood trauma exposure. Findings illustrate that there is a significant association between EA,
childhood trauma exposure, and engagement in problem behaviors. EA appears to be moderately related to sexual promiscuity and aggression more specifically. As hypothesized, childhood trauma exposure was a predictor of engagement in problem behaviors. Additionally, EA contributed to engagement in problem behaviors above and beyond that of childhood trauma exposure. PTSD symptomology was predicted by childhood trauma exposure, even more strongly when EA was added to the predictive model.
References


doi:10.1037/0022- 006X.64.6.1152

Pathways from physical childhood abuse to partner violence in young adulthood.


Table 1

Bivariate Correlations of Study Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Childhood trauma history – CTQ</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>2) Experiential Avoidance – MEAQ</td>
<td>.20*</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>3) Distraction/Suppression – MEAQ</td>
<td>.01</td>
<td>.67**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>4) Distress Aversion – MEAQ</td>
<td>.20*</td>
<td>.80**</td>
<td>.44**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5) Repression/Denial - MEAQ</td>
<td>.27**</td>
<td>.71**</td>
<td>.30**</td>
<td>.46**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>6) PTSD Symptoms – PCL-C</td>
<td>.42**</td>
<td>.36**</td>
<td>.12</td>
<td>.40**</td>
<td>.39**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>7) Problem Behaviors – CMPB</td>
<td>.27**</td>
<td>.33**</td>
<td>.13</td>
<td>.30*</td>
<td>.36**</td>
<td>.33**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>8) Nicotine Use Subscale – CMPB</td>
<td>.20*</td>
<td>.11</td>
<td>.02</td>
<td>.18</td>
<td>.05</td>
<td>.23*</td>
<td>.48**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>9) Alcohol Use Subscale - CMPB</td>
<td>-.03</td>
<td>.03</td>
<td>-.07</td>
<td>.09</td>
<td>.17</td>
<td>.10</td>
<td>.52**</td>
<td>.15</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>10) Sexual Promiscuity – CMPB</td>
<td>.26**</td>
<td>.23*</td>
<td>.12</td>
<td>.20*</td>
<td>.32**</td>
<td>.20*</td>
<td>.54**</td>
<td>.29**</td>
<td>.32**</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>11) Aggression – CMPB</td>
<td>.26**</td>
<td>.24**</td>
<td>.04</td>
<td>.21*</td>
<td>.35**</td>
<td>.22*</td>
<td>.59**</td>
<td>.25*</td>
<td>.20**</td>
<td>.48**</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>12) Drug Use - CMPB</td>
<td>.19*</td>
<td>.02</td>
<td>.07</td>
<td>.04</td>
<td>.14</td>
<td>.16</td>
<td>.64**</td>
<td>.52**</td>
<td>.40**</td>
<td>.35**</td>
<td>.31**</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. N = 107. *p < .05, **p < .01
### Table 2

<table>
<thead>
<tr>
<th>Block</th>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>$R^2$</th>
<th>$R^2 \Delta$</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Childhood Trauma History</td>
<td>.010</td>
<td>.004</td>
<td>.269</td>
<td>2.817**</td>
<td>.051</td>
<td>.041</td>
<td>5.434**</td>
</tr>
<tr>
<td>2</td>
<td>Experiential Avoidance</td>
<td>.004</td>
<td>.002</td>
<td>.196</td>
<td>2.037**</td>
<td>.091</td>
<td>.073</td>
<td>4.494**</td>
</tr>
</tbody>
</table>

*Note. *p* < .05, **p* < .01, ***p* < .001.*
Table 3

**Summary of Hierarchical Regression Predicting Problem Behaviors**

<table>
<thead>
<tr>
<th>Block</th>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>R²</th>
<th>R² Δ</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Childhood Trauma History</td>
<td>.003</td>
<td>.001</td>
<td>.258</td>
<td>2.673**</td>
<td>.258</td>
<td>0.057</td>
<td>7.142**</td>
</tr>
<tr>
<td>2</td>
<td>Experiential Avoidance</td>
<td>.002</td>
<td>.001</td>
<td>.280</td>
<td>2.937**</td>
<td>.376</td>
<td>0.124</td>
<td>8.156***</td>
</tr>
</tbody>
</table>

*Note. * p < .05, ** p < .01, *** p < .001.*
Appendices
Appendix A

Informed Consent

Western Michigan University
Psychology Department

Principal Investigator: Amy E. Naugle, Ph.D.
Student Investigator: Meaghan M. Lewis, M.S.
Title of Study: “Conceptual and measurement discrepancies in experiential avoidance: Replication and comparison”

You have been invited to participate in a research project titled “Conceptual and measurement discrepancies in experiential avoidance: Replication and comparison.” This project will serve as Meaghan Lewis’ research project for the requirements of the degree of Doctor of Philosophy in clinical psychology. This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

What are we trying to find out in this study?
This research project will investigate the relationship between particular life stressors in college students, responses to these events, and behaviors that might be affected by these life events. The purpose of this consent document is to give you an understanding of the project goals and time commitments, procedures, and risks and benefits of your participation. Please read this content carefully.

Who can participate in this study?
You are eligible to participate if you are 18 years of age or older and enrolled as a student at Western Michigan University. Interested individuals are encouraged to participate.

Where will this study take place?
Participation will take place on the Survey Monkey website online. You may complete the questionnaires online from your own computer or you may request to set up a time to complete them in the Trauma Research Laboratory.

What is the time commitment for participating in this study?
If you choose to participate, you will be asked to complete nine questionnaires that will require approximately 45 minutes to complete.

What will you be asked to do if you choose to participate in this study?
Should you choose to participate, you will be asked to complete nine questionnaires. These questionnaires will ask you to provide information regarding life stressors, responses to these stressors, and behaviors you may engage in to cope such as substance or alcohol use and risky sexual behavior.

**What information is being measured during the study?**
The questionnaires will ask about information related to stressful events you may have experienced at different points throughout your life. In addition, you will be asked about ways you manage emotion as well as painful thoughts or feelings and certain behaviors you engage in such as internet use, nicotine use, and eating behaviors.

**What are the risks of participating in this study and how will these risks be minimized?**
There are no apparent risks for participating in the present study. However, it is possible that some of the questions may trigger distress. If this becomes a problem, you may withdraw your participation. You may also skip any questions you do not wish to answer. Should you feel a need to seek professional mental health services, you will be provided with a referral list at the end of the survey to contact.

**What are the benefits of participating in this study?**
You may be eligible to receive extra credit from course instructors for participating in this study. At the end of the survey we will provide you with an extra credit verification sheet to send to your instructor. The decision to award extra credit is ultimately the decision of the course instructor.

It is anticipated that results of the present study will help further understanding of measurement issues related to emotional responses to stressful events. These results may also assist with the development of effective interventions for individuals who experience coping difficulties related to distressing events. Results of the study will be disseminated for publication in scholarly journals and presentation at research conferences with no names linked to the information. Results will appear in group format such that no individual responses can be identified. If you are interested in the results of the study, let us know, and we will send you a copy of the results when available.

**Are there any costs associated with participating in this study?**
Aside from your time participating, there are no anticipated costs involved with participating in our research.

**Is there any compensation for participating in this study?**
You may be eligible to receive extra credit from course instructors for participating in this study. At the end of the survey we will provide you with an extra credit verification sheet to send to your instructor. The decision to award extra credit is ultimately the decision of the course instructor.

**Who will have access to the information collected during this study?**
The student investigator will keep a master list with confidential identification numbers associated with participants to prohibit duplicate participation. These ID numbers will be used to de-identify your responses. The master list will be stored in a password protected computer in the Trauma Research Laboratory. This ID number will be generated by the student investigator and emailed to potential participants who contact study investigators with interest in participating.

**What if you want to stop participating in this study?**
_You can choose to stop participating in the study at anytime for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study._

_The investigator can also decide to stop your participation in the study without your consent._

Should you have any questions prior to or during the study, you can contact the student investigator, Meaghan Lewis or the primary investigator, Dr. Amy Naugle at 269-387-4485 or meaghan.m.lewis@wmich.edu or amy.naugle@wmich.edu. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

-------------------------------------------------------------------------------------------------------------------

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Please Print Your Name

_________________________________________ ____________________________
Participant’s signature  Date
Appendix B

Demographic Questionnaire

1. How old are you? _____ Years

2. Gender
   □ Female
   □ Male
   □ Transgender

3. Ethnicity
   □ African-American/Black
   □ Asian or Asian American
   □ Chicano/a/Latino/a/Hispanic
   □ European American or White
   □ Pacific Islander or PI American
   □ Middle Eastern or Arab American
   □ Mixed Heritage
   □ Other

4. Relationship status
   □ Divorced, not remarried
   □ Living with partner
   □ Married
   □ Married with children
   □ Remarried
   □ Single, never married, not living with partner
   □ Remarried
   □ Widowed
   □ Other

5. Annual household income (income for self – parent; income for family of origin – adult child)
   □ <$10,000
   □ $11,000-24,000
   □ $25,000-49,000
   □ $50,000-74,000
   □ $75,000-99,000
   □ $100,000-250,000
☐ >$250,000

6. Educational status
   ☐ Did not graduate high school
   ☐ GED
   ☐ Some college
   ☐ Bachelor’s degree
   ☐ Master’s degree
   ☐ Doctorate or equivalent in my field
# Appendix C

## Multidimensional Experiential Avoidance Questionnaire (MEAQ)

Please indicate the extent to which you agree or disagree with each of the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>I won’t do something if I think it will make me uncomfortable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I could magically remove all of my painful memories, I would</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When something upsetting comes up, I try very hard to stop thinking about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I sometimes have difficulty identifying how I feel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I tend to put off unpleasant things that need to get done</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People should face their fears</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Happiness means never feeling any pain or disappointment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I avoid activities if there is even a small possibility of getting hurt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When negative thoughts come up, I try to fill my head with something else</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At times, people have told me I’m in denial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I sometimes procrastinate to avoid facing challenges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Even when I feel uncomfortable, I don’t give up working toward things I value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I am hurting, I would do anything to feel better</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I rarely do something if there is a chance that it will upset me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually try to distract myself when I feel something painful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to “turn off” my emotions when I don’t want to feel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I have something important to do I find myself doing a lot of other things instead...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am willing to put up with pain and discomfort to get what I want</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Happiness involves getting rid of negative thoughts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I work hard to avoid situations that might bring up unpleasant thoughts and feelings in me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t realize I’m anxious until other people tell me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When upsetting memories come up, I try to focus on other things</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am in touch with my emotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am willing to suffer for the things that matter to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One of my big goals is to be free from painful emotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer to stick to what I am comfortable with, rather than try new activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I work hard to keep out upsetting feelings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People have said that I don’t own up to my problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear or anxiety won’t stop me from doing something important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to deal with problems right away</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>31</td>
<td>I’d do anything to feel less stressed</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>If I have any doubts about doing something, I just won’t do it</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>When unpleasant memories come to me, I try to put them out of my mind</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>In this day and age people should not have to suffer</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Others have told me that I suppress my feelings</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>I try to put off unpleasant tasks for as long as possible</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>When I am hurting, I still do what needs to be done</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>My life would be great if I never felt anxious</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>If I am starting to feel trapped, I leave the situation immediately</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>When a negative thought comes up, I immediately try to think of something else</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>It’s hard for me to know what I’m feeling</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>I won’t do something until I absolutely have to</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>I don’t let pain and discomfort stop me from getting what I want</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>I would give up a lot not to feel bad</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>I go out of my way to avoid uncomfortable situations</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>I can numb my feelings when they are too intense</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Why do today what you can put off until tomorrow</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>I am willing to put up with sadness to get what I want</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Some people have told me that I “hide my head in the sand”</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Pain always leads to suffering</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>If I am in a slightly uncomfortable situation, I try to leave right away</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>It takes me awhile to realize when I’m feeling bad</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>I continue working toward my goals even if I have doubts</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>I wish I could get rid of all of my negative emotions</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>I avoid situations if there is a chance that I’ll feel nervous</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>I feel disconnected from my emotions</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>I don’t let gloomy thoughts stop me from doing what I want</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>The key to a good life is never feeling any pain</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>I’m quick to leave any situation that makes me feel uneasy</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>People have told me that I’m not aware of my problems</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>I hope to live without any sadness and disappointment</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>When working on something important, I won’t quit even if things get difficult</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MULTIDIMENSIONAL EXPERIENTIAL AVOIDANCE
QUESTIONNAIRE

- SCORING -

BEHAVIORAL AVOIDANCE
DISTRESS AVersion
PROcrastination
DISTRACTION & SUPPRESSION
REPRESSION & DENIAL
DISTRESS ENDURANCE

Total items 1, 8, 14, 20, 26, 32, 39, 45, 51, 55, 59
Total items 2, 7, 13, 19, 25, 31, 34, 38, 44, 50, 54, 58, 61
Total items 5, 11, 17, 30 (r), 36, 42, 47
Total items 3, 9, 15, 22, 27, 33, 40
Total items 4, 10, 16, 21, 23 (r), 28, 35, 41, 46, 49, 52, 56, 60
Total items 6, 12, 18, 24, 29, 37, 43, 48, 53, 57, 62

(r) indicates reverse-key item; to reverse-key, subtract item from * 7 *

TOTAL SCORE
Behavioral Avoidance + Distress Aversion + Procrastination + Distraction & Suppression + Repression & Denial + (77 - Distress Endurance)

- NORMATIVE DATA -

COMMUNITY ADULTS
(N = 201)

Mean SD +1.0 +1.5
BEHAV. AVOID. 34.40 10.41 44.81 50.01
DISTRESS AVER. 41.65 11.97 53.62 59.60
PROCRASTINATION 22.41 7.45 29.86 33.58
DIST./SUPPRESS. 25.64 6.58 32.22 35.51
REPRESS./DENIAL 31.31 10.77 42.08 47.46
DISTRESS ENDUR. 47.12 7.93 39.19- 35.23-

TOTAL SCORE 185.29 39.95 225.24 245.21

COLLEGE STUDENTS
(N = 677)

Mean SD +1.0 +1.5
BEHAV. AVOID. 36.26 8.70 44.96 49.31
DISTRESS AVER. 43.24 11.46 54.70 60.43
PROCRASTINATION 25.04 6.61 31.65 34.96
DIST./SUPPRESS. 26.02 6.35 32.37 35.55
REPRESS./DENIAL 34.02 10.60 44.62 49.92
DISTRESS ENDUR. 46.51 7.66 38.85- 35.02-

TOTAL SCORE 195.08 34.46 229.54 246.77

PSYCHIATRIC PATIENTS
(N = 466)

Mean SD +1.0 +1.5
BEHAV. AVOID. 42.36 11.13 53.49 59.06
DISTRESS AVER. 50.47 12.63 63.10 69.42
PROCRASTINATION 26.62 7.00 33.62 37.12
DIST./SUPPRESS. 28.79 7.55 36.34 40.12
REPRESS./DENIAL 37.82 12.33 50.15 56.32
DISTRESS ENDUR. 43.21 9.57 33.64- 28.86-

TOTAL SCORE 224.61 39.94 264.55 284.52


© Copyright 2011, Wakiza Gamez
Appendix D

Composite Measure of Problem Behaviors

This questionnaire is designed to ask you about a range of behaviours that you may, or may not, engage in. It includes 46 statements and you are required to rate the extent to which each statement characterises you, using the scale below

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very unlike me</td>
<td>Quite unlike me</td>
<td>A little unlike me</td>
<td>A little like me</td>
<td>Quite like me</td>
<td>Very Like me</td>
</tr>
</tbody>
</table>

For example, if you read a statement and think “it’s very unlike me to do X” you would write a “1” next to the statement. If you think “that’s only very slightly like me” write ‘4’, or if you think “it’s very like me to do that”, write ‘6’.

Before completing the questionnaire, please take note of the following points:

Where questions refer to internet use, this means non-work related use such as chat rooms, surfing the net etc. Where questions refer to sexual behaviours, this includes both foreplay and all forms of sexual intercourse. Where questions refer to drugs, this means the use of illegal drugs. This would include, for example, Cannabis, Cocaine, Ecstasy etc. Where questions refer to smoking, this means tobacco.

Please read each statement carefully and answer as honestly as possible. All answers are anonymous. Please do not leave any answers blank.
It's like me ....

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>to say no to drugs, including cannabis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>to be pre-occupied by thoughts about smoking when smoking is prohibited</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>to sometimes consume more than 6 alcoholic drinks in one evening</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>to ignore dietary details (e.g., calorie content) when choosing something to eat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>to exercise even when I am feeling tired and/or unwell</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>to sometimes intentionally prevent scars or wounds from healing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>to smoke tobacco</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>to surf the net/play computer games before doing something else that needs doing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>to generally have no interest in taking drugs, including cannabis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>to sometimes engage in sexual activities with someone I have only just met</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>to find that my work performance or productivity suffers because of my internet/video game use.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>to never resort to violence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
to sometimes actively seek out drugs for personal use (this includes cannabis).

to feel irritation/frustration if I am in a non-smoking environment.

to sometimes scratch or bite myself to the point of scarring or bleeding.

to sometimes feel pre-occupied with the internet/computer games.

to skip doing exercise for no good reason.

to drink a lot more alcohol than I initially intended.

to have a long list of things that I dare not eat.

to feel excitement and/or tension in anticipation of getting drunk.

to be content if I am prevented from exercising for a week.

to always stop eating when I feel full.

to prefer being in places where smoking is prohibited.

to control my temper.

to deliberately take small helpings as a means of controlling my weight.

to exercise more than three times a week.

to sometimes eat to the point of physical discomfort.
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>to sometimes feel tension and/or excitement in anticipation of doing exercise.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>to sometimes cause myself direct bodily harm by, for example, cutting or burning myself.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>to only eat when I am hungry.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>to unsuccessfully try to cut back my use of the internet/computer games</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>to be excited by the opportunity of taking drugs (this includes cannabis)</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>to sometimes get so angry that I break something</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>to sometimes have more than one sexual partner.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>to sometimes engage in sexual activities with someone when really I shouldn't</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>to easily limit my use of the internet or video games</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>to feel the urge to have a cigarette.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>to sometimes feel that I need to take drugs (this includes cannabis)</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>to go out with friends who are drinking, but opt to stay sober</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>to sometimes think that I might have a drugs problem (this includes cannabis).</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>to avoid eating when I am hungry</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>to find it difficult to stop eating after certain foods</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>to be aggressive when sufficiently provoked</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>to feel the urge to intentionally harm myself</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>to sometimes feel that I need an alcoholic drink</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>to sometimes claim I have already eaten when this is not true</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E

Posttraumatic Stress Disorder Checklist-Civilian

If you endorsed that you experienced a stressful life event in the previous questionnaire, please respond to the following questionnaire with the event that caused you the most distress in mind:

**PCL-C**

**INSTRUCTIONS:** Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Repeated, disturbing dreams of a stressful experience from the past?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>Feeling very upset when something reminded you of a stressful experience from the past?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful experience from the past?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Avoiding thinking about or talking about a stressful experience from the past or avoiding having feelings related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>Avoiding activities or situations because they reminded you of a stressful experience from the past?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>Trouble remembering important parts of a stressful experience from the past?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14.</td>
<td>Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15.</td>
<td>Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16.</td>
<td>Being &quot;super-alert&quot; or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17.</td>
<td>Feeling jumpy or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**PCL-C for DSM-IV (11/1/94)**  Weathers, Litz, Huska, & Keane  National Center for PTSD - Behavioral Science Division
Appendix F

CHILDHOOD TRAUMA QUESTIONNAIRE

Please respond to the following questions using the scale below. 1 = Never True 2 = Rarely True 3 = Sometimes True 4 = Often true 5 = Very often true

When I was growing up…

_____ 1. I didn’t have enough to eat.

_____ 2. I knew that there was someone to take care of me and protect me.

_____ 3. People in my family called me things like “stupid,” “lazy,” or “ugly.”

_____ 4. My parents were too drunk or high to take care of the family.

_____ 5. There was someone in my family who helped me feel that I was important or special.

_____ 6. I had to wear dirty clothes.

_____ 7. I felt loved.

_____ 8. I thought that my parents wished I had never been born.

_____ 9. I got hit so hard by someone in my family that I had to see a doctor or go to the hospital.

_____ 10. There was nothing I wanted to change about my family.

_____ 11. People in my family hit me so hard that it left me with bruises or marks.

_____ 12. I was punished with a belt, a board, a cord, or some other hard object.

_____ 13. People in my family looked out for each other.

_____ 14. People in my family said hurtful or insulting things to me.

_____ 15. I believe that I was physically abused.

_____ 16. I had the perfect childhood.

_____ 17. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbor, or doctor.

_____ 18. I felt that someone in my family hated me.

_____ 19. People in my family felt close to each other.

_____ 20. Someone tried to touch me in a sexual way, or tried to make me touch them. If yes then who? (examples: a stranger, friend, niece or nephew, cousin, sibling)

__________________________________________________________________________ How long did this occur? ________________
21. Someone threatened to hurt me or tell lies about me unless I did something sexual with them. If yes then who? (examples: a stranger, friend, niece or nephew, cousin, sibling) __________________________________________ How long did this occur? ______________

22. I had the best family in the world.

23. Someone tried to make me do sexual things or watch sexual things. If yes, than who? (examples: a stranger, friend, niece or nephew, cousin, sibling) __________________________________________ How long did this occur? ______________

24. Someone molested me. If yes, than who? (examples: a stranger, friend, niece or nephew, cousin, sibling) __________________________________________ How long did this occur? ______________

25. I believe that I was emotionally abused.

26. There was someone to take me to the doctor if I needed it.

27. I believe that I was sexually abused. If yes, than who? (examples: a stranger, friend, niece or nephew, cousin, sibling) __________________________________________ How long did this occur? ______________

28. My family was a source of strength and support.

Emotional abuse Items: 3, 8, 14, 18, 25 Physical abuse Items: 9, 11, 12, 15, 17 Sexual abuse Items: 20, 21, 23, 24, 27 Emotional Neglect Items: 5(R), 7(R), 13(R), 19(R) 28(R) Physical neglect Items: 1, 2(R), 4, 6, 26(R) 10 16 22 denial items
Appendix G

Recruitment Script

Hello, my name is ______________. I am here to invite you to participate in a study that is being conducted. The title of the study is, “Conceptual and Measurement Discrepancies in Experiential Avoidance: Replication and Comparison.”

The purpose of this study is to investigate emotional responses to trauma and how certain coping strategies might influence recovery from distressing events.

If you choose to participate you will be asked to complete an online survey regarding distressing life experiences, reactions to these experiences, and behaviors you might engage in. This study will be conducted using an anonymous online survey format through the Survey Monkey website. Participation is estimated to require about 45 minutes of your time, depending on how quickly you complete the questionnaires. Data will be collected at one time point. All information will be kept confidential and your name and contact information will not be linked with any of the responses you provide.

Participation in this study is completely voluntary and you may choose to withdraw your participation at any time without penalty to your grade in this class or your relationship with the Western Michigan University psychology department.

Depending on your course instructor, it may be possible to receive extra credit for your participation. We will provide information for extra credit at the end of the survey. Please check with your instructor.

Please take a study handout regardless of whether or not you are interested in participating. You may do what you want with the handout after.

If you have any questions, please contact the student investigator, Meaghan Lewis at meaghan.m.lewis@wmich.edu or 269 387-4485. Thank you for your time and have a nice day!
Online Research Survey

Clinical researchers at Western Michigan University are looking for anyone over the age of 18 to participate in a study examining emotional responses to trauma by taking an online survey.

All information will be kept private and confidential.

If you are interested in participating, you can access the survey at the following link:

https://www.surveymonkey.com/r/YLT3DF9

Questions? Email meaghan.m.lewis@wmich.edu or elise.e.trim@wmich.edu