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### An Investigation of the Role of Experiential Avoidance in Posttraumatic Stress Disorder

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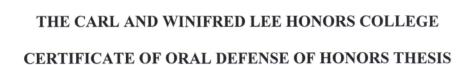
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# Western Michigan University

The Carl and Winifred Lee Honors College.



Meaghan M. Lewis, having been admitted to the Carl and Winifred Lee Honors College in the spring of 2011, successfully completed the Lee Honors College Thesis on April 23, 2012.

The title of the thesis is:

An Investigation of the Role of Experiential Avoidance in Posttraumatic Stress Disorder

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Mrs. Tara E. Adams, Psychology

Mrs. Abby E. Blankenship, Psychology

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An Investigation of the Role of Experiential Avoidance in Posttraumatic Stress Disorder

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### Abstract

Experiential avoidance is a construct that researchers have proposed as a possible mediating factor between psychopathology and a prior history of traumatic events. Among the traumatic events investigated in the research literature, experiential avoidance has demonstrated correlations with prior experiences of sexual victimization. Posttraumatic stress disorder (PTSD) and PTSD symptoms have also been linked with incidence of sexual victimization and engaging in experiential avoidance. Another variable commonly associated with this construct is problematic alcohol consumption. The present study presumed that women with a history of sexual victimization would report high PTSD symptoms, a stronger likelihood of partaking in problem drinking, and engaging in high levels of experiential avoidance. This research sought to investigate experiential avoidance as a mechanism by which PTSD symptoms and problem drinking may be exacerbated. Using self-report measures, this study investigated experiential avoidance as a correlational variable with a prior history of sexual victimization, PTSD symptoms, and problem drinking. Results indicated that PTSD symptoms and sexual victimization history predicted problem drinking, but that experiential avoidance did not contribute to the model concerning predicting problem drinking.

### Introduction

Sexual Victimization of Women

The sexual victimization of women is a social problem that has increased in prevalence. In their review of the literature, Messman-Moore et al. (2008) provide the terms unwanted sexual contact, verbal sexual coercion, attempted rape, and rape as broad categories of sexual victimization. Sexual victimization is also highly prevalent among female college students. Research illustrates that more than half of college women experienced some form of sexual victimization with 11.9% reporting sexual coercion, 12.1% attempted rape, and 15.4% reporting completed rape (Koss, Gidycz, & Wisniewski, 1987). A more recent replication of this research shows similar results with reported prevalence rates of 10.1% for rape and 10.9% for attempted rape (Fisher, Cullen, & Turner, 2000). Women within the age group of 16-24 report rape experiences at four times the rate of sexual assault for women in all other age groups. These women are also at the greatest risk for other forms of sexual victimization (Humphrey & Kahn, 2000).

There are numerous harmful sequelae associated with sexual victimization. Findings from research conducted among women who experienced sexual victimization as children support high rates of depression, anxiety, fear, and suicidal ideas and behavior (Zucker, Hood, Dacosta, Ackman, & Cassovia, 1992). In another sample, results implicated that sexual revictimization is associated with increased victim distress such as higher levels of anxiety, lifetime and current depression and PTSD, dissociation, binge drinking, and drug use within the past month (Casey & Nurius, 2005). Further research suggests a relationship between women who meet diagnostic criteria for both borderline personality disorder (BPD) and complex PTSD with early onset

sexual victimization (McLean & Gallop, 2003). In a sample of college women, those who reported a history of sexual victimization during adulthood also reported higher levels of intrusion and avoidance, borderline symptoms, and general distress in comparison to a group that had no trauma exposure (Kaltman, Krupnick, Stockton, Hooper, & Green, 2005). These results indicate that women with a history of sexual victimization are at an increased likelihood of incurring some form of psychopathology.

### PTSD and Sexual Victimization

According to the research literature, women who have experienced some form of sexual victimization have an increased vulnerability toward developing PTSD in comparison with women who have not experienced sexual victimization. Ullman et al. (2002) used data from the National Comorbidity Survey to examine correlates between PTSD and mental health service seeking in females with a sexual victimization history. The women in their results, particularly those of ethnic minorities, had greater propensity to meet criteria for PTSD. These results support theories that sexual victimization experiences are a considerable risk factor in the etiology of PTSD. In a community sample, a third of female rape victims experienced PTSD at some point following their assault (Kilpatrick, Edmunds, & Seymour, 1992). Similarly, 89% of women who reported childhood sexual victimization qualified for a diagnosis of PTSD, according to the Clinician Administered PTSD Scale (CAPS) (Owens & Chard, 2003). In another study, 58% of the women surveyed, who identified their experience of sexual assault as their worst traumatic event, met diagnostic criteria for PTSD at some point in their lifetime (Anders et al., 2001).

Sexual revictimization may also exacerbate PTSD symptom severity. Seligman (1975) proposed a conceptual model of learned helplessness in which individuals incapable of

terminating their abuse internalize feelings of helplessness. Assuming this model is generalizable, victimized individuals may learn to accept further detriment as inescapable. Therefore, women with histories of sexual victimization may fail to engage in escape behaviors necessary to terminate dangerous situations. Failing to engage in protective behaviors may result in an increased likelihood of repeated victimization. Assuming that Seligman is correct, women who are survivors of sexual victimization may have an increased risk of revictimization if they are unlikely to engage in escape behavior.

Seligman's learned helplessness model proposes that repeated exposure to injurious circumstances found difficult or impossible to terminate may diminish escape behaviors in response to similar circumstances. Arata et al. (2000) observed that PTSD symptoms tend to be positively correlated with revictimization status in female undergraduate students. These results provide support that behaviors consistent with the learned helplessness model may increase contact with further occurrences of sexual victimization and increase PTSD symptoms. Women surveyed in this sample reported more self-blame, higher levels of PTSD symptoms and high-risk sexual behavior which are incongruent with helping oneself avoid future victimization. The strong association of these variables with revictimization and childhood sexual victimization suggests that learned helplessness is an accurate conceptual model. If, as proposed under the learned helplessness model, women with prior histories of sexual victimization have a decreased likelihood of engaging in escape behavior, experiential avoidance may explain this lack of escape behavior. These women may also engage in problem drinking to further avoid PTSD symptoms that occur as a result of their sexual victimization histories.

Survivors of sexual victimization who meet criteria for PTSD may possess a greater propensity to imbibe in problem drinking. Results from clinical research indicate that PTSD

symptomatology is a potential mediating variable for women with childhood rape experiences, influencing their alcohol usage during adulthood (Ebstein, Saunders, Kilpatrick, & Resnick, 1998). Correspondingly, Najdowski et al. (2009) found PTSD to prospectively influence problem drinking in women who sustained further sexual victimization experiences. Victims of adult sexual victimization who reported a history of childhood sexual victimization reported more symptoms of arousal, re-experiencing, and avoidance. These results also indicate that the symptoms, in addition to predicting more robust problem drinking, increase the risk for revictimization (Ullman, 1997). Cappell & Greeley (1987) discuss a self-medication model in which survivors drink alcohol to cope with the symptoms of PTSD. This model may be a useful tool in conceptualizing the pattern of alcohol consumption as it pertains to PTSD and a history of sexual victimization.

### Internalized Coping Mechanisms

Experiential avoidance is a hypothetical construct characterized by an unwillingness to experience distressing private events including thoughts, feelings, and memories. The avoidance aspect constitutes subsequent attempts to reduce or alleviate aversive private experiences.

Experiential avoidance is generally associated with prior experiences of traumatic events.

Follette et al. (1996) found experiential avoidance to mediate psychological sequelae experienced by survivors of childhood sexual victimization. Survivors of childhood sexual victimization reported emotion-focused coping strategies (in attempts to maintain negative affect rather than attempting to control external variables) more often than problem-focused strategies (coping strategies that attempt to control the event). This research also evidenced an association of coping strategies such as denial, avoidance, and emotional suppression with poorer

psychological outcomes in adult survivors of childhood sexual victimization (Long & Jackson, 1993).

Blackledge et al. (2004) propose several reasons why experiential avoidance may maintain PTSD symptoms. They first hypothesize that experiential avoidance limits exposure to positive reinforcement contingencies and that avoidance behavior such as substance abuse increases exposure to aversive events. These researchers also assert that experiential avoidance maintains verbal rules, limiting exposure to real world consequences. Polusny & Follette (1995) hypothesize that avoidance behavior in response to a traumatic event may be focused on activities and stimuli parallel to the individual's traumatic event, while over time these coping strategies may generalize to non-trauma related stimuli. If this premise is accurate, such behavior may maintain posttraumatic stress symptoms. These studies suggest engaging in experiential avoidance may actually increase PTSD symptoms and PTSD symptoms may increase the risk of other damaging behavior including problem drinking. Among an ethnically diverse sample of women, researchers found experiential avoidance to mediate the relationship between both symptoms of PTSD and depression (Merwin et al., 2009).

Individuals who engage in experiential avoidance coping strategies are at risk for elevated levels of psychopathology. In several mediational analyses, experiential avoidance was isolated as a mediating factor between sexual victimization and psychological outcome (Marx et al., 2002; Polusny et al., 2004). Women who engage in experiential avoidance may also be at risk for revictimization. In a sample of 304 undergraduate females, those who indicated a history of adult victimization and problem drinking also displayed greater risk for later sexual victimization. In addition, linear regression analyses indicated that individuals who self-report adolescent sexual victimization also report higher levels of experiential avoidance (Polusny,

1998). The implications of literature reviews regarding experiential avoidance correlate this construct with multiple variables including a pervasive history of sexual victimization, problem drinking, and PTSD symptoms. Therefore, examining the relationships between these prevalent variables may be advantageous.

### Goals of the Current Study

The current study investigated experiential avoidance as a risk factor for problem drinking in female college students who reported a history of sexual victimization or unwanted sexual experiences. It investigated a possible association between sexual victimization and experiential avoidance with increased PTSD symptoms and problem drinking. There were also a series of research questions proposed. The present study had four hypotheses:

- 1). Individuals who endorsed a prior history of sexual victimization (defined as any unwanted sexual contact or touching) would report high levels of experiential avoidance.
- 2). Individuals who endorsed a prior history of sexual victimization would, in addition to reporting high levels of experiential avoidance, also report significant PTSD symptoms.
- 3). Individuals who endorsed a prior history of sexual victimization, would be more likely to report high levels of experiential avoidance, significant PTSD symptoms, and would also be more likely to report engaging in significant problem drinking.
- 4). Individuals who endorsed a prior history of sexual victimization as well as problem drinking would demonstrate higher levels of experiential avoidance.

This study attempted to identify a correlation between these variables through self-report measures. It also sought to extend the research literature. Specifically, it attempted to address a limitation in a study conducted by Najdowski et al. (2009) by exploring experiential avoidance as a construct associated with sexual victimization, PTSD symptoms, and problem drinking. It

was also used as a screening procedure for a doctoral dissertation research study.

### Method

Design

The current study used a cross sectional design to investigate the relationship between sexual victimization or unwanted sexual experiences, experiential avoidance, PTSD symptoms, and problem drinking. It postulated an association between statistically significant scoring on self-report measures of experiential avoidance with a prior history of sexual victimization or unwanted sexual experiences, and higher scoring on self-report measures regarding PTSD symptoms, and problem drinking.

### **Participants**

classrooms at Western Michigan University (WMU) and invited to participate in an undergraduate thesis project as well as a more involved study. This study was conducted as part of the screening procedure in conjunction with Abby Blankenship's dissertation research study examining the effects of mindfulness training on the mitigation of PTSD symptoms. Research assistants visited classrooms and read the oral recruitment script (Appendix A) detailing the study. Handouts with contact information for the graduate student investigator were provided and given to students to pass around the classroom (Appendix B). Any interested student could take a handout. In addition, flyers (Appendix C) were posted on campus containing e-mail and telephone contact information for the graduate student investigator conducting the dissertational study. Extra credit slips were provided to participants for the time spent completing the measures. However, extra credit was awarded by course instructors. If research participants were instructed at the end of the survey to contact the undergraduate student investigator via e-

mail to arrange a meeting time if interested in obtaining extra credit. Full completion of the measures was not required to receive extra credit.

### Materials

A total of five self-report measures were administered using the Survey Monkey website as well as an investigator developed demographic questionnaire (Appendix D) which was used to obtain demographic information from participants. Through the recruitment flyers or recruitment process, potential participants were instructed to contact the graduate student investigator. When a potential participant contacted the student investigator, they received more information about the study, a confidential identification number, and a link to the self-report measures on Survey Monkey. No names were associated with data collected on the Survey Monkey website. All of the information collected was kept completely anonymous and confidential. All data collected was stored in a password protected computer in the Trauma Research Laboratory.

### Measures

Life Events Checklist (LEC; Gray et al., 2004) (Appendix E). The LEC was established at the National Center for Posttraumatic Stress Disorder (PTSD) as a diagnostic assessment for PTSD. This 17-item checklist encompasses a list of potentially traumatic events (PTEs) including sexual assault and other unwanted sexual experiences. It also inquires about multiple types of exposure to each PTE and allows endorsement of multiple types of exposure to any item. For the purposes of this study, sexual assault and other unwanted sexual experiences were monitored closely. Exposure to other traumatic events or lack of exposure was also investigated. The LEQ has adequate test-retest reliability over a period of seven days with a mean of .61. It also shows good convergent validity with the Traumatic Life Events Questionnaire (TLEQ) with

a mean of .70. The LEQ was administered to gather information regarding the types of unwanted sexual experiences that participants may have experienced. Although data from participants with a history of unwanted sexual experiences were examined, data from participants who did not report these experiences were also examined. This allowed a thorough examination of sexual victimization and its correlates with the other dependent variables in comparison with a lack of this history.

Acceptance and Action Questionnaire (AAQ-II; Bond et al., in press) (Appendix F). The AAQ-II is a 7-item self-report measure meant to assess experiential avoidance and psychological flexibility. It is rated on a 7-point Likert-type scale. Higher scores indicate increased experiential avoidance and lower scores indicate greater psychological flexibility. The AAQ-II has good internal consistency ( $\alpha$ =.84). It also has good test-retest reliability at 12 months ( $\alpha$ =.81) and at 3 months ( $\alpha$ =.79). The AAQ-II has established negative correlations with measures of depression and thought suppression and positive correlations with measures of mindfulness. Specifically, it was used to measure conceptual constructs such as an unwillingness to remain in contact with negative private events, subsequent attempts to alleviate negative internal experiences, and a necessity for emotional and cognitive control.

Modified PTSD Symptom Scale-Self Report (MPSS-SR; Falsetti, Resnick, Resick, & Kilpatrick, 1993) (Appendix G). The MPSS-SR is a 17-item self-report measure of traumatic stress symptomatology. It assesses for 17 Diagnostic and Statistical Manual-IV-TR (DSM-IV-TR) PTSD symptoms inclusive of the clusters: re-experiencing, avoidance and numbing, and hyperarousal. This self-report measure is a modification of the PTSD Symptom Scale (PSS) developed by Foa, Riggs, Dancu, & Rothbaum (1993). Participants rate frequency (0=not at all to 3=5 or more times a week) and severity (A=not at all upsetting to D=extremely upsetting) of

symptoms over the past two weeks. The MPSS-SR has demonstrated excellent internal consistency ( $\alpha$ =.97 in a community sample,  $\alpha$ =.96 in a clinical sample). It has also demonstrated good convergent validity with the Structured Clinical Interview for DSM-IV-TR Axis I Disorders PTSD Module. This measure was used to assess PTSD symptom severity and frequency among participants.

Michigan Alcoholism Screening Test (MAST; Najdowski & Ullman, 2009) (Appendix H). The MAST is a 25-item standardized screening measure for potential alcohol abuse and dependence. Items on the MAST are answered as yes or no and scored in either binary response format or differentially weighted by items. This measure has demonstrated reliability across a one year time period (α=.88 and .90 respectively). The MAST has also validated significant correlations between PTSD and problem drinking and has bivariate correlations with the Sexual Experiences Survey (SES), and Posttraumatic Stress Diagnostic Scale (PDS). The current study employed the MAST as a measure of alcohol abuse and/or dependence as well as severity of use.

Sexual Experiences Survey (SES; Testa, VanZile-Tamsen, Livingston, & Koss, 2004) (Appendix I). The SES is a 10-item self-report measure of various sexually aggressive experiences. It also helps determine the nature of these experiences and provides four classification categories: rape, attempted rape, verbally coerced intercourse, or sexual contact. The SES has test-retest reliability of .93, and internal consistency among items of .73. Of individuals who endorsed rape on the SES there was an 81-94% inter-rater reliability agreement (coercion: 95%, contact: 40-85%, attempted rape: 16-68%). The SES was administered to obtain further details regarding unwanted sexual experiences.

#### Procedure

Potential participants contacted the graduate student investigator by telephone or e-mail and were provided with additional information through the phone or e-mail script (Appendix J). All session materials were administered using the Survey Monkey website. After the initial telephone or email contact, potential participants were provided a confidential identification number for Survey Monkey. Participants were directed to the website and instructed to enter their personal code number in order to link data from each session of Abby Blankenship's dissertation study. This study only collected data from participants at this first initial online session.

First, potential participants were invited to view an informed consent document (Appendix K). Once consent was obtained, participants proceeded with completing the self-report measures. Potential participants were required to indicate their agreement before proceeding to the measures. After completing the LEC and the AAQ-II, participants completed the Demographic Questionnaire. In accordance with a question on the Demographic Questionnaire regarding participant gender, if a participant chose the item "male", the survey ended but these individuals could still qualify for the dissertational investigation. Participants who chose the "female" item continued to complete the SES, MPSS-SR, and MAST. All participants could skip any items and could also discontinue participation at any point. Following completion of the measures, a referral list was provided (Appendix L). The total completion time of the measures was estimated to require approximately 45 minutes.

Participants were instructed in the informed consent document that they could terminate the study at any time for any reason if they wished to do so. They were also instructed to leave

questions unanswered if they did not feel comfortable providing an answer. All participant data was stored securely in the Trauma Research Laboratory. Participant data is stored for a minimum of 3 years. Upon obtaining data from approximately 110 participants, data analyses were completed.

### Method of Analysis

Pearson Product Moment Correlation Analyses: Pearson Product Moment correlations were calculated in order to determine the direction and degree of relationship among several variables. This included calculations to determine the relationship between the measure of experiential avoidance (AAQ-II) and sexual victimization status (SES) as well as symptoms of PTSD (MPSS-SR) and problem drinking scores (MAST). Individual correlations were computed between sexual victimization and several variables including problem drinking (MAST), and symptoms of PTSD (MPSS-SR) to determine the direction and degree of relationship.

Stepwise Regression Analyses: Stepwise regression analysis was used to determine if sexual victimization (SES), symptoms of PTSD (MPSS-SR) and experiential avoidance (AAQ-II) predicted problem drinking (MAST).

Independent Samples t-test: Independent samples t-tests were calculated to compare the mean scores on the measure of experiential avoidance (AAQ-II), PTSD symptoms (MPSS-SR), and problem drinking (MAST) between participants who reported a sexual victimization history (SES) and participants who did not report a sexual victimization history.

One-way Analysis of Variance: One-way analysis of variance (ANOVA) was used to examine differences in scores of experiential avoidance and PTSD symptoms between differing classifications of problem drinkers and non-problematic alcohol users.

### Results

Data collected from 108 female undergraduate students were used to compute the results. Although data were ultimately collected from 110 participants, two participants were excluded due to age outliers. The means, standard deviations, and correlations among variables are presented in Table 1.

Table 1

Variables		Problem drinking	Other traumatic events	Sexual victimization	Experiential avoidance	PTSD symptoms
Problem drinking	Pearson correlation	1	.127	.216*	.193*	.249*
Other traumatic events	Pearson correlation	104 .127	100	104 369**	104 .352**	104 .511**
Sexual victimization	Pearson correlation	100 216*	104 369**	104 1	104 096	101 201*
Experiential avoidance	Pearson correlation	104 .193*	104 .352**	108 096	108 1	105 .638**
PTSD symptoms	Pearson correlation	104 .249*	104 .511**	108 193*	108 .638**	105 1
		104	101	105	105	105
M		1.05	1.0	1.39	22.9	39.9
SD		1.21	.000	.49	8.08	8.08

<sup>\*</sup>P=<0.05, \*\*P=<0.01

As measured by the SES, 60.2% reported experiencing sexual victimization at some point in time (since age 14, past 6 months, or past 1 month), with 45.4% self-reporting unwanted

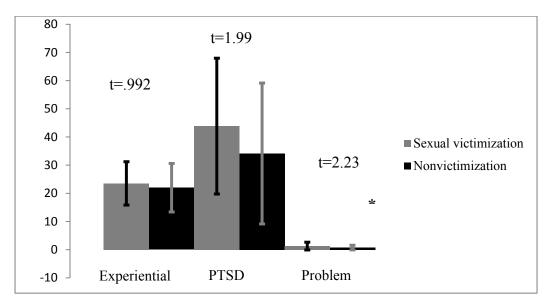
sexual contact, 31.5% unwanted sexual attempts, 26.9% reported coercion, and 25.0% reporting rape. 51.9% of the sample reported sexual victimization or unwanted sexual experiences as measured by the LEC. 89.8% endorsed experiencing a potentially traumatic event other than sexual victimization or an unwanted sexual experience on the LEC. The mean age of the sample was approximately 19 years old. The majority of the sample described themselves as Caucasian (76.9%) and 46.3% identified as single (not in a dating relationship).

Pearson product-moment correlations were computed to evaluate associations between the variables of interest. The results indicated a statistically significant positive correlation between sexual victimization and problem drinking, (r= .216 , p<0.05), a significant relationship between experiential avoidance on the AAQ-II and problem drinking on the MAST (r=.193, p<0.05), a significant relationship between experiential avoidance and PTSD symptoms (MPSS-SR) (r=.638, p<0.01), and a positive correlation of PTSD symptoms with both sexual victimization history as measured by the SES (r=-.193, p<0.05) and positive correlations with endorsing another potentially traumatic event on the LEC (r=.510, p<0.01).

An independent samples t test was used to determine mean differences across participants concerning sexual victimization and non-victimization on measures of PTSD symptoms and problem drinking. The results demonstrate that there was not a significant difference in experiential avoidance between sexually victimized and non-victimized women (t=.992). There was also not a significant difference in PTSD symptoms across the two groups (t=1.99). Statistically significant differences were found between victimized and non-victimized women in regards to problem drinking (t=2.23, \*p=.036).

Table 2

Differences between sexually victimized and nonvictimized women on measures of experiential avoidance, PTSD symptoms, and problem drinking



<sup>\*</sup>P=.036

A one-way between-groups ANOVA was conducted to explore the differences between people classified with a possible or probable likelihood of engaging in problem drinking as measured by the MAST, PTSD symptoms (MPSS-SR), and experiential avoidance scores (AAQ-II). There was not a statistically significant difference in experiential avoidance scores at the p < .05 level: F (.984, p = .324). Differences were significant concerning PTSD symptoms: F (3.966, p = .049) and problem drinking: F (4.984, p = .028). These results are displayed below.

Table 3

One-way ANOVA		
	F	Sig
Experiential avoidance	.984	.324
PTSD symptoms	3.966	.049*
Problem drinking	4.984	.028*

<sup>\*</sup>P = < 0.05

Stepwise regression analysis was used to analyze the impact of experiential avoidance, sexual victimization, and PTSD symptoms on the likelihood of engaging in problem drinking. Sexual victimization and PTSD symptoms were entered in step 2. The total variance explained by the model was 9.6% F (96, 99)=3.49, p<.019. Experiential avoidance explained an additional .2% of the variance and increased the value of p. As such, experiential avoidance did not contribute significantly to the model as hypothesized. In the final model, only PTSD symptoms were statistically significant and recorded higher beta values than sexual victimization.

Table 4

	se regression							
Step	Variable	В	SE B	ß	T	$R^2$	F	p
1	Sexual victimization	300	.129	228	-2.318	0.52	5.373	.023
2	Sexual victimization	240	.130	182	182	.096	5.167	.007
	PTSD symptoms	.006	.003	.215	.215			
						.098	3.493	.019
3	Sexual victimization	240	.131	183	-1.841			
	PTSD symptoms Experiential avoidance	.005	.003	.178	1.414			
	Emperiorium uvoidunee	.005	.010	.059	.476			

#### Discussion

The current study hypothesized that undergraduate females who reported a history of sexual victimization would report higher levels of experiential avoidance, higher PTSD symptoms, and statistically significant levels of problem drinking. Contrary to the hypotheses, findings indicated that sexual victimization and experiential avoidance were not significantly correlated. Although these variables were not correlated, experiential avoidance and PTSD symptoms were. The association between PTSD symptoms and experiential avoidance is supported in the research literature. Thompson & Waltz (2010) found positive correlations between PTSD avoidance symptoms and experiential avoidance (r=.34, p<.01). Pearson correlations in the current study indicated a relationship between all variables excluding sexual victimization and experiential avoidance, although experiential avoidance was correlated with endorsing directly experiencing at least one potentially traumatic event on the LEC.

As hypothesized, both sexual victimization and PTSD symptoms predicted problem drinking in the regression analysis. These findings are similar to the results of the investigation conducted by Najdowski (2009) in which PTSD symptoms influenced problem drinking in women reporting repeated victimization. Although the current study did not examine repeated victimization, these results provide further support that a sexual victimization history and PTSD symptoms contribute to the likelihood of engaging in problem drinking.

Another finding contrary to the hypotheses is that experiential avoidance did not predict problem drinking above and beyond PTSD symptoms and sexual victimization. Although experiential avoidance and problem drinking were correlated, experiential avoidance did not predict problem drinking in the regression analysis. One possible explanation is that the sample characteristics influenced the results of the investigation. As the mean age reported by the

sample was 19, the fact that many of the participants were not above the drinking age may also have influenced the results. Perhaps this relationship is one that becomes more problematic across time. Conceptually, if the majority of the reported sexual victimization or unwanted sexual experiences occurred in adolescence or young adulthood, it might follow that a maladaptive avoidance repertoire is more gradually shaped. However, because the current study did not make a distinction between child and adolescent victimization status, definitive conclusions cannot be made. Further research could investigate this relationship within a community or clinical sample or among individuals above the age of 21.

#### Limitations

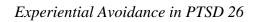
This study was limited in a number of capacities. The results of this study may not be drawn from an ideally representative sample because the sample consisted of college students, many of whom were not above the drinking age. This sample may also be higher functioning than that of a clinical sample or may engage in more adaptive coping skills than such a sample. Another limitation to this study is the use of self-report measures to retrospectively report experiences, symptomatology, and coping skills. This study is also limited in that it used a cross-sectional design, making it impossible to determine if PTSD symptoms led to increased alcohol consumption, if first experiencing sexual victimization exacerbated PTSD symptoms, which increased alcohol consumption, or if sexual victimization led to increased alcohol consumption and then increased PTSD symptoms. It is possible that other confounding variables influenced this relationship. An additional issue with this research is that 13 items of the MAST were unintentionally excluded from Survey Monkey. For the purposes of data analyses, items that corresponded with those on a shorter version of the MAST were included, but the construct validity of the MAST may have decreased as a result.

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Appendices

## Appendix A Student Oral Recruitment Script

Hello, my name is	, and I am here to invite you to participate in a
research study that is being conducted. Th	ne title of the study is "A Prospective Examination of
Mindfulness Training on the Mitigation of	Posttraumatic Stress Symptoms."

This study is looking at how people who participate in a program to learn certain skills to cope with stressful situations react to a video containing distressing content and if their reactions are different than those of people who do not participate in the program.

Only people who have had certain life experiences can participate in the study. In order to find out whether or not you can participate in the study you will have to complete several questionnaires online using Survey Monkey. Not only will these questionnaires y help us determine if you are eligible to participate, but the information gathered from the questionnaires will also be used to explore if certain tough experiences are related to particular ways of coping.

After you complete the questionnaires on Survey Monkey and are eligible to participate, the researchers will contact you by email to give you an opportunity to learn more about the study. Through email you will be able to schedule an appointment with the student investigator. If you decide to participate, you will be asked to attend 4 sessions, each approximately one week apart. During the first session you first will be provided with more information about the study. If you decide to continue your participation, you will be asked to meet one on one with a research assistant, and be asked to talk about an event from your past that you found distressing. During the interview you will be asked to talk about how you felt about that event then, and how you feel about it now. During Session 1 you will be randomly assigned to receive a training that is designed to improve physical and emotional well-being or no training at all. If you are assigned to receive the training we will ask you to practice the skills that you learned, and will provide you with materials to help you practice. We will also ask that you keep track of any practice that you do in-between sessions 1 and Session 2. If you are assigned to no treatment you will be asked to return 1-week from your initial participation. If you are assigned to receive the training, participation in Session 1 could take as long as 3 hours to complete. If you are assigned to no treatment, participation in Session 1 could take as long as 2 hours.

Session 2 will take place approximately 1 week after Session 1. During Session 2 we will ask you to respond to several questionnaires. In addition, we will ask you to watch a 12 minute video that contains some distressing and upsetting material. The video is designed to make you feel aroused or anxious. If you find the video to be too distressing you will be able to turn it off. In addition, in-between Session 2 and Session 3 you will be asked to keep track of any thoughts that you may have about the video.

Session 3 will take place approximately 1 week after Session 2, and Session 4 will take place one week from Session 3. During these sessions you will simply be asked to respond to several questionnaires. Session 3 and Session 4 will take you approximately 1 hour to complete.

All the information that you provide during the study is confidential and will be coded and kept separately from any of the information that you provided that contains personal identifiers such as your name, telephone number, or email address. Participation in this study is completely voluntary and you can stop at any time without any effect on your grade in this class or your relationship with Western Michigan University or the Psychology Department.

Depending on your instructor, it may be possible to receive some extra credit points for participating in this study. Alternatively, your instructor may have additional methods for obtaining extra credit if you choose not to participate in this study. Please check with your instructor.

If you are interested in learning more about the study, please feel free to take a handout. The handout includes the contact information for the student investigator.

Thank you for your time! Have a good day!

### Appendix B Recruitment Handouts

### Mindfulness and PTSD Study

Clinical researchers in the Psychology Department are seeking individuals 18 years of age or older to participate in a study examining whether a program that teaches coping skills helps people be less upset while viewing a video with distressing content. If you are 18-years old or older, and are interested in learning more about this study, please contact the student investigator by email at abby.e.seifert@wmich.edu or by phone at (269) 387-4485.

### **Mindfulness and PTSD Study**

Clinical researchers in the Psychology Department are seeking individuals 18 years of age or older to participate in a study examining whether a program that teaches coping skills helps people be less upset while viewing a video with distressing content. If you are 18-years old or older, and are interested in learning more about this study, please contact the student investigator by email at abby.e.seifert@wmich.edu or by phone at (269) 387-4485.

### Mindfulness and PTSD Study

Clinical researchers in the Psychology Department are seeking individuals 18 years of age or older to participate in a study examining whether a program that teaches coping skills helps people be less upset while viewing a video with distressing content. If you are 18-years old or older, and are interested in learning more about this study, please contact the student investigator by email at abby.e.seifert@wmich.edu or by phone at (269) 387-4485.

### Appendix C Recruitment Flyers

### **Research Participants Needed!!!**

Clinical researchers in the Psychology Department are seeking individuals 18 years of age or older to participate in a study examining whether a program that teaches coping skills helps people be less upset while viewing a video that contains distressing content.

If you are interested in learning more about participating please contact Abby Seifert at: abby.e.seifert@wmich.edu

All information is private and confidential.

### Thank you!

Abby.E.Seifert@wmich.edu	Abby.E.Seifert@wmich.edu
(269) 387-4485	(269) 387-4485
Abby.E.Seifert@wmich.edu	Abby.E.Seifert@wmich.edu
(269) 387-4485	(269) 387-4485
Abby.E.Seifert@wmich.edu	Abby.E.Seifert@wmich.edu
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(269) 387-4485	(269) 387-4485
Abby.E.Seifert@wmich.edu	Abby.E.Seifert@wmich.edu
(269) 387-4485	(269) 387-4485

The Demographic Questionnaire		5.		is your class standing upon ing this semester?	
Instr	uctions:	For each of the questions			8
		circle the response that best		01	Freshman
		or fill in the appropriate blank.		02	
		11 1		03	
1.	What	is your age? years		04	
				05	
2.	Gende	er			Special
				06	
	01	Male			
	02	Female			
			6.	What	is your current yearly income?
3.	What	is your relationship status?			
		The control of the second of t		01	\$15,000 or less
	01	Single and not in a dating		02	\$15,001 - \$25,000
		relationship		03	\$25,001 - \$35,000
	02	Single and currently dating/in		04	\$35,001 - \$50,000
		a relationship		05	over \$50,000
	03	Engaged			
	04	Living with a	7.	What	do you think your family's
		boyfriend/girlfriend or sexual partner		incon	ne was growing up?
	05			01	\$15,000 or less
	06	Separated/Divorced		02	\$15,001 - \$25,000
	07	Widowed		03	\$25,001 - \$35,000
				04	\$35,001 - \$50,000
4.	What	best describes your		05	over \$50,000
	race	ethnicity?			
			8.	Where	e do you currently reside?
	01	Asian			
	02			01	House
	03			02	Apartment
	04			03	Duplex
		Native		04	Residence Hall (dormitory)
	05			05	Fraternity or Sorority House
	06	Other:		06	Other:

### LIFE EVENTS CHECKLIST

Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that: (a) it <u>happened to you</u> personally, (b) you <u>witnessed</u> if happen to someone else, (c) you <u>learned about it</u> happening to someone close to you, (d) you're <u>not sure</u> if it fits, or (e) it <u>doesn't apply</u> to you.

Be sure to consider your entire life (growing up as well as adulthood) as you go through the list of events.

ISV.		Happened	Witnessed	Learned	Service Control	Doesn't
45.65	Event	to me	it	about it	Not Sure	apply
1.	Natural disaster (for example, flood, hurricane, tornado, earthquake)	ee		X 10 10 XX		
2.	Fire or explosion					
3.	Transportation accident (for example, car accident, boat accident, train wreck, plane crash)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
4.	Serious accident at work, home, or during recreational activity		Nail A			
5.	Exposure to toxic substance (for example, dangerous chemicals, radiation)					
6.	Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)					
7.	Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)					
8.	Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)					
9.	Other unwanted or uncomfortable sexual experience					
10.	Combat or exposure to a war-zone (in the military or as a civilian)					
11.	Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)					
12.	Life-threatening illness or injury					
13.	Severe human suffering					
14.	Sudden, violent death (for example, homicide, suicide)					
15.	Sudden, unexpected death of someone close to you					
16.	Serious injury, harm, or death you caused to someone else					
17.	Any other very stressful event or experience					

AAQ-II

Below you will find a list of statements. Please rate how true each statement is for you by circling a number next to it. Use the scale below to make your choice.

1 2		2 3		5	6	7	
never	very seldom	seldom	sometimes	frequently true	almost always	always	
true	true	true	true		true	true	

1.	My painful experiences and memories make it difficult for me to live a life that I would value.	1	2	3	4	5	6	7
2.	I'm afraid of my feelings.	1	2	3	4	5	6	7
3.	worry about not being able to control my worries and feelings.	1	2	3	4	5	6	7
4.	My painful memories prevent me from having a fulfilling life.	1	2	3	4	5	6	7
5.	Emotions cause problems in my life.	1	2	3	4	5	6	7
6.	It seems like most people are handling their lives better than I am.	1	2	3	4	5	6	7
7.	Worries get in the way of my success.	1	2	3	4	5	6	7

The purpose of this scale is to measure the frequency and severity of symptoms in the <u>past week</u>. Using the scale listed below, please indicate the frequency of symptoms to the left of each item. Then indicate the severity beside each item by circling the letter that fits you best.

Freque	ncy	Seve	rity			
0 1 2 3	Not at all Once per week or less/a little bit once in a while 2 to 4 times per week/ somewhat/half the time 5 or more times per week/ very much/almost always		Not at all distressing A little bit distressing Moderately distressing Quite a bit distressing Extremely distressing			g
FREQ	JENCY	SEV	ERITY			
_	Have you had recurrent or intrusive distressing thoughts or recollections?	A	В	С	D	Е
	Have you been having recurrent bad dreams or nightmares?	A	В	C	D	Е
	Have you had the experience of suddenly reliving an event, flashbacks of an event, or acting or feeling as if an event was re-occuring?  Have you been intensely	. A	В	C	D	Е
	EMOTIONALLY upset when something reminded you of an event that happened in the past?	A	В	С	D	Е
	5. Have you persistently been making efforts to avoid thoughts or feelings associated with something that happened in the past?	A	В	С	D	E
	6. Have you persistently been making efforts to avoid activities, situations, or places that remind you of something that happened in the past?	A	В	С	D	E
	7. Are there any important aspects about something that happened in the past that you still cannot recall?	A	В	С	D	E

Frequency				Severity			
0 1 2 3	2 to 4 t	all per week or less/a little bit once in a while times per week/ somewhat/half the time ore times per week/ very much/almost always	A B C D E	Not at all distressing A little bit distressing Moderately distressing Quite a bit distressing Extremely distressing			
	_ 8.	Have you markedly lost interest in free time activities?	A	В	С	D	Е
	9.	Have you felt detached or cut off from others?	A	В	C	D	Е
	_ 10.	Have you felt that your ability to experience emotions is less (e.g., unable to have loving feelings, do you feel numb, can't cry when sad, etc.)?	A	В	С	D	E
		in the past (e.g., no career, marriage, children, or long life)?	A	В	C	D	Е
	_12.	Have you been having persistent difficulty falling or staying asleep?	A	В	C	D	E
	_13.	Have you been continuously irritable or having outbursts of anger?	A	В	C	D	Е
	_14.	Have you been having persistent difficulty concentrating?	A	В	C	D	Е
	_15.	Are you overly alert (e.g., check to see who is around you, etc)?	A	В	C	D	E
	_16.	Have you been jumpier, more easily startled?	. A	В	С	D	Е
	_17.	Have you been having intense PHYSICAL reactions (e.g., sweaty, heart palpitations) when something reminded you of an event that happened in the past?	A	В	С	D	Е

### Michigan Alcohol Screening Test

The MAST Test is a simple, self scoring test that helps assess if you have a drinkin problem. Please circle the answers to the following YES or NO questions:

- 1. Do you feel you are a normal drinker? ("normal" drink as much or less than most other people) Circle Answer: YES NO
- 2. Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening?

Circle Answer: YES NO

- 3. Does any near relative or close friend ever worry or complain about your drinking? Circle Answer: YES NO
- 4. Can you stop drinking without difficulty after one or two drinks? Circle Answer: YES NO
- 5. Do you ever feel guilty about your drinking?

Circle Answer: YES NO

- 6. Have you ever attended a meeting of Alcoholics Anonymous (AA)? Circle Answer: YES NO
- 7. Have you ever gotten into physical fights when drinking?

Circle Answer: YES NO

- 8. Has drinking ever created problems between you and a near relative or close friend? Circle Answer: YES NO
- 9. Has any family member or close friend gone to anyone for help about your drinking? Circle Answer: YES NO
- 10. Have you ever lost friends because of your drinking?

Circle Answer: YES NO

- 11. Have you ever gotten into trouble at work because of drinking? Circle Answer: YES NO
- 12. Have you ever lost a job because of drinking?

Circle Answer: YES NO

you were drinking?  Circle Answer: YES NO
14. Do you drink before noon fairly often? Circle Answer: YES NO
15. Have you ever been told you have liver trouble such as cirrhosis?  Circle Answer: YES NO
16. After heavy drinking have you ever had delirium tremens (D.T.'s), severe shaking, visual or auditory (hearing) hallucinations?  Circle Answer: YES NO
17. Have you ever gone to anyone for help about your drinking? Circle Answer: YES NO
18. Have you ever been hospitalized because of drinking? Circle Answer: YES NO
19. Has your drinking ever resulted in your being hospitalized in a psychiatric ward? Circle Answer: YES NO
20. Have you ever gone to any doctor, social worker, clergyman or mental health clinic for help with any emotional problem in which drinking was part of the problem?  Circle Answer: YES NO
21. Have you been arrested more than once for driving under the influence of alcohol? Circle Answer: YES NO
22. Have you ever been arrested, even for a few hours because of other behavior while drinking?  (If Yes, how many times)  Circle Answer: YES NO

Participant code nu	mber:
	Sexual Experiences Survey
Since age 14, ha	ve you ever:
YesNo	Engaged in sex play (fondling, kissing, or petting, but not intercourse) with a man when you did not want to by being overwhelmed with continual arguments and pressure?  If yes, approximately how many times has this occurred since age 14?
	If yes, approximately how many times has this occurred in the past 6 months?  If yes, approximately how many times has this occurred in the past 1 month?
YesNo	2. Engaged in sex play (fondling, kissing, or petting, but not intercourse) with a man when you did not want to by him using his position of authority (boss, teacher, camp counselor, supervisor, etc.)?
	If yes, approximately how many times has this occurred since age 14?
YesNo	3. Engaged in sex play (fondling, kissing, or petting, but not intercourse) with a may when you did not want to by being threatened or physically forced (twisting your arm, holding you down, etc.)?  If yes, approximately how many times has this occurred since age 14?  If yes, approximately how many times has this occurred in the past 6 months?  If yes, approximately how many times has this occurred in the past 1 month?
YesN	4. Had a man attempt sexual intercourse with you when you did not want to by him using threat or some degree of physical force (twisting your arm, holding you down etc.) but intercourse did not occur?  If yes, approximately how many times has this occurred since age 14?  If yes, approximately how many times has this occurred in the past 6 months?  If yes, approximately how many times has this occurred in the past 1 month?
YesN	5. Had a man attempt sexual intercourse with you when you did not want to by him giving you alcohol or drugs, but intercourse did not happen?  If yes, approximately how many times has this occurred since age 14?  If yes, approximately how many times has this occurred in the past 6 months?  If yes, approximately how many times has this occurred in the past 1 month?
YesN	o 6. Engaged in sexual intercourse with a man when you did not want to by being overwhelmed with continual arguments and pressure?  If yes, approximately how many times has this occurred since age 14?  If yes, approximately how many times has this occurred in the past 6 months?  If yes, approximately how many times has this occurred in the past 1 month?

<u>- 11</u>	_Yes	_No	7. Engaged in sexual intercourse with a man when you did not want to by him using his position of authority (boss, supervisor, camp counselor, teacher, etc.)?  If yes, approximately how many times has this occurred since age 14?
			If yes, approximately how many times has this occurred in the past 6 months?  If yes, approximately how many times has this occurred in the past 1 month?
_	_Yes	_No	8. Engaged in sexual intercourse with a man when you did not want to by being given alcohol or drugs?
			If yes, approximately how many times has this occurred since age 14?
			If yes, approximately how many times has this occurred in the past 6 months?
			If yes, approximately how many times has this occurred in the past 1 month?
_	_Yes	_No	9. Engaged in sexual intercourse with a man when you did not want to by being threatened or physically forced (twisting your arm, holding you down, etc.)? If yes, approximately how many times has this occurred since age 14?
			If yes, approximately how many times has this occurred in the past 6 months?
			If yes, approximately how many times has this occurred in the past 1 month?
	_Yes	_No	10. Engaged in sex acts (oral or anal intercourse or penetration by objects other than the penis with a man) when you did not want to by being threatened or physically forced (twisting your arm, holding you down, etc.)?
			If yes, approximately how many times has this occurred since age 14?
			If yes, approximately how many times has this occurred in the past 6 months?  If yes, approximately how many times has this occurred in the past month?

## Appendix J Phase One Email/Phone Contact

Thank you so much for your interest in "A Prospective Examination of Mindfulness Training on the Mitigation of Posttraumatic Stress Symptoms." This study is looking at how people who participate in a program to learn certain skills to cope with stressful situations react to a video containing distressing content and if their reactions are different than those of people who do not participate in the program.

Only people who have had certain experiences can participate in the study. In order to find out whether or not you can participate in the study you will have to complete several questionnaires on Survey Monkey. Not only will these questionnaires help us determine if you are eligible to participate, but they will also be used to investigate if certain distressing experiences are related to particular ways of coping

If you are still interested in learning more about participating, please go to this link (link to be determined) and use this identification number (number to be determined). Once you visit this link and enter your confidential identification number, you will be asked to read and review an informed consent document. By electronically signing this informed consent document you are only agreeing to complete the questionnaires on Survey Monkey. Depending on how you respond to these questionnaires will determine whether or not you are eligible to participate in the study. If you are eligible to participate in the study I will contact you by email after you have completed the survey. Through email you will be able to schedule an appointment with the student investigator to participate in the study.

All responses that your provide on Survey Monkey are confidential, and will be coded and kept separately from any of the information that you provided that contains personal identifiers such as your name, telephone number, or email address. Participation in this study is completely voluntary and you can stop at any time without any effect on your relationship with Western Michigan University or the Psychology Department.

**Phone script:** Do you have any questionnaires or concerns?

**Email script:** Please do not hesitate to contact me if you have any additional questionnaires or concerns.

## Appendix K Phase One Informed Consent

### Western Michigan University Psychology Department

Principal Investigator: Amy Naugle, PhD
Student Investigator: Abby Seifert, MA
Student Investigator: Meaghan Lewis
Student Investigator: Tara Adams, MA

**Title of Study:** An investigation of the role of experiential avoidance in PTSD / A

Prospective Examination of Mindfulness Training on the Mitigation of

Posttraumatic Stress Symptoms

You have been invited to participate in a research project entitled "An Investigation of the Role of Experiential Avoidance in PTSD." This project will serve as Meaghan Lewis's undergraduate thesis for the requirements of her BS. In addition, it will be used to determine your eligibility to participate in a more involved study entitled "A Prospective Examination of Mindfulness Training on the Mitigation of Posttraumatic Stress Symptoms.", which will serve as Abby Seifert's dissertation project for the requirements of her PhD. 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 feel free to contact us by email: meaghan.m.lewis@wmich.edu and abby.e.seifert@wmich.edu or phone 269-387-4485 if you have any questions or if you need more clarification.

### What are we trying to find out in this study?

This study is investigating how certain distressing events are related to different styles of coping. In addition, we will be investigating how one consumes alcohol and any challenges one may experience following distressing events. We are also interested in determining whether you are eligible to participate in a more involved study looking at how people who participate in a program to learn certain skills to cope with stressful situations react to a video containing distressing content, and if their reactions are different than those of people who do not participate in the program.

### Who can participate in this study?

Anyone over the age of 18-years old may participate in this study. Depending on how you respond the questionnaires you may be invited to participate in "A Prospective Examination of Mindfulness Training on the Mitigation of Posttraumatic Stress Symptoms."

### Where will this study take place?

This study will take place using the internet on the Survey Monkey website.

### What is the time commitment for participating in this study?

You will be asked to respond to 6 questionnaires which will take approximately 45 minutes of your time.

### What will you be asked to do if you choose to participate in this study?

Today you will be asked to complete 6 questionnaires. It will take you approximately 45 minutes to complete all of these questionnaires. Depending on how you respond to these questionnaires, you may or may not be invited to participate in "A Prospective Examination of Mindfulness Training on the Mitigation of Posttraumatic Stress Symptoms." If you are eligible to participate you will be contacted by the primary student investigator, Abby Seifert, by email. If you exit survey monkey or withdraw from the study, you may still be invited to participate in "A Prospective Examination of Mindfulness Training on the Mitigation of Posttraumatic Stress Symptoms."

### What information is being measured during the study?

The questionnaires will ask you questions about yourself, including personal information about your sexual experiences both wanted and unwanted (including sexual victimization experiences). You will also be asked your alcohol usage. In addition, you will be asked several questions about your feelings and reactions to any distressing events that you may or may not have experienced.

### What are the risks of participating in this study and how will these risks be minimized?

One potential risk to you is that you may feel uncomfortable or upset answering questions about your personal experiences and about being asked to disclose whether or not you have experienced any uncomfortable or unwanted sexual experiences. In addition, you will be asked about your alcohol use and whether you have experienced potentially distressing events, which may also be uncomfortable or upsetting. You may skip any questions you do not wish to answer, and all your responses will remain completely confidential. In addition, you can stop participating at any time by exiting Survey Monkey. We have also included a list of resources at the end of this document if you would like to seek professional services.

### What are the benefits of participating in this study?

There are no direct benefits to you for participating in this study. However, information learned from you and other participants may be helpful in understanding how people react to difficult situations in order to develop more effective programs for helping people cope better.

### Are there any costs associated with participating in this study?

Other than the time commitment for participating, there are no other known costs associated with participating in this study.

### Is there any compensation for participating in this study?

No monetary compensation will be provided for participating in the study. If extra credit for participating in research is offered by your professor, extra credit will be given. If you would like extra credit, the email address of the student investigator will be provided to you at the end of the survey. You will then need to email the student investigator, and the student investigator (Meaghan Lewis) will arrange a time for you to pick up your extra credit.

### Who will have access to the information collected during this study?

All of the information collected from you is confidential. This means that your name will not be linked to any of your responses on survey monkey. In order to contact you if you are eligible to participate in "A Prospective Examination of Mindfulness Training on the Mitigation of Posttraumatic Stress Symptoms" a master list with your name and code number will be kept in an encrypted and password protected document. This master list will be kept separate from your other information and will be destroyed at the end of the study. In addition, all of the information you provide will be coded and kept separately from any name or email contact information you provide. Your name and email contact information will be destroyed after your participation in the study is complete or if you withdraw from the study. All of the collected information will be downloaded into a password protected and encrypted data file, and will be kept completely separate from other identifying information. All data will be kept in the Trauma Research lab for at least three years.

Your identity will be protected by the full extent allowed by the law. However, there are certain circumstances that cannot be kept confidential and must be reported to law enforcement, emergency mental health services or protection agencies. These circumstances include: If you are a danger to yourself or someone else or if you report knowledge of current child or elder abuse. Within the extent of the law your participation in this project as well as your responses during the study will be kept strictly confidential.

### 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 primary investigator, Amy Naugle at 269-387-4726 or at <a href="mailto:amy.naugle@wmich.edu">amy.naugle@wmich.edu</a>, or Abby Seifert and Meaghan Lewis at 269-387-4485 at <a href="mailto:abby.e.seifert@wmich.edu">abby.e.seifert@wmich.edu</a>, and <a href="mailto:meaghan.m.lewis@wmich.edu">meaghan.m.lewis@wmich.edu</a>. 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.

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Participant's signature	Date

### Referral List

### Mental Health Agencies and Service Providers in the Kalamazoo Area

Child and Family Psychological Services—(269) 372-4140

Family & Children Services - (269) 344-0202

The Psychology Clinic at Western Michigan University – (269) 387-8302

Counseling and Psychological Services at Western Michigan University - (269) 387-5105

Douglass Community Association - (269) 343-6185

Kalamazoo Community Mental Health and Substance Abuse Services - (269) 373-6000

Borgess Outpatient Mental Health Services - (269) 226-5600

Catholic Family Services—(269) 381-9800

Adult and Family Counseling—(269) 323-9797

### **Emergency Resources**

Gryphon Place - 2-1-1 (in Kalamazoo County) or (269) 381-4357

Kalamazoo Community Mental Health and Substance Abuse Services - (269) 373-6000

Bronson Methodist Hospital - (269) 341-6386 or 9-1-1

Borgess Hospital (269) 226-8000 or 9-1-1

National Suicide Prevention Hotline - 1-800-273-TALK