# Barriers to Mental Health Treatment for Latinos Seeking Treatment for Posttraumatic Stress Disorder

**A Senior Honors Thesis for the Clinical Psychology Major, Department of Psychology**

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**Tufts University, 2017**

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**Acknowledgement**

The current study was funded by an NIMH grant evaluating the implementation of Cognitive Processing Therapy (CPT; Resick & Schineke, 1992) at a community healthcare clinic. I'd like to acknowledge every member of my committee (Dr. Shin, Dr. Queen and Dr. Marques) for taking the time to read my thesis. I am honored to have had the chance to work with all of you throughout the course of my undergraduate career, and I would not have been able to make it where I am today without your guidance and support. I'd like to thank Dr. Luana Marques and everyone at Community Psychiatry Program for Research in Implementation and Dissemination of Evidence-Based Treatments (PRIDE) for granting me access to the dataset and advising me not only as I worked on this thesis, but also for serving as a mentor to me for the past year and a half.

**Abstract**

Posttraumatic stress disorder (PTSD) is an impairing and relatively common disorder with a lifetime prevalence of 6.8% for English-speaking American adults and between 4.4%-7.0% for Latinos (Alegria et al 2008; Roberts, Gilman, Breslau, Breslau, & Koenen, 2010). Despite effective evidence-based therapies for PTSD (Foa, Hembree, & Rothbaum, 2007; Resick & Scheinicke, 1992), not everyone with PTSD receives treatment due to several types of barriers. The present study aimed to identify the barriers to care reported by patients seeking treatment for PTSD at a community health clinic, stratified between Latino and non-Latino participants. Relationships between endorsed barriers to treatment and PTSD symptom severity were explored. Participants (N=60) were administered the Barriers to Treatment Questionnaire (BTQ) and the Posttraumatic Stress Disorder Checklist – Specific (PCL-S). The BTQ assesses three barrier dimensions: logistical, stigma, and treatment perception barriers. The PCL-S assesses total PTSD symptom severity in addition to the symptom clusters: avoidance/numbing, hyper-arousal, and re-experiencing (American Psychological Association, 2000). Bivariate correlations were run to detect relationships between PTSD symptom severity and perceived barriers to treatment, stratified by ethnicity. Latinos reported significantly more stigma barriers than non-Latinos ($t(58)= -4.13$, $p=.033$). There were no significant differences between non-Latino and Latino participants in logistical barriers or treatment perception barriers. PTSD symptom severity correlated significantly with perceived stigma barriers for Latinos ($r=.33$, $p<.05$) but did not with non-Latinos. PCL-S total scores for Latino patients also significantly correlated with treatment perception barriers ($r=.42$, $p=.005$). These results demonstrate a need for providers to address stigma and shame with their patients. Implications about cultural adaptation, treatment modification, and access to care are addressed.

## Introduction

Posttraumatic stress disorder (PTSD) is an impairing and relatively common disorder, with a lifetime prevalence of 6.8% for English-speaking American adults (Kessler et al., 2005) and between 4.4%-7.0% for Latinos (Alegría et al., 2008; Asnaani, Richey, Dimate, Hinon & Hoffman, 2010; Roberts, Gilman, Breslau, Breslau & Koenen, 2010). PTSD is characterized by symptoms of re-experiencing, avoidance/numbing, and hyperarousal following exposure to a potentially traumatic event. To be diagnosed with PTSD, an individual would have to report significant interference and/or distress associated with the trauma after 30 days of having experienced, witnessed, or learned about a traumatic experience (American Psychological Association, 2000[1]). Despite effective evidence-based treatments for PTSD, such as Cognitive Processing Therapy (CPT; Resick & Schenieke, 1992), Prolonged Exposure Therapy (PE; Foa, Hembree, Rothbaum, 2006), and Eye Movement Desensitization and Reprocessing (EMDR; Shapiro, 2014), not everyone with PTSD receives treatment due to several types of barriers (Valenstein et al., 2014).

Barriers to treatment are often divided into three types: (1) logistical barriers (i.e., transportation and financial/time constraints), (2) stigma, shame, and discrimination barriers (i.e., embarrassment, fear of judgement, and/or stigma held by individuals about mental health disorders/treatments) (Britt et al., 2008) and (3) treatment perception barriers (i.e., whether a person believes that treatment will help them or not, previous experiences with treatment) (Valenstein et al., 2014).

[1] The present study was designed and data collection was underway prior to during the 2013 release of the DSM-5 (American Psychiatric Association, 2013). DSM-IV diagnostic criteria were preserved in all study proceedings to maintain data integrity.

Individuals with PTSD report significant logistical barriers to treatment. Financial concerns have been found to be prevalent logistical barriers to treatment among both veteran (Pietrzak, Johnson, Goldstein, Malley & Southwick, 2009) and civilian (Spence et al., 2011) non-treatment-seeking populations. Stigma, shame, and discrimination were common amongst veteran populations (Wright, Britt, & Moore, 2014). For example, a sample of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans with PTSD undergoing a cognitive-behavioral intervention reported concerns about mental-illness stigma as a primary barrier to treatment (Stecker, Shiner, Watts, Jones, & Conner, 2013). Stecker et al. also found that treatment perception barriers (such as negative attitudes towards treatment and treatment providers) were prevalent barriers to treatment for the same population of veterans (2013). Not only do these barriers exist in populations with PTSD, but evidence suggests barriers may be more prevalent in patients diagnosed with this specific disorder. A study of veterans who had combat duty in Iraq and Afghanistan found that veterans who screened positive for PTSD reported more barriers to treatment than those who did not (Hoge et al., 2004). These findings regarding the existence and degree of specific barriers to treatment are salient, given the evidence linking barriers to treatment and negative outcomes in those with PTSD. For example, barriers to treatment correlated to PTSD symptom severity in a sample of predominately male army medics (DeViva et al, 2016). In a longitudinal study, Wright et al. found that in a sample of veterans (93% male) endorsed barriers to treatment (perceived stigma, practical barriers, and negative attitudes to mental health treatment) predicted not only psychopathology, but also treatment-seeking behaviors and engagement in treatment (2014).

Previous research has addressed the relationship between barriers to treatment for people with PTSD and specific symptom clusters of PTSD, particularly avoidance/numbing symptoms.

Previous literature has demonstrated a significant positive correlation between PTSD symptom severity and perceived barriers to treatment in veterans (DeViva et al., 2016). Stigma barriers correlated with PTSD symptom severity (DeViva et al., 2016; Chapman et al., 2014), specifically with avoidance symptoms in a sample of veterans (Ouimette et al., 2011). Sayer (2009) found that a sample of veterans reported that they chose not to seek out treatment in order to avoid talking about or thinking about their traumatic experiences. Sayer theorized that avoidance/numbing symptoms can actually influence the barriers that veterans report. Another study of veterans found that PTSD avoidance symptoms were correlated with reports of barriers to care, specifically reports of logistical barriers and stigma related barriers to care (Ouimette et al., 2011). However, a recent study of veterans has suggested that no relationship between avoidance symptoms and barriers to treatment exists (Doran, Pietrzak, Hoff, & Harpaz-Rotem, 2017). A study of civilians with PTSD participating in online treatment found that greater avoidance symptoms were specifically associated with perceived mental health stigma as a barrier to care (Esfahani, 2016). As findings regarding avoidance as a symptom cluster have been varied, it is essential that we address treatment barriers specific to PTSD, as barriers can interact with the avoidance/numbing symptom cluster. While the previous literature describing the correlation between symptom severity and barriers to treatment is robust, the majority of this research is veteran specific, and there is no research on the relationship for racial minorities between symptom severity and endorsed barriers to accessing treatment.

Racial minorities often report specific economic, cultural, familial and logistical barriers to mental health treatment for a variety of different diagnoses (Doornbos, Zandee, DeGroot, & Maagd-Rodriguez, 2013). A qualitative study of racially diverse immigrants and refugees with documented incidences of trauma in their countries of origin currently residing in the United

States reported barriers to treatment associated with cultural differences, such as stigma, language barriers, a lack of perceived norms in their country of origin for using mental health services, competing cultural practices, a lack of information, and cost (Saechao et al., 2012). Skorkin et al. (2016) found that a population of ethnically diverse older adults who reported that they might need mental health treatment were more likely to report that feeling uncomfortable talking to a professional about their problems was a barrier to mental health treatment. These findings demonstrate that barriers to treatment are prevalent amongst minority populations, and research should examine them more thoroughly.

PTSD is prevalent among Latinos; however, previous research has varied, with some studies finding that Latinos have a higher lifetime prevalence of PTSD than non-Latinos (Hinton & Lewis-Fernandez, 2011; Perilla, Norris, &, Lavisso, 2002), and others finding that Latinos have a lower lifetime prevalence for PTSD (Alegria et al 2008, Asaani, Richey, Dimaite, Hinton, & Hoffman, 2010; Roberts, Gilman, Breslau, Breslau, & Koenen, 2010). However, previous literature consistently demonstrates that Latinos face a higher conditional risk for PTSD after being exposed to a traumatic event (Alcántara, Casement & Lewis-Fernandez, 2012), with between 14%-27.9% of Latinos developing PTSD after a traumatic event compared to 9.35%-20.6% of non-Latino African Americans, and 6.5%-13.7% of non-Latino whites (Galea et al., 2002; Kulka et al., 1990).

In addition to experiencing a heightened conditional risk for PTSD, Latinos living in the United States face significant barriers to treatment for mental health care in all three of the traditionally outlined barrier domains (logistical; stigma, shame and discrimination; and treatment perception). Much of the previous literature on the logistical barriers to treatment that Latinos endorse has focused specifically on language as a logistical barrier to treatment (Caplan

& Whittemore, 2013; Hansen & Aranda, 2012; Seijo, Gomes, & Freidenberg, 1991). While language serves as a particularly important logistical barrier to treatment, Latinos also endorse logistical barriers such as not having insurance, not being able to afford treatment, or not being able to take time off work to get treatment (Cabassa, 2007). Low-income Latinos with depression seeking care in an emergency department listed transportation, employment status, and immigration documentation as primary barriers to treatment (Wells, Lagomasino, Palinkas, Green & Gonzalez, 2013).

While stigma about mental illness serves as a barrier to treatment for minority populations (Rao, Feinglass, & Corrigan, 2007), this problem is especially significant for Latinos struggling with various mental illnesses when compared to other minorities (Flórez et al., 2015; Jimenez, Bartels, Cardenas, & Alegría, 2013). Flórez et al. (2015) found that Latinos reported more stigmatizing attitudes about drug addiction than African-Americans, suggesting that stigma about mental illness poses a particular problem for the Latino community compared to other minority populations. A large study (*N*=2244) of older adults with common mental health problems (depression, anxiety, and at-risk alcohol use) found that Latinos were significantly more likely to endorse having more shame and embarrassment about having a mental illness than non-Latino whites and African Americans (Jimenez et al., 2013). A study of Latina immigrants with depression found that those who reported more stigma about mental illness were less likely to report a perceived need for mental health care and less likely to seek care (Nadeem, Lange, & Miranda, 2009). These findings suggest that stigma is not only a problem that is especially prevalent among the Latino community, but that it is also impairing, as stigma is associated with not only a lower perceived need for care, but it is also associated with reduced treatment seeking behavior.

Negative treatment perceptions also serve as a barrier to treatment for Latinos. A sample of Latino men seeking primary care services reported being skeptical of mental health treatment efficacy (Cabassa, 2007). Misperceptions about psychiatric medication are also a well-documented barrier to mental health treatment amongst Latinos with depression (Cabassa, 2007; Wells et al., 2013). A sample of Latinas seeking trauma-related care reported that feeling uncertain about what psychiatric treatment would entail or having doubts that healthcare services would work for their healthcare needs (Kaltman, Hurtado de Mendoza, Gonzales, & Serrano, 2013).

While the literature on PTSD and barriers to treatment is robust, the overwhelming majority has examined almost exclusively male, veteran populations. One study of male and female veterans demonstrated that women report different barriers to treatment and interact differently with those barriers (Elnitsky et al., 2013). There is evidence that veterans and civilians report different barriers to treatment (i.e., unit support; Pietrzak, 2009) and interact differently with these barriers. Initsky et al., (2013) found that active army duty medics who reported both logistical and stigma barriers to treatment still report help-seeking behavior. Fortney et al. found that veterans who reported barriers to treatment, especially stigma barriers, were more likely to perceive a need for treatment than community college students also struggling with psychopathology (2016). This suggests that barriers to treatment for veterans and civilians deserve to be examined separately.

Given the higher prevalence of PTSD in U.S. Latinos immediately following a traumatic incident, the increased conditional risk for PTSD in Latinos, the presence of unique and significant barriers to treatment in this population, and a previously demonstrated relationship between barrier dimensions and PTSD symptom clusters, the current study was designed to

examine reported barriers to care in treatment-seeking Latinos struggling with PTSD. To our knowledge, there is no other prior research that examines the specific barriers to treatment that Latinos with PTSD endorse.

The present study has two specific aims. The first aim is to determine what barriers to treatment exist for a treatment-seeking population with PTSD in a diverse community health clinic and to compare barriers between Latino and non-Latino participants. We hypothesize that Latinos will endorse more barriers to treatment than non-Latinos. The second aim is to determine the relationship between PTSD symptom severity and self-reported, perceived barriers to treatment, while investigating the relationship between barriers to treatment and specific PTSD symptom clusters. We hypothesize that increased severity of barriers to treatments will positively correlate with PTSD symptom severity, and that this relationship will be stronger for Latinos than non-Latinos. Based on previous literature, we hypothesize that the avoidance symptom cluster of PTSD will be positively correlated with the severity of stigma, shame, and discrimination barriers (Esfani et al., 2016; DeViva et al, 2013; Chapman et al., 2014), and that this relationship will be stronger for Latinos than it is for non-Latinos.

## Methods

The current cross-sectional study stems from an open trial examining the implementation of Cognitive Processing Therapy (CPT) (Resick & Schnicke, 1992) for PTSD in a diverse community health center near Boston, Massachusetts. The Institutional Review Board approved all study procedures. The present study was designed and data collection was underway prior to during the 2013 release of the DSM-5 (American Psychiatric Association, 2013). DSM-IV diagnostic criteria were preserved in all study proceedings to maintain data integrity.

### Participants

Participants (*n*=60) were considered eligible for study participation if they were a new or active client at the health center, were over 18 years of age, and if they held a current primary diagnosis of PTSD (per previous diagnostic record and/or a score of 35 on the Posttraumatic Symptom Checklist- Specific version [PCL-S]; Weathers, Litz, Herman, Huska & Kean, 1993). Participants were excluded if they were unable to participate in CPT in either English or Spanish, acutely suicidal, homicidal, or if they required hospitalization. Participants (*M* age=37.81, *SD*=13.53) were 71.2% female and 63.3% Latino. Demographic information can be found in Table 1.

### Procedure

Eligible patients were recruited to participate through identification by community mental health providers. Participants were referred to a bilingual (English and Spanish) clinical research coordinator to provide written informed consent. The consent form was read to participants who were illiterate in front of a witness who co-signed. Participants were administered a Demographic information sheet, the Life Events Checklist (LEC) (Blake et al., 1995) the Barriers to Treatment Questionnaire (BTQ) (Marques, Weingarden, Timpano, Jenike, &

Wilhelm, 2010), and the PCL-S (Weathers et al., 1993) prior to beginning treatment. Participants were able to complete these forms in either English or Spanish. Participants were compensated $80 upon completion of baseline, weekly, and post-treatment measures.

**Measures**

*Demographic Information.* Participants were administered an 18-item demographic information sheet that assessed for variables such as the participant's age, race, gender, employment history, and educational level. A Spanish translation of the demographic information sheet used in the present study was translated by a trained and certified medical translation specialist from Massachusetts General Hospital. The number of questions, content of questions, content of response items, and scoring are all identical to the English version.

*Life Events Checklist.* The Life Events Checklist (LEC) is a 17-item self-report questionnaire aimed at screening for and identifying the nature of exposure to one or more potentially traumatic events (PTEs) over the course of the respondent's whole life, by listing different DSM-IV PTSD Criterion A events (Blake et al., 1995). The first 16 items address specific events that may result in posttraumatic stress, and item 17 allows for the respondent to think of "Any other very stressful event or experience." The LEC is different from other measures aimed at identifying events that could result in posttraumatic stress because it asks about the nature of the respondent's exposure the event. For each item, respondents are asked about their experience of that event: "Happened to me," "Witnessed it," "Learned about," "Not sure," or "Doesn't apply." In this way, exposure to events that may not be captured by other inventories (i.e. *witnessing* a violent car accident) are elicited (Gray, Litz, Hsu, & Lombardo, 2004).

*Posttraumatic Stress Disorder Checklist-Specific.* The PCL-S is a 17-item self-report questionnaire (total scores range from 17-85, with higher scores indicating greater severity of PTSD symptoms), aimed at assessing the DSM-IV symptoms of PTSD (Weathers et al., 1993). Patients completing the measure are asked to indicate "How much they have been bothered by that problem in the past month" on a scale from "Not at all" (1) to "Extremely" (5). An example item is "Suddenly acting or feeling as if a stressful experience *were happening again* (as if you were reliving it)?" The PCL-S is scored in a summative manner, with a provisional diagnostic score of 35. (Wilkins, Lang & Norman, 2011). The PCL-S contains three subscales reflective of the DSM-IV diagnostic criteria of PTSD: Re-experiencing, Avoidance/Numbing, and Hyperarousal (American Psychiatric Association, 2013). The PCL-S was also administered in Spanish in the current study. The Spanish PCL-S was generated by a trained and certified medical translation specialist from Massachusetts General Hospital. While this version of the PCL-S has not yet been empirically validated, the Spanish PCL-Civilian version with identical items to PCL-S has been appraised and reported on in several papers (i.e., Marshal, 2004). The internal consistency reliability of the PCL-S has been good in 19 studies ($\alpha$>.75; Wilkins, Lang, & Norman, 2011).

*Barriers to Treatment Questionnaire.* The Barriers to Treatment Questionnaire (BTQ) is a 24-item dimensional self-report questionnaire aimed at identifying the specific factors that might prohibit an individual from seeking or receiving treatment for mental illness in the past year (Marques et al., 2010). The BTQ defines three separate domains of barriers to treatment: logistical and financial barriers (seven items), shame, stigma, and discrimination barriers (six items), and treatment perception barriers (three items). A total score for the BTQ is not calculated, instead the BTQ measures three separate dimensions of barriers to treatment. To

calculate the total barrier dimension scores, item responses that fall under that domain are summed. Seven additional items have been added to the BTQ since its original use (Marques et al., 2010). However, they have not been assigned to any specific dimension. BTQ items ask participants to indicate how much an item influenced their decision to delay or avoid seeking treatment from "Not at All" (0) to "Extremely" (4). The final item asks participants to rank their top three reasons why they have avoided or delayed seeking treatment in the last year. While a full psychometric evaluation of the BTQ has not been conducted, good internal consistency has been found in a sample of African-Americans with obsessive compulsive disorder ($\alpha = .82$; Williams, Domanico, Marques, Leblanc & Turkheimer, 2012) and acceptable internal consistency in a sample of Caucasian Americans with body dysmorphic disorder ($\alpha = .71$; Marques et al., 2010).

**Statistical Analysis**

SPSS Version 23.0 was used for data analysis. Less than 5% of the data was missing, therefore PCL-S and BTQ responses were prorated at the item-level using mean imputation (Tabachnick & Fidell, 2000). To test the first hypothesis, frequencies were run to determine the total barriers to treatment score across the three domains. Independent sample T-tests were run to determine if there was a statistically significant difference between Latinos and non-Latinos in endorsed barriers to treatment. To test the second hypothesis, bivariate correlations were run in order to determine a relationship between PCL-S total scores, PCL-S subscale scores, and barriers to treatment. Multicollinearity was not violated (within scale correlations for both the BTQ and the PCL-S were < .8 and standard errors were not large; Tabachnick et al., 2000). A multivariate linear regression was run to determine if the three separate dimensions of the BTQ predicted PCL-S total scores. A multivariate linear regression was also run to determine if BTQ

scores predicted PCL-S avoidance/numbing responses. We ran a linear regression to determine if the three barrier to treatment domains predicted PCL-S total responses and another linear regression to determine if barrier to treatment domains predicted PCL-S avoidance/numbing responses. Only the avoidance cluster of PTSD symptoms was examined as previous literature suggests that avoidance symptoms and barriers to treatment can interact with each other (Sayer, 2009; Ouimette et al., 2011; Chapman et al., 2014; DeViva et al., 2016).

## Results

*Sample Characteristics*

Demographic characteristics are available in Table 1. The age of the sample ranged from 18 to 63 years old ($M_{age}$=37.81, *SD*= 13.54). Of the total, 32.4% of Latino participants did not complete high school, compared to 9% of non-Latinos. Of the total sample, 50.0% earned less than $15,000 per year, with 39.3% of the sample having been briefly or not at all employed in the past year. The overall mean PCL-S score was 61.48 (*SD*=12.46). There was no significant difference in PTSD symptom severity (as measured by the total PCL-S score) between Latinos and non-Latinos, $t(58)=-.271$, $p=.79$ The most frequently endorsed traumatic experiences by the total sample were physical assault (75.0%), sexual assault (51.7%), assault with a deadly weapon (50.0%), and sudden unexpected death of someone close (46.7%). A complete list of past traumatic experiences is available in Table 2.

*Barriers to Treatment*

A table of mean BTQ scores stratified by ethnicity as well as t-tests can be found in Table 5. The internal consistency reliability for the entire scale was good (α = .84). The logistical barrier dimension demonstrated unacceptable or poor reliability (α=.49). The shame, stigma, and discrimination dimension of the BTQ demonstrated good reliability (α=.87). The treatment

perception barrier dimension demonstrated questionable but acceptable internal consistency reliability (α=.61). Contrary to our hypothesis, there were no significant differences in logistical barrier scores between Latinos and non-Latinos, $t(58)=-.34$, $p=.74$ Contrary to our hypothesis, there were no significant differences in treatment perception barrier scores between Latinos and non-Latinos, $t(58)=.26$,$p= .74$ Consistent with our hypothesis, Latinos had significantly higher scores on stigma, shame, and discrimination than did non-Latinos $t(58)= -4.13p=.03$.

*Association between Barriers to Treatment and Trauma Symptoms*

A complete correlation matrix is available in Table 3. Consistent with our hypothesis, there were significant positive correlations between total trauma symptom severity and two of three dimensions of the BTQ (shame, stigma, and discrimination barriers and treatment perception barriers). Only for Latino patients did PCL-S scores significantly correlate with shame, stigma, and discrimination barriers ($r=.33$, $p<.05$) as well as for treatment perception barriers ($r=.42$, $p<.01$). Contrary to our hypothesis, total PTSD symptom severity did not significantly correlate with logistical barriers for either Latinos ($r=.20$, $p= .23$) or non-Latinos ($r=.35$, $p=.11$.).

There were also significant positive correlations between endorsed barriers to treatment and specific PTSD symptom clusters. For Latinos, there were significant correlations between avoidance/numbing symptoms and stigma, shame and discrimination barriers ($r= .33$, $p<.05$), as well as treatment perception barriers ($r=.44$, $p<.01$). Avoidance/numbing symptoms had no significant correlations with BTQ subscales for non-Latinos. For Latinos, there was a significant correlation between hyperarousal symptoms ($r=.43$, $p<.01$), but no significant correlation for non-Latinos. Non-Latinos demonstrated a significant correlation between re-experiencing

symptoms and logistical barriers ($r$=.44, $p$<.05), but this correlation was not significant for non-Latinos ($r$=.25, $p$=.13).

Linear regressions were conducted to determine if the three dimensions of the BTQ predicted PCL-S total scores, stratified between Latinos and non-Latinos. For Latinos, barriers to treatment explained a significant portion of variance in PCL-S total scores, $R^2$= .20, $F$(3,34) = 2.91, $p$<.05. While the overall regression was significant, none of the individual predictors were. While none of the predictor variables explained variance with total PCL-S scores, treatment perception barriers tended towards significance, β = 1.23, $t$(36)= 1.953, $p$=.062. For non-Latinos, the regression model was not significant. Barriers to treatment did not significantly account for variance in PCL-S total scores, although it tended towards significance. $R^2$ = .306, $F$(3, 18) = 2.64, $p$ = .081.

Linear regressions were conducted to determine whether the three dimensions of the BTQ predicted PCL-S avoidance/numbing subscale scores. For Latinos, barriers to treatment accounted for a significant portion of variance in PCL-S avoidance subscale scores, $R^2$= .23, $F$(3,34) = 3.39, $p$<.05. Treatment perception barriers significantly predicted PCL-S avoidance and numbing scores for Latino participants, β =, $t$(36)= 2.13. For Latinos, logistical barriers and shame, stigma and discrimination barriers did not significantly predict PCL-S avoidance/numbing subscale scores. For non-Latinos, barriers to treatment did not significantly account for PCL-S avoidance and numbing subscale scores, $R^2$ = .25, $F$(3, 18) = 1.98, $p$ = .153.

## Discussion

The present study examined the perceived barriers to treatment endorsed by Latinos and non-Latinos seeking treatment for PTSD at a community healthcare clinic, and how barriers interacted with their symptom severity. Consistent with the previous literature, Latinos endorsed significantly more stigma, shame, and discrimination barriers than non-Latinos. There were no significant differences in the frequency of logistical and treatment perception barriers between Latinos and non-Latinos. PCL-S total scores correlated positively with perceived stigma, shame, and discrimination barriers and treatment perception barriers for Latinos, but not for non-Latinos. Elevated severity of negative treatment perception barriers predicted higher PCL-S avoidance symptoms in Latinos, but did not in non-Latinos.

There were no significant differences in the self-reported frequency of logistical barriers to treatment between Latinos and non-Latinos. These findings are inconsistent with the previous literature which suggests that Latinos face additional logistical barriers to treatment such as language barriers and immigration status (Wells et al., 2013). However, these findings are consistent with the current sample characteristics. As the current sample is treatment-seeking, and was enrolled in a larger open-trial of CPT, many participants have already overcome some of the logistical barriers described in the previous literature. Patients facing these additional logistical barriers may not have sought treatment, or may have been unsuccessful in their attempts to access treatment. The current population was sampled from the state of Massachusetts, which has the lowest percentage of uninsured residents (5.3%; Mendes, 2011). In Massachusetts, public insurance is both readily available and required for most residents—citizens can face penalties on their tax returns for the periods of time that they are uninsured (Commonwealth of Massachusetts Department of Revenue, 2008). Immediately following the

institution of the Affordable Care Act, rates of uninsured Latinos in the United States declined 7.8% from 38.7% in 2013 to 30.9% in 2015 (Marken, 2016). Lack of insurance has historically been a common and well documented barrier to mental health treatment across all racial groups (Tsai, Whealin, & Pietrzak, 2014; Wells et al., 2014; Sorkin et al., 2016). These factors could have mitigated not only the severity of logistical barriers endorsed for the entire sample, but also likely mitigated the gap between Latinos and non-Latinos.

Consistent with previous literature, Latinos endorsed significantly more stigma, shame, and discrimination barriers compared to non-Latinos. These findings suggest that Latinos are more likely than non-Latinos to feel embarrassed about their need for medical treatment for PTSD and are more likely to feel concerned about criticism or judgment from their loved ones while seeking treatment. Elevated mental illness stigma has been shown to inhibit help-seeking behavior for people struggling with psychopathology (Corrigan, Druss, & Perlick, 2014). As Latinos are significantly less likely than non-Latino whites to access mental health care (McGuire & Miranda, 2008; SAMHSA, 2012; USDHHS, 2001), the findings in the current study demonstrate the importance of addressing mental health stigma for Latino populations as they correlate with severity of mental illness, and can disrupt treatment engagement. Mental illness stigma could explain why Latinos are less likely to seek treatment, or that stigma could serve as an additional compounding factor for a population that is already less likely to seek treatment. One study of older African-Americans found that internalized mental illness stigma partially mediated the relationship between race and attitudes towards mental health treatments (Conner, Koeske & Brown, 2009). It is possible that a similar relationship mediation exists for Latinos who experience and endorse stigma, shame, and discrimination barriers. Future studies should run mediation analyses to see if stigma mediates the relationship between Latino ethnicity and

attitudes towards mental health treatment, or if ethnicity moderates the relationship between barriers to treatment and symptom severity.

There were no significant differences between Latinos and non-Latinos in negative treatment perception barriers. These findings suggest that Latinos and non-Latinos in the current sample have similar concerns regarding treatment outcomes and similar prior experiences which serve as barriers to treatment. While previous literature suggests that Latinos hold negative treatment perceptions and misperceptions about treatment (Cabassa, 2007), a study of Latina immigrants from Mexico, Central, and South America found that patients indicated a strong preference for evidence-based treatments for their trauma-related mental healthcare needs (Kaltman, Hurtado de Mendoza, Gonzales, & Serrano, 2014). The findings in that study are consistent with the data in the present study, where on average both Latinos and non-Latinos sample endorsed low negative treatment perception scores.

PCL-S scores were significantly correlated with stigma, shame, and discrimination barriers and with treatment perception barriers only for Latinos. These findings suggest that Latinos experiencing higher severity of PTSD symptoms are also more likely to face more internalizing shame and stigma surrounding their mental health. As Latinos endorsed significantly more shame, stigma and discrimination barriers than non-Latino participants, these findings are particularly salient. These findings have important implications for the treatment of PTSD. There has been some brief, behavioral interventions which seek to reduce stigma to and overcome barriers to treatment in order to improve treatment engagement, and have demonstrated effective stigma reduction and increased treatment engagement amongst veteran populations (Gallegos et al., 2015; Dickstein, Vogt, Handa & Litz, 2010). Providers should address mental illness stigma during early phases of treatment with their Latino participants. It is

possible that evidence-based treatments such as CPT (Resick et al., 1992) and PE (Foa et al., 2007), which address maladaptive thoughts regarding shame and mental health stigma could reduce both PCL-S scores and shame, stigma and discrimination barriers simultaneously.

There were no correlations between total PTSD symptom severity and logistical barriers for either Latinos or non-Latinos. These findings, while inconsistent with previous literature, are not unexpected with the current study design of treatment-seeking patients. Participants enrolled in the present study were enrolled in a larger implementation trial of CPT, suggesting that they may have already overcome several logistical barriers prior to accessing treatment in the study. Alternatively, this sample may under represent or exclude patients with the highest level of logistical barriers to treatment—those whose barriers kept them from seeking access to treatment at all. However, re-experiencing symptoms did positively correlate with logistical barriers to treatment for non-Latinos. Someone who is experiencing re-experiencing symptoms (i.e., nightmares, flashbacks, feeling as though the traumatic event is happening) (American Psychiatric Association, 2000), may also have a hard time engaging in (and they may even actively avoid) activities that aggravate these symptoms, such as taking public transportation to work or holding a job: activities which would enable them to afford care. However, Latinos did not show a relationship between re-experiencing symptoms and logistical barriers. These findings were inconsistent with previous literature, which do not suggest any distinctions in re-experiencing symptoms between Latinos and non-Latinos (Hinton et al., 2011; Hoyt & Yeater, 2010).

There is a significant positive relationship between treatment perception barriers and total PTSD scores for Latinos, though no relationship exists for non-Latinos. While the relationship tended towards significance, treatment perception barriers did not predict total PTSD symptom

severity. Latinos and non-Latinos did not have significantly different treatment perception barriers scores which positively correlated with avoidance/numbing symptoms. However, only for Latinos, did negative treatment perception barriers predict avoidance/numbing symptoms. This suggests that the relationship tending towards significance in the first regression could have been driven by the strong relationship between avoidance/numbing symptoms and treatment perception barriers. Negative attitudes about treatment (i.e. doubts about treatment efficacy, dissatisfaction with the treatment available, previous negative experiences in treatment) predicted Latinos avoidance symptoms. These findings are consistent with the previous literature, which has suggested that avoidance and numbing symptoms positively relate to negative treatment perceptions, such that negative treatment perceptions could actually be fueled by a desire to avoid talking about or thinking about the traumatic experience (Ouimette et al., 2011; Sayer, 2009). Latino populations have also been found to endorse higher avoidance symptoms than non-Latino populations, which could explain why the relationship between negative treatment perception barriers and avoidance/numbing symptoms is significant for Latinos and not for non-Latinos (Pole et al., 2005). As the population in the current study is treatment-seeking, clinicians practicing evidence-based treatments which focus on challenging maladaptive thought patterns such as CPT (Resick et al., 1992) could address and challenge negative treatment perceptions barriers that their patients endorse during therapy to ensure future treatment engagement.

*Limitations and Future Directions*

This study has several limitations. The present study sampled from a large implementation trial of patients seeking (but not yet enrolled in) treatment for CPT. Therefore, the present findings cannot be generalized to patients who are not seeking treatment or are

currently enrolled in treatment. Previous research has reported on barriers to treatment that exist for both treatment-seeking (Wells et al., 2014) and non-treatment-seeking populations (Spence et al., 2011). However, none have systematically compared barriers to treatment between these two groups, making unclear whether results about one group can be generalized to the other. Future studies should compare the difference in barriers between participants with PTSD who are and are not seeking treatment for care in order to distinguish between barriers to treatment (or severity of these barriers) which completely prevent treatment seeking behaviors from those which make treatment seeking more difficult or less desirable. The present study also sampled participants from a suburb of Boston, where public insurance and transportation is readily available (Mendes, 2011). The present findings may not be generalizable to rural communities, or communities outside of the Northeast. Future studies should consider addressing the barriers to treatment that minority populations living in rural areas, or areas where low income transportation is not readily available.

The present study used cross sectional data, as such, conclusions about causality of the effects of barriers to mental health treatment on PTSD symptom severity should be made with extreme caution. While we decided to measure a causal relationship in our regression models, such that barriers to treatment predict PTSD symptom severity, it is possible that this correlation is bidirectional in nature. Furthermore, our internal consistency reliability for the logistical dimension of the BTQ was unacceptable, so conclusions regarding this dimension of the BTQ should also be made with extreme caution, as it is possible that this measure does not actually adequately capture and assess for the severity of logistical barriers, or that the logistical barriers described in this dimension do not relate to each other. It is possible that in the current sample,

participants who lack time, or who lack transportation may not overlap, such that participants who cannot afford treatment, may have time for it, for example.

As the present study used cross sectional data, gathered before participants began treatment for PTSD. As such, we were unable to predict how the specific endorsed barriers affected treatment, and how the interaction between barriers to treatment and treatment engagement, retention, and effectiveness compared between Latinos and non-Latinos. Future studies should measure barriers to treatment prior to treatment to see how endorsed barriers can predict treatment engagement, patient dropout, and post-treatment PSTD symptom severity. Previous literature suggests that barriers can inhibit treatment engagement (Wright et al., 2014). One study found that addressing logistical barriers (transportation concerns and language concerns) as well as cultural barriers improved client outcomes when undergoing PE (López, Shealy & Rheinbold, 2014). Given the unique barriers to treatment experienced by Latinos, research should be dedicated to understanding how Latinos' barriers to treatment impact treatment engagement, outcome, and retention.

The present study utilized DSM-IV diagnostic criteria and scales to assess for PTSD diagnosis and symptom severity. The DSM-5 made significant alterations to the diagnostic criteria for PTSD (American Psychiatric Association, 2013). The DSM-5 no longer classifies PTSD as an anxiety disorder, but rather, creates its own category, "Trauma and Stress Related Disorders" (American Psychiatric Association, 2013). The DSM-5 also creates a clearer definition of what constitutes a traumatic event, and no longer requires that a person experience an intense emotional response to a traumatic event. The DSM-5 adjusts the symptom clusters: intrusion symptoms (formerly re-experiencing) and alterations in arousal and reactivity (formerly hyper arousal) are renamed though otherwise unchanged. However, the DSM-IV avoidance and

numbing criteria has been split into two distinct symptom clusters in the DSM-5: avoidance and negative alterations in cognitions and mood (American Psychiatric Association, 2013). The findings in the current study suggest that barriers to treatment have a relationship with avoidance/numbing symptom clusters, so the DSM-5 criteria could impact the results of the present study. Future studies should examine barriers to treatment using DSM-5 diagnostic criteria and use the PTSD Checklist for DSM-5 (PCL-5; Blevins, Weathers, Davis, Witte & Comino, 2015) to assess for PTSD symptom severity, to determine if barriers to treatment predict both avoidance symptoms and negative alterations in cognition and mood symptoms.

The present study's sample was too small to address within group variety. The Latino community in the United States is an incredibly heterogeneous group, and recent literature examining this ethnic group has moved toward stratifying by identifiers such as country of origin, language, and immigration status (i.e., Alcántara et al., 2013; Galea, Resnick, Hoover & Kilpatrick, 2004; Saechao et al., 2011). Previous literature has demonstrated differences between Latinos of different nationalities in PTSD symptom severity. For example, one study found of Latinos in New York during the September 11$^{th}$ attacks found that Dominicans and Puerto Ricans have higher PTSD prevalence that Latinos from other countries of origin (Galea et al., 2004). Language and immigration has also been found to effect PTSD symptoms; for example, re-experiencing and avoidance/numbing symptoms are higher among Spanish-speaking Latinos than primarily English-Speaking Latinos (Alcántara et al., 2013). As the findings in the present study show that stigma, shame and discrimination barriers correlate with avoidance/numbing symptoms for Latinos, and that treatment perception barriers predict avoidance/numbing symptoms, it is possible that primarily Spanish-speaking Latinos could have stronger relationships between avoidance/numbing symptoms and barriers to treatment than primarily

English-speaking Latinos. Future studies should seek to stratify findings about the role of barriers to treatment by nationality, immigration status, and racial identity. Immigrants often face additional cultural barriers to accessing treatment (Saechao et al., 2012), so addressing the intersection of immigration status and nationality will be crucial for understanding the needs of Latino immigrants in the United States. Future studies should recruit a larger, more diverse sample of Latinos so as to be able to examine nationality, immigration status, and primary language.

The current study grouped all non-Latinos together, such that non-Latino whites, African-Americans and people from other racial backgrounds were all grouped together. We ran post-hoc analyses to determine if findings changed when comparing Latinos just to non-Latino whites. Post-hoc analyses revealed no changes in our findings between endorsed barriers to treatment when comparing Latinos just to non-Latino whites. Latinos endorsed significantly more barriers to treatment than non-Latino whites ($t(47.02)=4.42$, $p=.018$)), but there were no significant differences in logistical barriers ($t(55)=.75$, $p=.51$) or treatment perception barriers ($t(55)=.07$, $p=92$). Post-hoc analyses also revealed no changes in present findings in the differences between Latinos and non-Latino whites in the regression models. For non-Latino whites, barriers to treatment did predict a significant portion of variance in PCL-S total scores, however, while the overall regression was significant, none of the individual predictors were ($R^2= .40$, $F(3,15) = 3.38$, $p=.046$). Non-Latino whites did not have PCL-S avoidance scores that were significantly predicted by barriers to treatment ($R^2= .34$, $F(3,15) = 2.59$, $p=.091$). However, non-Latino whites did have significant correlations between endorsed severity of stigma, shame and discrimination barriers and their re-experiencing symptoms ($r=.50$, $p=.022$) and Hyper-arousal symptoms ($r=.49$, $p=.33$). These findings suggest that non-Latino whites may have different relationships

between their endorsed barriers to treatment and their symptom severity than non-Latino people of color who were initially grouped with them in the original analysis. However, the sample size of non-Latinos whites was small (*N*= 19) so conclusions regarding differences between non-Latino whites and Latinos should be made with caution. Future studies should also consider how barriers differ between Latinos and other racial minorities, such as African-Americans, indigenous people, and Asian-Americans.

The present study extends the literature by examining the unique barriers of this population while also addressing how these barriers relate to their symptoms. Latinos face significant barriers to treatment for PTSD. As this population is at a particular risk for PTSD (Alcántara et al., 2013) it is essential that we address the gaps that exist between Latinos and non-Latinos. Understanding barriers to treatment is an important step in improving the mental healthcare for this underserved population. Both clinicians and researchers should address potential barriers to treatment for their Latino clients/participants struggling with PTSD.

Table 1

*Demographic Characteristics of the Sample*

| Characteristic | Total *N* (%) | Latino *n* (%) | Non-Latino *n* (%) |
|---|---|---|---|
| Age (*N* = 53) | *M* = 37.81, *SD* = 13.54 | *M* = 35.37, *SD* = 12.22 | *M* = 42.56, *SD* = 15.03 |
| Gender (*N* = 59) | | | |
| Male | 17 (28.8) | 10 (27.0) | 7 (31.8) |
| Female | 42 (71.2) | 27 (73.0) | 15 (68.2) |
| Race (*N* = 60) | | | |
| Latino | 30 (50.0) | - | - |
| White | 23 (38.3) | - | - |
| Black | 2 (3.3) | - | - |
| Other | 5 (8.3) | - | - |
| Ethnically Hispanic or Latino (*N* = 60) | | | |
| Yes | 38 (63.3) | - | - |
| No | 22 (36.7) | - | - |
| Country of origin if Hispanic or Latino (*N* = 41) | | | |
| Cuban | 3 (7.3) | - | - |
| Mexican | 2 (4.9) | - | - |
| Puerto-Rican | 12 (29.3) | - | - |
| South or Central America | 19 (46.3) | - | - |
| Other (Spanish) | 5 (12. 2) | - | - |
| Religious preference (*N* = 55) | | | |
| Baptist | 3 (5.5) | 1 (2.7) | 2 (11.1) |
| Born-Again Christian | 5 (9.1) | 4 (10.8) | 1 (5.6) |
| Buddhist | 2 (3.6) | 1 (2.7) | 1 (5.6) |
| Catholic | 30 (54.5) | 18 (48.6) | 12 (66.7) |
| Evangelical | 5 (9.1) | 5 (13.5) | 0 (0) |
| Muslim | 1 (1.8) | 0 (0) | 1 (5.6) |
| Protestant | 2 (3.6) | 1 (2.7) | 1 (5.6) |

| | | | |
|---|---|---|---|
| Spiritist (Santeria, Palo, Kongo, Voodoo) | 2 (3.6) | 2 (5.4) | 0 (0) |
| Other Christian | 5 (9.1) | 5(13.5) | 0 (0) |
| Rate of attendance of religious services (*N* = 52) | | | |
| Daily | 5 (9.6) | 4 (11.1) | 1 (6.3) |
| Once a week | 13 (25.0) | 12 (33.3) | 1 (6.3) |
| Once a month | 4 (7.7) | 4 (11.1) | 0 (0) |
| Every few months | 24 (46.2) | 15 (41.7) | 9 (56.3) |
| Never | 6 (11.5) | 1 (2.8) | 5 (31.3) |
| Marital status (*N* = 59) | | | |
| Single | 23 (39.0) | 12 (32.4) | 11 (50.0) |
| Married | 15 (25.4) | 6 (16.2) | 9 (40.9) |
| Divorced | 8 (13.6) | 7 (18.9) | 1 (4.5) |
| Separated | 4 (6.8) | 3 (8.1) | 1 (4.5) |
| Living with a partner | 9 (15.3) | 9 (24.3) | 0 (0) |
| Education (*N* = 59) | | | |
| Less than 5 years of school | 3 (5.1) | 3 (8.1) | 0 (0) |
| Between 5 and 7 years of school | 2 (3.4) | 1 (2.7) | 1 (4.5) |
| Junior high school | 2 (3.4) | 2 (5.4) | 0 (0) |
| Partial high school | 7 (11.9) | 6 (16.2) | 1 (4.5) |
| High school degree | 23 (39.0) | 15 (40.5) | 8 (36.4) |
| Partial college | 13 (22.0) | 5 (13.5) | 8 (36.4) |
| College graduate | 8 (13.6) | 5 (13.5) | 3 (13.6) |
| Graduate school | 1 (1.7) | 0 (0) | 1 (4.5) |
| Highest occupational level (*N* = 51) | | | |
| Manager/Professional | 11 (21.6) | 4 (13.3) | 7 (33.3) |
| Administrative | 4 (7.8) | 1 (3.3) | 3 (14.3) |
| Clerical | 4 (7.8) | 4 (13.3) | 0 (0) |
| Skilled | 19 (37.3) | 13 (43.3) | 6 (28.6) |
| Semi-Skilled | 8 (15.7) | 4 (13.3) | 4 (19.0) |
| Unskilled | 4 (7.8) | 3 (10.0) | 1 (4.8) |

| | | | |
|---|---|---|---|
| Never worked | 1 (2.0) | 1 (3.3) | 0 (0) |
| Current living situation ($N$ = 49) | | | |
| Urban | 35 (71.4) | 22 (71.0) | 13 (72.2) |
| Suburban | 12 (24.5) | 7 (22.6) | 5 (27.8) |
| Rural | 2 (4.1) | 2 (6.5) | 0 (0) |
| Income ($N$ = 53) | | | |
| $0 - $4,999 | 13 (21.7) | 9 (23.7) | 4 (18.2) |
| $5,000 - $9,999 | 9 (15.0) | 8 (21.1) | 1 (4.5) |
| $10,000 - $14,999 | 8 (13.3) | 4 (10.5) | 4 (18.2) |
| $15,000 - $24,999 | 4 (6.7) | 3 (7.9) | 1 (4.5) |
| $25,000 - $34,999 | 3 (5.0) | 1 (2.6) | 2 (9.1) |
| $35,000 - $49,000 | 6 (10.0) | 2 (5.3) | 4 (18.2) |
| $50,000 - $74,999 | 3 (5.0) | 0 (0) | 3 (13.6) |
| Greater than $75,000 | 1 (1.7) | 0 (0) | 1 (4.5) |
| Not given | 13 (21.7) | 11 (29.0) | 2 (9.0) |
| Present occupational status ($N$ = 55) | | | |
| Not applicable | 15 (27.3) | 8 (23.5) | 7 (33.3) |
| Full-Time employment | 10 (18.2) | 4 (11.8) | 6 (28.6) |
| Part-Time employment | 12 (21.8) | 10 (29.4) | 2 (9.5) |
| Dependent on a spouse or is a student | 5 (9.1) | 3 (8.8) | 2 (9.5) |
| Recipient of public or private assistance | 13 (23.6) | 9 (26.5) | 4 (19.0) |
| Gainfully employed over the past three years ($N$ = 56) | | | |
| Briefly or not at all | 22 (39.3) | 12 (35.3) | 10 (45.5) |
| Less than half of the time | 7 (12.5) | 6 (17.6) | 1 (4.5) |
| Half of the time | 4 (7.1) | 3 (8.8) | 1 (4.5) |
| Most of the time | 9 (16.1) | 7 (20.6) | 2 (9.1) |
| Virtually all of the time | 14 (25.0) | 6 (17.6) | 8 (36.4) |
| Limitations for employment ($N$ = 54) | | | |
| Not limited | 14 (25.9) | 7 (19.4) | 7 (38.9) |
| Going to school | 10 (18.5) | 9 (25.0) | 1 (5.6) |

| | | | |
|---|---|---|---|
| Household responsibilities | 8 (14.8) | 7 (19.4) | 1 (5.6) |
| Retirement | 3 (5.6) | 1 (2.8) | 2 (11.1) |
| Physical illness | 11 (20.4) | 7 (19.4) | 4 (22.2) |
| Psychopathology | 8 (14.8) | 5 (13.9) | 3 (16.7) |
| Characteristics of work performance (past 3 years) ($N$ = 49) | | | |
| Not applicable | 15 (30.6) | 9 (30.0) | 6 (31.6) |
| Marked decline in effectiveness | 8 (16.3) | 5 (16.7) | 3 (15.8) |
| Some decline in effectiveness | 6 (12.2) | 3 (10.0) | 3 (15.8) |
| Adequate, static | 9 (18.4) | 6 (20.0) | 3 (15.8) |
| Some increase in effectiveness | 7 (14.3) | 6 (20.0) | 1 (5.3) |
| Variable, fluctuating in degree of effectiveness | 4 (8.2) | 1 (3.3) | 3(15.8) |
| Social functioning ($N$ = 48) | | | |
| Marked decline in competence | 14 (29.2) | 6 (21.4) | 8 (40.0) |
| Some decline in competence | 14 (29.2) | 7 (25.0) | 7 (35.0) |
| Adequate, static | 9 (18.8) | 8 (28.6) | 1 (5.0) |
| Some increase in competence | 2 (4.2) | 2 (7.1) | 0 (0) |
| Marked increase in competence | 2 (4.2) | 2 (7.1) | 0 (0) |
| Variable, fluctuating in degree of competence | 7 (14.6) | 3 (10.7) | 4 (20.0) |

Table 2.
*Endorsed Responses for the Life Events Checklist*

| Event | Exposure Level | | |
|---|---|---|---|
| | Happened to me *n* (%) | Witnessed it *n* (%) | Learned about it *n* (%) |
| Natural disaster (for example, flood, hurricane, tornado, earthquake) | 20 (33.3) | 13 (21.7) | 9 (15.0) |
| Fire or explosion | 6 (10.0) | 9 (15.0) | 8 (13.3) |
| Transportation accident (for example, car accident, boat accident, train wreck, plane crash) | 23 (38.3) | 6 (10.0) | 13 (21.7) |
| Serious accident at work, home, or during recreational activity | 19 (31.7) | 10 (16.7) | 4 (6.7) |
| Exposure to toxic substance (for example, dangerous chemicals, radiation) | 5 (8.3) | 5 (8.3) | 2 (3.3) |
| Physical assault (for example, being attacked, hit, slapped, kicked, beaten up) | 45 (75.0) | 10 (16.7) | 6 (10.0) |
| Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb) | 30 (50.0) | 9 (15.0) | 7 (11.7) |
| Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm) | 31 (51.7) | 7 (11.7) | 9 (15.0) |
| Other unwanted or uncomfortable sexual experience | 32 (53.3) | 4 (6.7) | 6 (10.0) |
| Combat or exposure to a war-zone (in the military or as a civilian) | 8 (13.3) | 3 (5.0) | 6 (10.0) |
| Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war) | 6 (10.0) | 6 (10.0) | 5 (8.3) |
| Life-threatening illness or injury | 14 (23.3) | 11 (18.3) | 4 (6.7) |
| Severe human suffering | 14 (23.3) | 11 (18.3) | 9 (15.0) |
| Sudden, violent death (for example, homicide, suicide) | 10 (16.7) | 12 (20.0) | 9 (15.0) |
| Sudden, unexpected death of someone close to you | 28 (46.7) | 12 (20.0) | 8 (13.3) |

| | | | |
|---|---|---|---|
| Serious injury, harm, or death you caused to someone else | 5 (8.3) | 5 (8.3) | 1 (1.7) |
| Any other very stressful event or experience | 33 (55.5) | 8 (13.3) | 3 (5.0) |

*Blake, Weathers, Nagy, Kaloupek, Charney, & Keane, 1995*

*Note*. Each value represents the percentage of the total sample ($N = 60$) who experienced each event to the indicated degree of exposure. Individual events and exposure levels are not mutually

Table 3

*Summary of Intercorrelations for the PCL-S and BTQ Scale and Subscales at Baseline*

| | | *M* (*SD*) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|---|
| | | Non-Latino | | | | | | | |
| | *PCL-S* | | | | | | | | |
| 1 | Total Score | 62.06 (14.54) | — | | | | | | |
| 2 | Re-experiencing | 17.81 (4.77) | .89** | — | | | | | |
| 3 | Avoidance/Numbing | 25.04 (6.34) | .93** | .74** | — | | | | |
| 4 | Hyperarousal | 19.91 (4.91) | .90** | .71** | .75** | — | | | |
| | *BTQ* | | | | | | | | |
| 5 | Logistical | 4.18 (3.74) | .35 | .44* | .33 | .19 | — | | |
| 6 | Shame, stigma, and discrimination | 7.14 (5.83) | .38 | .36 | .30 | .37 | .10 | — | |
| 7 | Treatment perception barriers | 2.82 (2.48) | .35 | .15 | .34 | .45* | .16 | .15 | — |
| | | Latino | | | | | | | |
| | *PCL-S* | | | | | | | | |
| 1 | Total score | 61.14 (11.28) | — | | | | | | |
| 2 | Re-experiencing | 17.64 (4.25) | .76** | — | | | | | |
| 3 | Avoidance/Numbing | 24.92 (5.11) | .91** | .53** | — | | | | |
| 4 | Hyperarousal | 18.58 (4.09) | .81** | .35* | .67** | — | | | |
| | *BTQ* | | | | | | | | |
| 5 | Logistical | 4.26 (4.05) | .20 | .25 | .24 | -.15 | — | | |
| 6 | Shame, stigma, and discrimination | 11.26 (7.67) | .33* | .28 | .33* | .19 | .36* | — | |
| 7 | Treatment perception | 3.08 (3.06) | .42** | .16 | .44** | .43** | .21 | .46** | — |

*Note.* Correlations for Latino ($n$ = 38) and non-Latino ($n$ = 22) patients with PTSD are presented above. PCL-S = Posttraumatic Stress Disorder Checklist-Specific; BTQ = Barriers to Treatment Questionnaire

** $p < .01$ (2-tailed), * $p < .05$ (2-tailed).

Table 4.

*Regressions Reporting how Barriers to Treatment Predict Total PCL-S*

| | | B | SE B | β | *t* | *p* |
|---|---|---|---|---|---|---|
| Latino | Logistical | 0.213 | 0.457 | 0.076 | 0.446 | .644 |
| | Shame, stigma, and discrimination | 0.221 | 0.266 | 0.150 | 0.833 | .411 |
| | Treatment perception | 0.227 | 0.636 | 0.333 | 1.931 | .062 |
| Non-Latino | Logistical | 1.081 | 0.776 | 0.278 | 1.392 | .181 |
| | Shame, stigma, and discrimination | 0.775 | 0.497 | 0.311 | 1.560 | .136 |
| | Treatment perception | 1.525 | 1.177 | 0.260 | 1.296 | .211 |

For Latinos, $R^2$= .20, $F(3,34) = 2.91$, $p = .049$

For Non-Latinos, $R^2 = .306$, $F(3, 18) = 2.64$, $p = .081$

*Regressions Reporting how Barriers to Treatment Predict Avoidance/Numbing Subscales*

| | | B | SE B | β | *t* | *p* |
|---|---|---|---|---|---|---|
| Latino | Logistical | .147 | 0.204 | 0.116 | 0.719 | .477 |
| | Shame, stigma, and discrimination | .085 | 0.118 | 0.127 | 0.716 | .479 |
| | Treatment perception | .603 | 0.283 | 0.361 | 2.129 | .041* |
| Non-Latino | Logistical | .441 | 0.352 | 0.260 | 1.254 | .226 |
| | Shame, stigma, and discrimination | .258 | 0.225 | 0.237 | 1.144 | .268 |
| | Treatment perception | .680 | 0.534 | 0.266 | 1.274 | .219 |

For Latinos, $R^2$= .23, $F(3,34) = 3.39$, $p = .029$

For non-Latinos, $R^2 = .25$, $F(3, 18) = 1.98$,, $p = .153$

*= $p < .05$

Table 5.
Independent T-Tests for Barriers to Treatment Questionnaire

| | Latino | | Non-Latino | | |
|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | *t* |
| Logistical Barriers | 4.26 | 4.05 | 4.18 | 3.74 | 0.44 |
| Stigma, Shame and Discrimination Barriers | 11.26 | 7.67 | 7.14 | 5.83 | 4.13* |
| Treatment Perception Barriers | 3.08 | 3.06 | 2.28 | 2.48 | 0.26 |

*Note.* Independent sample t-tests comparing Latinos and non-Latino BTQ scores are presented above. *M*= Mean, *SD*= standard deviation, *t*= independent sample t-test.
* = $p < .05$

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