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# Responding to Trauma: Help-Seeking Behavior and Posttraumatic Growth in a College Sample

Aaron J. Burrick

*University of Connecticut - Storrs*, [aaron.burrick@uconn.edu](mailto:aaron.burrick@uconn.edu)

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Running Head: TRAUMA, HELP-SEEKING, AND POSTTRAUMATIC GROWTH

Responding to Trauma: Help-Seeking Behavior and Posttraumatic Growth in a College Sample

Aaron J. Burrick

University of Connecticut

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Supervisor: Dr. Rachel Tambling, PhD, LMFT

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### Abstract

Research indicates that traumatic experiences can impact college students' mental health, academic abilities, and relationships with peers. Trauma and associated symptoms of PTSD can lower students' well-being and increase the risk of withdrawing from the university. Research also emphasizes the importance of psychological help-seeking as a way to experience posttraumatic growth. This study examines traumatic experiences, help-seeking attitudes, barriers, and behaviors, and posttraumatic growth in a sample of 168 undergraduate college students. Results indicated an overwhelming preference for informal help-seeking resources and the importance of traumatic severity in the decision to seek help. Additionally, female participants reported greater traumatic severity and more positive help-seeking attitudes than male participants. This is a vital area of research; by understanding the variables mentioned above, clinicians and researchers can better help college students and improve their attitudes toward psychological help.

### Responding to Trauma: Help-Seeking Behavior and Posttraumatic Growth in a College Sample

The American Psychological Association (2011) defines trauma as an enduring emotional response to an unexpected or overwhelming event that involves high anxiety, unpleasant physiological arousal, vivid flashbacks, and strained relationships with others. In some cases, traumatic responses develop into posttraumatic stress disorder (PTSD), a severe condition marked by intrusive thoughts, avoidance behaviors, and hyperarousal (American Psychiatric Association, 2013). These symptoms are highly problematic and lead to prolonged suffering (de Castella & Simmonds, 2013) and difficulties with self-care and personal health (Shannon et al., 2013).

In the United States, traumatic experiences are prevalent, concerning, and costly. The National Trauma Institute reports that over 40 million emergency room visits every year are due to traumatic incidents. These emergencies, which encompass only one type of traumatic event, are estimated to cost the United States 406 billion dollars a year (National Trauma Institute, 2012). A comprehensive study by Frazier and colleagues (2009) reports similar, high rates of trauma among college students; 85% of their sample had experienced a traumatic event in their lifetime and 21% had experienced trauma over the past two months.

Among college students, trauma has been linked to negative outcomes like withdrawing from the university (Boyraz, Horne, Owens, & Armstrong, 2013), substance abuse (Calmes, Laux, Scott, Reynolds, Roseman, & Piazza, 2013), and risky sexual behavior (Johnson & Johnson, 2013). Research also indicates that help-seeking resources are underused and stigmatized (Boyraz et al., 2013; Schreiber, Maercker, & Renneberg, 2010). Instead of accessing

these resources, students seek support from their peers (Pisani et al., 2012) or through self-medication with drugs or alcohol (Read et al., 2013).

These trends are especially problematic when considering posttraumatic growth, the “experience of individuals whose development has surpassed what was present before...” a traumatic event (Tedeschi & Calhoun, 2004). Posttraumatic growth, like help-seeking, is inherently relational and involves sharing one’s feelings, listening, and mutually processing traumatic events (Lindstrom, Cann, Calhoun, & Tedeschi, 2013; Taku, Tedeschi, Cann, & Calhoun, 2009). However, college students’ negative attitude toward professional resources (Shreiber & Maercker, & Renneberg, 2010) and their preference for peer disclosure (Vishnevsky, Cann, Tedeschi, & Demakis, 2010) predict increased distress (Cann, Calhoun, Tedeschi, & Solomon, 2010) and are antithetical to posttraumatic growth.

The current study examined the relationship between traumatic experiences, help-seeking behavior, and posttraumatic growth among college students. To develop a comprehensive understanding of student help-seeking, the present study examined past behaviors, the likelihood of future behaviors, barriers to seeking help, and attitudes toward mental health resources. In examining these variables, researchers, mental health workers, and university administrators can develop a better understanding of student mental health issues and the culture surrounding psychological help.

### **Review of the Literature**

Current research suggests a relationship between trauma, help-seeking behavior, and posttraumatic growth (Calhoun, Cann, Tedeschi, & McMillan, 2000; Groleau, Calhoun, Cann, & Tedeschi, 2013; Hughes et al., 2011; Kira et al., 2013; Taku et al., 2009) that is significantly correlated with mental health outcomes among college students (Cann et al., 2010; Cheng,

Kwan, & Sevig, 2013). The additional association between college students' exposure to trauma and the development of PTSD (Boyratz et al., 2013, Hughes et al., 2011) highlights the importance of this public health issue. In addressing the impact of traumatic events, several measures of help-seeking behavior, and posttraumatic growth, the current study provides a comprehensive overview that can address gaps and support the existing literature. However, it is important to establish a foundation for the current study by first understanding the trends, approaches, and themes of past research.

### **Trauma**

Past literature and the current study define trauma as “an enduring emotional response to an unexpected or overwhelming event” (American Psychological Association, 2011, para. 1). Trauma has been studied in samples ranging from soldiers (Bensimon, Amir, & Wolf, 2012; Herzog, Everston, & Whitworth, 2011) to survivors of natural disasters (Ying et al., 2013) to high school and college students (Hughes et al., 2011; Porche, Fortuna, Lin, & Alegria, 2011). Traumatic events can range from illness to violence to emotional strain within a family (Kira et al., 2013; Shannon, Simmelink, Im, Becher, & Crook-Lyon, 2013). With this variability in mind, it is important to understand the foundational concepts and definitions of traumatic events and how individuals respond to them.

**Traumatic events.** Tedeschi and Calhoun (2004) define traumatic events as “difficult circumstances [that] produce psychological distress and distressing emotions” (p. 2). These events vary based on their intensity, severity, and duration, and impact different people in different ways (Kira et al., 2013; Tedeschi & Calhoun, 2004). Traumatic events also challenge an individual's worldviews, or schemas, by disrupting the comfort and expected-ness of daily life (Taku et al., 2009; Tedeschi & Calhoun, 2004). This disruption undermines an individual's

developmental functioning; the effects of traumatic events have been studied in regard to attachment behaviors, individuation, role identity, and self-actualization (Kira et al., 2013).

Kira and colleagues (2013) have identified four specific classes of traumatic events. In the first class of traumatic events, a trauma occurs once and then stops. These events may include a natural disaster (Ying et al., 2013) or the death of a friend or family member (Hughes et al., 2011). In the second class of events, trauma occurs multiple times before stopping. These traumas may include atypical experiences like a history of abuse (Erkan, Ozbay, Cihangir-Cankaya, & Terzi, 2012) or more normative experiences such as four years of moving between one's college and one's hometown (Calloway, Kelly, & Ward-Smith, 2012). In the third class of events, trauma is continuous and doesn't stop. Most research on this class of trauma examines the effects of long-term ethnic and racial discrimination (Carter & Forsyth, 2010; Pieterse, Evans, & Walter, 2010). The fourth class of events pertains to cumulative trauma, or the simultaneous occurrence of several different traumatic events. Of the four classes of traumas, Kira and colleagues found that cumulative, "multiple traumatization" had the greatest negative impact on individuals' mental health (2013). Participants who reported multiple traumas scored significantly higher on depression, anxiety, and PTSD measures than those who experienced a single trauma (Kira et al., 2013), demonstrating how multiple traumatization increased participants' risk for maladaptive thoughts and psychological disorders.

**Responding to trauma.** After an individual experiences a traumatic event, they are faced with the task of cognitive restructuring, or changing their worldviews to incorporate and make sense of the traumatic event. This is a difficult, enduring process that Tedeschi and Calhoun (2004) outline with the following steps. Immediately after a trauma, individuals experience shock and disbelief; their current schemas cannot account for the unexpected event. As they

begin to process the event, distress, intrusive thoughts, and negative psychological reactions can emerge. If an individual can effectively manage and process their experience, they will integrate the event into their schemas and are likely to experience posttraumatic growth (Lindstrom et al., 2013; Tedeschi & Calhoun, 2004), a phenomenon that will be described in greater detail later in the review. If the individual fails to process their trauma, their distress will increase, placing them at greater risk for PTSD (American Psychiatric Association, 2013; Cann et al., 2010).

PTSD is a psychological disorder that is assessed on three conditions: intrusive thoughts, avoidance behaviors, and hyperarousal (American Psychiatric Association, 2013). Intrusive thoughts involve recurrent memories, nightmares, and flashbacks of the unresolved trauma. Avoidance behaviors include physically avoiding reminders of the event and cognitively avoiding unresolved thoughts and feelings. Hyperarousal refers to a state of high physiological stress, aggression, and alert. These symptoms are also present in posttraumatic stress (PTS), a less severe but more common response to unresolved trauma (American Psychiatric Association, 2013). In both conditions, intrusive thoughts, avoidance behaviors, and the hyperarousal create a lifestyle that is exhausting, maladaptive, and dangerous. Instead of moving forward with their lives, individuals living with PTSD are haunted by their pasts and struggle to become reacquainted with the world around them (American Psychological Association, 2013).

**Trauma and college students.** Several studies have highlighted the prevalence of traumatic events in college students' lives (Boyraz et al., 2013; Grasso et al., 2013; Read et al., 2013). In a survey of 3,119 undergraduates, half of the sample reported a potentially traumatic event in their lives and almost 20% reported symptoms of probable but undiagnosed PTSD (Grasso et al., 2013). In a smaller sample of 346 students, 81% reported a traumatic experience (Read et al., 2013). In a third study of 423 Black American students, 75% reported a potentially

traumatic experience, 20% of whom also met the criteria for PTSD (Boyratz et al., 2013). Boyraz and colleagues also found that 47% of students who had experienced trauma and screened positive for PTSD and 29% of students who had experienced trauma and screened negative for PTSD left or dropped out of school after two years. These results demonstrate both the prevalence of PTSD among trauma-exposed students and its negative effects on college retention and academic performance.

Another study by Blevins, Witte, and Weathers (2013) found that, in a sample of 626 college students, 534, or 85%, had experienced a traumatic event. These trauma-exposed students reported symptoms of posttraumatic stress disorder, emotional withdrawal, and detachment from their college lives (Blevins, Witte, & Weathers, 2013), all of which detract from the academic and social experience of higher education. In a similar study by Read and colleagues (2012), 649 students, or 65% of the initial sample, reported a traumatic experience and substance-related withdrawal behaviors. Another study by Read and colleagues (2011) reports an almost identical prevalence of 66% trauma-exposed students in a sample of 3,014 college freshmen.

Trauma is not only prevalent in the college environment, it has a profound effect on students' self-care behaviors and health habits (Read et al., 2013; Shannon et al., 2013). In a journal analysis by Shannon, Simmelink, Im, Becher, and Crook-Lyon (2013), students who experienced trauma reported difficulties with self-care behavior that ranged from exercising to socializing with friends. A study by Read and colleagues (2013) found a similar lapse in self-care: students who entered college with PTSD were more likely to smoke cigarettes and to smoke for a longer period of time than students with partial or no symptoms of the disorder. Smoking cigarettes and other forms of substance abuse have been identified as "self-medication

coping” and linked to risky sexual behavior, increased stress, and other health risks (Johnson & Johnson, 2013, p. 2317).

Research has also focused on several protective factors and buffers against trauma, PTS, and PTSD in college students. Boyraz and colleagues (2013) found that early academic integration significantly increased trauma-exposed students’ GPAs and reduced their risk of dropping out of school. Johnson and Johnson (2013) suggest that the quality of a student’s social network may protect them from trauma-related substance abuse and sexual risk-taking. In a study of 4,629 students following the 2007 Virginia Tech shootings, a close-knit social network and effective, campus wide communication were significantly correlated with adaptive coping (Hughes et al., 2011). All of these protective factors can facilitate posttraumatic growth, a positive outcome for students who have experienced trauma.

### **Posttraumatic Growth**

The literature on trauma emphasizes the distress and conflict that follow unexpected or overwhelming events. Posttraumatic growth (PTG), the process of psychologically “[surpassing] what was present before struggle or crisis,” occurs at the same time as the negative outcomes associated with trauma (Tedeschi & Calhoun, 2004, p. 4). Tedeschi and Calhoun (2011) describe this process as a “qualitative transformation” of affect, interpersonal skills, and individual characteristics (p. 4). PTG is also an outcome; individuals who have experienced PTG report improved problem-solving skills (Calhoun et al., 2000), more supportive social networks (Tedeschi & Calhoun, 2004), and a greater sense of meaning in their lives (Triplett, Tedeschi, Cann, Calhoun, & Reeve, 2012). With these outcomes in mind, it is important to understand the process of PTG following traumatic events.

**The process of posttraumatic growth.** Triplett and colleagues (2012) describe trauma as a “departure point” for future growth and development. After experiencing trauma, individuals engage in two forms of rumination, or patterns of thinking: deliberate and intrusive (Calhoun et al., 2000; Lindstrom et al., 2013; Triplett et al., 2013). Deliberate rumination involves intentional, constructive efforts to incorporate a traumatic event into one’s worldview. This style of coping leads to disclosure (Lindstrom et al., 2013), meaning making (Cann et al., 2010), and, ultimately, posttraumatic growth (Calhoun et al., 2000; Lindstrom et al., 2013; Triplett et al., 2012). Intrusive rumination is characterized by less intentional and unabated negative thinking (Calhoun et al., 2000). This style is related to increased distress (Triplett et al., 2012), a failure to make sense of the traumatic event (Cann et al., 2010), and a decreased likelihood of PTG (Triplett et al., 2012). In responding to trauma, individuals can experience one or both of these styles (Tedeschi & Calhoun, 2004; Triplett et al., 2012). These styles support the idea that posttraumatic growth is part of an ongoing process, not an isolated result.

If an individual favors deliberate, solution-focused rumination, they are more likely to integrate a trauma into their worldview and experience posttraumatic growth (Tedeschi & Calhoun, 2004; Triplett et al., 2012; Vishnevsky et al., 2010). Tedeschi and Calhoun (2004, 1996) outline five domains where growth is likely to occur: appreciation of life, closer relationships with others, personal strength, identification of new possibilities, and spiritual growth. Appreciation of life refers to a positive change in priorities and values. Closer relationships with others involves an increased sense of closeness, emotional expression, compassion, and reliance on other people. Personal strength is based in increased feelings of self-reliance and accepting the outcomes of life events. New possibilities refers to developing new

interests, seeking new opportunities, and self-improvement. The fifth domain of spiritual growth involves a stronger religious faith or a greater understanding of spiritual, existential matters.

**Factors associated with posttraumatic growth.** Tedeschi and Calhoun (2004) have related the process and outcomes of posttraumatic growth with several other psychological factors. Resilience, defined as the ability to live with a sense of purpose following adversity, enhances one's capacity for PTG and their ability to solve problems (Tedeschi & Calhoun, 2004). Hardiness, or the ability to respond to trauma with a sense of commitment and control, enables individuals to accept the challenge of integrating trauma into their existing schemas (Tedeschi & Calhoun, 2004). Optimism, or the expectation of positive outcomes, allows individuals to focus on the most important and solvable aspects of a traumatic experience (Tedeschi & Calhoun, 2004). In addition to these factors, Taku and colleagues (2009) emphasize the importance of productive communication in facilitating posttraumatic growth. In a sample of Japanese university students, mutual, encouraging disclosure and active listening predicted greater posttraumatic growth and more positive perceptions of others (Taku et al., 2009). This type of communication allowed students to build new relationships, alleviate negative emotions, and consider new perspectives (Taku et al., 2013). While posttraumatic growth is a unique psychological process, many of its positive, growth-oriented features are found in similar concepts throughout the literature.

Researchers have also studied the effects of gender on posttraumatic growth (Cann et al., 2010; Vishnevsky et al., 2010; Yoder & Lawrence, 2011). In a meta-analysis by Vishnevsky and colleagues (2010), women reported slightly higher rates of PTG than men. This may be related to women's preference for emotion-focused coping (Vishnevsky et al., 2010) or their increased

reliance on rumination (Yoder & Lawrence, 2011). Provided that their rumination is deliberate, women may be more comfortable expressing and processing their emotions than men.

**Posttraumatic growth and college students.** In a sample of 118 undergraduates, college students reported significantly higher rates of posttraumatic growth than posttraumatic stress following traumatic events (Cann et al., 2010). Cann and colleagues (2010) found that greater disruption following trauma predicted greater PTG and deliberate coping. These results represent a growing body of research that supports the prevalence and importance of PTG on college campuses (Calhoun et al., 2000; Groleau et al., 2013; Lindstrom et al., 2013; Vishnevsky et al., 2010). In these studies, students who report PTG also report higher levels of life satisfaction and meaning (Cann et al., 2010), centrality of the traumatic event (Groleau et al., 2013), and decreased distress (Triplett et al., 2010). In accordance with other research in the literature, college students who engage in problem-solving, reminiscing, and other forms of deliberate rumination report significantly higher levels of PTG than other, less intentional students (Calhoun et al., 2000). Conversely, negative and intrusive rumination predicts greater distress and lower levels of PTG (Calhoun et al., 2000). A second study by Taku and colleagues (2009) found that disclosure predicted PTG regardless of a student's desire to share their feelings and experiences. While encouraging a student to disclose may facilitate PTG, "nonpreferred disclosure" was also related to increased avoidance (Taku et al., 2009, p. 1237).

Looking beyond these individual and dyadic factors, Lindstrom and colleagues (2013) surveyed 129 college students on their college environment and cultural themes of growth, struggle, and adaptation. 98% of participants reported salient, growth-based themes on their college campus, often reported as reading or hearing stories about others students' positive experiences with counseling or therapy (Lindstrom et al., 2013). Students who were aware of

these themes engaged in more deliberate, solution-focused rumination about their trauma (Lindstrom et al., 2013). However, researchers found no greater association between cultural growth themes and PTG (Lindstrom et al., 2013). With this in mind, it is important to examine the culture of psychological growth on college campuses and how it impacts students' behaviors following a traumatic experience.

### **Help-Seeking Behavior**

As the literature demonstrates, posttraumatic growth is a relational concept that involves close relationships, disclosure, and trust in others (Taku et al., 2009; Tedeschi & Calhoun, 2004). Failure to engage with others is bad. If individuals are capable of deliberate communication, they are likely to experience PTG (Cann et al., 2010; Taku et al., 2009; Tedeschi & Calhoun, 2004). If individuals cannot relate to others and experience enduring, internal conflict, they are predisposed to greater posttraumatic stress and symptoms of PTSD (Cann et al., 2009; Grasso et al., 2013; Vishnevsky et al., 2010). One important way that trauma survivors can communicate with and relate to others is through seeking psychological help. In doing so, survivors can increase their coping resources (Schreiber, Maercker, & Renneberg, 2010), share and process information with others (Erkan et al., 2012), and, ultimately, experience posttraumatic growth (Taku et al., 2009).

**The process of seeking help.** Before considering the role of help-seeking in college students and its relationship with posttraumatic growth, it is important to understand the process of experiencing trauma and seeking psychological help. In a longitudinal study of 13 trauma-exposed adolescents and teens, Stige, Træen, and Rosenvinge (2013) outline a five-step process of seeking help. The process begins with an individual experiencing a traumatic event. Following the event, personal coping strategies are used to integrate the trauma into one's working models.

However, the psychological demands of processing a trauma can exceed an individual's cognitive abilities. This can lead to an individual "losing control" and turning to the resources and support of others. This process was maintained throughout participants' lives, from their first interviews as adolescents to their final interviews as middle-aged adults.

This process is not easy, and there are several barriers to ultimately seeking help (Stige, Træen, & Rosenvinge, 2013). Stige, Træen, and Rosenvinge (2013) describe how maladaptive coping, the realization of losing control, and feelings of defeat can lead to withdrawal and negative views of others. If individuals cannot navigate these barriers in the help-seeking process, they may never be able to cope with and manage their distress (Schreiber, Maercker, & Renneberg, 2010; Stige, Træen, & Rosenvinge, 2013). Instead of experiencing posttraumatic growth, these individuals will be at an increased risk for PTSD and unresolved trauma (Cann et al., 2010). Schreiber, Maercker, and Renneberg (2010) describe three major influences on help-seeking behavior and attitudes. The first influence, characteristics of the system providing help, refers to the availability of different resources, the public's awareness of these resources, and how easy, or difficult, it is for individuals to access them (Schreiber, Maercker, & Renneberg, 2010). A college campus may provide incredible mental health resources, but without public information and student awareness, these resources can become ineffective and underutilized.

The second influence on deciding to seek help, societal attitudes toward help-seeking, guides how individuals accept or stigmatize therapy and psychological problems (Schreiber, Maercker, & Renneberg, 2010). While positive help-seeking attitudes facilitate healing and growth, negative attitudes create barriers and may cause individuals to devalue or avoid their problems (Schreiber, Maercker, & Renneberg, 2010; Taku et al., 2009). With this influence in

mind, it is important to assess the attitude and culture of psychological help-seeking on college campuses.

The third influence on deciding to seek help, knowledge about traumatic experiences, impacts how individuals understand and respond to trauma (Schreiber, Maercker, & Renneberg, 2010). Schreiber, Maercker, and Renneberg (2010) discuss how accurate information about a traumatic event allows an individual to feel comfortable with their experience and seek appropriate help from others. Misinformation, in contrast, can lead to inappropriate communication and help-seeking behavior. Taku and colleagues (2009) also emphasized the importance of trauma knowledge; in a sample of 395 Japanese students, accurate information contributed to developing growth-based narratives and posttraumatic growth.

**Sources of help.** After an individual moves through Stige, Træen, and Rosenvinge's help-seeking process (2013) and is subject to the influences described above, they must seek help from a specific person or resource. Barker (2007) defined two types of help-seeking resources: formal and informal. Formal help-seeking resources include mental health professionals, community programs, and social services. Informal resources include family, friends, and peers. While formal resources are often more experienced, they can be expensive, difficult to access, and stigmatized (Schreiber, Maercker, & Renneberg, 2010). Informal resources are more accessible and less expensive, but often less experienced than formal services.

**Help-seeking and college students.** Several more specific studies have examined help-seeking behavior among college students. To develop interventions and facilitate posttraumatic growth in this at-risk population (Calmes et al., 2013; Grasso et al., 2013; Read et al., 2013), researchers and professionals have studied predictors, preferences, perceived stigma, and the outcomes of seeking help.

***Predictors.*** In a study by Pisani and colleagues (2012), 2,737 high school students were surveyed on suicidal ideation, help-seeking behavior, and attitude toward seeking help. This sample, although a few years younger than college-aged, may indicate trends and common attitudes that college freshman bring to their new communities. Researchers found that positive help-seeking attitudes and perceptions of accessibility were most significantly related to seeking help (Pisani et al., 2012). These results applied to students' own, personal problems as well as sharing their peer's problems: adult availability facilitated students' abilities to overcome their friends' "secrecy requests" and engage in constructive, growth-oriented disclosure (Pisani et al., 2012).

In a similar study by Erkan and colleagues (2012), 5,829 college students reported that attitude toward seeking psychological help was the most significant predictor of actual behavior. The significance of attitude is a recurring result and has been found in several other studies (Cheng, Kwan, & Sevig, 2013; Hess & Tracey, 2013; Nam et al., 2013). Additionally, past help-seeking experiences predicted students' likelihood to seek help for present issues, and female students were significantly more likely to seek help than male students (Erkan et al., 2012). The researchers attributed this gender difference to communication norms: while men are expected to be strong-willed and independent, women are allowed to be more expressive and open with their thoughts and emotions (Erkan et al., 2012).

Erkan and colleagues (2012) also found that certain characteristics of college students' traumatic experiences predict help-seeking behavior. Students whose trauma involved sexual or gender-related issues were significantly more likely to seek psychological help (Erkan et al., 2012). Based on the prevalence of sexual violence, these are promising results; in 2012, the Center for Disease Control reported that 19% of college women experienced partial or complete

sexual assault during their time as an undergraduate. Researchers also reported the prevalence and significance of family, personality, romance, and academic issues in student help-seeking (Erkan et al., 2012).

Several researchers have also highlighted the importance of social support in seeking psychological help (Erkan et al., 2012; Hess & Tracey, 2013; Nam et al., 2013). The decision to seek help is significantly related to positive peer opinions (Hess & Tracey, 2013), encouragement (Taku et al., 2009), and more experience with disclosure (Nam et al., 2013). All of these correlates contribute to positive, growth-oriented norms (Hess & Tracey, 2013) and are facilitated in a supportive peer environment.

**Preferences.** Several studies have indicated that college-aged students prefer informal help from their peers to more formal and professional sources. In a study by Pisani and colleagues (2012), high school students with suicidal ideation were twice as likely to disclose to their peers than to adults. Tillman and Sell (2013) report that students are not only more likely to disclose to their peers, but also more likely to help their friends than seek help for their own problems. These results reflect students' aversion to seeing formal help. Researchers have attempted to explain this trend by examining the stigma toward mental health on college campuses.

**Stigma.** Stigma is both an intrapsychic and interpersonal construct (Cheng, Kwan, & Sevig, 2013); students can feel ashamed for their mental health problems and their peers can reinforce disgrace through their words and actions. In a study of 609 college students from ethnic minority groups, both self-generated and perceived stigma were correlated with higher distress and racial or ethnic discrimination (Cheng, Kwan, & Sevig, 2013). Perceived stigma was also correlated with increased help-seeking concerns and a decreased likelihood to seek formal help

(Cheng, Kwan, & Sevig, 2013). However, students with a strong ethnic identity were buffered from the effects of stigma (Cheng, Kwan, & Sevig, 2013), suggesting that students with a secure, grounded sense of self may be more likely to explore their feelings and seek psychological help.

In a meta-analysis of 19 studies and 7,396 participants, Nam and colleagues (2013) found that stigma, anticipated risks, and a desire for self-concealment were the most common barriers to seeking psychological help. All three of these barriers are indicative of a prevailing negative attitude toward help-seeking. Stigma-related barriers have been found in several other studies (Calloway, Kelly, & Ward-Smith, 2012; Erkan et al., 2012; Pisani et al., 2012) and highlight the importance of changing the help-seeking culture on college campuses. If mental health workers can reduce the stigma toward psychological problems, more students would feel comfortable seeking professional help and processing traumatic life experiences.

**Outcomes.** Across the literature, few studies have examined the outcomes of seeking formal and informal help. Researchers have focused on the sources, predictors, and barriers to seeking help without considering what happens afterward. Despite the extensive research on trauma and posttraumatic growth, few studies have connected help-seeking behavior with posttraumatic growth, stress, and symptoms of PTSD. This is a considerable gap in the literature that must be addressed. Investigating this relationship can enable researchers and professionals to educate college students on the importance of psychological help and to reduce the stigma toward trauma and mental health issues.

### **The Current Study**

College students who experience trauma are subject to several developmental pathways. If students engage in intrusive rumination or avoidant coping, they will likely fail to process their trauma and be at risk for developing PTSD. If students self-medicate and seek informal help

from their peers, they risk increased substance abuse (Read et al., 2013) and missing out on more constructive, formal coping strategies (Nam et al., 2013). In a third situation, students who seek professional help may increase their resilience, constructive coping strategies, and their ability to relate to others (Tedeschi & Calhoun, 2004). With these pathways in mind, help-seeking behavior may be an important influence on students' psychological outcomes. To increase their likelihood of experiencing posttraumatic growth, trauma survivors may need to engage in a specific type of help-seeking behavior, one that is productive, intentional, and involves a professional clinician.

In the current study, college students were asked about their traumatic experiences, attitudes toward seeking psychological help, likelihood to seek help, perceived barriers to help-seeking, past help-seeking behavior, and posttraumatic growth. While these variables have been examined by mental health researchers, few studies have assessed the direct relationship between traumatic experiences, help-seeking attitude and behavior, and posttraumatic growth. The current study used an online survey to examine this relationship and further the research on college student mental health. Considering the effects of posttraumatic stress and growth, this is an important investigation with positive, constructive implications.

The specific research questions that were addressed in this study include the following:

1. How do college students' traumatic experiences influence their attitudes toward seeking psychological help, help-seeking behavior, and posttraumatic growth?
2. How do college students' attitudes toward mental health influence their help-seeking behavior and experiences of posttraumatic growth?
3. How do college students' perceived barriers to psychological help-seeking impact their attitudes and behaviors surrounding mental health?

4. How do college students' past help-seeking behaviors influence their current attitudes toward mental health, their likelihood to seek help in the future, and their experiences of posttraumatic growth?
5. How do men and women converge or differ in their attitudes toward mental health, help-seeking behavior, and experiences of posttraumatic growth?

## **Method**

### **Participants**

The sample consisted of 168 students representing a variety of sexes, ages, races, and ethnicities at the University of Connecticut and other educational institutions. Participants were eligible for this study if they met the following inclusion criteria: 1.) Participants were at least eighteen years of age; and 2.) Participants identified themselves as college students. After confirming both of these requirements, participants were able to provide consent and opt into the study.

### **Procedure**

Participants for this study were recruited through flyers, in-class presentations, through social networking, and through the university email listserv on the University of Connecticut campus. Additional university students were recruited through social networking and communication with other researchers and professors. All surveys were completed online through psychsurveys.org, a website which allows researchers to securely create and administer custom surveys (see [www.psyhsurveys.org](http://www.psyhsurveys.org)). Participants were compensated for their time by entering a drawing for one \$50.00 gift certificate to amazon.com.

Before opting into the study, all students were provided with an online information sheet and consent form to read and approve of. When the study reached its maximum number of participants, the researcher removed it from psychsurveys.com and securely exported the data for statistical analysis.

## **Measures**

The current study used an online survey to measure participants' traumatic experiences, help-seeking attitudes and behaviors, and posttraumatic growth. The first page of the survey asked basic demographic questions. On the second page, participants were asked to report a traumatic experience and describe its impact using Weiss' Impact of Events Scale- Revised (2005). After reporting on their traumatic experience, participants completed Fischer and Farina's (1995) Attitudes Toward Seeking Professional Psychological Help Scale- Short Form. Attitudes were also measured with the General Help-Seeking Questionnaire (Wilson, Deane, Ciarrochi, & Rickwood, 2005), which measured a participant's likelihood to seek help from different sources, and the Barriers to Adolescents Seeking Help-Brief Form Scale (Kuhl, Jarkon-Horlick, & Morrissey, 1997), which measured perceived difficulties in seeking psychological help. After completing the attitude measures, participants were asked about the sources and frequency of their help-seeking behavior over the past year. Last, participants reported their posttraumatic growth with Tedeschi and Calhoun's (1996) Posttraumatic Growth Inventory.

**Impact of Events Scale, Revised.** The IES-R (Weiss) was used to determine the impact of a traumatic event on participants' lives. Before completing the measure, individuals were asked to select a recent trauma from a popular list generated by past researchers (American Psychiatric Association, 2013; Arikani & Karanci, 2010; Carter & Forsyth, 2010). Participants were also given the opportunity to report a traumatic experience that wasn't listed. The IES was

originally developed by Horowitz in 1979 to measure the PTSD symptoms of intrusive thoughts and avoidance. In 2004, Weiss revised the measure to also assess hyperarousal, the third symptom of PTSD. The measure is highly correlated with other indices of PTSD. In other studies by Weiss (2004), the measure yields logical, expected subscale intercorrelations between intrusive thoughts and avoidance ( $r = .71$ ), intrusive thoughts and hyperarousal ( $r = .81$ ), and avoidance and hyperarousal ( $r = .65$ ).

**Attitude Toward Seeking Professional Psychological Help Scale, Short Form.** The ATSPPHS-SF was used to determine participants' positive and negative perceptions of formal and informal mental health resources. While the original ten-item measure focused solely on formal treatment, an eleventh item was added to assess attitude toward informal family and peer sources, a form of help-seeking that is often preferred among college students and other populations (Greenberg, Gould, Langston, & Brayne, 2009; Pisani et al., 2012; Tillman & Sell, 2013). In a psychometric review by Elhai, Schweinle, and Anderson (2008), item intercorrelations were high in convergent validity with  $r = .3$ . Construct validity was also high: help-seeking attitude was positively correlated with help-seeking intentions ( $r = .24$ ) and negatively correlated with perceived help-seeking stigma ( $r = -.41$ ) (Elhai, Schweinle, & Anderson, 2008). Recent help-seekers also scored significantly higher than those who hadn't sought professional psychological help ( $d = .65$ ) (Elhai, Schweinle, & Anderson, 2008).

In the current study, the ATSPPHS-SF was rated on a scale of one to five instead of the measure's standard zero to three. This formatting allowed participants to express neutrality and eliminated the number zero, which is commonly registered by statistical software as an omission and rarely used as an anchor in survey research.

**General Help-Seeking Questionnaire.** This measure was used to determine participants' likelihood to seek psychological help. While the original GHSQ assesses both personal/emotional and suicide-related help, only the personal/emotional assessment was included in the current study. In a review by Wilson, Deane, Ciarrochi, and Rickwood, (2005), the personal/emotional component of the GHSQ had high test-retest reliability ( $r = .86$ ) and construct validity: an increased likelihood to seek personal/emotional help was significantly correlated with actual help-seeking ( $r = .17$ ) and the perceived quality of previous care ( $r = .51$ ). An increased likelihood to seek help was negatively correlated with perceived barriers at  $r = -.22$  (Wilson et al., 2005).

**Barriers to Adolescents Seeking Help Scale, Brief Version.** The BASH-B scale was used to measure perceived impediments and obstacles to seeking psychological help. In a review by the team that developed the scale, the 37-item measure was significantly related to history of help-seeking behavior and perceptions of helpers at  $p < .05$  (Kuhl, Jarkon-Horlick, & Morrissey, 1997). Wilson and colleagues (2005) found that the brief version of the BASH scale reduced overlap and completion time without compromising the original measure's psychometric properties.

**Past help-seeking behaviors.** To measure past behaviors, the current study provided participants with a list of common help-seeking resources. This list was generated from past researchers' assessments of the most common help-seeking resources for college students. From this list, participants selected which sources they used over the past year and estimated how many hours they spent in each. If participants sought help from an unlisted source, they had the opportunity to name that person or organization. Participants were also asked to select the once source they used most often over the past year. By selecting help-seeking resources and

providing time spent in each, participants provided both categorical and continuous data to measure their behaviors.

**Posttraumatic Growth Inventory.** The PTGI was used to measure posttraumatic growth following experiences of trauma and help-seeking. Psychometric analysis by Tedeschi and Calhoun (1996) has revealed modest correlations between responses on each item and the measure's total score ( $r = .35 - .63$ ) and high test-retest reliability ( $r = .71$ ). Tedeschi and Calhoun (1996) verified their measure's construct validity by correlating PTGI scores with optimism, positive life orientation, and religiosity.

## Results

### Demographic Information

There were 460 participants who began this study, but the researcher eliminated many of these cases using two methods. First, the researcher eliminated 172 cases that failed to provide consent to participate, only viewing the study's opening page (reducing the sample to 288), six that failed to identify as a college students (reducing the sample to 282), and two that failed to be at least eighteen years of age and were unable to provide consent (reducing the sample to 280). After eliminating these cases, the researcher used listwise deletion of missing and inappropriate data. Thirty participants stopped the survey after the first page of demographic data, resulting in no survey data for analysis (reducing the sample to 250). Forty-nine had no trauma to report (reducing the sample to 201), and 31 stopped early during the IES-R, the second measure on the survey (reducing the sample to 170). Lastly, one case was removed for reporting an impossible number of annual help-seeking hours (reducing the sample to 169). Through the listwise deletion process, 109 additional cases were removed from the final sample.

After the cleaning process, the final sample consisted of 169 students who represented a range of sexes, ages, races, ethnicities, and other demographics. The majority of the participants in the sample were female ( $n = 115$ , 68.0%). Males represented 30.8% of the sample ( $n = 52$ ), females represented 68.0% of the sample ( $n = 115$ ), and the remaining students identified as a different gender ( $n = 2$ , 1.2%). A majority of the sample fell within the traditional undergraduate age range of 18-22 years old ( $n = 162$ , 97%), with the final 3% of participants ranging from 23-27 years of age. 78% of the entire sample identified as White ( $n = 131$ ), followed by Asian ( $n = 15$ , 8.9%). The most common religious affiliation was Christianity ( $n = 101$ , 59.8%), followed by “No religion” ( $n = 42$ , 24.9%) and Judaism ( $n = 11$ , 6.5%). 42 participants (24.9%) reported a family experience with divorce. When asked to rate their religiosity on a scale of 1-100, participants reported a mean score of 39.48 ( $SD = 21.34$ ) and a median of 42.50. When asked to rate their family closeness on a similar scale, participants reported a mean score of 78.30 ( $SD = 19.93$ ) and a median of 82 out of a possible 100. A majority of participants from the University of Connecticut were enrolled in the College of Liberal Arts and Sciences ( $n = 96$ , 56.8%), followed by the School of Business ( $n = 13$ , 7.7%). 6.5% of the sample ( $n = 11$ ), were enrolled in a different university. When asked for the distance between their university and hometown, participants reported a mean of 112.35 ( $SD = 221.89$ ) and a median of 61.5 miles. These demographic characteristics can also be found in Table 1.

### **Preliminary Analysis**

**Extracurricular involvement.** The sample spent an average of 8.46 ( $SD = 8.5$ ) and a median of 6.0 hours a week participating in non-academic extracurricular activities. The range obtained from this question was 0-45 hours. When asked about academic extracurricular involvement, participants reported a mean of 2.89 ( $SD = 5.29$ ) and a median of one hour(s) per

week. For academic involvement, the range obtained was 0-40 hours. Participants also reported their total extracurricular involvement, indicating a median of nine hours. These descriptive statistics are also reported in Table 3.

**Traumatic experiences and IES-R.** Participants were asked to report one traumatic event that occurred in the past year. The most common traumatic experiences among participants were relationship conflicts ( $n = 51$ , 30.2%), the death of a friend or loved one ( $n = 42$ , 24.9%), academic or school-related ( $n = 23$ , 13.6%), related to personal health ( $n = 18$ , 10.7%), and the injury of a friend or loved one ( $n = 13$ , 7.7%). The remainder of the sample ( $n = 22$ , 13.2%) reported incidents of physical violence, divorce or parental separation, relocation, and witnessing a traumatic event. The sample's distribution of traumatic events can also be found in Table 2.

Participants reported a mean score of 2.97 ( $SD = .78$ ) on the IES-R. The possible range on the IES-R was 1-5, where higher scores indicated a more traumatic response. Similarly central means were reported for each subscale. For the Intrusive Thoughts scale, participants reported a mean score of 3.22 ( $SD = .94$ ). For the Avoidance subscale, participants reported a mean score of 2.97 ( $SD = .80$ ). For the Hyperarousal subscale, participants reported a mean score of 2.63 ( $SD = 1.01$ ). These descriptive statistics can be found in Table 3.

For comparison purposes, it was difficult to find other research that reported mean scores on the IES-R; most studies using the IES-R focus on factor analysis or correlations of scores over time. However, in a study of the devastating 1989 Loma Prieta earthquake in the San Francisco Bay, emergency personnel reported mean scores of 4.99 on the Intrusive Thoughts subscale, 4.34 on the Avoidance subscale, and 2.08 on the Hyperarousal subscale (Weiss, Marmar, Metzler, & Ronfeldt, 1995). The emergency responders reported over two standard deviations higher than

college students on the Intrusive Thoughts subscale, almost two deviations higher on the Avoidance subscale, but half a deviation lower on the Hyperarousal subscale.

**ATSPPHS-SF, GHSQ, and BASH-B.** Participants reported a mean score of 2.84 ( $SD = .60$ ) on the ATSPPHS-SF. In this study, the possible range on the ATSPPHS-SF was 1-5, where higher scores indicated a more positive orientation toward seeking psychological help. Participants reported a mean score of 3.38 ( $SD = .64$ ) on the GHSQ. The possible range on the GHSQ was 1-5, where higher scores indicated a greater likelihood of seeking psychological help in the future. Participants reported a mean score of 2.48 ( $SD = .68$ ) on the BASH-B scale. In this study, the possible range on the BASH-B was 1-5, where a higher score indicated a greater number of perceived barriers to psychological help-seeking. These descriptive statistics are also reported in Table 3.

**PTGI.** Participants reported a mean score of 3.37 ( $SD = .70$ ) on the PTGI. The possible range of scores on the PTGI was 1-5, where higher scores indicated greater posttraumatic growth. On the Relating to Others subscale, participants reported a mean score of 3.41 ( $SD = .85$ ). On the New Possibilities subscale, participants reported a mean of 3.29 ( $SD = .88$ ). On the Personal Strength subscale, participants reported a mean of 3.60 ( $SD = .83$ ). On the Spirituality subscale, participants reported a mean of 2.27 ( $SD = 1.16$ ). On the Appreciation of Life subscale, participants reported a mean of 3.85 ( $SD = .89$ ). These descriptive statistics can also be found in Table 3.

**Help-seeking resources.** A majority of the sample reported that their most frequently used help-seeking resources were informal: 67 participants (39.6%) selected friends, 47 (27.8), selected intimate partners, and 32 (18.9%) selected their parents. The remaining participants ( $n = 14$ , 8.4%) reported other relatives, mental health professionals, phone helplines, general

practitioners, religious leaders, and “wouldn’t seek help from anyone” as their most frequently used resource.

### **Traumatic Experiences**

To determine the intercorrelations between overall and subscale scores on the IES-R, correlational analyses were conducted. As expected, overall scores on the IES-R were significantly correlated with scores on the Intrusive Thoughts ( $r = .899, p = .000$ ), Avoidance ( $r = .808, p = .000$ ), and Hyperarousal ( $r = .877, p = .000$ ) subscales. Additionally, scores on the Intrusive Thoughts subscale were significantly correlated with scores on the Avoidance ( $r = .555, p = .000$ ) and Hyperarousal ( $r = .730, p = .000$ ) subscales. Scores on the Avoidance subscale were significantly correlated with scores on the Hyperarousal subscale ( $r = .556, p = .000$ ). While not surprising, these intercorrelations confirm the validity of the IES-R in the current study. The researcher expected that the IES-R, which measures symptoms of PTSD, would be correlated with the measure’s three, symptom-specific subscales. These correlations can also be found in Table 4.

To determine the relationship between the impact of a traumatic event and an individual’s experience of posttraumatic growth, correlational analyses were conducted. Overall scores on the IES-R were approaching significance with overall scores on the PTGI ( $r = .148, p = .058$ ) and significantly correlated with scores on the measure’s New Possibilities subscale ( $r = .218, p = .005$ ). The more intense an individual perceives a traumatic event, the more likely that individual is to experience posttraumatic growth, especially in terms of new possibilities. Scores on the IES-R’s Intrusive Thoughts subscale were significantly correlated with overall scores on the PTGI ( $r = .185, p = .018$ ) and scores on the Relating to Others ( $r = .174, p = .027$ ) and New Possibilities ( $r = .237, p = .002$ ) subscales. The more intrusive thoughts an individual

experiences, the more likely they are to experience posttraumatic growth, especially in relation to others and new possibilities. Scores on the IES-R's Hyperarousal subscale were significantly correlated with the PTGI's New Possibilities subscale ( $r = .216, p = .005$ ) and approaching significance with the PTGI's Spirituality subscale ( $r = .134, p = .088$ ). Similar to the Intrusive Thoughts subscale, increased hyperarousal lead to more posttraumatic growth-oriented possibilities and spiritual development. These correlations are also reported in Table 4.

To determine the relationship between the impact of a traumatic event and participants' attitudes toward seeking psychological help, correlational analyses were conducted. The Intrusive Thoughts subscale was the only scale on the IES-R to be significantly correlated with the ATSPPHS-SF ( $r = .179, p = .020$ ). As individuals experience more intrusive thoughts, they are more likely to hold increasingly positive attitudes toward seeking psychological help. These correlations can also be found in Table 4.

To determine the relationship between the impact of a traumatic event and participants' perceived barriers to seeking psychological help, correlational analyses were conducted. Overall scores on the IES-R were significantly correlated with scores on the BASH-B ( $r = .182, p = .019$ ). The IES-R's Avoidance and Hyperarousal subscales were also significantly correlated to the BASH-B ( $r = .259, p = .001$  and  $r = .210, p = .007$ , respectively). Participants who reported higher scores on these subscales also reported higher barriers to seeking help. The more intense an individual perceives a traumatic event, especially in regards to avoidance behaviors and hyperarousal, the more help-seeking barriers the individual will face. These correlations can also be found in Table 4.

To determine the relationship between different traumatic experiences and participants' attitudes and perceived barriers toward seeking psychological help, univariate analyses of

variance were conducted. Traumatic experiences had no significant impact on attitudes toward seeking psychological help,  $F(1,8) = 1.02, p = .427$ . However, traumatic experiences had a significant impact on perceived barriers to seeking help,  $F(1,8) = 2.47, p = .015$ . Posthoc comparisons using the Tukey HSD test indicated that BASH-B scores were significantly higher ( $p < .05$ ) among participants who reported physical violence or abuse ( $M = 3.40, SD = .89$ ) than those who reported the death of a friend or loved one ( $M = 2.29, SD = .55$ ) and those who witnessed a traumatic event ( $M = 2.09, SD = .61$ ). The Tukey HSD test also indicated a marginally significant difference ( $p = .059$ ) between BASH-B scores of participants who reported physical violence or abuse ( $M = 3.40, SD = .89$ ) and those who reported a breakup or relationship conflict ( $M = 2.45, SD = .65$ ). To minimize the likelihood of Type I errors, additional posthoc tests were conducted using Bonferroni adjusted alpha levels of .006 per test (.05/9). The results reported above withstood the Bonferroni adjustment and no Type I errors were found. Trauma survivors who experienced a physically violent event perceived a greater number of help-seeking barriers than other survivors. This analysis of variance is also reported in Table 7.

To determine the relationship between the impact of a traumatic event and participants' association with perceptions about future help seeking, correlational analyses were conducted. However, no significant correlations were found between the IES-R and the GHSQ ( $p = .233$  for Intrusive Thoughts subscale,  $p = .576$  for Avoidance subscale,  $p = .775$  for Hyperarousal subscale, and  $p = .676$  for overall IES-R score). These correlations are also reported in Table 4.

### **Perceived Barriers**

To determine the relationship between perceived barriers to seeking psychological help and attitude toward seeking psychological help, correlational analyses were conducted. There

was a significant negative correlation between perceived barriers and attitude toward seeking help ( $r = -.587, p = .000$ ). As expected, the more help-seeking barriers participants perceived, the lower their attitudes were toward psychological help. These correlations can also be found in Table 4.

To determine the relationship between perceived barriers to seeking psychological help and the average number of hours spent seeking psychological help across sources over the past year, correlational analyses were conducted. However, no significant relationship was found between the BASH-B and the number of hours participants spent seeking help ( $p = .187$ ).

To determine the relationship between perceived barriers to seeking psychological help and the likelihood of seeking help in the future, correlational analyses were conducted. However, no significant relationship was found between the BASH-B and GHSQ measures ( $p = .151$ ).

To determine the relationship between perceived barriers and posttraumatic growth, correlational analyses were conducted. There was a significant negative correlation between BASH-B scores and the Relating to Others subscale of the PTGI ( $r = .154, p = .049$ ).

### **Attitude Toward Seeking Psychological Help**

To determine the relationship between participants' attitudes toward seeking psychological help and their likelihood to seek help in the future, correlational analyses were conducted. Overall scores on the ATSPPHS-SF were significantly correlated with scores on the GHSQ ( $r = .282, p = .000$ ). Participants who viewed psychological help-seeking more positively were more likely to seek help in the future than those with more negative views. These correlations are also reported in Table 4.

To determine the relationship between participants' attitudes toward seeking psychological help and their experiences of posttraumatic growth, correlational analyses were

conducted. Scores on the ATSPPHS-SF were significantly correlated with scores on the PTGI's Relating to Others subscale ( $r = .231, p = .003$ ). Participants who viewed psychological help-seeking more positively were more likely to experience relational posttraumatic growth than those with more negative views. These correlations are also reported in Table 4.

To determine the relationship between participants' attitudes toward seeking psychological help and the average number of hours spent seeking help across sources over the past year, correlational analyses were conducted. However, no significant relationship was found between scores on the ATSPPHS-SF and the number of hours participants spent seeking help ( $p = .402$ ).

### **Likelihood of Future Help-Seeking**

To determine the relationship between participants' likelihood to seek future psychological help and their experiences on posttraumatic growth, correlational analyses were conducted. Scores on the GHSQ were significantly correlated to overall scores on the PTGI ( $r = .332, p = .000$ ) as well as on all five subscales: Relating to Others ( $r = .352, p = .000$ ), New Possibilities ( $r = .214, p = .006$ ), Personal Strength ( $r = .167, p = .034$ ), Spirituality ( $r = .306, p = .000$ ), and Appreciation of Life ( $r = .189, p = .016$ ). Participants who were more likely to seek help in the future had experienced significant amounts of posttraumatic growth across the PTGI's subscales. These correlations can also be found in Table 4.

To determine the differences between participants' placed in low, medium, and high likelihood categories and their scores on the IES-R, BASH-B, and ATSPPHS-SF, univariate analyses of variance were conducted. Scores on the ATSPPHS-SF were significantly correlated with higher categories of help-seeking likelihood,  $F(1,2) = 5.05, p = .007$ . This analysis of variance can also be found in Table 8.

### **Posttraumatic Growth**

To determine the intercorrelations between overall and subscale scores on the PTGI, correlational analyses were conducted. As expected, overall scores on the PTGI were significant correlated to all five subscales: Relating to Others ( $r = .860, p = .000$ ), New Possibilities ( $r = .845, p = .000$ ), Personal Strength ( $r = .777, p = .000$ ), Spirituality ( $r = .479, p = .000$ ), and Appreciation of Life ( $r = .767, p = .000$ ). The Relating to Others subscale was significantly correlated with the New Possibilities ( $r = .570, p = .000$ ), Personal Strength ( $r = .543, p = .000$ ), Spirituality ( $r = .331, p = .000$ ), and Appreciation of Life ( $r = .860, p = .000$ ) subscales. The New Possibilities subscale was significantly correlated with the Personal Strength ( $r = .625, p = .000$ ), Spirituality ( $r = .334, p = .000$ ), and Appreciation of Life ( $r = .621, p = .000$ ) subscales. The Personal Strength subscale was significantly correlated with the Spirituality ( $r = .198, p = .011$ ) and Appreciation of Life ( $r = .582, p = .000$ ) subscales. The Spirituality subscale was significantly correlated with the Appreciation of Life subscale ( $r = .217, p = .005$ ). These intercorrelations make sense and verify the PTGI's validity in the current study. These correlations are also reported in Table 4.

To determine the relationship between posttraumatic growth and the average number of hours spent seeking help across sources over the past year, correlational analyses were conducted. Participants who reported more hours seeking psychological help also reported higher levels of spiritual posttraumatic growth; the PTGI's spirituality subscale was significantly correlated with the average number of hours spent seeking psychological help ( $r = .189, p = .028$ ). These correlations are also reported in Table 4.

### **Religiosity**

To determine the relationship between participants' religiosity and other variables, correlational analyses were conducted. Religiosity was significantly correlated with the PTGI's Spirituality subscale ( $r = .444, p = .000$ ) and the GHSQ ( $r = .185, p = .017$ ). As expected, participants who reported higher religiosity experienced greater spiritual growth. These correlations can also be found in Table 4.

### **Family Closeness**

To determine the relationship between participants' family closeness and other variables, correlational analyses were conducted. Family closeness was significantly correlated with the PTGI's Relating to Others ( $r = .169, p = .031$ ) subscale, the BASH-B ( $r = -.165, p = .034$ ), and the GHSQ ( $r = .254, p = .001$ ). So, an individual's feelings of family connection were related to increased relationship-based growth, fewer barriers to help-seeking, and an increased likelihood to seek help in the future. Additionally, family closeness scores approached significant correlations with overall scores on the PTGI ( $r = .148, p = .058$ ), the PTGI's Appreciation of Life subscale ( $r = .140, p = .075$ ), and the IES-R's Hyperarousal subscale ( $r = -.144, p = .062$ ). Family closeness, then, was slightly less correlated with overall posttraumatic growth, appreciation of life, and decreased hyperarousal. These correlations can also be found in Table 4.

### **Deciding to Seek Help**

To determine the differences in perceived barriers to help-seeking between participants who did and did not seek psychological help, independent samples *t*-tests were conducted. However, there was no significant difference in mean BASH-B scores between participants who did and did not seek psychological help ( $p = .362$ ).

To determine the differences in attitudes toward seeking psychological help between participants who did and did not seek help, independent samples *t*-tests were conducted.

However, there was no significant difference in mean ATSPPHS-SF scores between participants who did and did not seek psychological help ( $p = .259$ ).

To determine the differences in likelihood to seek future psychological help between participants who did and did not seek help, independent samples  $t$ -tests were conducted.

However, there was no significant difference in mean GHSQ scores between participants who did and did not seek psychological help ( $p = .156$ ).

To determine the differences between participants who did and did not seek help and their placement in low, medium, and high likelihood of future help-seeking categories, a chi-square test of independence was conducted. However, no significant differences were found between participants who did and did not seek help and their placement in these categories ( $p = .317$ ). This chi-square distribution is also reported in Table 9.

To determine the differences in posttraumatic growth between participants who did and did not seek psychological help, independent samples  $t$ -tests were conducted. Overall scores on the PTGI were marginally significant; participants who did not seek help reported slightly higher scores ( $M = 3.58, SD = .63$ ) than those participants who did ( $M = 3.33, SD = .70$ );  $t(162) = -1.81, p = .07$ . Scores on the PTGI's New Possibilities subscale were significantly higher among participants who did not seek help ( $M = 3.61, SD = .87$ ) than those who did ( $M = 3.22, SD = .88$ );  $t(162) = -2.14, p = .03$ . These surprising statistics suggest that participants who did not seek psychological help experienced greater elements of posttraumatic growth than participants who did seek help. These  $t$ -test results are also reported in Table 6.

### **Gender Differences**

To determine the difference between male and female participants' scores on the IES-R, independent samples  $t$ -tests were conducted. Overall scores on the IES-R were significantly

higher in female ( $M = 3.18, SD = .71$ ) than male ( $M = 2.49, SD = .75$ ) participants;  $t(165) = -5.67, p = .00$ . Scores on the IES-R's Intrusive Thoughts subscale were significantly higher in female ( $M = 3.47, SD = .84$ ) than male ( $M = 2.68, SD = .96$ ) participants;  $t(165) = -5.33, p = .00$ . Scores on the IES-R's Avoidance subscale were significantly higher in female ( $M = 3.08, SD = .75$ ) than male ( $M = 2.70, SD = .84$ ) participants;  $t(165) = -2.88, p = .00$ . Scores on the IES-R's Hyperarousal subscale were significantly higher in female ( $M = 2.94, SD = .98$ ) than male ( $M = 1.96, SD = .75$ ) participants;  $t(165) = -7.01, p = .00$ . Female participants reported higher PTSD symptoms than males on all subscales of the IES-R. In addition to the Hyperarousal scale's significant differences, Levene's test indicated unequal variances ( $F = 5.35, p = .02$ ), so degrees of freedom was changed from 165 to 126. Posthoc analyses using histograms and frequency distributions indicated a lower mean and positive skew for male participants and a more central, normal distribution for female participants. These  $t$ -test results can also be found in Table 5.

To determine the differences between male and female participants' attitudes toward seeking psychological help, independent samples  $t$ -tests were conducted. Scores on the ATSPPHS-SF were significantly higher in female ( $M = 2.90, SD = .60$ ) than male ( $M = 2.69, SD = .59$ ) participants;  $t(165) = -2.22, p = .03$ . Females reported more positive attitudes to seeking psychological help than male participants. These  $t$ -test results are also reported in Table 5.

To determine the differences between male and female participants' perceived barriers to psychological help-seeking, independent samples  $t$ -tests were conducted. While there were no significant differences between male and female participants' scores on the BASH-B, Levene's test indicated unequal variances ( $F = 9.25, p = .00$ ), so degrees of freedom was changed from 162 to 134. Posthoc analyses indicated that, while both male and female participants reported a

similar mean score on the BASH-B, the frequency of female responses was significantly greater than male responses, creating a taller, wider distribution.

To determine the differences between male and female participants' likelihood to seek psychological help in the future, independent samples *t*-tests were conducted. However, there was no significant difference between male and female participants' scores on the GHSQ ( $p = .701$ ).

To determine the differences between male and female participants' posttraumatic growth, independent samples *t*-tests were conducted. Scores on the PTGI's New Possibilities subscale were significantly higher in female ( $M = 3.38, SD = .90$ ) than male ( $M = 3.08, SD = .83$ ) participants;  $t(160) = -2.03, p = .04$ . Female participants reported more growth-oriented possibilities following trauma than males. Levene's test indicated unequal variances on the Personal Strength subscale of the PTGI ( $F = 7.95, p = .01$ ), so degrees of freedom was changed from 160 to 138. Posthoc analyses using histograms and frequency distributions indicated that, due to the female majority within the sample, the frequency of female responses was significantly greater than male responses, creating a taller, wider normal distribution. These *t*-test results can also be found in Table 5.

To determine the differences between male and female participants' traumatic experiences, a chi-square test of independence was conducted. However, there were no significant differences between male and female participants' distributions of traumatic experiences ( $p = .687$ ).

To determine the differences between male and female participants' experiences of seeking or not seeking psychological help, a chi-square test of independence was conducted. However, there were no significant differences in male and female participants' decision to seek

or not seek psychological help ( $p = .138$ ). This chi-square distribution is also reported in Table 10.

To determine the differences between male and female participants' sources of psychological help, a chi-square test of independence was conducted. The relationship between gender and seeking help from an intimate partner was significant,  $\chi^2(62, N = 79) = 52.87, p = .03$ . The relationship between gender and seeking help from a friend was significant,  $\chi^2(56, N = 124) = 42.81, p = .02$ . The relationship between gender and seeking help from a parent was significant,  $\chi^2(28, N = 100) = 27.77, p = .00$ . Posthoc analyses using histograms and frequency distributions indicated that these differences were attributed to outliers, participants who reported over approximately 1,000 hours seeking psychological help from a specific source.

To determine the differences between male and female participants' average number of hours spent seeking help across sources, independent samples  $t$ -tests were conducted. Female participants reported a significantly higher mean number of hours ( $M = 113.72, SD = 354.11$ ) than male ( $M = 29.11, SD = 59.21$ ) participants;  $t(134) = -2.21, p = .03$ . Additionally, Levene's test indicated unequal variances ( $F = 6.23, p = .01$ ), so degrees of freedom was changed from 134 to 98. Posthoc analyses using histograms and frequency distributions indicated that, due to several outliers and the female majority within the sample, the frequency of female responses was significantly greater than male responses, creating a taller, wider distribution.

To determine the differences between male and female participants' most frequent help-seeking resources, a chi-square test of independence was conducted. However, no significant differences were found between male and female participants' most frequently used resources ( $p = .738$ ).

## Discussion

The purpose of the current study was to explore relationships between college students' experiences of trauma, psychological help-seeking, and posttraumatic growth. The researcher examined the diversity of students' traumatic experiences, attitudes toward seeking psychological help, likelihood of seeking help in the future, barriers to seeking psychological help, and self-reported posttraumatic growth. The results fit within the greater literature and suggest several future directions and considerations for the field.

### **Demographics and Preliminary Analysis**

While a majority of the sample was female (68.0%), white (77.5%), and Christian (59.8%), this bias reflects similar demographic and gender skews as the University of Connecticut's College of Liberal Arts and Sciences. Compared to entire student population, which reports an even distribution of men and women and a 26% minority population, this sample remains mostly representative.

Across genders, participants' levels of self-reported family closeness were higher than expected. Students also reported a surprisingly low prevalence of divorce; the American Psychological Association (2014) suggests that 40 to 50 percent of American marriages end in divorce, but only 25% of participants reported a divorce experience. The low prevalence of divorce may have influenced participants' higher reports on family closeness.

The sample's most frequently used sources of psychological help included friends, intimate partners, and parents, groups that Schreiber, Maercker, and Renneberg (2010) describe as informal help-seeking resources. Like the participants from their 2010 study, the current sample displayed an overwhelming preference for informal help. College students may feel more comfortable disclosing information to family and peers, and formal helpers must work to create similar, comfortable help-seeking environments.

### **Traumatic Experiences**

There were strong intercorrelations between the IES-R's three subscale and overall scores. Given that the IES-R measures the individual and combined effects of the three symptoms of PTSD, these intercorrelations make sense. The current study also found a significant relationship between the intensity of traumatic experiences and participants' self-reported posttraumatic growth, which supports past researchers' theories that traumatic experiences serve as "departure points" for posttraumatic growth (Triplett et al., 2013). Results also suggest that different classes or categories of traumatic events impact students in unique ways. Students who reported a trauma involving physical violence or abuse reported significantly higher BASH-B scores than participants who reported traumatic experiences. This increase in perceived barriers may place survivors of physical violence at a greater risk for PTSD and other negative outcomes. To enable these at-risk students to seek help and grow from their experiences, mental health professionals must work to understand and lift the taboos surrounding physical abuse.

Participants' attitudes toward seeking psychological help were, for the most part, independent of their traumatic experiences. In terms of posttraumatic growth, an intense traumatic experience is more significant than a merely positive attitude, which may have formed before the traumatic event.

### **Perceived Barriers and Attitudes Toward Seeking Help**

The strong, negative, and expected correlation between the BASH-B and ATSPPHS-SF supports the validity of both measures. On American college campuses, mental health issues are highly stigmatized (Boyras et al., 2013; Schreiber, Maercker, & Renneberg, 2010), a social barrier that may lower college students' help-seeking attitudes and abilities to care for

themselves. So, even if college students are personally open to the idea of seeking help, imposed societal barriers and stereotypes may reduce their actual help-seeking behaviors.

As expected, current attitudes toward psychological help-seeking were significantly correlated with seeking help in the future. However, only one subscale of the PTGI, Relating to Others, was correlated with the ATSPPHS-SF. Posttraumatic growth, then, may be grounded in the impact of a traumatic event rather than an individual's preconceived notions or attitudes. So, even if an individual has no interest in seeking psychological help, they are still capable of growth and self-improvement following an intense trauma. However, a positive attitude toward seeking psychological help is not enough to experience full posttraumatic growth.

### **Likelihood of Future Help-Seeking and Posttraumatic Growth**

The GHSQ was strongly correlated with overall and subscale scores on the PTGI. Participants may simultaneously experience posttraumatic growth and realize the effectiveness of their psychological help. Posttraumatic growth may improve participants' help-seeking attitudes and decrease their perceptions of future barriers, making future help-seeking more likely. This first experience of posttraumatic growth, then, is the start of a lasting process of growth and help-seeking.

Correlations between overall and subscale scores on the PTGI suggest that each subscale is a relevant component of posttraumatic growth. These strong relationships highlight the importance of each subscale's construct in the posttraumatic growth experience. Correlations between the PTGI subscales suggest that the constructs interact and that deficits in one area may be buffered by strengths in another.

### **Religiosity, Family Closeness, and the Decision to Seek Help**

As expected, participants' religiosity was strongly correlated with scores on the PTGI's Spirituality subscale. While "spirituality" isn't necessarily religious, religion may foster self-awareness, perspective, and moral development among college students. Religiosity was also correlated with an increased likelihood to seek help in the future; religious concepts like hope and faith may allow individuals to trust clinicians and believe in the help-seeking process.

Family closeness was strongly correlated with the PTGI's Relating to Others, Appreciation of Life, and overall scales. This finding is crucial; feelings of intimacy, appreciation, and love from one's family may facilitate traumatic coping and posttraumatic growth. This would also explain the negative relationship between family closeness and the hyperarousal subscale of the IES-R; families that practice appropriate emotional regulation may reduce the risk of anxiety and agitation among individual members. Similarly, the negative relationship between family closeness and the BASH-B scale suggests that adaptive family dynamics may improve college students' perceptions of psychological help-seeking.

Participants who decided to seek psychological help scored significantly lower on several subscales of the PTGI than those who didn't seek help. This was unexpected, but may be explained by some clinicians' focus on consistency over the new possibilities and change associated with posttraumatic growth. These statistical relationships may be anomalies that shouldn't be generalized to any greater populations.

### **Gender Differences**

Female participants reported significantly higher scores on the IES-R, ATSPPHS-SF, and PTGI than male participants. These results suggest that women may be more comfortable disclosing information and sharing their emotional experiences than men. Women may also be more comfortable with interpersonal problem-solving strategies than men, resulting in their

higher PTGI and ATSPPHS-SF scores. These results relate to the greater issue of gender socialization in society; while women are taught to communicate and share their emotional experiences, men are often encouraged to remain silent and maintain an appearance of toughness.

### **Limitations and Future Research**

While this study provides several contributions to the research on trauma, psychological help-seeking, and posttraumatic growth research, several limitations must be addressed. First, this study's university-based sample was relatively biased. This, in combination with the current study's specific focus on trauma symptoms and help-seeking behavior among college students, should be considered when generalizing results to other environments or populations.

Additionally, many participants were recruited through psychology or human development courses and may have been particularly informed of the study's topics and themes.

A second limitation pertains to the sensitive subject matter of trauma and psychological help. Even though the survey was completed through an anonymous, secure website, participants may have been hesitant to fully disclose and provide information about their experiences. Participants may have underreported their PTSD symptoms or selected less severe traumas over more serious, life-altering experiences.

A third limitation of this study was the researcher's difficulty in creating an appropriate measure for participants' preferences for and hours spent seeking help. While a continuous measure would have been ideal for statistical analysis, the discrete categories of help-seeking resources made this difficult. Instead, the researcher prompted participants to report the number of hours participants spent using each resource. The survey also asked for participants' most frequently used help-seeking resource, which wasn't always the resource with the greatest

number of reported hours. Looking toward the future, researchers should work to develop a more appropriate help-seeking measure.

The results of the current study suggest that future research is needed to better understand the complicated relationship between traumatic experiences, help-seeking attitudes and behaviors, and posttraumatic growth in college students. In addition to an improved help-seeking measure, future researchers should work to obtain a diverse sample reporting a variety of traumatic experiences. This will allow researchers to make more generalizable and educated comparisons across traumatic experiences. Similarly, cross-cultural studies can also be used to determine the differences between American college students and emerging adults from around the world. Researchers should also consider the influence of religion and experiences of posttraumatic growth across religious groups.

Future researchers should also continue to develop the distinction between formal and informal help-seeking. While there has been substantial research that differentiates between the two concepts (Baker, 2007; Schreiber, Maercker, & Renneberg, 2010), there have been few comparisons of efficacy or outcomes. Help-seeking behavior can also be connected to family dynamics, and it is vital to determine how family processes and interactions facilitate or hinder help-seeking among college students.

Researchers should also differentiate between perceived and actual barriers help-seeking barriers. Are help-seeking barriers and stereotypes present in students' social environments, or do students resist seeking help because of perceived stigmas that aren't actually features of their environment? The current study suggests that survivors of physical violence may face additional barriers, so future researchers should work to understand and improve the likelihood of seeking help after physical violence or abuse.

Last, researchers should examine gender socialization and its effects on seeking psychological help. If men are, in fact, socialized to embrace their own independence and self-efficacy, they may resist seeking psychological help or disclosing emotional information. Researchers should work to enable men, as well as women, to seek help for mental health issues.

The current study provides a unique understanding and interpretation of the complicated relationships between college students' traumatic experiences, attitudes toward and behaviors surrounding psychological help-seeking, and self-reported posttraumatic growth. Despite its limitations, future researchers can use this study to understand the variables listed above and develop their own investigations. The current study fits into a larger body of research that suggests not only a complicated interaction between several variables, but an important need to help college students and treat mental health issues on college campuses around the world.

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Table 1  
*Demographic Characteristics of Participants (N = 169)*

Demographic Information	n	%
<b>Gender</b>		
Male	52	30.8
Female	115	68.0
Other	2	1.2
<b>Age</b>		
18	25	15.0
19	38	22.8
20	38	22.8
21	47	28.1
22	14	8.4
23+	5	3.0
<b>Race</b>		
White	131	78.0
Black/African American	5	3.0
Asian	15	8.9
Hispanic	6	3.6
Latino	4	2.4
Other	7	4.2
<b>Religion</b>		
Christianity	101	59.8
Islam	1	0.6
Hinduism	2	1.2
Judaism	11	6.5
Buddhism	7	4.1
No religion	42	24.9
Other	5	3.0
<b>Divorce in Family</b>		
Yes	127	75.1
No	42	24.9
<b>UConn School</b>		
Agriculture/Natural Resources	9	5.6
Business	13	8.1
Engineering	8	5.0
Liberal Arts & Sciences	96	59.6
Education	5	3.1
Nursing	4	2.5
Pharmacy	10	6.2
Exploratory Students	5	3.1
Other institution	11	6.8

Table 2  
*Frequency Distribution of Traumatic Experiences*

Traumatic Experience	Male		Female		Total	
	n	%	n	%	n	%
Death of friend/loved one	13	25.0	29	25.2	42	24.9
Injury of friend/loved one	5	9.6	8	7.0	13	7.7
Personal injury/health problem	6	11.5	11	9.6	18	10.7
Physical violence/abuse	0	0.0	5	4.3	5	3.0
Divorce/separation of parents	4	7.6	2	1.7	6	3.6
Breakup/relationship conflict	15	28.8	36	31.3	51	30.2
Relocation	2	3.8	3	2.6	5	3.0
Academic/school-related	5	9.6	17	14.8	23	13.6
Witnessing a traumatic event	2	3.8	4	3.5	6	3.6

Table 3

*Descriptive Statistics*

Measure	Minimum	Maximum	<i>M</i>	<i>SD</i>
Religiosity	0	100	39.48	31.34
Family Closeness	0	100	78.30	19.93
IES-R	1.05	4.86	2.97	.78
IES-R-I	1.00	5.00	3.21	.94
IES-R-A	1.00	5.00	2.97	.80
IES-R-H	1.00	5.00	2.63	1.02
ATSPPHS-SF	1.00	4.09	2.84	.60
BASH-B	1.09	4.09	2.48	.68
GHSQ	1.60	5.00	3.38	.64
PTGI	1.00	5.00	3.37	.70
PTGI-R	1.00	5.00	3.41	.85
PTGI-N	1.00	5.00	3.29	.88
PTGI-P	1.00	5.00	3.60	.83
PTGI-S	1.00	5.00	2.27	1.16
PTGI-A	1.00	5.00	3.85	.89
SourcesMean	0.25	2525.00	84.86	291.28

Running Head: TRAUMA, HELP-SEEKING, AND POSTTRAUMATIC GROWTH

Table 4  
*Correlations*

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Relig	-															
2. FamClose	.102	-														
3. IES-R	.088	-.076	-													
4. IES-R-I	.069	.018	.899*	-												
5. IES-R-A	.063	-.092	.808*	.555*	-											
6. IES-R-H	.096	-.144*	.877*	.730*	.556*	-										
7. ATSPPHS-SF		.072	.078	.179*	-.041	.044	-									
	-.016															
8. BASH-B	.052	-.165*	.182*	.025	.259*	.210*	-.587*	-								
9. GHSQ	.185*	.254*	.032	.092	-.042	.022	.282*	-.112	-							
10. PTGI	.043	.148	.148	.185*	.060	.123	.067	-.032	.332*	-						
11. PTGI-R	-.025	.169*	.113	.174*	.021	.080	.231*	-.154*	.352*	.860*	-					
12. PTGI-N	-.006	.057	.218*	.237*	.097	.216*	-.017	.073	.214*	.845*	.570*	-				
13. PTGI-P	-.039	.126	.040	.053	.043	.001	-.046	-.044	.167*	.777*	.543*	.625*	-			
14. PTGI-S	.444*	.076	.107	.071	.071	.134	-.039	.138	.306*	.479*	.331*	.334*	.198*	-		
15. PTGI-A	-.061	.140	.045	.093	.093	.004	-.041	-.024	.189*	.767*	.561*	.621*	.582*	.217*	-	
16. SourcesMean	-	-	-	-	-	-	-.072	.113	-	.060	.040	.038	.008	.189*	.004	-

Note. \* $p < .05$  (two-tailed)

Table 5  
*t*-Test Comparisons Between Male and Female Participants

Measure	Gender		<i>t</i>	<i>df</i>
	Male	Female		
IES-R	2.49	3.18	-5.68*	165
IES-R-I	2.68	3.47	-5.33*	165
IES-R-A	2.70	3.08	-2.88*	165
IES-R-H	1.96	2.94	-7.01*	126
ATSPPHS-SF	2.69	2.91	-2.22*	165
GHSQ	3.42	3.38	.384	165
Help-Seeking Duration	29.11	113.72	-2.21*	99
BASH-B	2.48	2.48	-0.02	134
PTGI	3.27	3.42	-1.28	160
PTGI-R	3.30	3.46	-1.09	159
PTGI-N	3.08	3.38	-2.03*	160
PTGI-P	3.54	3.63	-.742	138
PTGI-S	2.29	2.26	.168	159
PTGI-A	3.81	3.87	-.406	160

Note. \* $p < .05$  (two-tailed)

Table 6  
*t*-Test Comparisons Between Participants Who Did and Did Not Seek Psychological Help

Measure	Seeking Help		<i>t</i>	<i>df</i>
	Yes	No		
ATSPPHS-SF	2.82	2.95	-1.13	167
BASH-B	2.50	2.38	.914	164
GHSQ	3.35	3.52	-1.43	167
PTGI	3.33	3.58	-1.81	162
PTGI-R	3.37	3.58	-1.15	161
PTGI-N	3.22	3.61	-2.41*	162
PTGI-P	3.58	3.72	-.783	161
PTGI-S	2.24	2.41	-.722	161
PTGI-A	3.80	4.09	-1.60	162

Note. \* $p < .05$  (two-tailed)

Table 7  
*Analysis of Help-Seeking Attitudes and Barriers across Traumatic Experiences*

Measure	Traumatic Experiences									F
	1	2	3	4	5	6	7	8	9	
ATSPPHS-SF	2.94 (.63)	2.89 (.54)	2.72 (.57)	2.87 (.48)	2.64 (.51)	2.86 (.61)	3.05 (.31)	2.60 (.67)	3.18 (.50)	1.06
BASH-B	2.29 (.55)	2.50 (.67)	2.68 (.69)	3.40 (.89)	2.58 (.75)	2.45 (.65)	2.20 (.40)	2.67 (.78)	2.09 (.61)	2.46*

*Note.* \* $p < .05$  (two-tailed), Mean (*SD*)

Table 8  
*Analysis of Variance across Categories of Help-Seeking Likelihood*

MeasureF	Likelihood to Seek Help in the Future			
	Low	Medium	High	
IES-R	2.96 (.82)	3.07 (.66)	2.94 (.83)	.48
IES-R-I	3.09 (.96)	3.39 (.78)	3.24 (1.04)	1.50
IES-R-A	3.02 (.80)	3.06 (.77)	2.87 (.78)	.97
IES-R-H	2.69 (1.05)	2.64 (.93)	2.64 (1.06)	.04
BASH-B	2.61 (.75)	2.47 (.63)	2.36 (.65)	1.94
ATSPPHS-SF	2.65 (.72)	2.87 (.48)	3.00 (.54)	5.05*

Note. \* $p < .05$  (two-tailed), Mean (*SD*)

Table 9  
*Chi-Square Test of Deciding to Seek Help and Placement in Low, Medium, and High Future Help-Seeking Categories*

Decision to Seek Help	Likelihood to Seek Help in Future			$\chi^2$
	Low	Medium	High	
Yes	9	11	13	1.03
No	47	47	42	

*Note.* \* $p < .05$  (two-tailed)

Table 10  
*Chi-Square Test of Deciding to Seek Help among Male and Female Participants*

Decision to Seek Help	Gender		$\chi^2$
	Male	Female	
Yes	46	89	3.98
No	6	26	

*Note.* \* $p < .05$  (two-tailed)