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Childhood Trauma History and Negative Social Experiences in College

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Abstract

While there is literature documenting the association between childhood trauma and later sexual assault or interpersonal violence victimization, less is known about risk of less severe, but still negative, victimization experiences such as sexual harassment, hazing, and bullying in college. The goal of this study was to explore the association between self-reported childhood trauma (both personally experienced and witnessed) and negative social experiences in college-age adults (e.g., sexual harassment, hazing, and bullying), and the role that internalizing difficulties (i.e., depression and stress) plays in this association. A sample of 620 college-aged adults (ages 18–25) was recruited. Structural Equation Modeling (SEM) was used to investigate two models concerning direct and indirect childhood trauma experience. The models demonstrated significant positive relations between experiences of childhood trauma (both direct and indirect) and negative social experiences. Internalizing difficulties (i.e., depression and stress) mediated the relation between indirect childhood trauma and negative social experiences, but it did not significantly mediate the relation between direct childhood trauma and negative social experiences. These findings help to inform prevention efforts and have important implications for both school and community based mental health providers.

 $\textbf{Keywords} \ \ Childhood \ trauma \ history \cdot Internalizing \ difficulties \cdot Negative \ social \ experiences \cdot Bullying \cdot Hazing \cdot Sexual \ harassment \cdot College \ students \cdot Revictimization$

Trauma exposure is associated with a host of potentially negative outcomes (Gerrity and Folcarelli 2008); however, it is especially detrimental when endured during childhood (Felitti et al. 1998). While there have been studies on the long-term effects of trauma on later emotional difficulties (Choi et al. 2017) and sexual victimization and assault (Polusny and Follette 1995) later in life, there is little information about whether trauma experienced during childhood is associated with less severe, but still negative, social victimization experiences such as sexual harassment, hazing, or bullying. There is also evidence that witnessing abuse and violence can be a potentially traumatic event as well, as indirect exposure has also been linked to negative outcomes later in life (Bensley et al. 2003; Coker et al. 2000). Attachment theory would suggest that when a child does not develop a strong emotional

attachment with caregivers, that they may experience more social difficulties later in life (see Bowlby 1969, 1978). Attachment can be particularly disrupted when a child experiences abuse or neglect (Pearlman and Courtois 2005), which suggests childhood trauma experiences could be associated with social difficulties throughout life. The goal of this study was to explore the association between self-reported childhood trauma (both personally experienced and witnessed) and negative social experiences in college-age adults and the role that internalizing difficulties (i.e., depression and stress) plays in this association.

Long-Term Outcomes of Trauma

Victims of childhood trauma are at risk for experiencing health and psychological problems in adulthood. For example, adults with histories of adverse childhood experiences are more likely to have diabetes (Monnat and Chandler 2015), substance use disorders (Choi et al. 2017), heart attacks (Monnat and Chandler 2015), sleep disorders (Kajeepeta et al. 2015), and poor pregnancy outcomes (Smith et al.



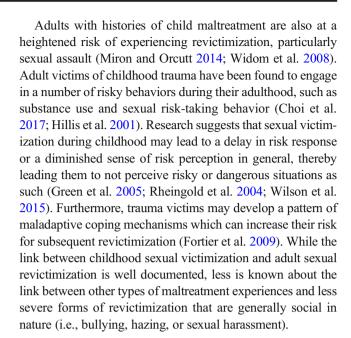
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2016) than their non-maltreated counterparts. Childhood trauma has also been linked to adult internalizing difficulties, such as depression (Choi et al. 2017; Ege et al. 2015), anxiety (Choi et al. 2017), and psychosis (Varese et al. 2012). Furthermore, adult victims of adverse childhood experiences may also engage in risky behaviors that put them in danger of experiencing additional traumas, such as risky sexual behaviors (Hillis et al. 2001), early initiation of alcohol use (Rothman et al. 2008), and suicide attempts (Dube et al. 2001). These outcomes may be even more detrimental for maltreatment victims in particular, as the interpersonal and abusive nature of maltreatment can lead to complex traumatization, thereby inducing a number of lasting affective, cognitive, social, and relational issues in addition to health and psychological problems (Cook et al. 2005; van der Kolk et al. 2005).

Indirect exposure to trauma such as witnessing violence can lead to outcomes that are similar to direct experiences of trauma (Zimmerman and Posick 2016). For example, in Zimmerman and Posick's 2016 study, indirect and direct experiences of violence were found to be statistically equal in their prediction of substance use, violent crime offenses, and suicidal behavior. Furthermore, a higher number of cumulative exposures to violent events are associated with more socio-behavioral problems (Zimmerman and Posick 2016) and problematic externalizing behaviors (Fleckman et al. 2016). Witnessing violence during childhood has also been linked with psychological distress in adulthood (Diamond and Muller 2004; Henning et al. 1997). These indirect events may also inappropriately promote the use of violence as a coping mechanism (Buka et al. 2001) or means for conflict resolution (Jaffe et al. 1986). The severity of symptoms associated with indirect trauma may depend on the child's proximity to the event. That is, researchers suggest that events that are considered threatening to the child, their parents, or other close individuals are more damaging than experiences perceived as distant (Pine and Cohen 2002; Pine et al. 2005).

Indirect trauma exposure in childhood has been linked to later victimization as well. One study found that women whose fathers were physically abusive to their mothers during their childhood were at a three times greater risk for experiencing physical abuse, and a four times greater risk for experiencing both physical and sexual abuse by their partners as adults (Coker et al. 2000). Bensley et al. (2003) reported similar findings. In their study, women exposed to any type of childhood family violence were at an increased risk of experiencing intimate partner emotional abuse and frequent mental distress. Further, women who specifically reported having witnessed violence between their parents as a child were at a four to sixfold increase in risk of experiencing physical intimate partner violence as an adult (Bensley et al. 2003). These experiences may teach children that violence in relationships is normal, thereby increasing their risk of victimization in later years (Coker et al. 2000).



Sexual Harassment

While childhood trauma has been linked to revictimization in the form of sexual assault and rape later in life (Cantor et al. 2015), what is less known is the link between childhood trauma and later incidents of sexual harassment as a form of social victimization. Sexual harassment can include verbal and physical acts, including unwanted touching, sexually suggestive or offensive jokes, pressure to engage in sexual behavior, and unsolicited sexual pictures (RAINN, n.d.). Sexual harassment has been shown to have negative impacts on the emotional and physical well-being of the victims, such as fear, anger, anxiety, depression, sleeping problems, difficulties with concentration, and increased substance use (Wolff et al. 2017). While immediate effects of sexual harassment and other forms of sexually violent behavior have a primary impact on the personal lives of the victims, the long-term, secondary effects can be just as deleterious. People experiencing sexual harassment are at risk for these symptoms having a negative impact on their professional and educational productivity (Wolff et al. 2017).

Hazing

Hazing is a unique form of social victimization that is defined as "any activity expected of someone joining or participating in a group that humiliates, degrades, abuses, or endangers, regardless of a person's willingness to participate" (Hoover 1999). Hazing can include being pressured to drink large amounts of alcohol, sleep deprivation, being yelled or cursed at, being humiliated, wearing embarrassing clothing, and



physical and/or sexual abuse (Allan et al. 2019; Allan and Madden 2008; Hoover 1999). The justifications reported for hazing (across team sports, Greek-letter organizations, military, and other groups) include increasing team cohesion (Allan et al. 2019; Keating et al. 2005; Waldron 2015), communicating or establishing group hierarchy (Allan et al. 2019; Keating et al. 2005; Waldron 2015), and creating an environment in which the individuals are more likely to adopt the group identity (i.e., team identity, fraternity/sorority identity, military identity; Allan et al. 2019; Keating et al. 2005; Waldron 2015). However, hazing literature shows that these justifications are often flawed and results of research in these areas are counter to what is believed by those engaging in these acts. Hazing has been found to be associated with anger and depression (Kim et al. 2019), less team cohesion amongst individuals within groups (e.g., Greek-letter orgs, military, sport teams; Van Raalte et al. 2007), social isolation (Allan et al. 2019), and suicidal ideation (Kim et al. 2019). Similar symptoms of internalizing difficulties are seen in hazing that are seen in abuse (childhood and adult; Choi et al. 2017), sexual victimization (assault and harassment; Wolff et al. 2017), and bullying (Kelly et al. 2015).

One of the unique aspects of hazing is the difference in perspective of those who report having been involved in incidents that fall under the definition of hazing, but do not selfreport having been hazed (Allan et al. 2019). In Allan et al.'s 2019 investigation of attitudes and beliefs about hazing behaviors, 26% of participants reported experiencing at least one involvement that met the criteria for hazing. However, only 4.4% of the total number of participants directly reported having been hazed at least once. This disparity in the victim's interpretation of the experience versus the objective definition of hazing is one possible reason participants in the same investigation were divided on whether or not they thought hazing was a problem on their campus (Allan et al. 2019). Hazing has traditionally been thought of as occurring within Greeklife organizations (fraternities and sororities) on college campuses, but has also been documented within collegiate sports teams (varsity, club, and intramural), performing arts groups (e.g., marching band), and professional student organizations (Allan et al. 2019; Allan and Madden 2008).

Bullying

The majority of research on bullying has focused on its impact among school-age populations prior to college, though there have been some investigations of bullying occurring in college (e.g., Holt et al. 2014; Rospenda et al. 2013). Bullying is physical, verbal, or relational aggression that is repeated, intended to be harmful, and inflicted by a more powerful person on a less powerful person (Gladden et al. 2014). Lund and Ross (2017) conducted a review of the literature regarding

college bullying and reported that across 14 studies, 20–25% of students were bullied in college, and additional 10-15% experienced cyberbullying. There is also research to suggest that experiencing bullying in college puts individuals at an increased risk for alcohol consumptions and problematic drinking behavior (Rospenda et al. 2013). While research concerning the impact of bullying on college students is limited, there is a rich body of literature documenting the internalizing difficulties that can result from being the victim of bullying during childhood and adolescence (e.g., Hawker and Boulton 2000; Kelly et al. 2015). Kelly et al. (2015) found that symptoms of depression and anxiety were strongly associated with bullying victimization among adolescents. Peer victimization has also been linked to emotional problems, conduct problems, and hyperactivity (Ranjith et al. 2019; Rasalingam et al. 2017). Further research suggests that bullying during adolescence is related to negative mental and physical health symptoms during early adulthood (Brendgen et al. 2019). These findings suggest that the negative ramifications associated with bullying victimization are varied, complex, and have the potential to impact victim's functioning across the longterm, similar to other childhood traumatic experiences.

The Current Study

The literature is equivocal that both personally experiencing and witnessing childhood trauma is associated with a wide variety of affective and social issues later in life, including extreme consequences such as an increased risk of revictimization like sexual assault (Polusny and Follette 1995). There is a dearth in the literature about whether childhood trauma could be associated with less severe, but still detrimental, forms of revictimization in adulthood such as sexual harassment, hazing, and bullying. From an attachment theory perspective (i.e., Bowlby 1969, 1978), early relational difficulties with caregivers can disrupt social relationships in the long run, so it is reasonable to hypothesize that child victims of trauma are not only at risk for physical or sexual forms of revictimization in adulthood, but also forms that are less severe, yet social in nature. Early adulthood is a time of increased freedom from parents, changing and growing social networks, and more participation in social events that are not supervised by an authority figure (Pritchard et al. 2007), which may lead to social experiences rich with opportunities for negative interactions.

The goal of this study was to explore relations among childhood interpersonal trauma, internalizing difficulties, and negative social experiences. To explore these relations, the following research questions and hypotheses were posed: Research Question 1: Is experiencing childhood trauma positively associated with negative social experiences in young adults (i.e., sexual harassment, hazing, and bullying)? We



hypothesize that childhood trauma will be positively associated with negative social experiences in young adults (Fortier et al. 2009; Miron and Orcutt 2014; Widom et al. 2008). Research Question 2: Is witnessed childhood trauma positively associated with negative social experiences in young adults (i.e., sexual harassment, hazing, and bullying)? We hypothesize that witnessed childhood trauma will be positively associated with negative social experiences in young adults (Bensley et al. 2003; Coker et al. 2000; Zimmerman and Posick 2016). Research Question 3: Do internalizing difficulties (i.e., depression and stress) explain the association between personal childhood trauma and negative social experiences in college? We hypothesize that internalizing difficulties will explain the association between personal childhood trauma and negative social experiences in college (Choi et al. 2017; Ege et al. 2015; Varese et al. 2012). Research Question 4: Do internalizing difficulties (i.e., depression and stress) explain the association between witnessed childhood trauma and negative social experiences in college? We hypothesize that internalizing difficulties will explain the association between witnessed childhood trauma and negative social experiences in college (Diamond and Muller 2004; Henning et al. 1997).

Methods

Participants

The sample for the current study included 620 college-aged adults (ages 18–25) with 66.2% of the sample enrolled in college at the time of participation. Approximately 90% of the sample had had more than one year of college experience at the time of participation. A small portion (3%) of the sample were international students living in the U.S. and 35.3% were first-generation college students. Participants reported their gender identity, sexual orientation, and race which is presented in Table 1.

Measures

Childhood Trauma History The Trauma Experience Questionnaire (TEQ; Blankenship 2018) was adapted for the purpose of this project. Its development was inspired by examining other frequently used trauma questionnaires such as the Trauma History Questionnaire (THQ; Green 1996) and Life Events Checklist for DSM-5 (LEC-5; Weathers et al. 2013), as well as the addition of items that covered childhood trauma specifically. The TEQ consists of a total of 27 items that measure exposure to six childhood-specific potentially traumatic events before the age of 18 (i.e., physical abuse, witnessing domestic violence, sexual abuse by a caregiver, sexual abuse by a stranger, emotional abuse, and neglect), as well as 21 lifetime trauma events that including interpersonal



	N	%
Age		
18	13	2.1
19	23	3.6
20	43	6.8
21	95	15.0
22	125	19.7
23+	321	50.6
Gender Identity		
Female	397	62.6
Male	194	30.6
Transgender Female	6	0.9
Transgender Male	6	0.9
Gender variant/Non-Conforming	14	2.2
Prefer not to say	1	0.2
Other	2	0.3
Sexual Orientation		
Heterosexual	440	69.4
Gay or Lesbian	37	5.8
Bisexual	103	16.2
Not sure	13	2.1
Prefer not to say	4	0.6
Other	23	3.6
Race		
Native American or Alaska native	15	2.4
Asian	39	6.2
Black or African American	63	9.9
Hispanic/Latino	30	4.7
Native Hawaiian/Pacific Islander	2	0.3
White	414	65.3
Multi-racial/Biracial	50	7.9
Other	2	0.3
Prefer not to say	4	0.6

assaultive events (e.g., events caused by a human that was physically violent, such as assault or domestic violence), interpersonal non-assaultive, (e.g., events caused by a human but were not physically violent, such as neglect or emotional abuse), and non-interpersonal events (e.g., events not involving human relationships, such as natural disasters or car accidents). Only the six childhood trauma questions were used in the current investigation. Participants provide two ratings for the childhood trauma items. First, they rate the frequency of how many times they personally experienced each event ranging from 0 (never happened to me directly one) to 3 (happened to me directly 4 or more times). Possible childhood trauma scores could range from 0 to 18. Then participants could also endorse that they witnessed the events. Cronbach's alpha in the current study was .746 for the childhood items.



Internalizing Difficulties The Depression, Anxiety, and Stress Scale (DASS; Henry and Crawford 2005) was used to measure internalizing difficulties experienced within the past week. It consists of 21 items that are rated on a 4-point scale ranging from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). Items assess depression (e.g., "I felt I had nothing to look forward to"), anxiety (e.g., "I felt that I was using a lot of nervous energy", not used in current study), and stress (e.g., "I found it hard to wind down"). Possible scores on the DASS can range from 0 to 54. In published studies, Cronbach's alphas on the subscales have ranged from .92 to .96 (Page et al. 2007) and in the current sample it was .956.

Sexual Harassment The American Association of University Women (AAUW 2001) sexual harassment survey is a 14-item survey designed to measure the frequency of sexual harassment victimization and perpetration. Perpetration items were not used in the current study. Participants are asked to indicate how often they experienced a range of sexually harassing behaviors (e.g., shown sexual pictures, touched, grabbed, or pinched in a sexual way) on a scale ranging from 0 (*Never*) to 4 (*Often*). Possible scores could range from 0 to 56. Cronbach's alpha in published research is .90 (Espelage and Holt 2006) and in the current study Cronbach's alpha was .919.

Bullying Victimization The Illinois Bully Scale (Espelage and Holt 2001) is an 18-item survey measuring the frequency of bullying perpetration, bullying victimization, and fighting in the last 30 days. Only the four victimization items were used in the current investigation to measure bullying victimization experiences in college (e.g., "other students made fun of me"). Items are rated on a 5-point scale ranging from 0 (*never*) to 4 (7 or more times). Ratings are summed to create a Victim subscale raw score, which can range from 0 to 16. Cronbach's alpha is .88 (Espelage and Holt 2001) and in the current study Cronbach's alpha is .933.

Hazing Hazing was measured via a list of 21 activities or events that college students may experience as part of initiation activities in groups or teams, which was originally used in the 1999 national survey of hazing and initiation in universities conducted by Hoover. One adaptation was made to the original Hoover survey. Rather than presenting each event or activity as a Yes/No question, respondents chose between four response options ranging from 0 (did not happen to me) to 3 (happened to me directly 4 or more times). Hoover categorized the activities into one of four categories: Acceptable (i.e., doing community service, requiring a certain grade point average), Questionable (i.e., being pressured to eat something you did not want to eat, carrying around unnecessary objects or items), Unacceptable (i.e., being tied up, taped, or confined to a small space, being kidnapped or transported and

abandoned), and Alcohol-related (i.e., forced to participate in a drinking game). Responses from the Questionable, Unacceptable, and Alcohol-related items were summed, ranging from 0 to 36, and the raw score was used in analyses. The six Acceptable items were not included in the total score since these were not negative experiences that could victimize the participant. Cronbach's alpha for the current study was .881.

Procedure

College-age adults (age 18 to 25) were recruited primarily via the crowdsourcing platform Amazon Mechanical Turk (mTurk; www.MTurk.com). Filters within mTurk were used so that the study was only visible to mTurk participants that met the age criteria and lived in the United States. Participants recruited through mTurk were compensated \$1.50. The link to the survey was also shared via social media platforms such as Facebook accounts of targeted student organizations. Data for the current study were collected as part of a larger project focused on trauma and college social experiences. Consent to participant was collected electronically at the beginning of the survey and participants completed all rating scales via Qualtrics in an average of 14 min. The survey order was randomly counterbalanced for all participants. All responses were anonymous.

Data Analysis Plan

In this study, Structural Equation Modeling (SEM) was used to investigate the relations among childhood trauma, internalizing difficulties, and negative social experiences in college. These three variables were latent variables. For childhood trauma, there were two conditions: personal trauma history and witness trauma history. The personal trauma history included six items from TEQ, and the witness trauma history contained six items from TEQ. Furthermore, internalizing difficulties included depression and stress. Research suggests that post-traumatic stress is a predictor of revictimization and maladaptive coping mechanisms, particularly risky sexual behavior and substance use (Filipas and Ullman 2006; Messman-Moore et al. 2009), among adults with childhood trauma histories. Thus, when the anxiety and stress variables were found to be highly correlated, stress was retained and anxiety was excluded from analyses to prevent multicollinearity. Negative social experiences contained hazing, sexual harassment, and victimization.

We investigated the relation among the personal trauma history, internalizing difficulties, and negative social experiences. Also, we investigated the relation among the witness trauma history, internalizing difficulties, and negative social experiences. Thus, in total, we had two models: Model 1: Personal trauma history would influence the negative social experiences through internalizing difficulties. Model 2:



Witness trauma history would influence the negative social experiences through internalizing difficulties. All analyses were performed in *Mplus*.

Results

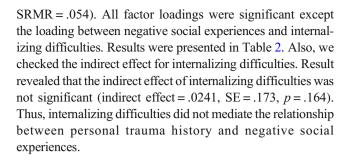
There were 8% missing values under the personal trauma history condition, and 11% missing values under the witness trauma history condition. A full information maximum likelihood method was used to handle those missing data. As to the SEM analysis, we followed the Anderson and Gerbing (1988) 2-step procedure to evaluate a full structural equation (SR) model for all models. According to Anderson and Gerbing (1988), firstly, a measurement model associated with the full SR model was checked, and then a full structure model was estimated. Due to missing data, the robust maximum likelihood (MLR) estimation was used to estimate all SEM models. In addition, the mediating effect (indirect effect) for mediators was checked for six models.

Model 1

In Model 1, we investigated whether internalizing difficulties would mediate the relationship between the personal trauma history and negative social experiences. The measurement model associated with the full SR model was first checked and then the full SR model was checked.

The Measurement Model Associated with the Full SR Model Because the chi-square test was easily influenced by the sample size, data distribution, and model complexity, we focused on global fit indices in this study, that is, root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker-Lewis Index (TLI), and standardized root mean square residual (SRMR). Guidelines suggest that models may be considered to have adequate fit if CFI values are greater than .90, SRMR values below .05, TLI values close to 1, and RMSEA values should not exceed .10, with values between .05 and .08 indicating adequate fit and values between .08 and .10 suggesting mediocre fit (Hooper et al. 2008). Goodness-fit indices were presented in Table 1. Fit statistics values for the measurement model revealed that this measurement model was acceptable (RMSEA = .053, CFI = .930, TLI = .904 and SRMR = .054). All factor loadings were significant (results were shown in Table 2), so we could move to the next step to test the full SR model.

The Full SR Model The second step of Anderson and Gerbing (1988) procedure was to estimate the full structural model. Results of goodness-fit indices were shown in Table 1. Goodness-fit indices for the full structural model was also acceptable (RMSEA = .053, CFI = .930, TLI = .904 and



Model 2

In Model 2, we investigated whether internalizing difficulties would mediate the relationship between the witness trauma history and negative social experiences.

The Measurement Model Associated with the Full SR Model From Table 2, we conclude that the measurement model for Model 2 adequately fit the data (RMSEA = .019, CFI = .985, TLI = .980 and SRMR = .046). Table 2 shows that all factor loadings were significant.

The Full SR Model Table 2 also shows that the full SR model for Model 2 adequately fit the data (RMSEA = .019, CFI = .985, TLI = .980, and SRMR = .046). Table 2 shows that coefficients for the causal path were significant, except the witness trauma history to negative social experiences, indicating the witness trauma history is related to internalizing difficulties, but not negative social experiences. Internalizing difficulties will influence negative social experiences. Although the coefficient for the witness trauma history and negative social experiences path was not significant, we still could investigate the indirect effect of internalizing difficulties. Results of the indirect effect test revealed that there was an indirect effect from the witness trauma history to negative social experiences via internalizing difficulties, indicating internalizing difficulties could mediate the relationship between the witness trauma history to negative social experiences (indirect effect = .991, SE = .404, p < .05).

Discussion

The goal of this study was to investigate the relations between childhood interpersonal trauma (e.g., physical, emotional, or sexual abuse, neglect, or witnessing domestic violence), internalizing difficulties (i.e., depression and stress), and negative social experiences (i.e., hazing, sexual harassment, and bullying/victimization). To this end, we explored the research questions of whether 1) personal childhood trauma was positively associated with negative social experiences in young adults; 2) whether witnessing childhood trauma was positively associated with negative social experiences in college, 3) whether



 Table 2
 Results for Model 1 and 2

Parameter Estimate	Standardized	SE	p value
Model			
Measurement Model			
Physical Abuse	.492	.50	<.001
Witness Domestic Violence	.671	.057	<.001
Sexual Abuse by Caregiver	.560	.059	<.001
Sexual Abuse by Stranger	.479	.079	<.001
Emotional Abuse	.510	.056	<.001
Severe Neglect	.669	.054	<.001
Depression	.848	.047	<.001
Stress	.902	.049	<.001
Hazing	.577	.055	<.001
Sexual Harassment	.693	.064	<.001
Bullying Victimization	.463	.069	<.001
Full Structural model			
Personal Trauma History to Internalizing Difficulties	.319	.054	<.001
Personal Trauma History to Negative Social Experiences	.425	.100	<.001
Internalizing Difficulties to Negative Social Experiences	.094	.070	.181
Indirect effect via Internalizing Difficulties	.030	.022	.175
Model 2			
Measurement model			
Physical Abuse	.671	.054	<.001
Witness Domestic Violence	.629	.062	<.001
Sexual Abuse by Caregiver	.349	.073	<.001
Sexual Abuse by Stranger	.347	.083	<.001
Emotional Abuse	.785	.048	<.001
Severe Neglect	.532	.066	<.001
Depression	.821	.058	<.001
Stress	.932	.061	<.001
Hazing	.571	.063	<.001
Sexual Harassment	.707	.068	<.001
Bullying Victimization	.455	.071	<.001
Full Structural model			
Witness Trauma History to Internalizing Difficulties	.256	.055	<.001
Witness Trauma History to Negative Social Experiences	.118	.071	.098
Internalizing Difficulties to Negative Social Experiences	.191	.066	<.05
Indirect effect via Internalizing Difficulties	.991	.404	.014

internalizing difficulties mediated the associations between personal childhood trauma and negative social experiences in college, and 4) whether internalizing difficulties mediated the association between witnessed childhood trauma and negative social experiences in college.

Personal Trauma History and Negative Social Experiences

The first model we investigated addressed our first and third research questions. Our hypothesis that trauma would have a significant, positive relationship with negative social experiences was correct; a significant positive association exists between personal trauma history and negative social experiences in college. These results provide further evidence for the idea that childhood traumatic experiences increase the risk for future revictimization, particularly among victims of sexual abuse (Miron and Orcutt 2014; Widom et al. 2008), and extends it to less severe forms of victimization experienced in college (i.e., hazing, sexual harassment, and bullying). For example, it has been shown that within hazing culture, individuals are more likely to engage in hazing or agree to being

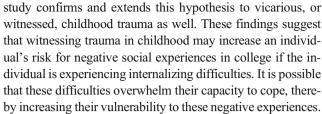


hazed when there are strong team norms for hazing already in place (Waldron 2015). It has hypothesized that the adoption of team norms and values as individual norms and values increases the likelihood of involvement in future hazing experiences (Waldron 2015). According to a national survey done by Allan and Madden (2008), 47% of high school students come to college with at least some hazing experiences; potentially increasing the likelihood they will participate in hazing activities in college if the hazing culture is familiar to them.

Our second hypothesis that internalizing difficulties would act as a mediator for the relationship between trauma history and negative social experiences was partially incorrect. Within Model 1, the indirect pathway in which internalizing difficulties acts as a mediator for personal trauma history and negative social experiences was insignificant. Thus, internalizing difficulties do not adequately explain how personal traumatic experiences as a child impacts future, negative social victimizations. There are possible explanations for this. First, there is a body of literature that identifies maladaptive coping strategies, including risky sexual behavior and substance use, as primary factors in predicting revictimization (Filipas and Ullman 2006; Messman-Moore et al. 2009; Testa et al. 2010). Other studies have identified gender differences in overall emotional reactivity to stress (Ge et al. 1994; Hankin et al. 2007) as well as mental health symptoms amongst children exposed to violence (Zona and Milan 2011), suggesting that there are gender-specific pathways to trauma-related psychopathology that may not be represented in our model. A lack of consideration for these variables might explain the insignificant role of internalizing difficulties in this model.

Witness Trauma History and Negative Social Experiences

The second model we investigated addressed our second and fourth research questions. Whereas personal trauma history shared a significant, positive relationship with negative social experiences in college in Model 1, witnessed trauma history as a child did not share any significant, direct relationships with negative social experiences in college. However, witnessed trauma history's relationship with negative social experiences was explained through the indirect pathway of internalizing difficulties. While internalizing difficulties was not an adequate mediator for the pathway in Model 1, Model 2 showed that an individual's difficulty with internalizing symptoms that accompany witnessed traumatic events in childhood (i.e., depression, anxiety, and stress), at least partially explains the increased risk of having negative social experiences in college compared to those who have not had the same childhood experiences. Using the attachment theory perspective (i.e., Bowlby 1969, 1978), we hypothesized that child victims of trauma were also at risk of less severe, and more social, forms of revictimization in adulthood. The evidence of this



One suggestion for why internalizing difficulties explained the second model's (witnessed trauma experiences) indirect pathway but not the first model's (personal trauma experiences) is a difference in outcome variables. For those who have had past personal trauma history, 'negative social experiences' in college may not be the type of revictimization individuals are experiencing. The literature shows that children who suffer traumas and abuse in childhood are at greater risk for reexperiencing similar victimization later in life, particularly sexual victimization (Miron and Orcutt 2014; Widom et al. 2008). Furthermore, research shows that the risk for developing PTSD symptomology is greater for those who have direct trauma exposure compared to those who witnessed trauma (indirect; May and Wisco 2016). Therefore, students with personal trauma history may be experiencing more severe forms of victimization through the 'internalizing difficulties' mediation pathway than the defined "negative social experiences" in college (i.e., hazing, sexual harassment, and bullying) used in this study.

Limitations

This study is limited by its reliance on self-report measures, which may be biased based on respondents' under- or over-reporting of experiences and/or associated symptoms (Hardt and Rutter 2004). Additionally, it is possible that cognitive (i.e., memory) factors may play a role in respondents' recollection, perception, and recall of their childhood experiences, due to mood-congruent recall biases or general memory deficits resulting from psychopathology (Brewin et al. 1993). Due to this project's use of retrospective reports of trauma, there may be unintentional error or biases in responses (Hardt and Rutter 2004). Further, the current sample was limited to college-age adults (i.e., 18–25 years of age), therefore the current findings may not be generalizable to broader populations.

Implications and Future Directions

Understanding the link between a student's childhood trauma and the negative social experiences they might be facing in college can inform prevention and treatment efforts of university counseling and health education centers. For many students in college, it is the first time that they have had control over their own physical and mental health decisions; including seeking treatment. Providing targeted mental health



education, based on quality research, on internalizing difficulties and past trauma linkage can provide an opportunity for students to make informed decisions about potential treatment. For practitioners, greater theoretical understanding of how their client's personal background is related to the difficulties they face as an adult may improve establishing the therapeutic relationship and planning evidence-based treatments. Lastly, informing practitioners with knowledge about the differences listed between students who have experienced personal compared to witnessed trauma provides greater sensitivity in conceptualization and treatment planning.

Additional research is warranted to isolate the factors at play in the relations between childhood trauma, internalizing difficulties, hazing, sexual harassment, and bullying victimization. For example, models including current relationship violence, coping, externalizing problems, and social support may provide additional insight into revictimization patterns. Further studies may also investigate whether the revictimization risk associated with trauma exposure in childhood depends on the type (direct and indirect) and frequency (one time or reoccurring) of trauma or age at which the victims were exposed to such events.

Compliance with Ethical Standards

Disclosure of Interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

Ethical Standards and Informed Consent All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation at Florida State University and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all patients for being included in the study.

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