Journal of Effective Teaching in Higher Education

Creating Trauma-Informed Higher Education Classrooms: Exploring Undergraduate and Graduate Student Perceptions

Tommy Wells, Bellarmine University, twells@bellarmine.edu

Abstract. Colleges and universities may desire to become more trauma-informed in light of our growing understanding of the impact that trauma can have on student outcomes. However, there has been little research on what strategies and practices colleges and universities should implement to become more trauma-informed. One approach to this work could be to start in the college classroom to determine which trauma-informed strategies and practices are most beneficial to students with an understanding that undergraduate and graduate students may have different needs. In this study, I surveyed 60 School of Education students, including both undergraduate and graduate students, to evaluate their perceptions of the importance of specific trauma-informed strategies and practices in the classroom, as well as their perceptions of how trauma-informed the host university is overall. Both undergraduate and graduate students believed the host university is moderately trauma-informed. However, there was a perceived significant difference between undergraduate and graduate students as to how important specific trauma-informed classroom strategies and practices were. I discuss the importance of faculty reflecting on various trauma-informed strategies and practices they could implement in the classroom.

Keywords: trauma-informed practices; classroom environment; student perspectives

The COVID-19 pandemic has highlighted the need to develop trauma-informed environments and offer specific trauma-informed services in higher education (Carello & Thompson, 2021). Exploring the need for trauma-informed colleges and universities is important, as research indicates that between 66% to 85% of children and adolescents have been exposed to a traumatic event before they reach college age (Frazier et al., 2009; Read et al., 2011; Smyth et al., 2008), and students who have been impacted by trauma are more likely to have difficulty adjusting to college (Banyard & Cantor, 2004). Trauma and other adversities also increase the risk that college students may develop posttraumatic stress disorder (PTSD), depression, substance use disorders, among others (Anders et al., 2012; Copeland et al., 2007; Read et al., 2011; Turner & Butler, 2003). Moreover, as much as 50% of students are exposed to a traumatic event in their first year of college (Galatzer-Levy et al., 2012). Trauma exposure can impact students in different areas of their college experience, including retention and academic performance, which is related to their experiences in the college classroom.

College students exposed to trauma face a higher likelihood of experiencing academic failure, which can impact retention (Boyraz et al., 2013; Duncan, 2000; Harrison et al., 2020). A correlation between college persistence and PTSD symptomatology has been demonstrated (Boyraz et al., 2013). For example, Boyraz et al. (2013) studied first semester African American students who were

exposed to trauma and how PTSD symptomatology affected retention rates into their second year. Notable differences were also observed by gender in that academic achievement and persistence were not affected in men, but women with higher levels of PTSD symptomatology had a higher dropout rate. Boyraz et al. (2016) also found that the prevalence of PTSD among participants who were exposed to trauma was 12.4%. Because of the various effects that trauma can have on college students, it is important to understand how colleges and universities support them.

Historically, higher education has taken a reactive approach in responding to trauma (New England Board of Higher Education [NEJHE], 2020). If a college student exposed to trauma needed support, services were provided individually to that student. Student services commonly recommended included mental health services and counseling. In this approach, services are reactive and provided after a problem is indicated. In considering how K-12 schools have become more proactive and systematic in their approach to supporting students who have experienced trauma (Avery et al., 2021), colleges and universities could consider how their responses could also become more proactive. Establishing trauma-informed campuses with support services is important, but an even greater shift could occur when the college classroom becomes trauma-informed as well. As Gross states, "Higher education professors need to learn about trauma, its symptomology and its impact on current and prospective students. Then, they need to change what they are doing with their students in and out of class" (NEJHE, 2020, para. 19). Before further exploring how colleges and universities can become more trauma-informed, it is important to offer conceptualizations of trauma and trauma-informed care.

Conceptualizing Trauma

Although the impact of trauma on college students has been discussed, it is critical to offer a definition of trauma. For example, the Substance Abuse and Mental Health Services Administration (2014) holds the following definition of trauma:

> trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being. Substance Abuse and Mental Health Services Administration [SAMHSA], 2014, p. 7

Additionally, according to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, Text Revision (DSM-5-TR), trauma is defined in the context of post-traumatic stress disorder, and PTSD occurs when an individual has "exposure to actual or threatened death, serious injury, or sexual violence" (American Psychiatric Association [APA], 2022, p. 302). These competing definitions of how narrow or expansive to make the definition of trauma help to highlight how there is no single understanding of trauma and its impact. Consequently, approaches to addressing trauma and creating trauma-informed environments also vary.

Trauma-informed Care and Higher Education

Trauma-informed care can be defined as approach that "recognizes the intersection of trauma with many health and social problems for which people seek services and treatment, aiming to sensitively address trauma along with an individual's issues" (Bowen & Murshid, 2016, p. 223). Trauma-informed care is also grounded in six core principles outlined by the Substance Abuse and Mental Health Services Administration (2014):

1. Safety (e.g., Students need to feel safe, and they use their schema to determine who is safe. They also determine if the location they are in is not safe.)
2. Trustworthiness & Transparency (e.g., Educators need to "make a conscious effort to form a relationship with each child as a precursor to teaching and learning" (Erdman & Colker, 2020, p. 87).
3. Peer Support (e.g., Peer support and mutual self-help are key vehicles for establishing safety and hope, building trust, enhancing collaboration, and utilizing their stories and lived experiences to promote recovery and healing" (Substance Abuse and Mental Health Services Administration, 2014, p. 11).
4. Collaboration & Mutuality (e.g., All members of a school community play a key role in helping children with trauma heal. Relationships are likely the most important factor in whether a child impacted with trauma can overcome the trauma and thrive.)
5. Empowerment & Choice (e.g., Each intervention should be chosen because it is uniquely suited for that student)
6. Cultural, Historical & Gender Issues (e.g., Educators should "seek to understand and apply knowledge of cultural, historical, and gender issues in interactions with children and families, be culturally responsive in policies and classroom choices" (Erdman & Colker, 2020, p. 88).

Despite an anchoring in six core principles, there is not an agreement on the use or clear operationalization of the terms "trauma-informed approach," "trauma sensitive," or "trauma-informed system" (Hanson & Lang, 2016; Maynard et al., 2017). Different systems of care, such as education, may have applied the six core principles of trauma-informed care (Substance Abuse and Mental Health Services Administration, 2014) in varying ways. For example, the National Child Traumatic Stress Network, Schools Committee (2017) operationalizes trauma-informed practices in K-12 settings as a place that "promotes a safe and welcoming climate; seeks to create a structured and predictable learning environment that minimizes unnecessary trauma and loss reminders; focuses on building positive and attuned relationships between teachers and students, and among school staff" (p. 4). Despite varying approaches to trauma-informed practices in K-12 schools (Thomas et al., 2019), fewer resources and frameworks are available in higher education settings. However, Davidson (2017) offers that colleges and universities can also be

systems of care and describes how creating trauma-informed higher education institutions requires "the entire campus community—faculty members, administrators, staff members, counselors, and clinicians—to deepen its shared understanding of trauma's impacts on learning and agree to a campuswide approach," to promote "the physical, social, emotional, and academic safety of every student" (p. 14).

Specifically, college and university faculty can take steps to ensure success for all learners within the classroom setting (Davidson, 2017), as "the foundation for effective trauma-informed classroom practice is the educator's grasp of how trauma impacts students' behavior, development, relationships, and survival strategies" (p. 17). In a review of work by Carello and Butler (2014), Downey (2013), Health Federation of Philadelphia (2010), Wolpow et al. (2009), and Hoch et al. (2015), Davidson (2017) offers one of the first available specific set of trauma-informed strategies and practices that faculty could implement in the classroom, which include checking in with students, preparing for significant anniversaries, being sensitive to family structures, identifying mentors and other support systems, expressing unconditional positive regard, maintaining high expectations, and maintaining appropriate boundaries, among others. Additionally, Knight (2015) emphasizes on how educators should neither ignore nor dwell on students' past trauma and instead validate and normalize students' experiences, help students to recognize how their past influences the present, and empower students.

Researchers have studied trauma-informed practices from the lens of K-12 students (e.g., Acevedo & Hernandez-Wolfe, 2014; Anderson et al., 2015; Berger et al., 2007; Ijadi-Maghsoodi et al., 2017; West et al., 2014). These studies highlighted students' voice through both focus groups and/or employing students as participant-researchers. Therefore, to better support college students, it is imperative that the body of knowledge developed to help K-12 students impacted by trauma extend to colleges and universities, particularly through learning from college students' perspectives on establishing and maintaining trauma-informed environments. To explore trauma-informed practices in higher education classrooms, this study seeks to understand college students' perspectives on trauma-informed practices, including an expansion of trauma-informed practices or strategies that faculty could implement in the classroom.

Present Study

Student perspectives on trauma-informed practices and strategies can help college and university faculty, staff, and administrators better understand how to support all students who may have been impacted by trauma. Student perspectives are helpful in identifying the extent to which students believe that their higher education institution is trauma-informed and can indicate how faculty, staff, and administrators could evolve in their support. This study takes a specific focus on the nature of the college classroom and how faculty could create more trauma-informed environments for both undergraduate and graduate students. Therefore, the following research questions are addressed in this study: What are college students' beliefs on how to create a trauma-informed classroom environment? To what extent

does undergraduate or graduate status impact perceptions of trauma-informed support?

Because of the void in the extant literature on perceptions of trauma-informed colleges and universities between undergraduate and graduate students, I hypothesize the following:

H1: Undergraduate and graduate students will hold similar perceptions and beliefs of what encompasses a trauma-informed classroom environment.
H2: Undergraduate and graduate students will hold similar perceptions and beliefs of how trauma-informed the host institution is.

Methods

A cross-sectional survey design was employed because this is a descriptive study aimed to examine college students' perceptions and beliefs of trauma-informed practices at one point in time (Creswell & Guetterman, 2019).

Measure

Participants completed the *Student Perspectives on Creating Trauma-Informed Classrooms* survey that was designed for this study based on processes outlined in Fowler (2014) because there was not an existing survey that addressed trauma-informed practices and strategies in higher education settings. I began by conducting a review of the extant literature of trauma-informed practices in higher education. Then, I held a focus group with six current students enrolled in the School of Education at the host university, one faculty member in the School of Education at the host university, and one student services staff member at the host university who have all previously learned about trauma-informed care and/or trauma-informed practices in K-12 settings to generate a comprehensive list of trauma-informed classroom strategies or practices for the college classroom. Based on feedback from the focus group, I drafted initial survey items followed by a field pretest with the eight members of the focus group to check for content and face validity. Survey items were then revised or removed for clarity.

The final survey included 20 items on a Likert type scale and four demographic items. Fourteen of the 20 Likert type scale items comprised the variable of Trauma-informed Strategies or Practices in which participants rated the importance of each potential strategy or practice for in-person classroom environments. The remaining six of the 20 Likert type scale items comprised the variable of Aspects of Campus in which participants rated the extent of how trauma-informed the host university is. Demographic items included year in college (i.e., first-year, sophomore, junior, senior, post-baccalaureate, master's student, Ed.S. student, doctoral student, non-degree student, other, and prefer not to say), race (i.e., Asian, Black/African American, Native American or American Indian, Native Hawaiian or Other Pacific Islander, White/Caucasian, two or more races, or prefer not to say), ethnicity (i.e., Spanish, Hispanic, or Latino or prefer not to say), and gender (i.e., woman, man, non-binary, prefer to self-describe, or prefer not to say).

Recruitment and Procedure

This study received Institutional Review Board approval from the host university, a small, private institution located in an urban city in the South. I employed purposeful sampling (Creswell & Guetterman, 2019) to collect responses from students enrolled at the host university with the eligibility criteria that participants must have been currently enrolled in the School of Education. Students from the School of Education were identified as the population because they were more likely to have received training in how to create a healthy classroom environment in K-12 settings through their coursework and/or prior work experiences, allowing them to potentially have a better understanding of what might be possible in terms of trauma-informed strategies or practices in a higher education classroom. To recruit participants, I emailed all students enrolled in the School of Education, including a description of the study and informed consent, as well as access to the survey. Data were collected online via Qualtrics from March 2022 through April 2022. Participants were not compensated and could withdraw from the study at any time.

Participants

There were 60 participants out of 301 students contacted for a response rate of 19.9%. For gender identity, 7 identified as men, 39 as women, one as non-binary, one preferred to self-describe (i.e., she/they), and 12 preferred not to say. For race, eight identified as Black or African American, two as Multiracial, 36 as White, and 14 preferred not to say. For ethnicity, three identified as having Spanish, Hispanic, or Latino origin, 45 did not, and 13 preferred not to say. For year in school, six were in their first year, four were sophomores, eight were juniors, four were seniors, 14 were master's students, 12 were doctoral students, and 12 preferred not to say.

Data Analysis

Data were analyzed in Microsoft Excel. Construct reliability, validity, and descriptive statistics were calculated for rating scale items, and t-tests were conducted to test research hypotheses. Results are explored using the six core principles of trauma-informed care (i.e., Safety, Trustworthiness & Transparency, Peer Support, Collaboration & Mutuality, Empowerment & Choice, and Cultural, Historical & Gender Issues) (Substance Abuse and Mental Health Services Administration, 2014).

Results

First, I assessed survey items to determine construct reliability and validity (Table 1). Construct composite reliabilities (CR) are 0.72 and 0.83, and Cronbach's alphas (α) are 0.90 and 0.97. Both reliability measures surpass the recommended 0.70 threshold (Nunnally & Bernstein, 1994). I evaluated discriminant validity using the average variance extracted (AVE), but neither AVE exceeded the recommended 0.50 threshold (Fornell & Larcker, 1981). The factor loadings of each item and descriptive statistics are shown in Table 2 and Table 3.

Table 1

Reliability, Validity and Construct Correlations

Variable	CR	α	AVE
Trauma-informed Strategies or Practices	.72	.97	.20
Aspects of Campus	.83	.90	.47

Note: CR = Composite Reliability; α = Cronbach's Alpha; AVE = Average Variance Extracted.

Rating scales items covered various trauma-informed classroom strategies or practices as well as perceptions of aspects on campus. Table 2 displays aspects of creating a trauma-informed campus based on Likert scale ratings from 1 (strongly disagree) to 5 (strongly agree). Participants expressed the following strategies and practices as most important for faculty to implement: not tokenizing a student based on identity ($M = 4.81$, $SD = 0.44$), showing students compassion and empathy in the classroom ($M = 4.80$, $SD = 0.44$), focusing on building a healthy classroom environment ($M = 4.71$, $SD = 0.56$), knowing where to go if there is an issue with an instructor ($M = 4.59$, $SD = 0.57$), and giving students individualized, supportive feedback ($M = 4.57$, $SD = 0.57$).

Table 2

Importance of Trauma-informed Classroom Strategies or Practices

Strategy or Practice [a]	*M*	*SD*	*Factor Loading*
Showing students compassion and empathy in the classroom.	4.80	0.44	.721
Building one-on-one relationships with students.	4.41	0.79	.556
Building positive relationships among peers in the classroom.	4.41	0.75	.600
Focusing on building a healthy classroom environment.	4.71	0.56	.807
Allowing for individualized plans for attending classes.	3.77	0.98	.261
Allowing for individualized plans for submitting assignments.	3.76	1.01	.238
Alerting students ahead of time if class topics could be triggering.	4.23	0.96	.205
Promoting open dialogue between students and the instructor.	4.33	0.66	.146
Taking an active role in facilitating difficult conversations in the classroom.	4.33	0.63	.121
Giving students individualized, supportive feedback.	4.57	0.57	.649

Strategy or Practice [a]	*M*	*SD*	*Factor Loading*
Describing what resources are available to students outside the classroom.	4.31	0.71	.208
Recognizing the signs and symptoms of trauma in their students.	4.48	0.76	.511
Not tokenizing a student based on identity (e.g., race/ethnicity, gender identity, military affiliation)	4.81	0.44	.194
Knowing where to go if there is an issue with an instructor	4.59	0.57	.184

[a] Participants rated strategies and practices on a Likert scale (1 = not at all important to 5 = extremely important).

In considering how much the host university is trauma-informed (Table 3), participants perceived staff members ($M = 3.43$, $SD = 1.02$) to be more trauma-informed than professors/instructors ($M = 3.06$, $SD = 1.09$). They also perceived that the university had more resources available for students' mental health ($M = 3.38$, $SD = 1.17$) than for students experiencing trauma ($M = 3.02$, $SD = 1.18$), which may indicate that participants view mental health and trauma as issues requiring unique and separate resources. Broadly, participants believed that the university was moderately trauma-informed ($M = 3.28$, $SD = 1.00$).

Table 3

Perceptions of Aspects of Campus

Aspect of Campus [a]	*M*	*SD*	*Factor Loading*
Mental health is a priority on our campus.	3.66	1.20	.844
There are enough resources provided for student mental health.	3.38	1.17	.927
There are enough resources provided for students experiencing trauma.	3.02	1.18	.736
Professors/instructors are trauma-informed.	3.06	1.09	.318
Staff members (e.g., academic advisors, resident advisors) are trauma-informed.	3.43	1.02	.450
The host university is a trauma-informed institution.	3.28	1.00	.615

[a] Participants rated aspects on a Likert scale (1 = strongly disagree to 5 = strongly agree).

I used t-tests (two-sample assuming unequal variances) to evaluate the hypotheses, comparing undergraduate ($n = 22$) to graduate ($n = 26$) students on the variables of Trauma-informed Classroom Strategies or Practices (14 items) and Aspects of Campus (6 items). While there was no statistically significant difference between groups for Aspects of Campus, there was a statistically significant

difference between groups at the .01 level for Trauma-informed Classroom Strategies or Practices (Table 4).

Table 4

T-test between undergraduate and graduate student based on variable

Variable	Total Sample		Undergraduate		Graduate				Hypothesis Support
	M	*SD*	*M*	*SD*	*M*	*SD*	*t(df)*	*p*	
H1: Trauma-informed Classroom Strategies or Practices	61.19	5.82	63.50	4.99	59.23	5.83	2.73(46)	.01*	Unsupported
H2: Aspects of Campus	19.70	5.45	18.27	5.04	20.96	5.58	-1.73(45)	.09	Supported

* $p < .01$

Discussion

The goal of this study was to understand college student perceptions on how to create trauma-informed classroom environments as well as to determine if there were differences between undergraduate and graduate students.

The first hypothesis (H1) considers whether there is a difference between undergraduate and graduate students on what they consider to be important trauma-informed strategies or practices in the classroom. Results indicate that this is not supported, as undergraduate students (M = 63.50, SD = 4.99) rated the trauma-informed classroom strategies and practices as more important overall than graduate students (M = 59.23, SD = 5.83). The reason for this difference may be because graduate students prefer other trauma-informed strategies or practices that were not listed, or they may need less of this type of support in the classroom setting than undergraduate students. For example, graduate students may desire more trauma-informed support from student services (e.g., advising, mental health services) that are outside of the classroom environment, or perhaps graduate students simply do not need as much support in the classroom as undergraduate students. Further exploration of the differences between undergraduate and graduate students' needs for trauma-informed support in and outside of the classroom environment is an important next step, particularly because the second hypothesis (H2) is supported. H2 considers the extent that both undergraduate and graduate students perceive the host institution as trauma-informed. There was no statistical difference between undergraduates (M = 18.27, SD = 5.04) and graduate students (M = 20.96, SD = 5.58). Because both undergraduate and graduate students perceive the institution as similarly trauma-informed in H2, H1 may indicate that undergraduate students hold higher expectations of trauma-informed support from faculty in the classroom.

More specifically, all participants perceived the following as the top five important trauma-informed strategies and practices to implement in the classroom: (a) not

tokenizing a student based on identity, (b) showing students compassion and empathy in the classroom, (c) focusing on building a healthy classroom environment, (d) giving students individualized, supportive feedback, and (e) recognizing the signs and symptoms of trauma in their student. These trauma-informed strategies and practices, as well as the others within the survey, align with the six core principles of trauma-informed care. For instance, an example of not tokenizing a student based on identity could be the instructor not calling on a Black or African American student in the classroom with the expectation that the student is representative of all voices of their community in a discussion. This practice of not tokenizing identity is related to *Cultural, Historical & Gender Issues* in that faculty consider biases, beliefs, and values that they may hold, as well as the backgrounds and lived experiences of their students as instructors make pedagogical decisions in the classroom. Next, the strategies of showing students compassion and empathy in the classroom as well as focusing on building a healthy classroom environment both speak to the principle of *Safety*, including whether students feel safe and welcomed in the classroom and how much they perceive faculty as being caring. Giving students individualized, supportive feedback relates to *Trustworthiness & Transparency* as well as *Empowerment & Choice*, as individualized feedback can empower students to continue what they are doing well and work on areas of weakness. Individualized feedback also can build trust between students and faculty when students believe that faculty are being open and honest in the feedback provided. Finally, the practice of recognizing the signs and symptoms of trauma in their students speaks to *Safety* and *Cultural, Historical & Gender Issues* in that faculty can increase students' safety by recognizing when they are experiencing trauma, which may be influenced by students' cultural backgrounds and lived experiences.

Some of the trauma-informed strategies and practices may be straightforward for faculty to implement in the classroom, while others may be more out of faculty's control. For example, building one-on-one relationships with students is within faculty's discretion more so than it is for faculty to allow for individualized plans for students to attend class. While participants evaluated the importance of a range of trauma-informed strategies and practice, participants were not asked whether these strategies and practices need to be implemented simultaneously to create a trauma-informed classroom. Because results indicated that undergraduate and graduate students rated the importance of these strategies and practices differently, it is likely that only some of these strategies and practices may be needed to improve the classroom environment depending on the students enrolled in the class. One strategy to determine which trauma-informed strategies and practices to employ in the classroom is for faculty to directly ask students at the beginning of the semester on how to best support them (e.g., open discussion, anonymous survey). These conversations could also occur one-on-one with students, especially if faculty may have identified a particular student as needing extra support.

Limitations and Recommendations for Further Research

When interpreting the results from this study, there are notable limitations that should be considered given the study's scope. These include the sample being limited to one university with a smaller sample size, which decreases the generalizability of findings across other institutions. Additionally, while face and content validity may have met through the focus group, discriminant validity of survey items was weak, as indicated by the low average variance extracted for both variables. However, because this is a newly constructed survey, I view this initial study as exploratory and indicative of future directions. I hope to replicate this study with an increased sample size as well as with increased specificity in survey items, particularly in the trauma-informed classroom strategies and practices.

While this study provides an initial set of strategies and practices that help create a trauma-informed classroom environment, there are remaining considerations that require further exploration. For example, next steps may include determining the knowledge and skills that are necessary for faculty to develop, so that they are better prepared to employ trauma-informed strategies and practices. However, further research is needed to explore the training that may be required for faculty to develop the skills and knowledge needed. While K-12 schools may have more robust guidance on creating trauma-informed classrooms and schools (e.g., Avery et al., 2021; Cole et al., 2005; National Child Traumatic Stress Network, Schools Committee, 2017), there is not as much research regarding trauma-informed guidance for higher education institutions. Moreover, in addition to training faculty, creating trauma-informed colleges and universities requires further research into the roles and responsibilities of higher education staff and administrators.

The trauma-informed strategies and practices included in this study were for in-person classroom environments. Further research could investigate the needs of students in hybrid, online synchronous, and/or online asynchronous learning environments. Finally, the finding that participants rated staff as more trauma-informed than instructors is an interesting point to be further explored, such as through identifying which strategies or practices staff may be implementing that participants believe make them more trauma-informed.

Conclusion

From the student perspective, there are several key trauma-informed practices and strategies that could support all students, both at the undergraduate and graduate level. Results indicated that undergraduate and graduate rated trauma-informed strategies and practices differently, so not all practices or strategies may be equally as important. Faculty may have discretion as to which ones to employ in their classrooms, and faculty may benefit from directly asking students about which strategies and practices would best support them. Future directions for this work include exploring implications for trauma-informed strategies and practices beyond the classroom level, including what institutional support may be required to train faculty, as well as staff and administrators, to become more trauma-informed.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

References

Acevedo, V. E., & Hernandez-Wolfe, P. (2014). Vicarious resilience: An exploration of teachers and children's resilience in highly challenging social contexts. *Journal of Aggression, Maltreatment & Trauma*, *23*(5), 473–493. https://doi.org/10.1080/10926771.2014.904468

American Psychiatric Association (2022). *Diagnostic and statistical manual of mental disorders*. (5th Text Revision ed.) Washington, DC: American Psychiatric Association.

Anders, S. L., Frazier, P. A., & Shallcross, S. L. (2012). Prevalence and effects of life event exposure among undergraduate and community college students. *Journal of Counseling Psychology*, *59*(3), 449–457. https://doi.org/10.1037/a0027753

Anderson, E. M., Blitz, L. V., & Saastamoinen, M. (2015). Exploring a school-university model for professional development with classroom staff: Teaching trauma-informed approaches. *School Community Journal*, *25*(2), 113–134. https://files.eric.ed.gov/fulltext/EJ1085667.pdf

Avery, J. C., Morris, H., Galvin, E., Misso, M., Savaglio, M., & Skouteris, H. (2021). Systematic review of school-wide trauma-informed approaches. *Journal of Child & Adolescent Trauma*, *14*(3), 381–397. https://doi.org/10.1007/s40653-020-00326-w

Banyard, V. L., & Cantor, E. N. (2004). Adjustment to college among trauma survivors: An exploratory study of resilience. *Journal of College Student Development*, *45*(2), 207–221. https://doi.org/10.1353/csd.2004.0017

Berger, R., Pat-Horenczyk, R., & Gelkopf, M. (2007). School-based intervention for prevention and treatment of elementary-students' terror-related distress in Israel: A quasi-randomized controlled trial. *Journal of Traumatic Stress*, *20*(4), 541–551. https://doi.org/10.1002/jts.20225

Bowen, E.A., & Murshid, N.S. (2016). Trauma-Informed social policy: A conceptual framework for policy analysis and advocacy. *Perspectives From the Social Sciences*, *106*(2), 223-229. https://doi.org/10.2105/AJPH.2015.302970

Boyraz, G., Granda, R., Baker, C. N., Tidwell, L. L., & Waits, J. B. (2016). Posttraumatic stress, effort regulation, and academic outcomes among college students: A longitudinal study. *Journal of Counseling Psychology*, *63*(4), 475–486. https://doi.org/10.1037/cou0000102

Boyraz, G., Horne, S. G., Owens, A. C., & Armstrong, A. P. (2013). Academic achievement and college persistence of African American students with trauma exposure. *Journal of Counseling Psychology*, *60*(4), 582–592. https://doi.org/10.1037/a0033672

Carello, J., & Butler, L.D. (2014). Potentially perilous pedagogies: Teaching trauma is not the same as trauma-informed teaching. *Journal of Trauma & Dissociation*, *15*(2), 153-168. https://doi.org/10.1080/15299732.2014.867571

Carello, J., & Thompson, P. (2021). *Lessons from the pandemic: Trauma-informed approaches to college, crisis, change.* Palgrave Macmillan.

Cole, S. F., O'Brien, J. G., Gadd, M. G., Ristuccia, J., Wallace, D. L., & Gregory, M. (2005). Helping Traumatized Children Learn. Massachusetts Advocates for Children.

Copeland, W. E., Keeler, G., Angold, A., & Costello, E. J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry*, *64*(5), 577-584. https://doi.org/10.1001/archpsyc.64.5.577

Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson.

Davidson, S. (2017). Trauma-informed practices for postsecondary education: A guide. Portland, OR: Education Northwest. https://educationnorthwest.org/sites/default/files/resources/trauma-informed-practices-postsecondary-508.pdf

Downey, L. (2013). *Calmer classrooms: A guide to working with traumatised children*. Melbourne, Victoria, Australia: State of Victoria, Child Safety Commissioner, & Queensland, Australia: State of Queensland, Department of Education, Training and Employment.

Duncan, R. D. (2000). Childhood maltreatment and college drop-out rates: Implications for child abuse researchers. *Journal of Interpersonal Violence*, *15*(9), 987–995. https://doi.org/10.1177/088626000015009005

Erdman, S., Colker, L. J., & Winter, E. C. (2020). *Trauma & young children: Teaching strategies to support & empower.* National Association for the Education of Young Children.

Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.2307/3151312

Fowler, F. J. (2014). *Survey research methods* (5th ed.). Sage.

Frazier, P., Anders, S., Perera, S., Tomich, P., Tennen, H., Park, C., & Tashiro, T. (2009). Traumatic events among undergraduate students: Prevalence and associated symptoms. *Journal of Counseling Psychology*, *56*(3), 450–460. https://doi.org/10.1037/a0016412

Galatzer-Levy, I. R., Burton, C. L., & Bonanno, G. A. (2012). Coping flexibility, potentially traumatic life events, and resilience: A prospective study of college student adjustment. *Journal of Social and Clinical Psychology*, *31*(6), 542–567. https://doi.org/10.1521/jscp.2012.31.6.542

Hanson, R. F., & Lang, J. M. (2016). A critical look at trauma-informed care among agencies and systems serving maltreated youth and their families. *Child Maltreatmenti 21*(2), 95–100. https://doi.org/10.1177/1077559516635274

Harrison, N., Burke, J., & Clarke, I. (2020). Risky teaching: Developing a trauma-informed pedagogy for higher education. *Teaching in Higher Education*, 1-15. https://doi.org/10.1080/13562517.2020.1786046

Health Federation of Philadelphia, Multiplying Connections. (2010). CAPPD: Practical interventions to help children affected by trauma. http://www.multiplyingconnections.org/become-trauma-informed/cappd-interventions-guide

Hoch, A., Stewart, D., Webb, K., & Wyandt-Hiebert, M.A. (2015, May). *Trauma-informed care on a college campus.* Presentation at the annual meeting of the American College Health Association, Orlando, FL.

Ijadi-Maghsoodi, R., Marlotte, L., Garcia, E., Aralis, H., Lester, P., Escudero, P., & Kataoka, S. (2017). Adapting and implementing a school-based resilience-building curriculum among low-income racial and ethnic minority students. *Contemporary School Psychology*, *21*(3), 223–239. https://doi.org/10.1007/s40688-017-0134-1

Knight, C. (2015). Trauma-informed social work practice: Practice considerations and challenges. *Clinical Social Work Journal*, *43*(1), 25–37. https://doi.org/10.1007/s10615-014-0481-6

Maynard, B., Farina, N., & Dell, N. (2017). Effects of trauma-informed approaches in schools. https://campbellcollaboration.org/media/k2/attachments/ECG_Maynard_Trauma-informed_approaches.pdf

National Child Traumatic Stress Network, Schools Committee. (2017). *Creating, Supporting, and Sustaining Trauma-Informed Schools: A System Framework*. Los Angeles, CA, and Durham, NC: National Center for Child Traumatic Stress.

New England Board of Higher Education. (2020, April 21). *Trauma in the time of Coronavirus and beyond: A NEJHE Q&A with Karen Gross.* https://nebhe.org/journal/trauma-in-the-time-of-coronavirus-and-beyond-a-nejhe-qa-with-karen-gross/

Nunnally, J., & Bernstein, I. (1994). *Psychometric theory*. McGraw-Hill.

Read, J. P., Ouimette, P., White, J., Colder, C., & Farrow, S. (2011). Rates of DSM IV-TR trauma exposure and posttraumatic stress disorder among newly matriculated college students. *Psychological Trauma: Theory, Research, Practice, and Policy*, *3*(2), 148–156. https://doi.org/10.1037/a0021260

Smyth, J. M., Hockemeyer, J. R., Heron, K. E., Wonderlich, S. A., & Pennebaker, J. W. (2008). Prevalence, type, disclosure, and severity of adverse life events in college students. *Journal of American College Health*, *57*(1), 69–76. https://doi.org/10.3200/JACH.57.1.69-76

Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*. HHS Publication No. (SMA) 14-4884. Substance Abuse and Mental Health Services Administration.

Thomas, M. S., Crosby, S., & Vanderhaar, J. (2019). Trauma-informed practices in schools across two decades: An interdisciplinary review of research. *Review of Research in Education*, *4*3(1), 422–452. https://doi.org/10.3102/0091732X18821123

Turner, H. A., & Butler, M. J. (2003). Direct and indirect effects of childhood adversity on depressive symptoms in young adults. *Journal of Youth and Adolescence*, *32*(2), 89–103. https://doi.org/10.1023/A:1021853600645

West, S. D., Day, A. G., Somers, C. L., & Baroni, B. A. (2014). Student perspectives on how trauma experiences manifest in the classroom: Engaging court-involved youth in the development of a trauma-informed teaching curriculum. *Children and Youth Services Review*, *38,* 58–65. https://doi.org/10.1016/j.childyouth.2014.01.013

Wolpow, R., Johnson, M.M., Hertel, R., & Kincaid, S.O. (2009). *The heart of learning and teaching: Compassion, resiliency, and academic success*. Office of Superintendent of Public Instruction, Compassionate Schools website: https://www.k12.wa.us/sites/default/files/public/compassionateschools/pubdocs/theheartoflearningandteaching.pdf