Winter 12-1-2019

Utilizing a Trauma Informed Approach to Build Resiliency in Underrepresented College Students

Marie Lindloff
Winona State University, mlindloff17@winona.edu

Utilizing a Trauma Informed Approach to Build Resiliency in Underrepresented College Students

Marie Lindloff

A Capstone Project submitted in partial fulfillment of the requirements for the Master of Science Degree in Counselor Education at Winona State University

Fall 2019

Winona State University

College of Education

Counselor Education Department

CERTIFICATE OF APPROVAL

_____

CAPSTONE PROJECT

_____

Utilizing a Trauma Informed Approach to Build Resiliency

in Underrepresented College Students

This is to certify that the Capstone Project of

Marie Lindloff

Has been approved by the faculty advisor and the CE 695 – Capstone Project

Course Instructor in partial fulfillment of the requirements for the

Master of Science Degree in

Counselor Education

Capstone Project Supervisor: Anquinetta V. Calhoun

Anquinetta V. Calhoun, Ph.D.

Approval Date: 18 December 2019

Abstract

Higher education institutions currently face a mental health crisis across the nation. Research has shown that an increasing number of students have significant trauma in their background impacting the occurrence of mental health issues, academic success, and lifelong health and well-being. This project explores the research surrounding marginalized students and trauma, evidences of resiliency as a mitigating factor to trauma, and ways that college campuses can begin to adopt a trauma-informed approach throughout their communities. Findings indicate that the transition from high school to college is a tenuous developmental time and students with trauma are susceptible to maladaptive coping skills, substance use and abuse, and increased mental illness. Research further demonstrates that the impact of trauma can be mitigated by promoting resiliency through the teaching and training of specific skills, behaviors, and mindsets.

Contents

Utilizing a Trauma Informed Approach to Build Resiliency in Underrepresented College Students

Researchers have aggregated compelling evidence in support of the need for trauma informed care for young people over the past two decades. Awareness of trauma and its wide-reaching negative impact is also becoming more comprehensive in education, and educators are developing research-based interventions to help break the cycle of trauma for students. However, this awareness has mainly been focused on children in grades K-12. The research provides far less information about implementing a trauma-informed approach in working with students beyond high school, specifically in college.

Trauma is characterized as any experience in which an individual's internal resources are incapable of coping with their external stressors (Hoch, Stewart, Webb, & Wyandt-Hiebert, 2015). More and more, educators are offering support to students affected by trauma through developing resources, creating safe spaces, and exploring ways to engage them in learning (McInerney & McKlindon, 2014). These efforts are arguably even more important to implement within postsecondary education institutions (*Distressed College Students Following Traumatic Events*, 2014). All students will face challenges as they transition to college, but for those students from underrepresented student groups and with a history of trauma, those challenges are multiplied exponentially (Falcon, 2015).

College students are at an overall increased risk of experiencing new traumas as compared to members of the general public (Galatzer-Levy, Burton, & Bonanno, 2012) and 35% of young adults enter college with a diagnosed mental health issue (Eisenberg, Lipson, Ceglarek, Kern, & Phillips, 2018). Trauma also increases vulnerability to depression and substance abuse, presenting immediate concerns for both mental health and student services professionals across

campuses (Rytwinski, Scur, Feeny, & Youngstrom, 2013). Greater than 45% of students binge drink and 20% experience an alcohol use disorder (Pedrelli, Nyer, Yeung, Zulauf, & Wilens, 2015).

The American College Health Association's 2014 National Health Assessment surveyed close to 80,000 students at 140 different colleges and discovered that over 50% of students experienced "overwhelming anxiety" and more than one third expressed that they felt "so depressed it was hard to function" within the past 12 months (National Center for Education Statistics, 2015, p. 3). It is possible however for students impacted by trauma to persist in postsecondary education. Those students who find a path to persistence are able to develop into models of resiliency and success, inspiring self-efficacy in other students and motivating them to believe that they also can achieve their goals and dreams (Bartlett and Steber, 2019).

With the aforementioned data in mind, this project focuses on the susceptibility of students from underrepresented populations that have experienced trauma and the importance of post-secondary institutions adopting a trauma informed approach to effectively meet the needs of this ever-increasing student demographic. In addition, resiliency is presented as a mitigating factor and intervention for students with trauma in their background. College communities that work collaboratively, sharing responsibility for students' physical, social, emotional, and academic safety, play a vital role in providing a pathway to success for students through providing skills to build overall resiliency.

Review of Literature

The Impact of Trauma on Students

The impact of trauma on students has become a widely recognized and documented concern, affecting all areas of an individual's development both in the present and well into the

future. Students may experience singular trauma or ongoing egregious offenses. Statistics gathered by the Substance Abuse and Mental Health Service Administration (SAMHSA) detail that 61% of men in the United States and 51% of women report being exposed to at least one traumatic event in their lifetime (SAMHSA, 2019). These events may include a violent domestic crime, the loss of a parent or guardian through death or divorce, a life altering accident, or even a natural disaster (Oral, Ramirez, Coohey, Nakada, Walz, Kuntz…Peek-Asa, 2015). Trauma can also encompass varied and continuous deeply distressing events including ongoing sexual abuse, exposure to physical violence and abuse, living with a guardian that experiences ongoing mental illness, and exposure to regular substance abuse (Oral, et al., 2015). Traumas may be chronic and the result of circumstances, such as homelessness, generational poverty, or foster care placement (American Psychological Association [APA], 2008).

The CDC-Kaiser Permanente Adverse Childhood Experiences (ACE) Study, conducted from 1995-1997, is one of the largest bodies of research compiled on childhood abuse and neglect and its' impact on health and well-being later in life (Felitti et al., 1998). The ACE study confirmed that adverse childhood experiences are common, often interrelated, and have long term, negative effects over an individual's lifetime (Dong et al., 2004). *The Journal of the American Medical Association Pediatrics* (2018) published the largest study to date, substantiating that these experiences are universal, though they do highlight some disparities among socioeconomic groups and racial and ethnic minority groups. Individuals with low-income and limited educational attainment and participants who identified as African American and Hispanic reported higher incidents of experiencing adversity in childhood (Merrick, Ford, & Ports, 2018). These findings further confirm that the overall risk for being impacted by ACEs is not shared equally by all children and in fact, children from underrepresented populations,

specifically black and Latinx, are more strongly impacted by adverse childhood experiences (Burke, Hellman, Scott, Weems, & Carrion, 2011).

Across the nation, 61 percent of black non-Hispanic children and 51 percent of Hispanic children have experienced at least one ACE. This is in comparison with 40 percent of white non-Hispanic children and only 23 percent of Asian non-Hispanic children. ACE scores are lowest among Asian, non-Hispanic children across all regions and in most regions highest among black, non-Hispanic children in most (Sacks, Murphey, & Moore, 2014).

Adverse childhood experiences (ACEs) and trauma are pervasive among young adult student populations with 66%-89% of students reporting a history of ACEs. (see also: Ouimette, White, Colder, & Farrow, 2011; Wiehn, Homberg, & Fischer, 2018). College students that have self-reported incidences of trauma and abuse experience an increased risk for emotional, behavioral, psychiatric, and cognitive impairment (Mersky & Topitzes, 2010). The high prevalence of ACEs also poses an increased vulnerability for these students to physical and mental illness as well as maladaptive coping behaviors including drug and alcohol abuse, intimate partner violence, and self-harm and suicide (SAMHSA, 2014, pp.47-50).

Students from underrepresented populations experience a significant amount of adverse childhood experiences (Burke, et al., 2011). African American college students report higher rates of trauma exposure and Post Traumatic Stress Disorder (PTSD) in comparison to other groups (Roberts, Gilman, Breslau, Breslau, & Koenen, 2010). Approximately, four out of five Latino youth suffer at least one traumatic childhood experience (Ramirez, 2018). Although Latino youth are increasingly attending college, fewer graduate and there is scant data which captures evidences about Latino college students and potential correlations to adverse childhood experiences. In addition to behavioral evidences, neuroscientists have discovered differences

within integral brain functioning among college students with co-occurring trauma and depression symptoms. Stress from sustained childhood maltreatment and trauma can impede critical brain development, responsible for executive individuals' decision-making and anger management capacity. (Schaefer & Nooner, 2017).

Trauma and the Transition from High School to College

Trauma is a risk factor in students transitioning from high school to college, particularly for students from underrepresented populations. These students are especially vulnerable as they go through the significant transitions from adolescence to adulthood. They can be susceptible to poor decision making, higher levels of risk taking, difficulty with impulse control and regulating emotion, and underdeveloped cognitive flexibility (Walters, Bulmer, Troiano, Obiaka & Bonhomme, 2018). Students exposed to trauma possess an increased risk for developmental and adjustment issues in addition to academic, social, and emotional difficulties upon admission into college (Baker et al., 2016; Boyraz, Horne, Armstrong, & Owens, 2015). They may also encounter challenges functioning on one or multiple domains of adjustment (Anders, Frazier, & Shallcross, 2014; Lee, Anderson, & Klimes-Dougan, 2016). In one research sample, students who reported more severe symptoms of distress following exposure to trauma were less likely to remain enrolled in successive semesters (Boyraz et al., 2015).

Childhood maltreatment reliably predicts adjustment difficulties in college students (Arata, Langhinrichsen-Rohling, Bowers, & O'Farrill-Swails, 2005; Goldberg, 2016). Adversity arises through lower grade point averages, increased difficulty integrating into the campus social structure, and lower retention rates as opposed to students who do not report any form of childhood trauma or adverse experiences (Duncan, 2000). Students who experienced various forms of interpersonal trauma reported elevated frustration with personal, emotional, and social

adjustment than their peers who did not experience a similar traumatic event (Krupnick et al., 2004). Hetzel-Riggin and Roby (2013) assessed the impact of specific types of trauma on student adjustment and discovered that students who reported interpersonal forms of trauma consistently reported higher rates of depression, anxiety, PTSD, and expanded complications with personal and emotional adjustment than those who reported other forms of trauma. It is important to note that several college student groups may have specific risk factors for past or ongoing trauma including African American and Latinx students (Davidson, 2017; *National Alliance on Mental Illness*, 2011; Tiemensma, Depaoli, Winter, Felt, Rus, & Arroyo, 2018).

Resiliency as a Mitigating Factor

Resiliency has been defined by scholars as the "capacity to cultivate strengths to positively meet the challenges of life" (Silliman, 1994, p. 58) and the "dynamic process of positive adaptation within the context of significant adversity" (Luthar, Cicchetti, & Becker, 2000, p. 93). The American Psychological Association (2014) defines resilience as "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress" (p. 2). While these definitions are helpful, they belie the complexity of the concept of resilience.

Resilience in fact is not one single characteristic but is made up of several protective factors or buffers to stress that can be developed and improved upon (Davidson & McEwen, 2012). Resilience may be observed as a trait, a process, or even an outcome. It is not simply an attribute that someone possesses or does not possess, but rather, operates on a continuum which is present to differing degrees across the various domains of life; physical, intellectual, social, emotional, spiritual (Pietrzak & Southwick, 2011). Resilience is available and accessible to any individual regardless of their personal background or history. An individual who adapts well to

stress in a workplace may fail to produce resilience in the relational domain of their life. This continuum of resilience can change over time as a consequence of development and context, an individual's interaction with their environment (Kim-Cohen & Turkewitz, 2012). As humans, how we respond to trauma and toxic stress occurs within the context of our interactions with other people, our available resources, culture and religions, and community and society (Sherrieb, Norris, & Galea, 2010). Variable contexts provide variable resiliency and higher or lower support of an individual. Physiologically, some studies suggest that resilient genes may be adequate to help a person overcome traumatic developmental events in some cases (Feder, Charney & Collins, 2010). However, this is a contradictory position requiring additional research.

Resilience is produced through the interaction of biological systems and protective factors in the social environment. Harvard University's Center on the Developing Child [HUCDC] (2013) reports in their working paper titled, "The Science of Resilience," that "On a biological level, resilience results in healthy development because it protects the developing brain and other organs from the disruptions produced by excessive activation of stress response systems. Stated simply, resilience transforms potentially toxic stress into tolerable stress" (p. 2). Therefore, it is not a trait that individuals are born with but rather must work to cultivate. When a person's positive experiences and protective factors outweigh negative experiences and risk factors, the needle is moved on the resiliency continuum toward strengthened resiliency (HUCDC, 2013). Active ingredients in building resilience in students include supportive relationships with parents, coaches, teachers, caregivers, and other adults in the community as well as the opportunity to practice skill building. (HUCDC, 2013). Resiliency capacity can be strengthened at any age through physical exercise, stress reduction techniques, and building self-

regulation and executive functioning skills (HUCDC, 2013). Resilience in individuals can be optimized across contexts and domains when layered into families and communities and though integrating faith and cultural traditions (HUCDC, 2013).

Resilience studies suggest that transitional periods, such as entering young adulthood and beginning college are potential turning points in development (Madewell and Ponce-Garcia, 2016). These turning points are attributed to the high likelihood of either a positive or negative outcome dependent upon cognitive traits, resources for coping, and available social support (Madewell and Ponce-Garcia, 2016). This transitional period is also when mental health disorders often emerge or become acute, furthering highlighting the priority of examining factors of resilience to increase understanding of experiences, environments, and traits that can either shield an individual from or enhance the development of mental health concerns after exposure to trauma (Belch, 2011).

Developing Resilience to Adversity

Research in the 1980's revealed that the human brain is not fixed but capable of change, indeed malleable, despite previous impacts or circumstances. Dr. Caroline Leaf, a pioneer in the field of cognitive neuroscience, explains in her podcast that, "neuroplasticity as a term came to be in the late 90's with the advent of the MRI and various different types of brain technology" (Lowry and Greer, 2019, p. 2). One study defines neuroplasticity as the, "brain's ability to change, remodel and reorganize for purpose of better ability to adapt to new situations" (Demarin, Morovic, & Bene, 2014, p. 209).

Nat Kendall-Taylor, Chief Executive Officer at the FrameWorks Institute, developed The Resilience Scale, an "effective simplifying model for channeling thinking about developmental outcomes and resilience" (2012, p. 6). The Resilience Scale can be used as a metaphor to reframe

how people think about development and resiliency (Kendall-Taylor, 2012). In the metaphor, a child's life is correlated to a scale or a see saw with things (environmental factors) piled on either side of the scale that shape the child's development (Kendall-Taylor, 2012). These environmental factors of varying weights placed on either side of the scale determine which way the scale tips, affecting the outcomes of the child's development (Kendall-Taylor, 2012). A desirable outcome is to have the scale tip to towards positive outcomes, indicating positive development (Kendall-Taylor, 2012).

Children are born with their fulcrum point of the scale in a certain place indicating their genetic starting point (Kendall-Taylor, 2012). The position of their fulcrum influences how much positive weight it takes to tip the scale toward positive outcomes and how much negative weight is required to tip the scale toward negative outcomes (Kendall-Taylor, 2012). The placement of this fulcrum point at the beginning of development is critical but is important to note that it is not fixed and can also shift over time (Kendall-Taylor, 2012). An individual's experiences can cause the fulcrum to move in either direction, affecting how the scale works and what it takes to tip it either way (Kendall-Taylor, 2012).

Positive factors, such as supportive relationships and opportunities to develop skills for coping and adapting, will get stacked on one side, while risk factors, such as abuse or violence, will build up on the opposite side (Kendall-Taylor, 2012). Not all of these environmental factors are the same weight. Certain periods during development present an especially malleable fulcrum (Kendall-Taylor, 2012). Resilience occurs when the scale tips towards the positive side, despite the scale being stacked with negative factors (Kendall-Taylor, 2012). Thus, resilience is an individual possessing a scale that is tipped towards the positive even when several things are stacked on the negative side (Kendall-Taylor, 2012). Developmental outcomes can not only be

addressed but improved upon through various research-based intervention strategies (Kendall-Taylor, 2012).

Intervention strategies that are effective in the effort towards building resiliency take place on an individual, relational, and community level (Resiliency: Strength Under Stress, 2009). These strategies include building a positive view or outlook, developing self-regulation, enhancing self-efficacy, having access and engagement with caring and competent relationships, and engagement with community, culture, and spirituality (ACE Interface, 2013). All individuals possess strengths and have the capacity to introduce and build the upon the common traits of resilient people: commitment, time together, respect, spirituality, connectedness, adaptability, communication, and cohesion (Connor & Davidson, 2003).

Trauma-Informed Campus Resiliency Practices

A trauma-informed or sensitive campus is an environment that is created to be a place of safety for students and their families, campus staff, and the broader community. The campus will strive to help all students feel welcomed and supported and wherein a priority is placed on addressing trauma's impact on learning. This environment is maintained by a continual process of review, requiring a systemwide accountability and collaboration in sharing the responsibility for the well-being of all students (Cole, Eisner, Greggory & Ristuccia, 2013). These schools offer support for student academic proficiency and implement resources and tools to support both students and school staff in managing emotional and behavioral challenges while also offering support in navigating challenging circumstances to teachers and other staff (Blaustein, 2013).

The campus mental health crisis notes lack of resilience as a contributing factor (Eiser, 2011). Higher education administrations must recognize that adopting a trauma-informed

approach on campus is no longer an option but a necessity (Paterson, 2019). Creating a trauma-informed environment within colleges will require a system wide collaboration and sense of responsibility (Thomas, Crosby, & Vanderhaar, 2019). This approach requires the entire campus community to embrace a paradigm shift of focus to understanding what happened to a student rather than focusing on a student's negative behaviors (McInerney and McKlindon, 2014). An outcome of successfully making this transition will be faculty members, administrators, and staff members beginning to engage in teamwork, collaboration, and creativity that lead to a deeper understanding of the impact of trauma on students and learning (Davidson, 2017). Colleges must seek to address the needs of students holistically which will involve staff collaborating across the campus community to support students with trauma in improving their relationships and sense belonging, regulating both their emotions and behaviors, boosting their academic competence, and increasing their physical and emotional well-being (Rodenbush, 2015).

The U.S. Department of Health and Human Services (2011) has identified specific trauma-informed principles: safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, and cultural, historical, and gender issues. These principles can be incorporated into developing a trauma-informed approach across campuses and increasing education, training, and practice of resiliency skills (SAMHSA, 2011). Knight (2015) reported that educators trained in a trauma-informed approach should neither ignore nor dwell on students' trauma, but should instead validate and normalize students' experiences, helping them to understand how their past influences the present and empowering them to manage their current daily lives and circumstances more effectively.

Research conducted by Hoch (2015) suggests that colleges take the following steps to meet the needs of students who have experienced trauma: connect students to the school

community, provide students with opportunities to practice their skills, embrace teamwork and shared leadership, anticipate and adapt to the changing needs of students and the community. Within the work of building resiliency, students also have a part to play. Providing students with information and interactive discussion opportunities about the human brain and development and highlighting the effects trauma can bring awareness and understanding to students' experiences (HUCDC, 2013). Professional counselors and peer supporters on campus should also receive training and ongoing education regarding the impact and effects of trauma, as well as incorporate best practices for assisting students who are dealing with these effects (Hoch, 2015).

Creating opportunities to build resiliency skills can be easily integrated across campus classrooms and activities (Davidson, 2017). Cultivating gratitude (Seligman, Steen, Park, & Petersen, 2005) and teaching and practicing deliberate acts of kindness (Seligman, 2011) are two intervention strategies which have demonstrated effectiveness in building a positive perspective. Self-regulation skills can be promoted through teaching yoga, mindfulness, and the power of adequate sleep, exercise, and supportive, nutrient based eating (Peterson and Benca, 2006; Willett and Skerrett, 2010). Kuhl and Boyraz (2017) discovered that among trauma-exposed college students, those who scored themselves higher on a mindfulness scale were more likely to both trust others and perceive higher levels of social support. In addition, mindfulness may help trauma-exposed college students manage their emotions and enhance their relational functioning, as well as increase their ability to have compassion and empathy for others and themselves (Solhaug, Eriksen, Vibe, Haavind, Friborg, Sørlie, & Rosenvinge, J. H., 2016).

Increasing self-efficacy through education about specific, measurable, achievable, relevant, and time-based goals or SMART goals, allows individuals to experience success in a new environment and believe that they can reach their desired goals (Chowdhury, 2019).

Fostering a thriving campus community through empowering individuals to participate in leadership opportunities, creating shared meaning and working towards purposeful outcomes is another effective intervention (ACE Interface, 2013). Additional important factors in building a healthy community include students participating in cultural activities, clubs, organizations, and spiritual practices (ACE Interface, 2013). Research in Washington State communities showed that when individuals felt they had at least two people they could call for concrete help, feelings of hopefulness and support increased while physical health outcomes of diabetes and mental health symptoms decreased (ACE Interface, 2013).

Above all, the single most important protective factor in building resiliency in the presence of and relationship with a stable, caring and competent individual (Hambrick, Brawner, Perry, Brandt, Hofmeister, & Collins, 2019). Creating opportunities for mentoring relationships and connection is a critical practice (Hambrick et al., 2019). Hambrick et al. (2019) reported in his research that relational health is a better predictor of outcomes than ACEs. An individual with good relational health and a high ACE score will have fewer physical, mental, emotional, and social issues than a person with an ACE score of zero and poor relational health (Hambrick et al., 2019).

Counselors and Trauma-Informed Campuses

Counselors play a vital role in creating a trauma-informed school environment. Research indicates that social support, resiliency, and hope are key factors in helping students cope successfully with the mental challenges encountered after trauma exposure (Hines, 2015). Distinctive, campus-wide interventions are most effective when implemented within the context of integrated mental and behavioral health services provided for the entire student body (Adelman & Taylor, 2013). The involvement of trained staff including counselors, social

workers, and psychologists throughout the process of adopting a trauma sensitive approach is essential. Very few individuals on college campuses are adequately trained or prepared to work from a trauma sensitive lens and counselors are needed in the developmental stages to help create programming that contains equipping components, assisting educators in developing the appropriate skills and coping strategies necessary to both identify and teach students with trauma (Wong, 2008).

Counselors can employ a variety of support measures including teaching skills to build resiliency and promoting efforts to build belonging on campus. Students who participate in social emotional learning programs show significant improvement in their academic performance, social, emotional skills, and positive social behaviors as well as a decline in disruptive student behaviors and emotional distress (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Counselor interventions that cultivate students' engagement in school have been shown to improve retention (Reschly & Christenson, 2006) and academic performance (Battistich, Schaps, & Wilson, 2004). Counselors can also work towards advancing strong student, teacher relationships, helping students to feel increased measures of safety, security and connectedness, feel more competent and able to forge more positive connections with peers, as well as obtain stronger academic success (Hamre & Pianta, 2006).

Conclusion

The Center for Disease Control and Prevention (2019) recently reported that one in six people across the United States have experienced four or more kinds of adverse childhood experiences. Furthermore, students from marginalized populations have a significantly higher risk of experiencing four or more types of childhood traumas. An increasing number of individuals in society affected by trauma demands that it is more important than ever to pay close

attention to how institutions facilitate their learning; the theory of one size fits all does not apply in education (Ziegler, n.d.). If faculty and staff do not receive significant support to address the impact that trauma creates, students with a history of trauma will continue to achieve below their potential and staff will burn out, experiencing compassion fatigue (Cole, Eisner, Gregory, Ristuccia, 2013).

Trauma-informed learning environments and campuses benefit a myriad of individuals: students whose trauma history is known as well as those whose trauma will never be distinctly identified. Through trauma sensitivity and trauma-informed practices, colleges can ensure that all students are given the opportunity to achieve at their highest levels (Cole et al., 2005). A continued synthesis of new data on trauma, brain development, interventions, and strategies is vital to ensure that institutions can continue to develop resources and best practices. (Ziegler, n.d.).

Although further research is needed to determine the potential impact of genetics on resilience (Feder, Charney & Collins, 2010), individuals with a history of trauma have the capacity despite their genetic factors to develop resiliency and persist, experiencing a sense of belonging and a proven success in the postsecondary education environment. Reaching success and navigating barriers in educational settings is a unique accomplishment that can potentially carry more weight for students from underrepresented populations. The school experience can often confirm that the world is comprised of unresponsive, threatening adults and peers or it can provide opportunities to discover that some people and places are safe and supportive, stimulating, and even enjoyable.

Resiliency and relationship are among the most effective tools available to assuage the impact that trauma leaves. Post-secondary institutions must proceed with knowing that students

can and do recover from the debilitating effects of trauma. However, they have a vital role to play in supporting these students through understanding and responding to their unique needs. Further research is needed to identify additional factors to strengthen the effectiveness of these efforts and confirm the long- term impact of adopting a trauma informed approach on a college campus.

References

ACE Interface. (2013). Retrieved November 25, 2019, from http://www.aceinterface.com/.

Adelman, H. S., & Taylor, L. (2013). Addressing trauma and other barriers to learning and teaching: Developing a comprehensive system of intervention. In E. Rossen and R. Hull (Eds.), Supporting and educating traumatized students: A guide for school-based professionals (pp. 265–286). New York: Oxford University Press.

American Psychological Association. The road to resilience. Washington, DC: American Psychological Association; 2014. Retrieved from http://www.apa.org/helpcenter/road-resilience.aspx

Anders, S. L., Frazier, P. A., Shallcross, S. L. (2014). Changes in functioning following potentially traumatic life events in college students. *Psychological Trauma: Theory, Research, Practice, and Policy*, 6(1), S99–S106. https://doi.org/10.1037/a0033835

Arata, C. M., Langhinrichsen-Rohling, J., Bowers, D., O'Farrill-Swails, L. (2005). Single versus multi-type maltreatment: An examination of the long-term effects of child abuse. *Journal of Aggression, Maltreatment & Trauma*, 11(4), 29–52.

Avp. (2008). National Coalition of Anti-Violence Programs. Retrieved October 10, 2019, from https://avp.org/ncavp/.

Baker, M. R., Frazier, P. A., Greer, C., Paulsen, J. A., Howard, K., Meredith, L. N., Shallcross, S. L. (2016). Sexual victimization history predicts academic performance in college women. *Journal of Counseling Psychology*. https://doi.org/10.1037/cou0000146

Bartlett, J. D., & Steber, K. (2019, May 9). How to Implement Trauma-informed Care to Build

Resilience to Childhood Trauma. Retrieved from https://www.childtrends.org/publications/how-to-implement-trauma-informed-care-to-build-resilience-to-childhood-trauma.

Battistich, V., Schaps, E., & Wilson, N. (2004). Effects of an elementary school intervention on students' "connectedness" to school and social adjustment during middle school. Journal of Primary Prevention, 24, 243–262.

Becker, M. A. S., Roberts, S. F. N., Ritts, S. M., Branagan, W. T., Warner, A. R., Clark, S. L. (2017). Supporting transgender college students: Implications for clinical intervention and campus prevention. *Journal of College Student Psychotherapy*, 31(2), 155–176.

Belch, H. A. (2011). Understanding the experiences of students with psychiatric disabilities: A foundation for creating conditions of support and success. *New Directions for Student Services*, (134), 73–94. doi:10.1002/ss.396

Blaustein, M. E. (2013). Childhood trauma and a framework for intervention. In E. Rossen and R. Hull (Eds.), Supporting and educating traumatized students: A guide for school-based professionals (pp. 1–21). New York, NY: Oxford University Press.

Burke, N. J., Hellman, J. L., Scott, B. G., Weems, C. F., & Carrion, V. G. (2011). The impact of adverse childhood experiences on an urban pediatric population. *Child Abuse & Neglect*, *35*(6), 408–413. doi: 10.1016/j.chiabu.2011.02.006

Center on the Developing Child at Harvard University. (2013). The science of resilience: Working paper no. 13. Retrieved from www.developingchild.harvard.edu.

Children and Trauma: Update for Mental Health Professionals. (2008). Retrieved October 2, 2019, from https://www.apa.org/pi/families/resources/children-trauma-update.

Chowdhury, M. R. (2019, July 4). Four Ways To Improve And Increase Self-Efficacy. Retrieved from https://positivepsychology.com/3-ways-build-self-efficacy/.

Cole, S., Eisner, A., Gregory, M., & Ristuccia, J. (2013). Helping traumatized children learn: Vol. 2. Creating and advocating for trauma sensitive schools. Retrieved from Massachusetts Advocates for Children, Trauma and Learning Policy Initiative website: https:// traumasensitiveschools.org/tlpi-publications/download-a-free-copy-of-a-guide-to-creating-trauma-sensitive-schools/

Connor, K. M., Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, *18*(2), 76–82. doi: 10.1002/da.10113

Davidson, R. J., McEwen, B. S. (2012). Social influences on neuroplasticity: Stress and interventions to promote wellbeing. *Nature Neuroscience*, 15, 689–695. doi:10.1038/nn.3093

Davidson, S. (2017). Trauma-Informed Practices for Postsecondary Education: A Guide. Retrieved November 11, 2019, from https://educationnorthwest.org/sites/default/files/resources/trauma-informed-practices-postsecondary-508.pdf.

Demarin V., Morović, S. (2014). Neuroplasticity. Period. *Biology*. 116, 209–211.

Distressed College Students Following Traumatic Events. (2014). Retrieved from https://www.counseling.org/docs/default-source/vistas/article_21.pdf?sfvrsn=8.

Dong, M., Anda, R. F., Felitti, V. J., Dube, S. R., Williamson, D. F., Thompson, T. J., Giles, W.

H. (2004). The interrelatedness of multiple forms of childhood abuse, neglect, and household dysfunction. *Child Abuse & Neglect*, *28*(7), 771–784. doi: 10.1016/j.chiabu.2004.01.008

Duncan, R. D. (2000). Childhood maltreatment and college drop-out rates implications for child abuse researchers. *Journal of Interpersonal Violence*, 15(9), 987–995.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development, 82, 405–432.

Eisenberg, D., Lipson, S.K., Ceglarek, P., Kern, A., Phillips, M.V. (2018). College student mental health: The national landscape. In M.D. Cimini & E.M. Rivero (Eds.), Promoting behavioral health and reducing risk among college students: A comprehensive approach (pp.1-280). Retrieved from http://healthymindsnetwork.org/system/resources/W1siZiIsIjIwMTgvMDEvMjQvMTFfMjFfMzdfNDQ3X0hlYWx0aHlfTWluZHNfQm9va19DaGFwdGVyLnBkZiJdXQ/Healthy%20Minds%20--%20Book%20Chapter.pdf.

Eiser, A. (2011). The crisis on campus. *Monitor on Psychology*, 42(8), 18.

Falcon, L. (2015, June). Breaking Down Barriers: Academic Obstacles of First-Generation Students at Research Universities. *National College Learning Center Association*, 17 (2), 1-20. Retrieved from https://files.eric.ed.gov/fulltext/EJ1002281.pdf.

Feder, A., Charney, D. & Collins, K. (2011). Neurobiology of resilience. In S.M. Southwick,

B.T. Litz, D. Charney, & M.J. Friedman, (Eds.), *Resilience and mental health: Challenges across the lifespan*, (pp. 1-29). Cambridge: UK: Cambridge University Press.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245–258.

Flourish: a visionary new understanding of happiness and well-being. (2011). *Choice Reviews Online*, *48*(12). doi: 10.5860/choice.48-7217

Goldberg, D. B. (2016). Impact of childhood sexual abuse on college student development: A seven-vectors perspective. *Journal of College Counseling*, 19(2), 168–179.

Hambrick, E. P., Brawner, T. W., Perry, B. D., Brandt, K., Hofmeister, C., & Collins, J. O. (2019). Beyond the ACE score: Examining relationships between timing of developmental adversity, relational health and developmental outcomes in children. *Archives of Psychiatric Nursing*, *33*(3), 238–247. doi: 10.1016/j.apnu.2018.11.001

Hamre, B. K., & Pianta, R. C. (2006). Student–teacher relationships. In G. G. Bear and K. M. Minke (Eds.), Children's needs III: Development, prevention, and intervention (pp. 59-71). Bethesda, MD: National Association of School Psychologists.

Hetzel-Riggin, M. D., Roby, R. P. (2013). Trauma type and gender effects on PTSD, general distress, and peritraumatic dissociation. *Journal of Loss & Trauma*, 18(1), 41–53. https://doi.org/10.1080/15325024.2012.679119

Hines, L. (2015). Children’s coping with family violence: Policy and service recommendations.

Child and Adolescent Social Work Journal, 32, 109–119.

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.

Kendall-Taylor, N. (2012). Using Metaphor to Communicate a Developmental Perspective on Resilience. *Public Understanding of Science*, *25*(5). doi: 10.1177/0963662514564918

Kim-Cohen J., Turkewitz R. Resilience and measured gene-environment interactions. *Development and Psychopathology*. 2012; 24: 1297–1306.

Knight, C. (2015). Trauma-informed social work practice: Practice considerations and challenges. *Clinical Social Work Journal*, 43(1), 25–37.

Krupnick, J. L., Green, B. L., Stockton, P., Goodman, L., Corcoran, C., Petty, R. (2004). Mental health effects of adolescent trauma exposure in a female college sample: Exploring differential outcomes based on experiences of unique trauma types and dimensions. *Psychiatry: Interpersonal & Biological Processes*, 67(3), 264–279.

Kuhl, M., Boyraz, G. (2017). Mindfulness, general trust, and social support among trauma-exposed college students. *Journal of Loss and Trauma*, 22(2), 150–162.

Lee, C., Anderson, J. R. , Klimes-Dougan, B. (2016). Potentially traumatic experiences, academic performance, and psychological distress: The role of shame. *Journal of Counseling & Developmen*t, 94(1), 41–50. https://doi.org/10.1002/jcad.12060

Lowry, M., Greer, A. (2019, June 17). Retrieved November 1, 2019, from

https://www.dinner-conversations.com/episodes/mind-matters-featuring-dr-caroline-leaf/.

Luthar, S. S., Cicchetti, D., Becker, B. (2000). The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work. *Child Development, 71*(3), 543–562. doi: 10.1111/1467-8624.00164

Madewell, A. N., Ponce-Garcia, E. (2016). Assessing resilience in emerging adulthood: The resilience scale (RS), Connor–Davidson resilience scale (CD-RISC), and scale of protective factors (SPF). *Personality and Individual Differences*, 97, 249–255.

May, V. (2011). Self, belonging and social change. *Sociology*, *45*(3), 363-378.

McInerney, M., McKlindon, A. (2014). Unlocking the door to learning: Trauma-informed classrooms & transformational schools. Retrieved from Education Law Center of Pennsylvania website: http://www.elc-pa.org/resource/unlocking-the-door-tolearning-trauma-informed-classrooms-and-transformational-schools/

Merrick, M. T., Ford, D. C., Ports, K. A., Guinn, A. S. (2018). Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System In 23 States. *JAMA Pediatrics*, *172*(11), 1038. doi: 10.1001/jamapediatrics.2018.2537

Mersky, J. P., Topitzes, J. (2010). Comparing early adult outcomes of maltreated and non-maltreated children: A prospective longitudinal investigation. *Children and Youth Services Review*, *32*(8), 1086–1096. doi: 10.1016/j.childyouth.2009.10.018

National Alliance on Mental Illness. (2011). State mental health cuts: A national crisis. Retrieved from http://www.nami.org/getattachment/About-NAMI/Publications/Reports/NAMIStateBudgetCrisis2011.pdf

National Center for Education Statistics (NCES) Home Page, part of the U.S. Department of Education. (n.d.). Retrieved November 29, 2019, from https://nces.ed.gov/.

Oral, R., Ramirez, M., Coohey, C., Nakada, S., Walz, A., Kuntz, A., … Peek-Asa, C. (2015). Adverse childhood experiences and trauma informed care: the future of health care. *Pediatric Research*, *79*(1-2), 227–233. doi: 10.1038/pr.2015.197

Paterson, J. (2019). Trauma Aware & Safety Ready. Retrieved from https://www.nacacnet.org/news--publications/journal-of-college-admission/trauma-aware--safety-ready/.

Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C., Wilens, T. (2015). College students: Mental health problems and treatment considerations. *Academic Psychiatry*, 39, 503–511. doi:10.1007/s40596- 014-0205-9

Peterson, M. J., & Benca, R. M. (2006). Sleep in Mood Disorders. *Psychiatric Clinics of North America*, *29*(4), 1009–10032. doi:10.1016/j.psc.2006.09.003

Pietrzak R. H., Southwick S. M. (2011). Psychological resilience in OEF-OIF Veterans: Application of a novel classification approach and examination of demographic and psychosocial correlates. *Journal of Affect Disorders*. ; 133(3): 560–568.

Preventing Adverse Childhood Experiences (ACEs) to improve U.S. health. (2019, November 5). Retrieved November 11, 2019, from https://www.cdc.gov/media/releases/2019/p1105-prevent-aces.html.

Ramirez, A. (2018). The State of Latino Early Childhood Development. Retrieved October 2,

2019, from https://salud-america.org/state-latino-early-childhood-development-research-review/.

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. doi: 10.1037/a0021260

Reschly, A., & Christenson, S. L. (2006). School completion. In G. G. Bear & K. M. Minke (Eds.), Children's needs III: Development, prevention, and intervention (pp. 103–113). Bethesda, MD: National Association of School Psychologists.

Resiliency: Strength Under Stress (2009) Retrieved 10/1/13 from: http://fyi.uwex.edu/familyresiliency/files/2011/08/ResiliencyTeachingUnit.pdf

Roberts, A. L., Gilman, S. E., Breslau, J., Breslau, N., Koenen, K. C. (2010). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. *Psychological Medicine*, *41*(1), 71–83. doi: 10.1017/s0033291710000401

Rodenbush, K. (2015). The effects of trauma on behavior in the classroom [Presentation materials]. Retrieved from Monterey County, Office of Education website: http://www.montereycoe.org/Assets/selpa/Files/Presentation-Materials/The%20Effects%20of%20Trauma%20on%20Behavior%20in%20the%20Classroom.pdf

Rytwinski, N. K., Scur, M. D., Feeny, N. C., Youngstrom, E. A. (2013). The co-occurrence of

major depressive disorder among individuals with posttraumatic stress disorder: A metaanalysis. *Journal of Traumatic Stress*, 26(3), 299–309.

Schaefer, L. M., Nooner, K. B. (2017). Brain function associated with cooccurring trauma and depression symptoms in college students. *Journal of Aggression, Maltreatment & Trauma*, 26(2), 175–190.

Seligman, M. E. P., Steen, T. A., Park, N., Peterson, C. (2005). Positive Psychology Progress: Empirical Validation of Interventions. *American Psychologist*, *60*(5), 410–421. doi: 10.1037/0003-066x.60.5.410

Sherrieb K., Norris F. H., Galea S. (2010). Measuring Capacities for Community Resilience. *Social Indicators Research*, 99(2): 227–247.

Silliman, B. (1994). Resiliency research review: Conceptual & research foundations. National Network for Family Resiliency.http://www.cyfernet.org/researchfresilreview.htm 1.

Solhaug, I., Eriksen, T. E., Vibe, M. D., Haavind, H., Friborg, O., Sørlie, T., & Rosenvinge, J. H. (2016). Medical and Psychology Student's Experiences in Learning Mindfulness: Benefits, Paradoxes, and Pitfalls. *Mindfulness*, *7*(4), 838–850. doi: 10.1007/s12671-016-0521-0

The prevalence of adverse childhood experiences, nationally, by state, and by race or ethnicity. (2014). Retrieved November 22, 2019, from https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity.

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*, *43*(1), 422–452. doi: 10.3102/0091732x18821123

Tiemensma, J., Depaoli, S., Winter, S. D., Felt, J. M., Rus, H. M., & Arroyo, A. C. (2018). The performance of the IES-R for Latinos and non-Latinos: Assessing measurement invariance. *Plos One*, *13*(4). doi: 10.1371/journal.pone.0195229

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. (2011, April 26). Building resilience in children and youth dealing with trauma [Blog post]. Retrieved from https://blog.samhsa. gov/2011/04/26/building-resilience-in-young-children-dealing-with-trauma/#.WSYDm9wkrQw

Walters, Kenneth, Bulmer, Sandra, Troiano, Peter, Obiaka, Uzoma, Bonhomme, Rebecca. (2018). Substance Use, Anxiety, and Depressive Symptoms Among College Students. *Journal of Child & Adolescent Substance Abuse*. 27. 1-9. 10.1080/1067828X.2017.1420507.

Wiehn, J., Hornberg, C., Fischer, F. (2018). How adverse childhood experiences relate to single 700 and multiple health risk behaviours in German public university students: A cross-sectional analysis. BMC Public Health, 18, 1–13. doi:10.1186/s12889-018-5926-3

Willett, W. C., Skerrett, P. J. (2010). Essentials of Healthy Eating: A Guide. *Journal of Midwifery & Womens Health*, *55*(6), 492–501. doi: 10.1016/j.jmwh.2010.06.019

Wong, M. (2008). Interventions to reduce psychological harm from traumatic events among children and adolescents: A commentary on the application of findings to the real world of schools. American Journal of Preventive Medicine, 35, 398–400.

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. (2014). *Trauma-informed care in behavioral health services*. Rockville, MD.

Ziegler, D. (n.d.). Optimum learning environments for traumatized children: How abused children learn best in school. Retrieved from Jasper Mountain Center website: http://www.jaspermountain.org/optimum_learning_environment.pdf