

Design relief: how interior design can foster the reintroduction of adolescent survivors with  
PTSD back into the classroom after a school shooting

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## I. INTRODUCTION

The National Institute of Mental Health (NIMH) defines Post Traumatic Stress Disorder (PTSD) as a disorder seen amongst individuals who have suffered through a traumatic experience or event (National Institute of Mental Health, 2017). The Journal for the American Academy of Child and Adolescent Psychiatry conducted a study with adolescents and found that an average of 5.26% of adolescents in the United States between the ages of 13-18 suffer from PTSD (Merikangas, 2010). When we take this statistic and insert it into the realm of schools and educations. We are posed with an issue of the lack restorative environments within the school system. Grady High School is located in the heart of Atlanta, Georgia and according to the National Center for Education Statistics, there were 1,372 students enrolled from grades 9-12. When we look at the national statistics for PTSD in adolescents compared to the size of the student body at Grady, the school has 72 adolescents that suffer from PTSD. This statistic is seemingly high for the future of the U.S. but likely to fluctuate after the event of a mass shooting at the school. Due to a multitude of recent mass shootings within the public and private school systems, there is a need for a program and infrastructure to reintroduce these students back into the classrooms. The goal of this thesis is to research and understand how schools can foster environments for children with PTSD from mass shootings. This thesis will provide relief to students who are affected by a mass shooting in school. Designers can create a space that reintroduces adolescents with PTSD into the school through research and studies of their environments and the psychological aftermath of trauma within schools.

Thirty-one high school students were shot and killed in 2018 over the course of 16 incidents in the school system. Recognizing that this number is sporadic, it is important to foster environments for students that have suffered trauma through this type of violence in schools.

### *STATEMENT OF THE PROBLEM*

There have been over 100 reported incidents of school shootings throughout the United States since the Columbine murders in 1999. There is minimal research and programs in place for these students who have suffered through the violence and live with PTSD. The NIMH explains that there are multiple ways that people deal with PTSD in accordance to their distinct to their personality and experiences. One of the listed symptoms of PTSD is avoidance symptom which is defined as “staying away from places, events, or objects that are reminders of the traumatic experience”. The problem at hand is seen through the lack of facility prototype and space planning of a restorative environment for adolescents who suffer from PTSD which ultimately inhibits their performance in the classroom and has a negative impact on their education. “In addition, decreased IQ and reading ability, lower grade-point average (GPA), more days of school absence, and decreased rates of high school graduation have been associated with exposure to traumatic events” (Delaney-Black, 2002).

### *PURPOSE OF THE STUDY*

The purpose of this study is to understand how to create a safe environment that can foster the healing process in adolescents that have experienced trauma after a mass shooting. It is necessary per the research to understand how high school students interact within an educational environment after a traumatic event. Through research, it is important to understand how interior design can create a restorative built environment to assist students that need to go back to school yet suffer from PTSD.

### *IMPORTANCE OF THE STUDY*

The study is important because it is needed. A large portion of the school student populations are either directly affected by a shooting or have experienced second-hand grief from news and social media outlets. There is a lack of psychological resources for students that might need psychological and physiological support after experiencing the trauma of a mass shooting.

### *RESEARCH RATIONALE*

Because there is limited data about the proactive side of these crisis- research methods involved in this study are evolving as research continues. The research methods primarily introduced throughout the study include precedent studies, observations, and interviews. Surveys were given to high school teachers throughout the southeast region of the United States. Observations were conducted of how high school students interact within a scholastic environment. A multitude of high school teachers, administrators, safety officers, and adolescent psychiatrists were interviewed throughout the Atlanta Metropolitan school system.

### *LIMITATIONS OF THE STUDY*

Due to mass shootings in educational environments being a relatively new phenomena, this research found limited study material in the field. There are a varying amount of limitations of the study due to a new field of research amongst the sporadic inconsistencies in mass shootings. Interviewing psychologists instead of their patients will pose more ethically based research as discussing trauma with survivors might induce anxiety. Discussing trauma with someone is only ethically viable if you are a trained psychologist or counselor. It is important to study the interviews of students after a mass shooting and observe their behaviors while on

screen. This might cause an issue due to publicity and media bias and pressure put on the student to say things per media expectations.

## **II. LITERATURE REVIEW**

There are common themes within the literature that is available and relevant to understanding PTSD in adolescents that have experienced trauma. This literature review is an analysis of others work and experience from survivors of a mass shooting and those who are dealing with trauma patients. This literature review discusses the importance of fully understanding PTSD, how it changes the adolescent brain, PTSD directly caused from a school shooting, first hand accounts over a varying time frame from the incident, proposed treatment, and interior design theories that are directly related to trauma-informed space.

### *A. What is PTSD?*

The National Institute of Mental Health (NIMH) defines Post Traumatic Stress Disorder (PTSD) as a disorder seen amongst individuals who have suffered through a traumatic experience or event (National Institute of Mental Health, 2017). Those who suffer from PTSD have experienced the incident personally, witnessed the incident, or learned about the incident happening to someone close to them (Butzen, 2019).

### *B. PTSD and the adolescent brain*

#### ***Children, adolescents and trauma.***

#### **Introduction**

Shaw discusses the psychological effects of trauma that occurs in an adolescent brain. There are five stages of human brain development, the third stage of development ranges from ages 7-22. Wiring of the brain is ultimately still in progress and searching for stability amongst electrical impulses and surrounding neurons. The last part of the brain to mature at this stage is the prefrontal cortex. This brain region is crucial in creating complex cognitive behavior, personality expression, decision making, and acceptable social behavior. It is imperative for teenagers to learn to self-control, and understanding irrational and irritable behavior. During this stage of development, teens should avoid doing drugs, drinking alcohol, smoking, and engaging in unprotected sex and substance abuse. If trauma is present in the student, they are more than likely to have a stunt in brain development and experience issues with cognitive behavior, personality expression, decision making, and acceptable social behavior. Although there are some people that cope with depression and trauma through substance abuse, it is imperative that teens steer clear of any type of substances as their brain is not finished developing. The adolescent and adult brains are similar especially while treating and diagnosing PTSD; the adolescent brain is slightly more impressionable. The personality of adolescents is to ultimately challenge and change the world - this common personality trait in this age group promotes resilience and adaptability to the healing process. The adult brain and personality are more adaptable to understanding their new reality. These slight neurological and personality differences can create a large difference in how a healing environment should be built and designed. Adolescents are typically more impressionable and are already experiencing the every-day teen anxiety; they are at a higher risk of comorbidity due to this precedent of psychological instability.

## **Relevance**

This journal is useful for understanding a statistical analysis of PTSD. “Man-made disasters such as war, sexual and physical assaults, terrorism, muggings, kidnaping and torture. The lifetime risk of exposure to a traumatic stressor is estimated to vary from 70–90% and of those exposed, about ten percent will develop a posttraumatic stress disorder” (Shaw, 2000). Understanding how the brain functions and the importance of continuing development, it is possible to implement psycho-social environments that will enable the healing process and support brain development even if stunted by trauma. Implementing spaces for social development is important as the article states that trauma can inhibit this brain tissue formation.

### *C. PTSD from school shootings*

## ***Responding to Students with PTSD in Schools***

### **Introduction**

The UCLA department of Psychiatry and Biobehavioral Sciences has researched the problem of PTSD in adolescents around a multitude of high schools within the Los Angeles Public School System. This journal provides insight into the aftermath of trauma from violence within high schools. The exposure to traumatic events have impacted and decreased the overall IQ of students. Along with the lowering IQ, students are more likely to see a decrease in their GPA and social skills and more students are being reported as socially isolated. These negative effects associated with PTSD have a direct impact on these students’ mental health, social, and academic needs and successes.

## **Relevance**

This journal is supportive of the research that schools are in need of creating programs involving teachers and faculty in order to ease adolescents back into the classrooms. In contrast to the research gleaned in this paper, this study mainly focuses on children who are living below the poverty line and face the most violence at home; but this journal is important because it discusses school-wide trauma and the psychological after effects of mass trauma amongst adolescents. The journal has introduced this research to new terminology, psychological first aid.

The journal directly discusses and defines school-wide trauma as a man-made terrorist attack. It brings attention to the importance of creating a space that incorporates universal design amongst personnel, students, and administration within the school. “The impact of these traumatic events can be manifested at three distinct levels: the individual (student or staff), the school system, and/or the surrounding school community”. Once trauma spills into the community, there is the chance of news reporters and prolonged disruptive activity amongst the schools normal routines. The article leaves suggestions on how to interact within the environment after a school-wide trauma has occurred. From this article we have learned the importance of the five steps that schools can take to focus on addressing and moving past PTSD in adolescents. These five steps are founded on the understanding of “Psychological First Aid for Students and Teachers: Listen, Protect, Connect—Model & Teach,” (LPC). This crisis response strategy is designed to reduce the initial trauma and distress experienced by students to help them return to school, stay in school and have a successful learning environment. This cannot be administered over just a single session but this model can guide how the students and educators interact over time through their healing and recovery process. The five step counseling process includes:

1. Step 1: Listen

- a. “It is important to validate the students”, let the student know that someone is willing to listen and understand them.

2. Step 2: Protect

- a. Having adults and teachers reestablish students’ feelings of both physical and emotional safety is an important step in the process of psychological first-aid. Being able to establish a sense of physical and emotional security will help the student process emotions easier.

3. Step 3: Connect

- a. “One of the most common reactions to trauma or fear is emotional and social isolation and the sense of loss of social supports...students also can be encouraged to interact, share “recovery” activities and take on team projects with other students, friends or teachers. With this type of interaction, students feel the caring and consistent support of adults in their lives, even during a difficult time of coping.”

4. Step 4: Model Calm and Optimistic Behavior

- a. Maintain level emotions and reactions with students to help them achieve balance. Emphasize positive thoughts and ideas about the future such as “recovery from this disaster may take some time, but we’ll work on improving the conditions at school every day”.

5. Step 5: Teach

- a. In order to facilitate the healing and recovery process, it is important to help students understand the variety of stress reactions. An emphasis on the different

stages of grief and teaching that every student deals with this differently is important.

- b. “With early intervention and psychological first aid, the majority of students and adults may be able to resume a new normality of function and routine. However, those with a “trauma history” of previous exposure and experience with violence may require follow-up care and treatment for PTSD, depression, severe behavioral disorders, or suicidal ideation.”

This 5-step immediate step process is important per this research as it acknowledges the importance of counseling and psychotherapy. Having counselors on staff and readily available to go to the site of a mass shooting is a crucial aspect of the healing process. This literature has created a new user group and programmatic detail within the camp guidelines.

### ***The Parkland students, one year later***

#### **Introduction**

This is a podcast from the New York Times that revisits and interviews 8 survivors of the Marjory Stoneman Douglas High School shooting. Clare Toeniskoetter is a producer for “The Daily” and spoke with four students who survived the shooting. There are four female students that recall the last year from when they first hand experienced the shooting in their classroom in Parkland, Florida.

#### **Relevance**

These first hand accounts can give direct input on what it is like to be a mass shooting survivor. The girls talk about their ‘new normal’ and how they have suffered over the past year giving insight into how adolescents deal with grief. The interview and focus group hosted four

fifteen-year-old female students Eden, Maddie, Brooke, and Jade. Below are direct quotes from the interview that support the rationale of creating a facility for these trauma survivors:

1. Eden: "I feel like now, I don't know, in a way I feel burnt out a little, just like — I feel like I've been through hell. Like hell. And at that moment, I feel like I was so innocent."
2. Maddie: "This year has been exhausting."
3. Brooke: "Being together was the only good part about going back to school after the shooting. There was a constant feeling of emptiness especially when I saw the empty desks."
4. Brooke: "It kind of never feels normal. We have a new normal, I feel like. My normal is seeing the 1200 building every day and having flashbacks and then moving on."
5. Eden: "After three months, I would say, is when it wasn't all we thought about all the time. Like that wasn't the feeling I had."
6. Brooke: "Summer was a great time, we were finally away from the building. All of our friends completely understand and I feel like I can trust them more than a therapist, they know me, it's a lot more personal."
7. "I don't talk about it with anyone. Like, no one. I just can't. Not even my my closest friend. It's really hard for me to talk about it, because my closest friends, most of them weren't in the building. And it's just like, what is it going to help me to talk about it? They're going to feel bad for me, and then what?"
8. Clare: "How did it feel coming back in the new school year?" response:
  - a. Maddie: "I hated it"
  - b. Eden: "It was awful"

- c. Jade: "It was like 'oh...we're back here?'...there's a huge separation with the new freshman class that don't understand what happened. There's a whole separation, an entire divide."
- 9. Clare: "Does it make you feel older?" response:
  - a. Eden: "I feel like a 90 year old woman"
  - b. Brooke: "We fast tracked...I feel bad celebrating my birthday, I feel bad getting my license when they can't, every milestone is really hard. They're supposed to be here, that whole thing wasn't supposed to happen. I feel like our childhood got ruined, it's not there anymore"
  - c. Jade: "Just getting up every day"
- 10. Maddie: "Like, our high school, everybody says high school is the best time of your life, along with college. But we don't get that."
- 11. Eden: "It's consuming our lives. Like, our high school, everybody says high school is the best time of your life, along with college. But we don't get that."
- 12. Eden: "It's hard to differentiate what's from the shooting and what's from regular teenage anxiety. Because everybody has anxiety. Everybody. So for me, it's like, I'll get those times where I'll feel like there's literally — I'm just like, I can't, I can't. And I don't know if it's from the shooting, and I don't know what it's from."
- 13. Maddie: "Sometimes the stress of the shooting has a big impact on regular teenage stresses. So it'll make your normal teenage stresses more stressful. Even more dramatic."
- 14. Jade: "I just feel like time is going by so fast-I feel like it was yesterday. I relive it every day. Like, it surrounds. When I look back on the person I was exactly a year ago from

today, she would have not acted like this at all. She would have been a completely different person. I was fundamentally changed.”

15. Brooke: “I don’t think anyone can mentally be the same after what we went through...It’s so hard for me to want to have kids in a place like this...I’ve wanted kids my whole life. But I don’t know if I want them anymore.”

16. Eden: “For, like, three months after the shooting, I would always be searching up videos of the shooting and watching them over and over...Because I needed, I needed that closure. I needed to actually see that was real.”

17. Maddie: “I think the significance of getting something permanent on you is that just like the tattoo, the shooting is going to be with you for the rest of your life.”

18. Clare: “Do you think you’ll ever have closure?” response:

- a. Eden: “No.”
- b. Brooke: “Probably not. Like, I want to have closure. But I don’t know if it’s attainable.”
- c. Maddie: “Hopefully.”

19. Clare: “Are any of you going to go into school on Thursday?” response:

- a. Maddie: “No. I can’t. I couldn’t even stay for the rest of today. I can’t physically do it.”
- b. Eden: “Yea, today was hard.”
- c. Maddie: “I had to leave after third.”
- d. Jade: “Are you going tomorrow?”
- e. Maddie: “No. I can’t. I physically, like, starting on Monday, I walked into school and I couldn’t.”
- f. Jade: “I feel like if I don’t, like, I don’t want to be at home thinking about it.”

- g. Eden: “Yeah. I don’t want to be home by myself.”
  - h. Maddie: “I’d rather be home than there [the school].”
20. Maddie: “Something that I’ve always wished that the media knew is that — what we went through, other than the politics. But we have stories that are worth being told.
21. Brooke: “And I wish people knew that just because the cameras went away and people aren’t writing about it as much does not mean that the issue went away. Like, people are still depressed. People are still having panic attacks and anxiety attacks. And there are still people that can’t go throughout the day without breaking down because of this. And they didn’t just like, poof, when the camera stopped reporting them or their interview ended — nothing stopped.”

### ***Parkland: Birth of a Movement***

#### **Introduction**

Author Dave Cullen goes through a series of interviews, focus groups, and observations with the survivors of the MSD shooting in Parkland, Florida. The literature is heavily researched and told through the ideology of Parkland being a pivotal moment in American culture.

#### **Relevance**

Cullen sets a precedent on how to research the topic of a mass shooting. He creates interviews with students, parents, psychologists, to get an overall understanding of the resiliency of these students. He describes the MSD students as ‘phoenix-like’ as they set an example on how to rise from the ashes after a mass shooting. The sense of community and understanding that each student is not alone is a significant part of this literature.

## ***Life after a mass shooting: a survivor speaks.***

### **Introduction**

This CBS interview takes place between interviewer Lee Cowan and a Virginia Tech shooting survivor Kristina Anderson. Anderson was 19 years old when she was carried out of her French class at Virginia Tech in April 2007, after having been shot three times by a student who killed 32 and wounded 16 others. Anderson talks with Lee Cowan about the physical and mental healing required after a mass shooting. Kristina recalls the incident at the Virginia Tech shooting in 2007 and discusses her mental and physical healing process over the past ten years.

### **Relevance**

“Your brain is numb for about two years. You’re kind of fuzzy and memories are not fully formed because your brain is going through a sense of ‘wait, am I safe yet? Am I okay?’ The hard parts are not always immediately after the shooting. The hard parts are nine months afterwards when there is constant fear and loneliness that’s really hard to prepare for.”

“Physical and mental healing can be on vastly different schedules. For the first five years after the event I thought about the shooting every single day, something would trigger and I’d lose anywhere from ten to twenty minutes depending on how severe that trigger was. It’s not even always just mentally breaking down, I’d just have a disassociation with the place. For instance, if I was in a classroom I’d tune out for the conversation, my heart rate would rise and my pulse would start beating and the worst part was that I didn’t know why it was happening. I didn’t know why someone walking in late or slamming a door slammed and that would scare me...and I couldn’t connect the ‘why’”.

Kristina has been going to a therapist but finds most of her comfort through those who have the commonality of being mass shooting survivors. “We talk about how awkward other

people are around us. Or how funny certain media questions are. Sometimes people in your close family and friends don't do well either, unintentionally saying things that can really upset you especially around the anniversary of the event." "I mentally start to be kinder to myself in the days leading up to this because I know what's coming is going to be hard, your mind knows that something is coming. I'm more tired, reactive, emotional. I'm brought back to a really painful reminder that I almost died. The hard part is accepting that you'll never go back to how you were the day before your shooting. The obligation is to live a better life, that life is short. The best way to honor what happened is to be authentic to yourself."

This recollection of the shooting provides insight on the healing process and emphasizes the importance of community through the healing process. Being surrounded by like minded individuals will create social programming within the camp facility.

### ***Columbine Survivor Shares Her Story on the Anniversary of the Shooting***

#### **Introduction**

The short film follows Amy Over, a survivor of Columbine, and discusses how she lives with trauma from the shooting on a day to day basis. Nineteen years after the attack on Columbine, Over attended the March for Our Lives rally in Denver, Colorado. The rally was organized by students that experienced the mass violence in Parkland, Florida. She discusses the importance of creating a fostering community based off of the trauma that everyone who has survived a mass shooting might experience.

#### **Relevance**

Over's recollection of the day is "all a blur". Over was a basketball player at Columbine and received full scholarship to play in college the day before the shooting. After the shooting, she lost all interest in being involved in sports. "Sadly in Colorado we have a large community of

mass trauma survivors...so I feel like I'm about to march with my people...I won't feel like an outcast, as a shooting survivor you feel like an outcast at some times..." Over discusses her struggles with PTSD that includes situational panic attacks. Her feelings of empowerment within the trauma survivors community enhances the ideology of creating spaces for community spaces.

### ***Student Wounded In Florida School Shooting: My Friend 'Didn't Make It'***

#### **Introduction**

This is an interview with 17 year old Parkland student and her 15 year old sister as they recall the day that the school experienced a mass shooting. They are both giving a first hand statement about their experience before, during, and after the shooting.

#### **Relevance**

Both students mention having nightmares and feelings of stripped away control, calmness, and safety. They discuss the issue of having survivors guilt and emotions behind this and suffering through trauma.

#### ***D. First hand accounts***

### ***Stoneman Douglas Activists Discuss the School Shooting with Ellen.***

#### **Introduction**

This talk show interview hosts Parkland shooting survivors Emma Gonzalez, Cameron Kasky, and Jaclyn Corin. The students talk with Ellen about their experience during the shooting at Marjory Stoneman Douglas High School.

## **Relevance**

These are first hand accounts just 9 days after one of the deadliest school shootings in US history killing 17 high school students.

## ***13 Families: Life After Columbine***

### **Introduction**

This hour and a half documentary takes an in depth look into the lives, trauma, and every day stressors that survivors, victims, and their families have dealt with. It follows thirteen families that lost children from the mass murder that took place at Columbine High School on April 20th, 1999.

## **Relevance**

The victims families and the shooting survivors recant their experience in this documentary ten years after Columbine. This source has first and secondhand accounts directly involving PTSD from a mass shooting. Many of the survivors acknowledges the importance of mental health. Even ten years after the incident, the survivors have a hard time talking about the incident and express how much the shooting changed their lives. With many survivors, they had to adapt to a 'new normal' way of life, the feeling of loss of control is commonplace amongst every account of the shooting. Survivors discuss the hardships of PTSD and the lack of interest in returning to school. They recall having a hard time focusing on tasks at school, lack of initiative with previously important aspects of their lives. The school did not have any programs in place or psychologists on hand for these survivors and they express regret of not reaching out for help. Every year on April 19th, Columbine and other mass shooting survivors get together and memorialize the lives lost on April 20th, 1999. The sense of community in this

group of specific trauma influenced peers has created feelings of togetherness and comfort for these survivors in knowing that they are not alone. Being able to incorporate the ideas of bringing this victim base together will be helpful for the healing process through social growth.

## ***Parkland Speaks***

### **Introduction**

Parkland Speaks is the 'yearbook' developed by students and teachers after the massacre at Marjory Stoneman Douglas High School (MSD) in Parkland, Florida on February 14th, 2018. The book was edited by a teacher at the school and is an accumulation of over 30 student's journal entries and essays three months after the incident.

### **Relevance**

This book has provided direct insight into how students feel and interact with one another after the disaster at MSD. This information is important for research efforts as it relates to coping mechanisms, how the students interact with one another, their own introspection and their environments. The journal entries account for the emotions felt during, immediately afterwards, and 3 months beyond the mass shooting. Some students express their priorities of the healing process which provides insight as to how to design a space per their particular requests. There are many instances within the literature that prove evidence of PTSD from the shooting within the students writing- examples range from the following:

1. "I constantly dream about it...when I do actually get some sleep."
2. "I'm someone else now, and this new person doesn't like fireworks, knocking on doors or walls, loud popping noises, the sound of glass shattering. Nor do I like people screaming & I don't like the sounds of phones ringing."

3. "I remember when reality was boring and not painful, distorted"
4. "It felt more exhausting to go to school"
5. "Now I find myself on the floor covering my ears first in denial, but then the screams. Lives were taken, and made his souvenirs."
6. "I'm losing more and more of myself each day I'm seeming to fade away I don't know how much more I can take."
7. "Now writing this three months later, it feels as if time has stood still. We all take life day by day and try to do our best to make it through each day while we practice our methods of coping. My way of coping was heading down to the tattoo shop and forever memorializing the victims with the word 'love' and a number 17 connected to it."
8. "I lost so much more. I lost my sense of safety. I lost my sense of innocence. I lost my sense of security. I lost my ability to see the world as I had only hours earlier. I would give anything to go back to the way things were before the fire alarm rang."
9. "The days after that were filled with crying and being with friends for comfort...this whole experience has made me look at things differently. I will not take anything for granted and I will always watch my surroundings."
10. "...new normal...there would be beanbags, picnics, movies, and all the activities that would contribute to our healing process."
11. "...my students needed me to be there for them, but they are all scarred.  
Students aren't coming to school because they don't feel safe. It is so difficult to heal..."
12. "I can still see the chaos in the hallways when I close my eyes. I am traumatized."

13. "I am mentally exhausted and drained."
14. "...My neurons have gone through a blender....but here I am, alive pushing through the sadness, pulling myself out of the breakdowns."
15. "I think that I'm fine until I find myself dreaming about the screams I heard."
16. "Sometimes I think that I am fine, that I've lost some of that sheer pain and wrath; that I'm on that path towards healing and success, towards not moving on really, but growing from the distress and the stress of the press and the emotions I repress..."
17. "I continue to have nightmares where I'm running through my school being chased by a gunman as he shoots in my direction."
18. "Since the shooting, it has been extremely difficult to stay positive, though I've been working to stay motivated in my day-to-day activities."
19. "I shouldn't worry about living everyday."
20. "My students hugged me and told me stories of how yoga and meditation have helped them get through these difficult days. Some told me they used their breathing techniques during the attacks to remain calm...I continue to hold classes and raise money and awareness of the benefit of yoga for healing trauma."

### ***"Rebuilding Normal: Mass Shooting Survivors' Journey Of Recovery"***

#### **Introduction**

The videos and interviews within this short documentary depict what life is like for three separate women after surviving a mass shooting. One woman was shot in both legs during the massacre at a nightclub in Orlando, another was at the Las Vegas country concert where the

deadliest mass shooting in US history took place. The third woman experienced the mass shooting at a US Constituents meeting in Arizona in 2011. Each of the women discuss how they live their lives with PTSD and how they have reacted to the situations; they discuss survivors guilt, therapy, and their personal PTSD triggers.

## **Relevance**

This news broadcast is relevant to the research because it directly discusses PTSD from a mass shooting. The triggers in PTSD from adults and adolescents alike are similar across the board; although the women express different triggers per person, these trigger symptoms are commonplace amongst other survivors of violence. In the interview, the triggers for their personal PTSD is listed as someone running up from behind, popping sounds, loud noises, fireworks, all women express their constant state of fear and lack of control.

## ***“PTSD in past, Neb-Omaha player advocates for mental wellness.”***

## **Introduction**

This interview gets an inside look at a survivor of a mass shooting at a public high school. Kyler Erickson was a high school senior at Millard South High School in January of 2011. Erickson expresses the need for institutionalized PTSD therapy and training for students that have experienced similar trauma. He was interviewed by ESPN as he was a stand out basketball player at the University of Nebraska and also an activist for mental wellness within the state. During his freshman year at college, Erickson felt isolated and alone while suffering from PTSD and claims that there was a negative stigma about the disorder from his classmates leaving his family and teammates to lean on. He experiences hallucinations, nightmares, and flashbacks even two years after the incident. His immediate and prolonged triggers from the

school shooting include loud and sudden noises. Erickson now travels around the US giving lectures about PTSD in hopes to break the stigma and encourages mental wellness amongst high school students; pushing those in need to get help.

### **Relevance**

This interview is relevant to research as it provides an insight on a first hand survival of a mass shooting. The seemingly successful young adult has created a movement for PTSD and expressed the importance that his sports teams played within his healing process. Erickson also discusses the importance of community, family, and speaking out against stigmas.

### *E. Proposed treatment*

### ***Practice parameters for the assessment and treatment of children and adolescents with posttraumatic stress disorder.***

### **Introduction**

This journal discusses the parameters and suggestions for therapy amongst children and adolescents with PTSD. Through clinical experience and evidence based research the Journal of the American Academy of Child & Adolescent Psychiatry (JAACP) has established guidelines and speaks on the importance of early identification of PTSD in adolescents, access to information from the patient, and treatment for the possibility of comorbid disorders. The most common and supported type of therapy amongst this age group is Cognitive Processing Therapy (CPT). Trauma Focused CPT (TF-CPT) is introduced as an additional therapy for

adolescents that has a higher success rate with patients that have experienced trauma. The therapy can benefit from including the patient's non-perpetrator parent.

## **Relevance**

This journal has given suggested parameters for the implementation of TF-CPT in adolescents that have experienced trauma at home and in school. After Hurricane Katrina, high school students that attended school near the broken levee in New Orleans have experienced such severe trauma from the 2005 Category 5 hurricane. The article states that “most individuals who experience truly life threatening events manifest posttraumatic symptomatology immediately. However, only about 30% on average tend to manifest enduring symptomatology beyond the first month.” This supports the idea of a year-round open camp for students with PTSD. Within the first three months after experienced trauma, if there are still signs of altered physical and mental states then the patient can be diagnosed with PTSD. Until this three month threshold, the patient will be considered to have acute PTSD.

Reminders of the trauma could lead to intense physiological or psychological distress. Students that experienced trauma from Katrina showed a “decreased interest or participation in previously enjoyed activities; detachment or estrangement from others; restricted affect; and a sense of a foreshortened future.” Even if the student cannot be properly diagnosed with PTSD, there is still prevalence of generalized anxiety with symptom of nightmares, psychological and physiological impairment, lessened academic function, hypervigilance, lack of interest, and ADHD. In adolescents, the presence of severe anxiety and PTSD can lead to self-afflicted behavior such as repeated cutting or substance abuse. Adolescents that have generalized anxiety before the inflicted trauma can experience severe symptoms after the experienced

trauma. The article states that “for older children psychodynamic trauma-focused therapies provide an opportunity to mobilize more mature cognitive capacities, objectify and explain symptoms, identify trauma reminders, identify environmental factors that may complicate recovery— especially interactions that heighten regressive experience and make more explicit ways in which overwhelming fear and helplessness of the traumatic situation run counter to age-appropriate strivings for agency, competence, and self-efficacy.” This supports the reasoning behind having spaces that facilitate the notion that the user is in control of how they experience their therapy and overall time at camp. The somewhat unstructured nature of the environments and sessions can help the adolescent regain an internal sense of control that was stripped away during an uncontrollable traumatic event.

The article introduces the parents as a new user group as “parental inclusion in treatment resulted in significantly greater improvement in child-reported depression and parent-reported behavior problems. trauma-focused CBT (TF-CBT) treatment.” The incorporation of parents will expand our user group per therapy sessions and space planning. This source is beneficial for understanding the guidelines of TF-CBT and how it can be adapted per user.

### ***On a ledge: the mental health benefits of climbing.***

#### **Introduction**

This magazine article focuses on the alternative mindfulness therapy of climbing. The article takes an overall look at the healing features of physical exercise especially amongst user groups that have PTSD, anxiety, and depression. “Exercise—climbing included—boosts mood-related chemicals in our brain like dopamine, norepinephrine, and serotonin, helping to lift our spirits.”

## **Relevance**

While rock climbing seems like an individualized sport, a bouldering facility integrated into the camp can create a hang out and third place for campers that are wanting alone time. It can facilitate group activities in the event the multiple campers are at the facility at once. The author of this article works with Sacred Rok, a Yosemite based nonprofit organization that invites adolescents that experience harsh living environments, poverty, and stressful lifestyles to climb for healing. A 16-year-old first time climber expresses that “My favorite part was that I actually made it, without giving up. At first I wanted to, but I put my mind to it and did it. Now I know that if I put my mind to something, I can make it in life.” This article is relevant to research as it facilitates an understanding of an accessible type of exercise that can create a space of comfort and promotion of fun/exercise.

## *F. Design theories for PTSD*

### ***Empathy in architecture: COTS embraces 'trauma-informed design' in shelter renovation.***

## **Introduction**

This short radio interview brings host Liam Connors with Jonathan Farrell, the facilities director at Committee on Temporary Shelter (COTS) in Burlington, Vermont. In this brief interview they discuss the psychological effects that the built environment has on their homeless user base at COTS. Per Jill Pable's design advice, the facility has made minor alterations to the environment and the users have expressed their admiration for the updates.

## **Relevance**

Jill Pable is a professor of architecture at Florida State University and is quoted in the radio interview saying “for example, when a person has experienced domestic violence or been assaulted, they are very concerned about people coming up to them from behind because they feel very vulnerable...So a reaction to this architects and designers might think about is to create furniture arrangements that offer people protected backs, which means their back is not facing the door....We know a lot about how to build hospitals and schools and prisons, but surprisingly very little about behavioral health sorts of facilities,” she says. “That's just starting to heat up in the last four to six years. So I really see this idea of "trauma-informed design" as really being the next frontier of where we need to go.”

Although this interview focuses on homelessness, it is a key factor in understanding the relatively new term of trauma-informed design. Pable states that this type of design is the next frontier for interior designers and validates the reasoning and rationale of this thesis research and work.

### ***The effects of color on the moods of college students.***

#### **Introduction**

Through empirical evidence, Kurt and Oseuke discuss the psychological effects of colors on campus at a university. The research develops a full understanding of primary, secondary, and tertiary colors and how they relate to the psychology of adolescents and young adults.

#### **Relevance**

This journal is essential to the understanding of primary colors within adolescent psychology. Kurt outlines the importance of understanding psychological effects on each primary color. The camp facility will adapt to these guidelines and appropriate colors will be placed per users space in accordance to the psychological effects of each primary color. For

instance, Kurt discusses the importance of yellow in creativity; the art therapy room will follow a yellow color scheme as a method to enhance creativity within the space.

### **III. RESEARCH BACKGROUND**

### **IV. RESEARCH METHODS AND RESEARCH FINDINGS**

- A. Research questions
- B. Research design
- C. Population/user group
- D. Timelines

### **V. RESEARCH FINDINGS AND DISCUSSION**

#### **A. Precedent studies**

- 1. Kronstad Psychiatric Hospital
- 2. Children's Center for Psychiatric Rehabilitation
- 3. Day Care Psychiatric Institute
- 4. Psychiatric Center
- 5. Camp Southern Ground
- 6. Camp JRF Eco-Village
- 7. Camp Twin Lakes- Rutledge

#### **B. Observations**

#### **C. Interviews**

##### **1. Matt Petersen**

Petersen is the Assistant Head of Upper School at Mt. Pisgah Christian School in Johns Creek, Georgia. Petersen is a mentor, sports coach, and acting role model for the high school students at Mt. Pisgah. One of his duties for being the Assistant Head of Upper School is the

leader of the Intruder Team; this team was designed and set up by a local SWAT team in order to train and implement techniques and protocol in case of an emergency intruder situation.

Petersen is quoted “I heard it said that life is ten percent what happens to us and ninety percent how we choose to react. It is in that ninety percent that we reveal if we are grounded in the virtues that should be engrained to help define our character” (Mt. Pisgah, 2018).

## **2. Anita Hunter**

Anita Hunter is the Visual Art Instructor at Mt. Pisgah Christian School in Johns Creek, Georgia. Hunter discusses the role of art as therapeutic for her adolescent students; the art room has created a sacred space for students at Mt. Pisgah and they have a firm understanding in the importance of art within the educational system. Hunter is quoted saying “I enjoy the intrinsic rewards my students receive upon successfully completing a challenging work of art” (Mt. Pisgah, 2018). She discusses further on the intrinsic rewards and benefits of incorporating art into the healing process.

## **3. Dr. Edward Vega, PHD**

Dr. Edward Vega is a clinical psychologist at the Department of Veterans Affairs in Decatur, Georgia that specializes in PTSD treatment primarily using cognitive processing therapy (CPT) and characterizes CPT as the best form of psychotherapy for children and adolescents with PTSD. Although Dr. Vega works closely with veterans that have experienced PTSD from deployment, he talks on his experience with a wide range of patients who suffer from PTSD outside of military experiences. During the interview, Dr. Vega discusses the importance of understanding the user. He emphasizes on the importance of knowing that there

are limitations within the psychological healing process. The environment that will be designed needs to support areas that will facilitate psychotherapy and comfortability but it is ultimately up to the patient to control their own healing process. During one-on-one therapy sessions, the majority of his patients like to face the door so they can feel secure in knowing who is coming in and out or walking by. It is important for the patient to feel safe especially in a space designated to promote the healing process. Many of the patients he works with have a hard time focusing on the therapy if there are large windows in the room. The patient can be easily distracted by the overstimulation of sights and sounds ultimately backtracking in steps towards healing and is quoted saying “distractions such as the AC cycling on and off slow the process”. Dr. Vega recommends creating a comfortable, safe, and understimulating (aesthetically simple) area for one-on-one therapy rooms and says that “seeing less is more”. Along with CPT, Dr. Vega talks to his patients about the importance of being able to deal with the anxiety and depression that generally coincide with PTSD. He states that “the healthiest bodies deal with stress better” and patients are encouraged to develop healthy eating, exercising, and sleeping habits. Sleep hygiene is extremely important in creating an overall healthy lifestyle and promotes progression within the healing process. “The relationship between sleep and depression is complex. While sleep disturbance has long been held to be an important symptom of depression, recent research has indicated that depressive symptoms may decrease once sleep apnea has been effectively treated and sufficient sleep restored. The interrelatedness of sleep and depression suggests it is important that the sleep sufficiency of persons with depression be assessed and that symptoms of depression be monitored among persons with a sleep disorder” (Zimmerman, 2006). The most important thing to focus on in the sleeping area is to support circadian functions for the user.

#### **4. Matthew Finn**

Matt Finn is an architect and the founder and Director of Collaboration at Cognitive Design in Atlanta, Georgia. In an article for Behavioral Healthcare Journal, Finn states “the built environment shouldn’t attempt to change these reactions; it’s simply not possible to treat PTSD with a building. The role of a therapeutic environment is to facilitate, in concert with the psychologist, an expedient and comprehensive recovery.” Throughout the interview with Finn, we discuss the importance of honest and easy to read materials. He emphasizes the fact that buildings cannot heal but they can foster and expedite the therapeutic healing process; the built environment cannot cause or treat PTSD but architects and designers can do research in understanding the role of the environment within the recovery process. Everyone experiences spaces differently especially if they have experienced trauma which is why Finn stresses the importance of creating a space that is easy to read. Each space needs to be functional and pleasing within the frame of its purpose for the user. Patients with PTSD almost always like to assess their surroundings before they enter a space and it creates comfort for the user when the environment is easy to understand; this can be seen in many design choices. The sleeping and retreat areas need to have an obvious theme of relieving anxiety and feelings of being over stimulated. This retreat zone should incorporate lower lighting to support a relaxing environment during the day and natural circadian sleep cycles at night. Although screams/audible nightmares are rare, Finn mentions the possibility of incorporating acoustically isolated rooms in case the users wake up their neighbor. He mentions that if we focus on designing a camp, it needs to read like a summer camp and remain fun, interesting, and kid friendly. The cafe and/or cafeteria needs to be highly communal and promote social growth within the healing process. It is important to introduce adolescents to the practices of teamwork, acceptance, and getting rid of the negative stigmas behind mental illnesses and PTSD. Many trauma survivors feel as though

they have been stripped of their sense of control; there needs to be a level of cohesion for creating options and presenting situational control for the user. It will be useful to incorporate 'break out' zones near areas that might cause high levels of anxiety such as a cafeteria.

## **5. Dr. Nathan Butzen, Psy. D.**

Dr. Nathan Butzen is a licensed psychologist and the Director of Clinical Services at the Summit Counseling Center in Johns Creek, Georgia. The counseling center offers treatment for everyone and Dr. Butzen's experience with high school students that have experienced trauma is resourceful per this research. Dr. Butzen works closely with adults and teens that have experienced trauma; he is well versed in a wide range of therapy and has given insight into important programmatic and design details that will foster the healing process. Teens that have PTSD may sometimes experience hypervigilance which is over alertness and constant anxiety that something bad is going to happen. This hypervigilance in teens can be a feeling of being trapped, induced claustrophobia, fidgeting, fear of touch, jumpiness, etc. The fear of being trapped can transfer into the furniture selections; Dr. Butzen mentions that in communal seating it is common for designers to incorporate booth seating which can create anxiety and induce PTSD feelings of being trapped. He articulates the concept of having spaces that are 'intimate but with options'. Within a cafeteria setting, he recommends having at least 2 people at each seating area to create intentionally social spaces. These intended spaces help create a sense of community and promotes the adolescent to continue their social development. Although Dr. Butzen recommends only communal seating within the social zones, he mentions the importance of creating 'break away' areas especially for eating outside. If the student feels overwhelmed in a large cafeteria, there are still options to eat outdoors. Many trauma patients do not like sitting with their backs to the doors in fears that they don't always know what is

behind them. They prefer spaces that have obvious entrances and exits that incorporate visibility within the built environment. He recognizes the challenges of incorporating a visible yet understimulating space that remains private. Visual and auditory stimuli can sometimes be overwhelming for those with PTSD and it's important to balance the space between visibility, practicality, and sight distance. Reminders of spaces and events are triggering for patients and he advises to create a space that feels therapeutic and does not subliminally or consciously look like a school. Dr. Butzen uses a wide variety of therapeutic practices but mentions the success of animal therapy (specifically equine therapy), art therapy, yoga and meditation, and team building. These types of therapies can vary dependent on the patient's phase in the healing process but Dr. Butzen mentions the importance of giving the user options especially when dealing with adolescent girls and boys. With teenage boys he focuses on alternative therapy. Boys generally experience the healing process through moving and processing information and feelings about their trauma. Teenage boys are more able to process trauma when they are engaged in activities such as equine therapy, team building exercises, experiential design, and any type of therapeutic environment outside of the therapy room. Teenage girls differ because they process trauma easier through group therapy sessions and individualized treatment. Art therapy is proven to be a useful across all teenagers. Dr. Butzen incorporates sand trays in his one-on-one therapy sessions and encourages the patient to draw what they're feeling or sketch scenes in the sand. This idea of using sand trays creates the feeling of casualness and the ability to open up and draw their trauma instead of verbally admitting it. Dr. Butzen states that there are three types of ways that people can have PTSD; if they have experienced the event personally, if they have witnessed the event, or if they have learned about this event happening to someone close to them. Students that experience trauma almost always have changed behaviors especially within the classroom. These can be detected by over fidgeting, the inability

to sit still, signs of ADHD even if never before present, daydreaming, minimal eye contact, disconnect from reality, and social isolation. Less often you get kids that will act out in class and have angry outbursts and constant irritability. The student has to know that they are in a physically and emotionally safe place before they can heal. To create a physically safe space it is important to obviously relay this information by creating a barriers within the campus and its buildings. This will help the user in knowing that no one can get in without having gone through these barriers. Having a defined entrance and exit is important for this so the user knows that even if an unfamiliar or threatening face comes in the space, the student has an option to always leave. Creating spaces and an organized flow of choices for the student is important in enhancing the emotionally and physical safety of the place. Dr. Butzen has seen great success with equine therapy and mentions that this can create a healthy relationship to know that it is okay to take care of something else even if it will someday be gone. Spaces that provide animal therapy can also become spaces for the user to collaborate and hang out amongst their friends and peers. Having this third place and social retreat zone is an important step in the healing process because it creates a sense of community and safety for the user.

## **6. Dan Matthews**

Dan Matthews is the Chief Operations Officer at Camp Twin Lakes (CTL) in Rutledge, Georgia. “For 25 years, Camp Twin Lakes has provided life-changing camp experiences to thousands of Georgia's children with serious illnesses, disabilities and other challenges each year. We collaborate with over 50 different nonprofit organizations, each serving a different population, to create customized programs that teach our campers to overcome obstacles and grow in their confidence and capabilities” (CTL, 2018). Matthews took us on a tour of the campgrounds and expressed the importance of creating adaptable spaces. The user group

varies every weekend at CTL and adaptability is the main importance in the camps infrastructure. The camp can accommodate up to 350 users and provides medical services, a media center, sleeping cabins, a gym, creative arts theater, arts and crafts building, library, dining hall, administrators office, staff housing, a pool, petting zoo, a ropes course, and a treehouse. The camp is renowned for its healing community, proximity to nature, and calming effect on its user groups. Matthews focuses on the importance of community and touches on the importance of feeling welcomed at CTL. Matthews showed us the treehouse which is the most recent addition to the camp that has become a sacred space for the campers and their family members. Seven veteran CTL campers passed away from cancer and their families have requested to spread their ashes by the treehouse. The well intended outdoor yet indoor escape treehouse has fully lived up to its potential in created a sacred and community space for these campers and their family members.

## **7. Amy Leathers**

Amy Leathers is an Atlanta based architect who that worked on the team with Lord, Aeck & Sargent on the design and additions at Camp Twin Lakes (CTL) in Rutledge, Georgia. Leathers discusses the original concept and the most recent additions and renovations at CTL. The overall focus of the space was to let them know that they are not alone regardless of any mental or physical state the user is in. They have incorporated spaces for everyone and adhere to the Americans with Disabilities Act to create an inclusive environment. Her team designed spaces that create a place to experience nature, an area with hang out zones, places for group cooperation, and other therapeutic spaces and experiences for these campers. There are flexible meeting spaces that can be used for a variety of activities that pertain to the organization that is at the camp. Leathers suggests incorporating a medical or nurses station

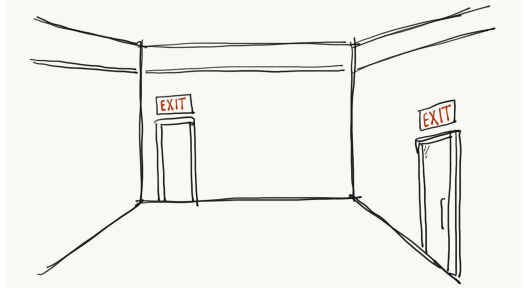
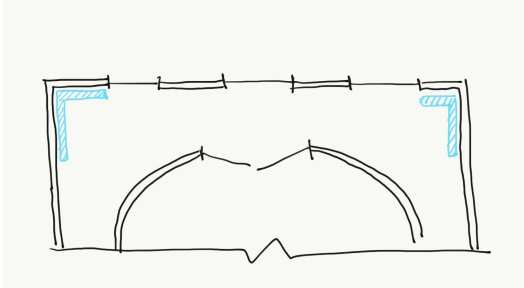

just in case there are regulated medications that each camper needs to take. The cabins can house up to 12 campers and can accommodate wheelchairs in the sleeping, shower, and restroom spaces. The staff housing is geared towards college aged adolescents and Leathers has incorporated privacy within the up-to 6 person shared space. The restroom and shower area can be utilized yet remain private all at once by separating the rooms. Each bed area is given their own personal lamp, side table and storage space. There are six 3' wide bays that are used for storage for the counselors who are generally at the camp for a 12-week term over the summer. Leathers has given the cabins a front and back porch area which has had tremendous success amongst each user group. The connection to nature and incorporation of community within the front porch is seen in many traditional southern vernacular architecture and the theories hold strong on the camps front porches. Along with the staff cabins, the treehouse is a newer addition to the CTL campus. Leathers collaborated with the team and held a concept design contest to create a space that could serve as an 'inside out' space for the campers. The treehouse is ADA accessible and provides direct proximity to the paved nature trail around the lake. She discusses the importance of creating the fun transitions between the treehouse and nature and has incorporated this into the structure by using a slide and climbing wall as alternative entrances into the treehouse. This interview aided in the advancement of the regrowth concept. , Leathers suggests looking at the roots and their width in comparison to the extending branches.

D. Focus Groups

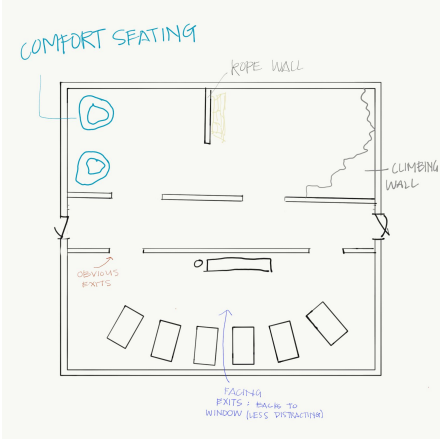
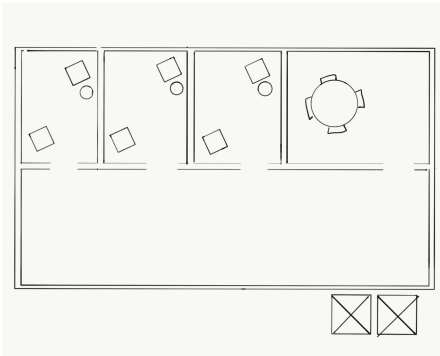
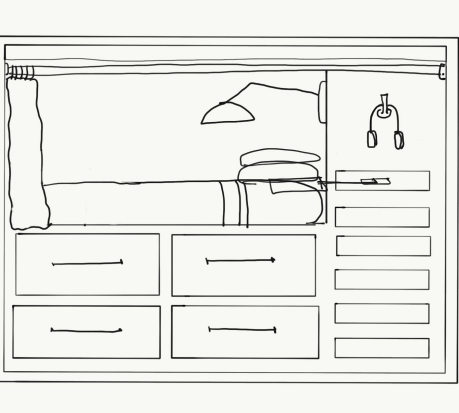
E. Survey

F. Design guidelines

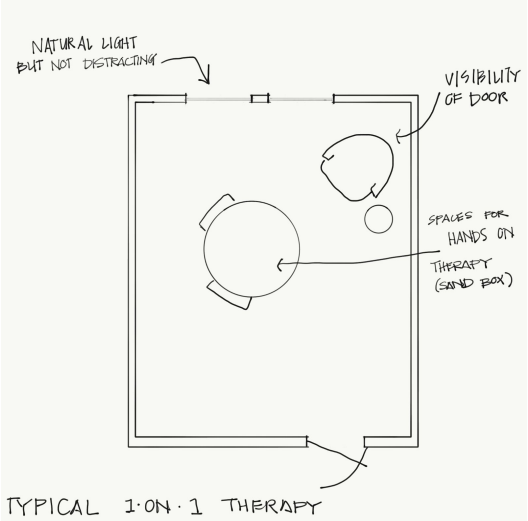
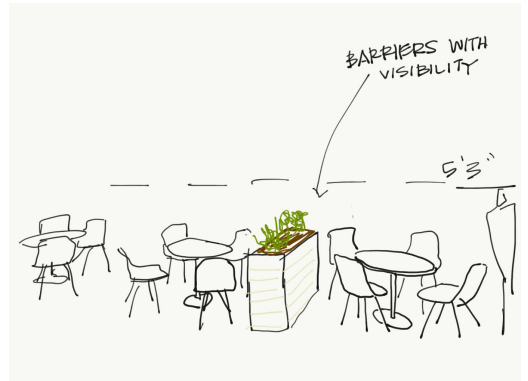
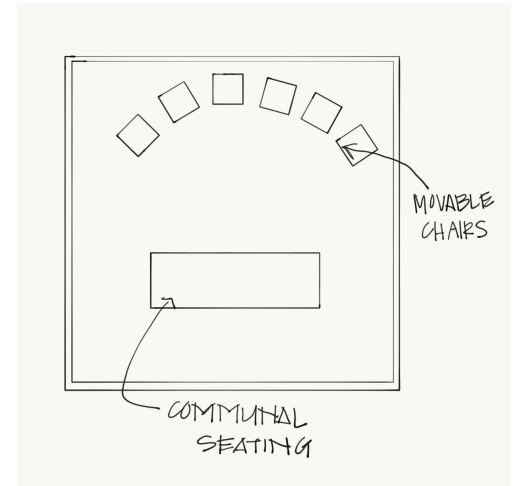
This set of guidelines will outline important design aspects to implement into a restorative and nurturing environment. The developed guidelines are based on psychological research and interviews with professionals.


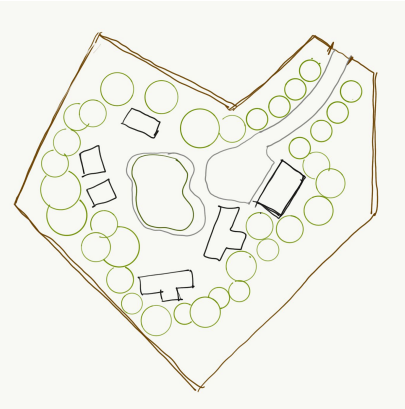
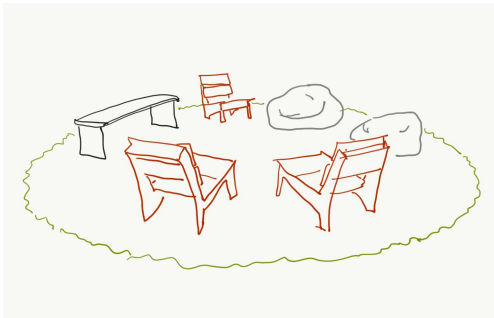
Guideline	Reasoning	Diagrammatic Example
Visible exits and entrances.	PTSD survivors feel comfort in knowing that they can easily escape if needed.	
Implement increased visibility around corners.	This will reduce the risk of running into someone around the corner which surprise can trigger anxiety and fear.	
Easy access to activities involving exercise. Including areas of interior exercise opportunities such as a rock climbing wall.	Overall health and wellness can promote a quicker healing process and positive mental health.	


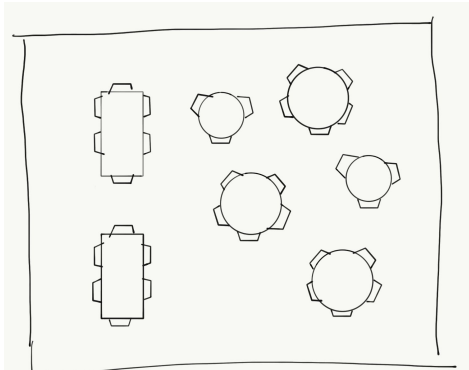
# DESIGNING A RESTORATIVE ENVIRONMENT FOR STUDENTS WITH PTSD FROM A MASS SHOOTING

<p>Create spaces for group therapy classes. Avoid using self defense classes as it subliminally victim blames. Incorporate spaces for yoga, meditative, and team building exercises. Creating more than one space for activities to go on at once creates options to choose from.</p>		
<p>therapy room- quiet, not distracting. ac cycling on and off/distractions in therapy will slow the process</p>		
<p>importance of sleep hygiene- basic idea to support circadian function, lower lighting, sound proofing</p>		

# DESIGNING A RESTORATIVE ENVIRONMENT FOR STUDENTS WITH PTSD FROM A MASS SHOOTING

<p>Furniture placement within all spaces, especially one-on-one therapy, needs to promote the visibility of safety.</p>	<p>Patients don't like sitting with their back to the door.</p>	 <p>TYPICAL 1-ON-1 THERAPY</p>
<p>space that promotes visibility</p>		
<p>Group therapy spaces need to be adaptable per each user group.</p>	<p>Boys- moving enhances ability to process information. able to engage while doing other activities such as playing with horses, animals, experiential design</p> <p>Girls- group therapy, individualized treatment</p>	 <p>MOVABLE CHAIRS</p> <p>COMMUNITAL SEATING</p>

<p>Incorporate seating that will provide comfort and support for fidgeting.</p>	<p>School performance drops after trauma; inability to sit still, minimal eye contact, social isolation.</p>	
<p>Create barriers within the site and buildings.</p>	<p>It is important for the user to understand they're in a safe place- natural and physical barriers between the camp and outside world are necessary to enforce security.</p>	
<p>Incorporate hang out zones and third place spaces.</p>	<p>Trauma will typically make a student feel isolated and alone. The adolescent brain is still developing and social development can come to a halt if the student has experienced trauma. Having a social zone to retreat to is important for the progression of positive mental health.</p>	

		
In areas that are intentionally social spaces; promote sociability by arranging every table have at least 2 people at it.	Promoting the healing through social development.	

## VI. DESCRIPTION OF THE GRAPHIC/VISUAL EXPRESSION OF THESIS

### A. Client

Camp Twin Lakes (CTL) is the client for the proposed camp. As seen in precedents, CTL has extended experience and abilities to support the opening of a new camp. "Camp Twin Lakes provides year-round, fully-accessible, and intentionally designed camp programs that teach campers to overcome obstacles while creating shared experiences with other children who face similar challenges. After spending every other day of the year adapting to the world around them, for one week, camp adapts to them. The magic happens at our campsites in

Rutledge, Winder, and Warm Springs, Georgia, and through Camp-to-Go programs at children's hospitals and other locations throughout the state. Before Camp Twin Lakes opened in 1993, special needs groups in Georgia lacked adequate facilities to support camp programs for children with serious illnesses, disabilities, and other life challenges. Camp Twin Lakes founder, Doug Hertz, saw this need and had the courage and the vision to create a solution. 25 years later, Camp Twin Lakes powers a vital network of over 60 closely aligned partner organizations. "We bring our proven expertise in therapeutic, adaptable programming, state-of-the-art camp sites, healthy and kid-friendly food services customized to each camper's dietary needs, highly trained staff, and devoted volunteers. Camp Partners bring expertise in each diagnosis or challenge and recruit campers, volunteer cabin counselors, and medical support staff. This collaboration ensures that Camp Twin Lakes and our Camp Partners share resources to maximize impact and best meet the needs of each camper." Camp Twin Lakes operates as a 501-(c)(3) not for profit corporation and has been continuously awarded the Guidestar Gold Star for financial transparency. Each year, the organization publishes their tax exempt forms, an annual financial report, and their audit. Camp Twin Lakes has over 300 annual corporate donors that created over 3 million dollars worth of funding in 2017. Camp Twin Lakes has prepared a 5-year expected business plan to show financial costs and projections. The camps funding will be provided from a variety of sources (including but not limited to) unrestricted and restricted contributions, fundraising events, and corporate and private donors.

There are currently three existing locations for the CTL corporation and the camp is looking to expand into the mountains of North Georgia. More than 90% of the campers are from the state of Georgia, creating a need for more diverse locations throughout the state. Because the three CTL locations that are in middle Georgia, the organization is striving to open a camp in the mountains so the North Georgia community has more opportunities for involvement. The

subtropical climate of middle Georgia has created a few challenges amongst campers during the summer months. The proposed location outside of Dahlonega also experiences subtropical Georgian summers but has a steadily lower average temperature during the summer months.

### *B. Users/activities*

The focused user group at Camp Twin Lakes-Neverland is adolescents that have experienced a mass shooting at school. These students have been exposed to mass trauma on a large scale and will be working with camp counselors, psychologists, and administration in efforts to promote the healing cycle. There is a need to incorporate spaces that families and parents can interact through parental TF-CPT and group therapy. The user activities are outlined below in Part D.

### *C. Site and Building Analysis*

The proposed site location is at Neverland Farms in Cleveland, GA 30528. The land and structures are currently used as a wedding venue and the farm owner will be donating the property to Camp Twin Lakes while keeping its namesake of Neverland. The location is settled in Lumpkin County about 14 miles Northeast of Dahlonega, Georgia. CTL-Neverland is nestled in the foothills of the North Georgia mountain range near the base and beginning of the Appalachian Trail (AT). There are journals that discuss the psychological benefits of hiking and proximity to nature trails and mountains while hiking the AT. The precedent knowledge of the camp being located near the AT will give its user a predisposed sense of a calming environment before arrival to the site location.

The neighboring town is rich in history and is known throughout the state of Georgia as one of the best places to retire. In the event of camp expansion, the proximity to a

medium-sized town that can host visitors is necessary to support the camp and its user-based growth. With Hartsfield-Jackson less than a two hour drive away, the proposed location will allow for easy access to the camp if users are coming from further geographical locations.

#### *D. Program*

Per research, the camp will host the following spaces:

Program	Design Features	Reasoning
Yoga	The yoga center will be a quiet space for campers to relax and connect with their inner psyche. The room will have natural light and be acoustically paneled in order to create a quiet environment for meditation.	Students at Parkland have expressed the importance of yoga within their healing process. The practice of yoga varies between user, as does the healing process. If the student feels uncomfortable with closing their eyes, they are still able to experience the calming effect of the class.
Animal therapy	Within the horse barns, there will be private spaces for campers to reflect and discover the emotional side of animal therapy. The other animal therapy spaces will be outdoors where interior design and its theories are not applicable.	Multiple psychologists and resources have discussed the benefits of animal therapy within the healing process. The campus will include a 'petting zoo' type area that supports activities such as equine-based therapy. Creating a strong relationship with an animal is one of the primary steps of the healing process amongst adolescents.
Art therapy	The art therapy classroom will foster an environment for	Research has shown that therapy is an essential part of

	creativity and uniqueness.	connecting with students that have developed uncharacteristic behaviors from experienced trauma. Many students subconsciously open up about their grief and emotions through art which can expedite the healing process.
One-on-one CPT rooms	The therapy center will host a quiet space for personal conversation. Through research, many students have expressed feeling uncomfortable in therapy sessions as they feel like their peers understand their trauma more than a therapist would. This space will create a sense of comfort and stability for the camper.	One-on-one cognitive processing therapy is shown to be the leading type of therapy amongst adolescents especially those who have lived through trauma.
Team building spaces	The student has an option to choose which type of team building they want to participate in. These spaces will range from indoor rock climbing to places where larger groups can work on puzzles.	The sense of community and understand that the patient is not alone is crucial to the healing process.
Communal hang out zones	Per Parkland students request, the space will have beanbags, swings, and picnic scenarios.	The ability to connect to others is an important part of overall therapy. The students will be given spaces to reflect or play with others in a casual setting. These hang out zones will create its own type of therapy amongst the users.
Group therapy	The group therapy center will give campers the option to communicate with their peers in a small group setting.	Group therapy works best amongst female trauma survivors. There will be the option for separated group

		sessions. The sense of community will be fostered in this group therapy environment.
Sleeping facilities	The personal sleeping cabins will be an area for retreat when necessary. It will have noise cancelling headphones, privacy/drapery pulls over the beds, personal reading lights, and a chalkboard wall to cross user-base when one camp session has ended.	Per research, it is important that the sleeping area facilitates positive circadian functions. Limiting direct views of the outside while incorporating clerestories and natural light will create a sense of safety amongst the user while allowing natural light in.
Cafe	The cafe will host ergonomic and functional seating arrangements. If the user wants to take control and create a particular seating arrangement, they are able. Lowered plant partitions will create a sense of safe separation; the camper can easily see entrances and exits but they are also given privacy.	Research supports the need for separation and partitions within larger public spaces. There is a chance that the camper might feel overwhelmed in an over populated space and giving the camper an option to have one in the same is necessary to the cafe's success. Obvious entrances and exits will provide physical and emotional safety for the camper.
Nurses office	The nurses office will be a smaller area that promotes medical and psychological privacy and security.	Per precedent studies and interviews, it was deemed necessary to have a nurses station/area that will have a secured space to facilitate any medication that the campers might need to take on a regular basis.

### *E. Design Drivers*

The client's goals are to provide an environment that will foster a physically and emotionally safe environment for high school students that have experienced trauma from a mass shooting. The client wants a space for campers to enjoy nature even if they are feeling bouts of depression and they want to stay indoors. This goal can be achieved by integrating a treehouse into the camp programming. This tree house will envelop a sense of being outside while remaining under shelter. Creating an environment while using natural materials will give the user a sense of being outdoors and connecting with nature.

One of the client goals is to have an art room that can be adaptable and easily cleaned. Through design, the material selection and functionality of each furniture piece will enhance the user and staff experience. Camp Twin Lakes wants to foster a sense of physical safety through design. The campus will be enclosed and users will be given key fobs for entrance into every space, this will reinforce the feeling of safety amongst the campers and the staff.

The overall goal of Camp Twin Lakes- Neverland and their other locations is for the campers to achieve overall wellness through having fun. Their goal for CTL-Neverland is to create areas of intentional play that also fosters community, team building, and therapy. This can be achieved through third place and 'hang-out' spaces throughout the camps facility. One way this can be implemented is through a rock climbing and bouldering room. This type of intentional play space allows students to work together and teach each other the importance of supporting one another. There are many psychological benefits to rock climbing and the campers at CTL-Neverland may benefit from this indoor experience.

## *F. Theories*

### *1. Trauma-informed design*

According to the National Council for Mental Health, there are a developed set of interior design and architecture guidelines for trauma-informed design:

- Reduce or remove identified adverse objects and stimuli.
- Minimize unnecessary and overwhelming ambient noises.
- Increase natural lighting, access to green spaces, and easy-to-care-for plants.
- Promote opportunity for individual choice in balance with everyone's safety and comfort.
- Limit visual complexity, such as distracting patterns on the walls or flooring.
- Ensure adequate lighting that does not buzz or flicker and that can be manipulated for those with light sensitivities and visual impairment.
- Use color schemes that emphasize cool colors, such as blue, green, and purple. Avoid stark, white walls.
- Provide clear and consistent signage.
- Do not overcrowd furniture and ensure adequate space to navigate around each piece.
- Keep spaces neat and clean.
- When designing spaces and choosing fixtures, refer to the principles of universal design to promote accessibility.
- Ensure décor and design is culturally sensitive and relevant.
- Institute a fragrance-free policy to eliminate synthetic fragrances, especially in enclosed spaces.
- Create a balance between social spaces and private spaces.
- Train staff responsible for greeting guests to serve individuals who speak little or no English and who have other communications needs, such as hearing impairment and limited literacy, with respect and competency.

## *2. Biophilia*

Biophilic elements in interior design and architecture is a sustainable design strategy and theory that aims to reconnect people with the natural environment. It may be seen as a necessary complement to green architecture, which decreases the environmental impact of the built world but does not address human reconnection with the natural world. Biophilia is often defined as “an inborn need of connection to life and to the vital processes” (Ryan, 2014). Ryan also writes that biophilic design can be characterized by:

1. The naturalistic dimensions
2. The basic structure
3. The geometric coherency; the space must adhere to common geometric and organic shapes seen in nature that will ultimately connect the human to the natural environment.

Ryan also write that biophilic designed spaces have psychological, physiological, and sociological benefits. This design theory and practice can lessen stressors on cognitive functions. For instance, in hospitals having a window looking out to nature or plants in the room has been seen to accelerate the patients healing process. Research supports the healing powers of overt and subliminal connections to the natural environment. The theory of biophilia will be implemented throughout every space as a secondary design aspect. The primary design aspect is trauma-informed design. The aesthetics and materials that will be introduced into the space, concept, and overall branding of the environment will focus around biophilia.

## *3. Color Theory*

Within the realm of visual arts and design, there is a common presence of the importance and significance of intentional colors within design and art. Understanding each basic fundamental color theory will provide the ability to select materials, create concept, and enhance the user experience.

There are many proven psychological properties on how the brain reacts to all of the primary colors. Red is the longest wavelength and grabs the users attention and reminds them of power, strength, and simplicity. Psychologically, red can appear and be perceived as closer than it actually is. Because red represents 'fight or flight' and sometimes danger, the camp facility will disregard the use of this primary color as an avoidance mechanism for psychological triggers. (Wright, 1998).

The color yellow is psychologically the strongest color and enhances self esteem and creativity. "Yellow is most associated with words like 'cheerful', 'jovial', 'joyful', and 'sunny'" (Kurt, 2014). The lighter pastel shades of yellow are perceived as juvenile while darker hues of yellow are perceived as warm and mellow. "Yellow is thought of as joyful, outgoing, open, and friendly...yellow is associated with comedy, a happy mood, and playfulness. Yellow ribbons have been used as a sign of hope and optimism since the nineteenth century" (Eiseman, 2006). Yellow will be present in communal areas to enhance an overall joyful experience for the campers. This element of color theory will be particularly implemented in the art therapy center as it is proven to promote creativity.

The color green is equated to an emotionally calming environment. Kurt has research this color and found that it "gives a sense of refreshment, harmony, and equilibrium. It symbolizes universal love, environmental awareness, and peace" (2014). Eiseman discovers that green and cooler shades of blue with neutral earth tones "to be relaxing because these colors remind of nature" (2006). Green is utilized within hotel lobbies and offices as it has an

underlying ability to adjust users to new environments. The camp will utilize green in the majority of public and communal spaces.

Throughout psychology and literature, blue is known for its qualities of promoting intellectual activity, logical thought processes, and cognitive stability. There is empirical evidence that supports the ideology that blue can lower blood pressure. The connection of blue in nature is seen in the sky and oceans, both areas that Kurt exemplifies as places to encourage calmness and reflection (2006).

The overall branding of the camp and its facilities will be integrated along with CTL's logo and branding specialties. The camps overall message portrays success through play and the use of primary colors will enable a sense of this branding amongst the intended adolescent user group.

#### *4. Attention Restoration Theory*

In 1989, Rachel and Stephen Kaplan developed Attention Restoration Theory (ART) through research and observations. The theory concludes that spending time in nature can create mindfulness and lessen mental and physical fatigue. Kaplan focuses on the idea that people have an attention threshold and can become overwhelmed and worn down when attention is too focused that it doesn't allow time for a mental break. Overall mental fatigue of everyday life and especially the stressors involved with trauma in the adolescent brain can create negative mental health. If these campers are overly focused and overwhelmed on school, one-on-one therapy, talking to counsel and advisors, they can experience mental and physical fatigue. Kaplan promotes the idea that in nature, 'what you see is what you get'. The majority of the time people are viewing nature it does not create conflict of over stimulation. This theory

goes hand in hand with the symptom of hypervigilance in trauma survivors. If the campers are overwhelmed, the restorative areas can be a place to mentally and physically retreat.

The utilization of ART is important within overall wellness and healthcare design. This theory can be applied, especially within the cafe. Creating spaces and an environment of unambiguous and obvious feature while follow the previously outlined guidelines for designing an understimulating space that is necessary in proper trauma-informed design. ART remains consistent across all sensory adaptations creating nature-based and calming environments for the sights, smells, sounds, and touch. This theory can be adapted in use of local wood materials, branded scents per space, acoustic paneling when needed, and soft material selection on surfaces meant to calm the user.

#### *5. Prospect and refuge theory*

This theory encompasses the importance of studying evolutionary development along with the human psyche. According to Appleton “prospect-refuge theory means that individuals are motivated to perceive their surrounding in such a way that environmental information is acquired and stored in a form in which can be efficiently and quickly retrieved when needed to ensure survival...evolutionary development of humanity has led humans to prefer a setting in which, without being seen (refuge), they can see a broad vista (prospect) and such preferences increase their chance of life by affording a safe observation point and the capability to safely see, predict, and act in relation to potential predators, prey, mates. Range of vision is directly related to survival.” Creating multiple places of refuge within a larger space might cause issues per trauma-informed design guidelines but an area of retreat when necessary is important for the designs to follow. Due to research and trauma-informed guidelines, this design theory will be implemented mainly within the sleeping quarters. It is important to intentionally create socialized

spaces within intended social environments. The security and sense of refuge within design will be enforced in these private quarters.

### *G. Concept*

The concept of Regrowth was developed through close analysis of dendrology and the importance of fire ecology within the ecosystem. Like trauma, fires can be violent, unpredictable, and sporadic. After a forest fire- we only see the top half of a tree. The other half is underground, where roots contain plenty of water and nutrients. When a tree is burned, it senses the destruction and begins to regrow itself. For the tree to regrow to its fullest potential it needs sunlight, food, water. The same concept is applicable to people who suffer through PTSD from violence; the psychological health is promoted when the physical health is at its peak. The body and mind need the outdoors, proper nutrients, and a quench of livelihood to survive and thrive. Fires are part of the natural ecology and can cause tremendous pain and suffering to the environment and its inhabitants. Those produced by man have the same effect as natural fires, triggering a genetic survival response by trees. The burned parts of the tree may or may not be dead, but the new sprouts will eventually take over.

## **VII. DEFINITION OF TERMS**

Circadian Rhythms- "Circadian rhythms are physical, mental, and behavioral changes that follow a daily cycle. They respond primarily to light and darkness in an organism's environment.

Sleeping at night and being awake during the day is an example of a light-related circadian rhythm" (NIGMS, 2017).

Comorbidity- “In medicine, comorbidity is the presence of one or more additional conditions co-occurring with (that is, concomitant or concurrent with) a primary condition; in the countable sense of the term, a comorbidity (plural comorbidities) is each additional condition.

CPT- “Cognitive processing therapy (CPT) is a specific type of cognitive behavioral therapy that has been effective in reducing symptoms of PTSD that have developed after experiencing a variety of traumatic events including child abuse, combat, rape and natural disasters” (APA, 2017).

Hypervigilance- “abnormally increased arousal, responsiveness to stimuli, and screening of the environment for threats; it is often associated with delusional or paranoid states, and constant scan of the environment for threats” (Miller-Keane, 2003).

NIMH- National Institute of Mental Health

Post-Traumatic Stress Disorder (PTSD)- “can develop after exposure to a potentially traumatic event that is beyond a typical stressor. Events that may lead to PTSD include, but are not limited to, violent personal assaults, natural or human-caused disasters, accidents, combat, and other forms of violence. Exposure to events like these is common” (NIMH, 2017).

Psychological First Aid- “is an evidence-informed modular approach to help children, adolescents, adults, and families in the immediate aftermath of disaster and terrorism” (NCTSN, 2018).

Sleep Hygiene- “Good sleep habits (sometimes referred to as “sleep hygiene”) can help you get a good night’s sleep. Some habits that can improve your sleep health: Be consistent. Go to bed at the same time each night and get up at the same time each morning, including on the weekends. Make sure your bedroom is quiet, dark, relaxing, and at a comfortable temperature. Remove electronic devices, such as TVs, computers, and smartphones, from the bedroom. Avoid large meals, caffeine, and alcohol before bedtime. Get some exercise. Being physically active during the day can help you fall asleep more easily at night” (CDC, 2016).

## VIII. REFERENCES

### Figures

Merikangas KR, He JP, Burstein M, Swanson SA, Avenevoli S, Cui L, Benjet C, Georgiades K, Swendsen J. Lifetime prevalence of mental disorders in U.S. adolescents: results from the National Comorbidity Survey Replication--Adolescent Supplement (NCS-A). *J Am Acad Child Adolesc Psychiatry*. 2010 Oct;49(10):980-9. PMID: 20855043

### Other

Amaya-Jackson L, Reynolds V, Murray MC, et al. Cognitive-behavioral treatment for pediatric posttraumatic stress disorder: protocol and application in school and community settings. *Cogn Behav Pract*. 2003; 10:204.

American Psychological Association. (July, 2017). *Cognitive Processing Therapy (CPT)*. Retrieved February 20, 2019 from <https://www.apa.org/ptsd-guideline/treatments/cognitive-processing-therapy>

Barbaro, M. (Host). (2019, February 14). The New York Times. *The Parkland students, one year later*. [Audio Podcast]. Retrieved from <https://www.nytimes.com/2019/02/14/podcasts/the-daily/parkland-stoneman-douglas-school-shooting.html>

Brown, James K.; Smith, Jane Kapler. 2000. Wildland fire in ecosystems: effects of fire on flora. Gen. Tech. Rep. RMRS-GTR-42-vol. 2. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 257 p.

Butzen, N. (2019, February 21). Phone call interview.

Camp Twin Lakes. (2018). Retrieved from <http://camptwinlakes.org>

CBS Sunday Morning. (2017). *Life after a mass shooting: a survivor speaks*. Retrieved from <https://www.youtube.com/watch?v=45it3p3zK7E>

Center for Disease Control and Prevention. (2016). *Sleep and Chronic Disease*. Retrieved from [https://www.cdc.gov/sleep/about\\_sleep/chronic\\_disease.html](https://www.cdc.gov/sleep/about_sleep/chronic_disease.html)

Cohen JA, Bukstein O, Walter H, et al. Practice parameters for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *J Am Acad Child Adolesc Psychiatry*. 2010; 49:414. [PubMed: 20410735]

Cohen, J., & Mannarino, A. (2004). Treatment of childhood traumatic grief. *Journal of Clinical Child and Adolescents Psychology*, 33, 819-931.

Connors, L. E. (April 2018). *Empathy in architecture: COTS embraces 'trauma-informed design' in shelter renovation*. Vermont Public Radio.

Corbin N., Katchur M. D., (2009). *13 Families: Life After Columbine* [Motion picture].

Cullen, D. (2019). *Parkland: Birth of a Movement*. Harper.

Delaney-Black V, Covington C, Ondersma SJ, Nordstrom-Klee B, Templin T, Ager J, Janisse J, Sokol RJ. Violence exposure, trauma, and IQ and/or reading deficits among urban children. *Arch Pediatr Adolesc Med*. 2002 Mar; 156(3):280-5.

Demirbas, Ozgen & Demirkan, Halime. (2000). Privacy dimensions: A case study in the interior architecture design studio. *Journal of Environmental Psychology* - 20. 53-64.  
10.1006/jevp.1999.0148.

Doneva, R. (2016, December 2). 7. Experience Design Guidelines for PTSD. Retrieved January 23, 2019, from <https://medium.com/experience-design-for-ptsd/experience-design-guidelines-for-ptsd-2c8d0dd23cf6>

Eiseman, L. (2006). *Color: Messages and meanings—A Pantone color resource*. Gloucester, MA: Hand Books Press Distributed by North Light Books.

*The Ellen Show*. "Stoneman Douglas Activists Discuss the School Shooting with Ellen." YouTube. February 23, 2018.

*Glamour*. "Columbine Survivor Shares Her Story on the Anniversary of the Shooting." YouTube. May 28, 2018.

Finn, M. (2015, July 07). Choose honest materials that agree with the senses. Retrieved from <https://www.behavioral.net/article/choose-honest-materials-agree-senses>

Finn, M. (2019, February 15). Personal interview.

Hales, A. (2017, November 8). *Chatting with a Columbine survivor*. [Audio Podcast]. Retrieved from <https://player.fm/series/chatting-with/chatting-with-a-columbine-survivor>

Hill, T. R. (2008). Healthcare Interior Design Think Tank. *Using color to create healing environments*.

Hunter, A. (2019, February 1). Personal interview.

Hypervigilance. (n.d.) Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition. (2003). Retrieved March 3 2019 from <https://medical-dictionary.thefreedictionary.com/hypervigilance>

Kaplan, R.; Kaplan, S. (1989). *The experience of nature: a psychological perspective*. Cambridge University Press. ISBN 978-0-521-34139-4.

Kataoka, S., Langley, A. K., Wong, M., Baweja, S., & Stein, B. D. (2012). Responding to students with posttraumatic stress disorder in schools. *Child and adolescent psychiatric clinics of North America*, 21(1), 119-33, x.

KETV NewsWatch7. "Teen copes with PTSD after deadly school shooting." May 8, 2014.

Kurt, S., & Osueke, K. (2014, February 28). The effects of color on the moods of college students. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/2158244014525423>

Lambert, K. (2017). On a ledge: the mental health benefits of climbing. *Climbing Magazine*. Retrieved from <https://www.climbing.com/people/out-on-a-ledge-the-mental-health-benefits-of-climbing/>

Leathers, A. (2019, March 1). Personal interview.

Lerner, S. (2019). *Parkland speaks: Survivors from Marjory Stoneman Douglas share their stories*. New York: Crown.

Matthews, D. (2019, March 2). Personal interview.

*Megyan Kelly Today*. "Florida School Shooting Survivor: I Hid Beneath A Dead Body." YouTube. February 28, 2018.

Mt. Pisgah Christian School. (2018). *Matt Petersen Biography*. Retrieved from <http://www.mountpisgahschool.org/faculty/mpetersen/>

Mt. Pisgah Christian School. (2018). *Anita Hunter Biography*. Retrieved from <http://www.mountpisgahschool.org/faculty/ahunter/>

National Center for Education Statistics. Grady High School. CCD Public school data 2016-2017, 2017-2018 school years.

National Child Traumatic Stress Network. (2018). Psychological first aid. Retrieved from <https://www.nctsn.org/treatments-and-practices/psychological-first-aid-and-skills-for-psychological-recovery/about-pfa>

National Institute of General Medical Sciences. (2017). Circadian rhythms. Retrieved from [https://www.nigms.nih.gov/education/pages/factsheet\\_circadianrhythms.aspx](https://www.nigms.nih.gov/education/pages/factsheet_circadianrhythms.aspx)

*NBC News*. "Rebuilding Normal: Mass Shooting Survivors' Journey Of Recovery". December 13, 2017.

*PeopleTV*. "Parkland Student Maia Hebron On Survivor's Guilt: 'It's Unreal...To Keep On Living". March 20, 2018.

Petersen, M. (2019, February 1). Personal interview.

PTSD in past, Neb-Omaha player advocates for mental wellness. (2016, March 1). Retrieved from [http://www.espn.com/espn/wire/\\_/section/ncb/id/14874873](http://www.espn.com/espn/wire/_/section/ncb/id/14874873)

Rohde, M. (2019, March 5). Phone interview.

Ryan, C., Browning, W., Clancy, J., Andrews, S., & Kallianpurkar, N. (2014). BIOPHILIC DESIGN PATTERNS: Emerging Nature-Based Parameters for Health and Well-Being in the Built Environment. *International Journal of Architectural Research: ArchNet-IJAR*, 8(2), 62-76. doi:<http://dx.doi.org/10.26687/archnet-ijar.v8i2.436>

Saltzman, W.R., Pynoos, R.S., Layne, C.M., Steinberg, A.M., & Aisenberg, E. (2001). Trauma/grief focused intervention for adolescents exposed to community violence: Results of school based screening and group treatment protocol. *Group Dynamics: Theory, Research, Practice*, 5, 291-303.

Selmes, J. (2018, January 23). Australian Hunting Podcast. *Columbine High School Shooting Survivor Evan Todd*. [Audio Podcast]. Retrieved from <https://player.fm/series/australian-hunting-podcast/ahp-171-columbine-high-school-shooting-survivor-evan-todd>

Shaw, J.A. (2000). Children, adolescents and trauma. *Psychiatric Quarterly*, 71, 227-242.

*Today*. "Student Wounded In Florida School Shooting: My Friend 'Didn't Make It'". February 15, 2018.

Tompkins, M. A., Martinez, K. A., & Sloan, M. (2010). *My anxious mind: A teens guide to managing anxiety and panic*. Washington, DC: Magination Press.

Turunen, T., Haravouri, H. Pihlajamaki, J. Marttunen, M., & Punamaki, R.-L. (2014). Framework of the outreach after school shooting and students' perceptions of the provided support. *European Journal of Psychotraumatology*, 5, 23097. doi:10.3402/ejpt.v5.23079

Turunen, T., Punamaki, R.-L. (2014). Psychosocial support for trauma-affected students after school shootings in Finland. *Violence and Victims*, 29, 476-491.

Turunen, T., Punamaki, R.-L. (2016). Professionally led peer support group process after the school shooting in Finland: organization, group work, and recovery phases. *Journal of Death and Dying*, 73(1), 42-69.

U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Mental Health. (2015). NIMH Strategic Plan for Research (NIH Publication No. 02-2650). Retrieved from <http://www.nimh.nih.gov/about/strategic-planning-reports/index.shtml>


Vega, Dr. E. (2019, February 15). Personal interview.

Wright, A. (1998). *Beginner's guide to color psychology*. London, England: Color Affects.

Zimmerman M, McGlinchey JB, Young D, Chelminski I. (2006). Diagnosing major depressive disorder I: A psychometric evaluation of the DSM-IV symptom criteria. *J Nerv Ment Dis* 2006;194:158–163.

Display Transcript

001847757 Amanda G. Hunter  
Apr 16, 2019 04:00 pm  
Your current Institution is SCADUS

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Transcript Data

STUDENT INFORMATION

Birth Date: Aug 21, 1994

Curriculum Information

Current Program

College: School of Building Arts

Major and Department: Interior Design, Interior Design

\*\*\*Transcript type:Unofficial is NOT Official \*\*\*

DEGREES AWARDED

Sought: Master of Arts

Degree Date:

Curriculum Information

Primary Degree

Major: Interior Design

INSTITUTION CREDIT

-Top-

Term: Fall 2017

College: School of Building Arts

Major: Interior Design

Academic Standing: Satisfactory

SUBJECT	COURSE	LEVEL	TITLE	GRADE	CREDIT HOURS	QUALITY POINTS	R
INDS	702	GR	Interior Design Seminar	A	5.000	20.00	
INDS	712	GR	Grad Interior Design Studio I	A	5.000	20.00	
				ATTEMPT HOURS	PASSED HOURS	EARNED HOURS	GPA
Current Term:				10.000	10.000	10.000	4.00
Cumulative:				10.000	10.000	10.000	4.00

Unofficial Transcript

Term: Winter 2018

College: School of Building Arts

Major: Interior Design

Academic Standing: Satisfactory

SUBJECT	COURSE	LEVEL	TITLE	GRADE	CREDIT HOURS	QUALITY POINTS	R
INDS	706	GR	Intr Dsgn Theory & Criticism	A	5.000	20.00	
INDS	709	GR	Research Methods for INDS	B	5.000	15.00	

INDS	714	GR	Grad Interior Design Studio II			B	5.000	15.00
			ATTEMPT HOURS	PASSED HOURS	EARNED HOURS	GPA HOURS	QUALITY POINTS	GPA
Current Term:			15.000	15.000	15.000	15.000	50.00	3.33
Cumulative:			25.000	25.000	25.000	25.000	90.00	3.60

## Unofficial Transcript

## Term: Spring 2018

**College:** School of Building Arts  
**Major:** Interior Design  
**Academic Standing:** Satisfactory

SUBJECT	COURSE	LEVEL	TITLE	GRADE	CREDIT HOURS	QUALITY POINTS	R		
INDS	740	GR	Contemp Issues/Interior Design	A	5.000	20.00			
INDS	751	GR	Graduate INDS Studio III	A	5.000	20.00			
INDS	779F	GR	Graduate Field Internship Grade Changed from Incomplete	A	5.000	20.00	I		
				ATTEMPT HOURS	PASSED HOURS	EARNED HOURS	GPA HOURS	QUALITY POINTS	GPA
Current Term:				15.000	15.000	15.000	15.000	60.00	4.00
Cumulative:				40.000	40.000	40.000	40.000	150.00	3.75

## Unofficial Transcript

## Term: Summer 2018

**College:** School of Building Arts  
**Major:** Interior Design  
**Academic Standing:** Satisfactory

SUBJECT	COURSE	LEVEL	TITLE	GRADE	CREDIT HOURS	QUALITY POINTS	R...		
BUSI	746	GR	Entrepreneurship Practicum	W	0.000	0.00			
INDS	779F	GR	Graduate Field Internship	B	5.000	15.00	I		
				ATTEMPT HOURS	PASSED HOURS	EARNED HOURS	GPA HOURS	QUALITY POINTS	GPA
Current Term:				10.000	5.000	5.000	5.000	15.00	3.00
Cumulative:				50.000	45.000	45.000	45.000	165.00	3.66

## Unofficial Transcript

## Term: Fall 2018

**College:** School of Building Arts  
**Major:** Interior Design  
**Academic Standing:** Satisfactory

SUBJECT	COURSE	LEVEL	TITLE	GRADE	CREDIT HOURS	QUALITY POINTS	R.	
ELDS	713	GR	Imaging and Digital Rendering	A	5.000	20.00		
INDS	726	GR	Environmental Psychology	B	5.000	15.00		
INDS	752	GR	Graduate INDS Studio IV	B	5.000	15.00		
			ATTEMPT HOURS	PASSED HOURS	EARNED HOURS	GPA HOURS	QUALITY POINTS	GPA
Current Term:			15.000	15.000	15.000	15.000	50.00	3.33
Cumulative:			65.000	60.000	60.000	60.000	215.00	3.58

## Unofficial Transcript

## Term: Winter 2019

**College:** School of Building Arts  
**Major:** Interior Design  
**Academic Standing:** Academic Warning

SUBJECT	COURSE	LEVEL	TITLE	GRADE	CREDIT HOURS	QUALITY POINTS	RANK		
INDS	755	GR	Global Professional Practices	B	5.000	15.00			
INDS	791	GR	Grad INDS Studio V: Thesis I	D	5.000	0.00			
LXFM	501	GR	Business in Luxury and Fashion	B	5.000	15.00			
				ATTEMPT HOURS	PASSED HOURS	EARNED HOURS	GPA HOURS	QUALITY POINTS	GPA
Current Term:				15.000	10.000	10.000	15.000	30.00	2.00
Cumulative:				80.000	70.000	70.000	75.000	245.00	3.26

Unofficial Transcript

TRANSCRIPT TOTALS (GRADUATE) -Top-

	ATTEMPT HOURS	PASSED HOURS	EARNED HOURS	GPA HOURS	QUALITY POINTS	GPA
Total Institution:	80.000	70.000	70.000	75.000	245.00	3.26
Total Transfer:	0.000	0.000	0.000	0.000	0.00	0.00
Overall:	80.000	70.000	70.000	75.000	245.00	3.26

Unofficial Transcript

COURSES IN PROGRESS -Top-

Term: Winter 2019

College: School of Building Arts  
Major: Interior Design

SUBJECT	COURSE	LEVEL	TITLE	CREDIT HOURS
GRAD	000	GR	Thesis Support Program	0.000

Unofficial Transcript

Term: Spring 2019

College: School of Building Arts  
Major: Interior Design

SUBJECT	COURSE	LEVEL	TITLE	CREDIT HOURS
INDS	749	GR	Final MA Proj/Interior Design	5.000

Unofficial Transcript

RELEASE: 8.7.1

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