EXPLORING THE INTERSECTION OF STRESS, RESILIENCY, AND RELATIONSHIP WITH TEACHER AMONG HIGH SCHOOL STUDENTS WITH EMOTIONAL AND BEHAVIORAL DISORDERS

By

Scotia Hammond

Bachelor of Arts – Psychology
University of Nevada, Las Vegas
2017

Master of Education – Special Education
University of Nevada, Las Vegas
2018

A dissertation submitted in partial fulfillment
of the requirements for the

Doctor of Philosophy – Special Education

Department of Early Childhood, Multilingual, and Special Education
College of Education
The Graduate College

University of Nevada, Las Vegas
December 2022

UNLV | GRADUATE COLLEGE

Dissertation Approval

The Graduate College
The University of Nevada, Las Vegas

October 27, 2022

This dissertation prepared by

Scotia Hammond

entitled

Exploring the Intersection of Stress, Resiliency, and Relationship with Teacher Among High School Students with Emotional and Behavioral Disorders

is approved in partial fulfillment of the requirements for the degree of

Doctor of Philosophy – Special Education
Department of Early Childhood, Multilingual, and Special Education

Joseph Morgan, Ph.D.
Examination Committee Chair

Wendy Rodgers, Ph.D.
Examination Committee Member

Heather Van Ness, Ph.D.
Examination Committee Member

Wendy Hoskins, Ph.D.
Graduate College Faculty Representative

Alyssa Crittenden, Ph.D.
Vice Provost for Graduate Education & Dean of the Graduate College

ABSTRACT

Exploring the Intersection of Stress, Resiliency, and Students Relationship with Their Teachers among High School Students with Emotional and Behavioral Disorders

By

Scotia Hammond

Dr. Joseph Morgan, Committee Chair
Associate Professor of Special Education
University of Nevada, Las Vegas

Experiencing stress at high levels during pivotal developmental years can have a detrimental impact on adolescents' overall development and well-being (Rahdar & Galvan, 2014; Romeo, 2013). Extensive research has shown the positive effects a strong student-teacher relationship has on students' resiliency to counteract the negative effects of stress (Akin & Radford, 2018; Johnson, 2008; Masten et al., 2008; Mulloy, 2011; Sanders et al., 2016; Stewart & Sun, 2004). Unfortunately, these studies rarely include students with emotional and behavioral disorders (EBD). Students with EBD are more likely to have higher levels of stress, lower levels of resilience and often struggle forming a positive relationship with their teachers, placing them at a greater risk of the negative effects of stress (Cullinan & Sabornie, 2004; Lambert et al., 2021; Murray & Greenberg, 2001; Offerman et al., 2022).

The current study filled the research gap by exploring the relationship between stress, resilience, and students' relationship with their teachers among students with EBD. A convergent sequential mixed methods design was used to explore the intersection of stress, resiliency, and student-teacher relationships among self-contained high school students with EBD. Participants included high school students with EBD (n = 5) and their teachers (n = 5). Student participants completed the *Shortened Version of the Adolescents Stress Questionnaire* (ASQ-S; Anniko et al.,

2018) to measure their current stress levels, the *Child and Youth Resilience Measure* (CYRM-R; 2018) to measure their resiliency, and the student version of the *Teacher-Student Relationship Inventory* (S-TSRI; Ang et al., 2020) to measure their relationship with their teacher. Teacher participants completed the *Teacher-Student Relationship Inventory* (T-TSRI; Ang, 2005) to measure their relationship with their student participating in the study. In order to gain a deeper understanding of the variables, all student and teacher participants participated in semi-structured individual interviews.

The results of this study contribute to the existing literature which suggests adolescents most frequently stress about school performance and their future (Anniko et al., 2018; De Anda et al., 2000; Epplemann et al., 2016). The results of this study also show that students with EBD and their teachers perceived their relationship similarly and identified similar characteristics to describe their student-teacher relationship. These findings contribute to the research as the first study to explore the intersection of these variables with students with EBD. Although the results of this study were not statistically significant, data suggest a strong, positive linear relationship between stress, student-teacher relationship, and student resiliency. Further research with a larger sample size is needed to continue to explore the intersection and impact of these variables among students with EBD.

Keywords: emotional and behavioral disorders, resiliency, stress, student-teacher relationships, mixed methods

ACKNOWLEDGEMENTS

I could not have successfully completed the defense of my dissertation without the help of some very influential individuals. I would like to thank all of the members on my committee for their support, guidance, and expertise.

To my advisor, Dr. Joseph Morgan, thank you for providing the support, empowerment, and sanity I needed. Thank you for all of the opportunities you have provided over the years. Dr. Wendy Rodgers, you left a lasting impression on me and I will forever be thankful for everything I have learned and continue to learn from you. Nobody can critique a paper quite like you and while there may have been more comments than content, your feedback has shaped my view and expanded my thinking. Dr. Heather Van Ness, your passion is inspiring; my first class with you ignited an inspiration within that drove me to continue pursuing this field. Thank you for your mentorship, motivation, and support throughout the years. Dr. Wendy Hoskins, thank you for all of the contributions, support, and encouragement you have provided me with throughout this journey.

I would like to say thank you to all of the instructors I have had in this program. Dr. Jenna Weglarz-Ward, you have been a continuous source of inspiration and support to me; from teaching my first doctoral class to now helping me apply for new opportunities, thank you for your guidance and encouragement. Dr. Kyle Higgins, a 10 minute conversation during our first meeting changed the trajectory of my life, you provided opportunities that I didn't know I needed and I thank you.

To my family (aunts, uncles, cousins, and my Nana), to my friends, and to all of the new friends I've made in this program, thank you all for your support. Mom, thank you for

never letting me give up and having confidence in me even when I doubted myself. Thank you for the care packages and inspirational cat memes that got me through the years. Words cannot express how much I appreciate the sacrifices you have made for me, including everything you have done to ensure my health conditions wouldn't affect my studies and halting your life to be by myside whenever I needed you (even when I didn't think I needed you). Dad, thank you for supporting even my wildest ideas. Thank you for teaching me to never let fear stop you, but to let it empower you. To my brother, Travis, thank you for inspiring me to pursue higher education. I treasure all of the late nights we spent at the diner before getting kicked out after spending an unreasonable amount of hours avidly discussing our current projects, losing track of time as we brainstormed new ideas, and studied with each other. Thank you for editing my papers in middle school, high school, to now editing my dissertation and our manuscripts. Thank you for being my personal tutor, my personal sounding board, and dare I say one of my best friends.

Diontay, thank you for your love, patience, support, and laughter over the years. Thank you for supporting me through all of the late nights and early mornings and being my legs when I didn't have mine. To our fur baby, Muffin, who was by my side every hour I spent working on this dissertation providing endless emotional support.

All of you have been an integral part of my success and I will forever be grateful for each one of you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

The stress adolescents experience daily has been progressively increasing (American Psychological Association [APA], 2014). The APA (2014) has reported teenagers in America are continuing to endure higher levels of stress than adults. A national study conducted in 2018 suggested that adolescents are experiencing higher levels of anxiety and depression than all other age groups (APA, 2018). Experiencing stress, especially at high levels and during pivotal developmental years, can have a detrimental impact on adolescents' overall development and well-being (Rahdar & Galvan, 2014; Romeo, 2013). Adolescents have experienced a significant rise in psychological distress, major depression, and suicide (Twenge et al., 2019). Most recently, researchers have found adolescents are experiencing alarmingly high levels of anxiety, depression, and post-traumatic stress disorder since the start of the global COVID-19 pandemic (PTSD; Selcuk et al., 2021). A side effect of this physical safety precaution was an increase in social isolation. Schools across the world moved to an online education platform in an effort to socially distance during the pandemic resulting in adolescents feeling socially isolated, an increase in stress about school, and elevated overall anxiety (Cianfarani & Pampanini, 2021; Jones et al., 2021).

Experiencing high rates of stress during adolescents can contribute to the development of exacerbate existing mental health difficulties and emotional and behavioral problems (Cumming et al., 2018; Klasen et al., 2010; Leonard et al., 2015; McLaughlin et al., 2009; Robinson et al., 1995; Slavich et al., 2019; Suldo & Huebner, 2004). However, resilience can counteract the negative effects associated with stress by equipping students with the skills and supports needed to overcome and adapt to difficult situations (Luthar et al., 2000). Resiliency is an evolving multidimensional construct that is influenced by various internal and external factors, such as

positive relationships (Luthar et al., 2000; Masten & Coastworth, 1998). Relationships are a critical component of increasing an individual's resiliency and can often times act as a protective barrier against the negative effects of stress (Perry, 2009; Willis & Nagel, 2015). Students with emotional and behavioral disorders (EBD) often (a) have been exposed to adverse experiences and experience high levels of stress, (b) lack the resiliency skills needed to overcome stress, and (c) have poorer relationships with their teachers (Little & Kobak, 2003; Mueser & Taub, 2008; Murray & Greenberg. 2001; Offerman et al., 2022; Sullivan et al., 2015; Zolkoski et al., 2016).

Students with Emotional and Behavioral Disorders

Students with emotional and behavioral disorders (EBD) make up 5.5% of students with disabilities (U.S. Department of Education [USDOE], 2020). Educational outcomes continue to be a concern for students with EBD. While the graduation rate has improved over the last year, students with EBD continue to have the second lowest high school graduation rate compared to all other disability categories, with only 60% of students graduating with a diploma. Additionally, 32% of students with EBD drop out of school, continuing to have a substantially higher rate than any other group (USDOE, 2020). This population of students are more likely to repeat grade levels and be less academically engaged (Bradley et al., 2008). Students with EBD are removed from school, suspended, and expelled at alarmingly higher rates than any other student population (USDOE, 2020; Wagner et al., 2005). Outside of school, students with EBD report lower levels of overall life satisfaction than their peers (State & Kern, 2017). While the issues pertaining to the outcomes of students with EBD are multifaceted (e.g., inaccurate representation, socioeconomic status, structural racism, bias), stress has been predicted to be one factor contributing to the negative outcomes for students with EBD (Lewis, 1999; Lidz, 1983; McLaughlin et al., 2009).

While researchers have explored numerous interventions to improve academic achievement and modify behavior for students with EBD, it is critical researchers explore effective ways to improve student resiliency. Students with EBD are a vulnerable population to stress as many lack the resiliency skills needed to overcome stressful situations, placing them at a greater risk of being affected by the long-term negative effects of stress (Sullivan et al., 2015; Zolkoski et al., 2016). Unfortunately, many students with EBD report having either negative relationships with their teachers or no relationship at all (Murray & Greenberg, 2001). Considering the long-term consequences associated with stress and the vulnerability of this population, it is critical for research to further explore the relationship between stress, resiliency, and STR among students with EBD.

Overview of Stress

Stress is an essential characteristic of survival as it serves as an alert system for the body (Selye, 1976). The body is alerted to unfamiliar stimuli and reacts as a nonspecific response to the stimuli (Selye, 1976). There are two types of stress: eustress and distress. Eustress is a healthy form of stress that is often present after successfully accomplishing a task, feeling positive, excited, or fulfilled (Selye, 1976; Suedfeld, 1997). Distress, the opposite of eustress, is an unhealthy form of stress and is referred to as the "disease causing" form of stress (Selye, 1976; Suedfeld, 1997). Distress is commonly associated with having relationship problems, financial difficulties, time management difficulties, or experience of a traumatic event. Both eustress and distress can be acute or chronic. Acute distress is created by the small occurrences that happen throughout the day that are stressful, such as missing an alarm, showing up late, forgetting a meeting, or worrying about an upcoming test. Acute distress is common and can be helpful by acting as a motivator to help individuals achieve their goals (Leonard et al., 2015).

Chronic distress occurs after an individual has been exposed to distress for a prolonged period of time (Franke, 2014; Hornor, 2015).

After a person has been exposed to a prolonged period of chronic distress, they can compile an accumulation of harmful toxins, known as toxic stress (Franke, 2014; Hornor, 2015). This can produce psychological and physiological symptoms including raised heart rate, loss of eating or excessive eating, difficulty concentrating, difficulty regulating emotions, poor memory, restlessness, or indigestion (Herman & Lester, 1994). Toxic stress can progress to have an impact on an individual's capacity to learn, academic performance, physical health, emotional and mental health, and their social relationships (Franke, 2014; Hornor, 2015; Pascoe et al., 2020). Stress only becomes problematic when the distress is continuous (i.e., becomes chronic), and the individual experiencing distress lacks the supports or resilience needed to overcome it, often resulting in toxic stress.

Impact of Stress on Development

The amount of distress children and teenagers endure on a regular basis is steadily increasing over time (APA, 2014; APA, 2018). How individuals respond to stress, and the effect stress has will change over time as individuals progress through developmental life stages (Farrell et al., 2017).

Infancy and Childhood

Stress is the body's response to any external foreign sense which results in a disruption of the current state of senses. This disruption (stress) temporarily stops the current development process and can result in permanent underdeveloped parts of the brain (Bick et al., 2017; Perry et al., 1995). During infancy and early childhood, the brain's neural system develops in a sequential and hierarchical fashion. Interruptions of stress or malnourishment during this critical

developmental period can result in irreversible destruction to certain parts of the brain (Perry et al., 1995). Early life neglect and stress increase the likelihood that children will develop anxiety, depression, and internalizing long term problems (Bick et al., 2017).

Adolescence

Adolescence is another critical stage of development, as during this period of time the remaining parts of the individual's brain continue to grow. Specifically, there are shifts in the hypothalamic-pituitary adrenal axis reactivity, which releases cortisol resulting in a heightened stress-induced hormonal response which makes adolescents react to stress more intensely than other stages of development (Romeo, 2013). During adolescence the brain continues to develop significantly, specifically in the limbic and cortical regions which are sensitive to stress, making the brain extremely vulnerable to outside stressors (Romeo, 2013). In fact, researchers suggest adolescents are more susceptible to the effect of daily stress than adults due to the lasting impact stress can have on adolescents' brain development (Rahdar & Galván, 2014).

Experiencing high levels of stress during adolescence can contribute to the development of mental health difficulties such as depression, anxiety, and emotional and behavioral problems (Cumming et al., 2018; Leonard et al., 2015; McLaughlin et al., 2009; Robinson et al., 1995; Slavich et al., 2019; Suldo & Huebner, 2004). This can contribute to adolescents attempting suicide (Yildiz et al., 2019) as well as risky behavior and the development of physical health problems (Slavich et al., 2019). Adolescents who experience stressful life events reported lower levels of life satisfaction (Milas et al., 2021; Robinson et al., 1995). Expectations and societal cultural norms continue to place a great demand on adolescents as they enter a new phase of learning how to independently juggle their academics, extracurricular activities, appearance, health, social life, and family. However, it is critical that students are taught and equipped with

effective coping strategies to overcome stress and that the high rates of stress students are experiencing are not dismissed as normative developmental experiences (De Anda et al., 2000).

Coping with Stress

The way adolescents cope with stress will change and develop over their lifetime (Frydenberg & Lewis, 2000; Masten & Coatsworth, 1998). Additionally, male and female adolescents are likely to differ in how they cope with stress. For example, female adolescents are more likely to internalize their emotions as a way of coping whereas male adolescents are more likely to externalize their emotions (Leonard et al., 2015). The strategies adolescents use will also depend on outside factors such as what skills they have previously mastered and their current access to resources (Skinner & Saxton, 2020). The methods an individual uses to cope with stress can also have an impact on their development. For example, adolescents have reported using alcohol and drugs as they found it to be the "only effective way" to cope and relax from the stress they were feeling (Forster et al., 2017; Leonard et al., 2015). Adolescents also turn to their social environment, including social support from family members, friends, and school personnel to help cope with their stress (Leonard et al., 2015).

Stress in School

High school students most commonly stress about future plans, school work, not letting their feelings out, violence, and social issues (De Anda et al., 2000; Leonard et al., 2015; Lin & Yusoff, 2013). School work, grades, expectations, lack of time, and extracurricular activities at school are commonly some of the largest stressors in adolescents' lives (Anniko et al., 2019; De Anda et al., 2000). School has been identified as one of the main sources of stress for adolescents (Anniko et al., 2018; Epplemann et al., 2016). For this reason, the school environment makes for one of the best locations to implement interventions targeted at reducing adolescent stress (De

Anda et al., 2000; Masten et al., 2008). While a majority of students tend to engage in appropriate adaptive coping strategies, students who experience higher levels of distress are more likely to engage in maladaptive coping strategies such as withdrawal, arguing, yelling, and denial (De Anda et al., 2000; Lin & Yusoff, 2013). School connectedness can act as a buffer towards the negative effects of stress (Areba et al., 2021) however, students with high levels of stress, anxiety, and depression and students with EBD are more likely to have poorer school connectedness (Marsh et al., 2019; Perkins et al., 2021; Pikulski et al., 2020).

Students with Emotional and Behavioral Disorders

Students with EBD have certain characteristics placing them at a greater risk for the negative effects associated with high levels of distress (Lewis, 1999; Lidz, 1983; McLaughlin et al., 2009). It is estimated that about 30% of adolescents with EBD have experienced a traumatic event or show stress related symptoms (Mueser & Taub, 2008). Adolescents who have maladaptive schemas and depressive symptoms are at increased risk for a number of stressors (Calvete et al., 2013). This is of concern, considering students with EBD engage in more maladaptive functioning (i.e., behaviors and emotions) than students without EBD (Cullinan & Sabornie, 2004). Additionally, students with EBD report significantly higher levels of depressive symptoms, unhappiness, and fear (Cullinan & Sabornie, 2004; Lambert et al., 2021); all these characteristics are risk factors for additional levels of stress (Calvete et al., 2013). Therefore, it is critical that educational professionals understand the variables that can mitigate the impact of stress on students with EBD. Research indicates that one factor that has shown to decrease the negative effects of stress is an individual's resiliency (Luthar et al., 2000).

Resiliency

Resilience is an individual's ability to overcome or adapt to stressful situations (Luthar et al., 2000). An individual who displays a high level of resilience is less likely to suffer long term damage after experiencing a stressful situation. Resilience is not a dichotomous personality trait that a person has or does not have (Luthar et al., 2000). Instead, resilience is a continuously evolving, multidimensional construct that encompasses multiple skills and strategies an individual would use to cope and persevere when experiencing stress. Resilience implies (a) the individual has been exposed to stressful, adverse conditions or circumstances, and (b) the individual successfully adapted to the stressful event by positively adapting to the stress with minimal to no changes across one or more domains of functioning (Luthar et al., 2000).

Resilience is a construct encompassing multiple skills, which makes it challenging for researchers and educators to operationalize characteristics or behaviors that would allow for monitoring or measuring of an individual's resilience (Luthar et al., 2000). However, researchers have identified certain criteria such as age specific benchmarks and expectations across multiple domains (i.e., relationships, academics, emotional and behavioral regulation) to determine if the individual was affected by the event or if they are resilient (Walsh et al., 2010). For example, to determine if a child is resilient, an adult would monitor the child after the child has experienced a stressful event. The adult would look for changes in the child's behavior across multiple domains such as relationships with peers, their academic achievement, and their emotional and behavioral regulation which would serve as an indicator the child is resilient (Walsh et al., 2010). A decrease in any of the domains could suggest the child is not resilient, suggesting the child is vulnerable to the negative effects of stress and needs additional resiliency increasing resources. During adolescence, additional indicators to monitor to determine if an individual is resilient or

not include substance abuse, suicidal ideations or attempts, self-harm, psychiatric diagnosis, and engaging in dangerous activities for a thrill (Leonard et al., 2015; Prince-Embury, 2015; Walsh et al., 2010). It is important to note these benchmarks and expectations are influenced by the cultural norms of the majority and therefore cannot be applied to all individuals in the community (Lewis, 1999). Additionally, an individual's resiliency will fluctuate over their lifetime as it is influenced by multiple external factors (i.e., relationships with others, access to resources, safe environment, etc.) and their internal characteristics (i.e., coping strategies, emotional regulation, flexibility, etc.) are developed overtime (Masten & Coatsworth, 1998).

Building Resiliency

There is a common misconception suggesting that children and adolescents are instinctively resilient. Assuming children are automatically resilient and naturally have the ability to "bounce back" from anything is harmful and perpetuates this fallacy (Perry et al., 1995). In actuality, children are in the most vulnerable state during these developmental years, and providing resiliency supports and equipping them with the skills needed is crucial for children to overcome stressful situations (Perry et al., 1995). Considering resiliency is an evolving concept that encompasses an individual's ability to access various mastered skills, increasing an individual's resiliency requires targeting specific skills (i.e., coping, personality traits, positive outlook, self-esteem, prosocial behaviors, life satisfaction, etc.) in their current repertoire to further develop (Morrison & Allen, 2007). Children who are resilient do not possess "mysterious or unique qualities"; rather, they exhibit important protective skills (Masten & Coatsworth, 1998).

Researchers have identified protective factors that can help increase an individual's resilience (Gartland et al., 2019; Masten & Coatsworth, 1998; Perry et al., 1995; Wang et al.,

1997). Various factors contribute to an individual's ability to be resilient, such as optimism, adaptability, access to resources, self-efficacy, emotional regulation, self-reflection, and self-esteem (Gartland et al., 2019; Masten & Coatsworth, 1998). Additional protective factors include access to resources, close attachment with a caregiver, positive relationships with peers or teachers, utilizing coping strategies, and engagement in a safe and secure environment (Diers, 2020; Masten & Coatsworth, 1998; Wang et al., 1997). Having access to resources that promote resiliency can contribute to building an individual's resiliency. However, it is important to note that access to these critical resources can vary by socioeconomic status, culture, and other contributing factors which can all have an impact on individual's level of resiliency.

Risk Factors for Low Levels of Resiliency

There are various factors that put an individual at a greater risk for having lower resilience such as poverty, family education levels, family environment, family violence, and/or substance abuse (Kassis et al., 2018; Pollard et al., 1999). Individuals who have experienced high levels of stress or have been exposed to traumatic events during infancy or early childhood are at greater risk of having lower resiliency later on life (Danese et al., 2020; Lewis, 1999; Thakur & Cohen, 2020). Additionally, adolescents and children with certain personality traits, such as neuroticism, optimism, impulsivity, are at a greater risk for having lower levels of resiliency (Carballo et al., 2020; Kassis et al., 2018).

Students with Emotional and Behavioral Disorders

Students with EBD find it more difficult to handle problems and lack essential coping strategies to overcome difficult situations (Sullivan et al., 2015; Zolkoski et al., 2016). Lewis (1999) suggests improving a student's resilience can not only help current students with EBD, but can act as a proactive measure for future students from developing emotional and behavioral

disorders. One factor that has been shown to improve an individual's level of resiliency is relationships.

Elements of Relationships

Relationships are a vital part of human development and a core component of resilience. In fact, relationships with others have been shown to be the most important factor for resilience (Makhnach, 2016). A consistent, emotionally available relationship can provide a sense of security and comfort that can help children mitigate the negative effects of stress (Perry, et al., 1995). Healthy relationships have the power to enhance an individual's resiliency and ultimately protect them from the harm associated with stress and trauma (Perry, 2009; Willis & Nagel, 2015).

Development Stages

Relationships are critical starting as early as infancy and begin to have an impressionable impact on development. An infant's relationship with their mother can impact pre-linguistic communication (Barwick et al., 2004). Parenting interventions that target a varied range of skills including parent-child relationship can have a significant impact on the child's cognitive, language, and motor development (Jeong et al., 2021). In fact, the high quality attachment relationships formed during infancy provide a framework for successful relationships later in development even into adulthood (Englund et al., 2011).

Children and adolescents who have an unstable and poor relationship with parents can lack the expected guidance and support often expected from a parent (Neal, 2017). An adolescent's self-esteem can be shaped by their relationship with their caregivers (Keizer et al., 2019). Mentors and the development of relationships with trusted adults can shape how students see themselves. Additionally, children with problem behavior and difficulty forming attachment

during developmental years are more likely to continue having difficulty building and maintaining healthy relationships as they get older (Vergunst et al., 2020).

Relationships continue to be vitally important for individuals in late adulthood. Individuals between 60 and 95 years old who have more secure attachment styles reported having more acceptance towards themselves, perceived greater meaning and purpose in their lives, had more satisfying relationships with others, and engaged in more growth-promoting activities (Homan, 2018). Additionally, positive relationships with others can increase an individual's overall general health, improve their perception and outlook, and reduce mortality among adults in late adulthood (Cohen, 2004; Garcia et al., 2018; Sabin, 1993).

Student-Teacher Relationship

As children begin to enter school, relationships with others become increasingly important, specifically relationships with their teachers. A strong and positive STR can lay the groundwork for a student to make greater academic gains, increase feelings of school connectedness, and establish relationships with peers (Hamre & Pianta, 2001). However, as students progress from kindergarten through high school, it is common for STR to decrease as peer relationships increase (McGrath & Bergen, 2015).

Many variables impact the development and characteristics of the relationship students have with their teachers. For example, student age, gender, socioeconomic status, ethnicity, and academic ability all have an impact on STR (McGrath & Bergen, 2015). Additionally, students' behavioral and emotional strengths set a foundation and are predictive of STR (Sointu et al., 2016). For example, a student who has good emotional and behavioral regulation and is able to express their emotions is more likely to have a strong, positive relationship with their teacher

compared to a student who struggles managing their emotions, engages in disruptive behavior, and struggles accepting as well as expressing affection (Sointu et al., 2016).

Impact of Student-Teacher Relationship

Positive and caring STRs can influence a student's overall development, academic achievement, and socioemotional development, and they can provide a sense of belonging (Ibrahim & Zaatari, 2020; Longobardi et al., 2019; Neal, 2017). Students who have better relationships with their teachers experience better academic outcomes and educational beliefs and aspirations (Ansari et al., 2020; Sointu et al., 2016). Students who have a positive relationship with their teacher are more likely to have better emotional well-being than students who have a poor relationship with their teacher (Wang et al., 2016). A positive STR was found to be a mediator of student engagement in risky behavior (Rudasill et al., 2010). A positive STR can provide a platform for the student to learn the skills needed to build and maintain a relationship with others, which could then be generalized to other individuals and settings. Students reported their relationship with their teachers could "make or break" their educational experience for them, signifying the importance of a positive STR (Sanders et al., 2016, p. X).

Stress and Resiliency

Positive STRs can mediate the negative effects associated with stress for an adolescent. There is an extensive amount of research related to the impact STRs have on students' resiliency (Akin & Radford, 2018; Johnson, 2008; Masten et al., 2008; Mihalas et al., 2009; Mulloy, 2011; Sanders et al., 2016; Stewart & Sun, 2004). Teachers have the ability to help students recover from stress by reprogramming the plasticity of children's brains and reforming current thought patterns and behaviors by forming a positive STR (Willis & Nagel, 2015).

Student-Teacher Relationship and Students with Disabilities

The characteristics of STRs can vary greatly depending on the placement and disability status of the student. For example, students placed in general education are more likely to have a well-established, stable relationship with their teachers (Blacher et al., 2009). However, students receiving services for a disability such as autism spectrum disorder (ASD), intellectual disorders (ID), or students with EBD, are more likely to struggle forming and maintaining a positive relationship with their general education teachers and special education teachers (Friere et al., 2020; Murray & Greenberg. 2001). Students with disabilities (e.g., EBD, ASD, mild intellectual disabilities, learning disabilities, and other health impairments) are at a heightened risk of experiencing poor quality relationships with their teachers (Friere et al., 2020; Murray & Greenberg. 2001). Students with disabilities may be more likely to engage in disruptive classroom behavior, lack appropriate social skills, and have emotional and mental health problems that interfere with their potential to build a relationship with their teachers (Friere et al., 2020). The quality of students' relationships with their teachers can have significant impact on student outcomes (Friere et al., 2020; Hamre & Pianta, 2001). This is especially important for students with EBD.

Students with Emotional and Behavioral Disorders

Students with EBD have difficulty building and maintaining a relationship with others, including their teachers (Cullinan & Sabornie, 2004; Lambert et al., 2021). In fact, students with EBD report having the lowest quality relationships with their teachers (Murray & Greenberg, 2001). Additionally, students with EBD report having greater dissatisfaction with their teachers and poorer bonds with school overall (Murray & Greenberg, 2001). Students who engage in externalizing behavior (e.g., conduct problems and hyperactivity) or have difficult temperaments

are more likely to have a poor relationship with their teachers (Ansari et al., 2020; Berchiatti et al., 2021; Friere et al., 2020; Ladd & Burgess, 1999; Roorda & Koomden, 2021; Rudasill et al., 2010). This is troublesome considering many students with EBD exhibit externalizing behaviors in the classroom setting (Gage, 2013). Teachers report it is often more difficult to establish a relationship with students engaging in these types of behaviors (Berchiatti et al., 2021). Having a positive relationship with an adult at school is predictive of school success for students with EBD (Vance et al., 1998).

Intersection of Stress, Resiliency, and Relationships

Stress can cause long term detrimental damage to an individual, which can have a negative effect on their relationships with others and decrease their overall resiliency (Franke, 2014; Herman & Lester, 1994; Hornor, 2015; Pascoe et al., 2020; Masten & Wright, 2010). Resiliency is an individual's ability to overcome and adapt to stressful situations, leaving the individual unharmed from stress (Luthar et al., 2000). For example, an individual who is highly resilient may experience a stressful event with little to no effects to their overall psychological well-being. Whereas an individual who is less resilient may experience a stressful event which can eventually affect how the individual's brain processes information, their emotional regulation, and their overall psychological well-being. Resiliency is not a natural human instinct, and instead is a multidimensional construct that is influenced by multiple factors and is constantly changing (Gartland et al., 2019; Luthar et al., 2000; Masten & Coatsworth, 1998; Perry et al., 1995). Fortunately, a healthy relationship with others can dramatically improve an individual's resilience, ultimately mitigating the negative effects of stress (Makhnach, 2016; Perry, 2009).

Related to Students with Emotional and Behavioral Disorders

The association and intersection between stress, resilience, and relationships is critical to understanding the emotional well-being of students and their future academic success. Students with EBD have higher levels of depressive symptoms, unhappiness, and engage in maladaptive functioning, which are all risk factors for experiencing greater levels of stress (Calvete et al., 2013; Cullinan & Sabornie, 2004; Lambert et al., 2021). Additionally, students with EBD often lack the coping skills or resilience to overcome stressful situations (Sullivan et al., 2015; Zolkoski et al., 2016). Lastly, students with EBD struggle to maintain a relationship with others and report having the lowest quality relationships with their teachers (Cullinan & Sabornie, 2004; Lambert et al., 2021; Murray & Greenberg, 2001). These characteristics (e.g., low levels of resiliency skills, lack of relationships with others, and greater chances of experiencing high levels of stress) place this population at a greater risk for experiencing the long-term negative effects of stress. For these reasons, it is critical future research explore the intersection of these variables to better inform future interventions to improve the lives of students with EBD.

Conceptual Framework

The conceptual framework of this study consists of attachment theory (Ainsworth, 1979; Ainsworth & Bowlby, 1991), resilience theory (Masten, 2001; Zimmerman, 2013), and disability critical race theory (DisCrit; Annamma et al., 2014; refer to Figure 1). The combination of these three theories guide this study as its purpose is to explore the relationship between attachments (i.e., student-teacher relationships) and the impact they have on students' resiliency and stress levels (Atwool, 2006) within students with EBD, a historically marginalized group (Annamma et al., 2014).

Attachment Theory

Attachment theory emphasizes the importance of early attachments during infancy and childhood (Ainsworth & Bowlby, 1991). Attachment theory expands from infancy, suggesting secure attachment during all phases of life are important and play a role in influencing the development of an individual. Ainsworth (1979) identified three patterns of attachment: secure, ambivalent, and avoidant. Secure attachment is defined as a child who feels loved and cared for and develops the ability to form relationships with others. A child who has ambivalent attachment is likely to be cautious of building relationships with others. Lastly, a child who experiences an avoidant attachment is likely to grow up struggling to express their feelings and avoid close or healthy relationships with others. Prior to attachment theory, relationships were primarily viewed to be transactional, innate, and simply for survival purposes. However, researchers began to identify the different interactions and the various benefits attachments have. Secure attachments are fundamental for developing an individual's resilience (Ainsworth 1979; Atwool, 2006). In the classroom setting, teachers serve as potential temporary secure attachments for students. A student who has a secure attachment with their teacher is associated with greater emotional regulation, social competence, and overall academic achievement (Bergin & Bergin, 2009). This study explored the characteristics of the relationship students with EBD have with their teachers. The STR is a critical resource that promotes resiliency and helps mediate the negative effects, this study explored the mediating effect the student-teacher relationship had on students' levels of resilience and stress.

Resilience Theory

Resilience theory framework takes a strengths-based approach to understanding how youth overcome and develop when experiencing adversity (Masten, 2001; Zimmerman, 2013).

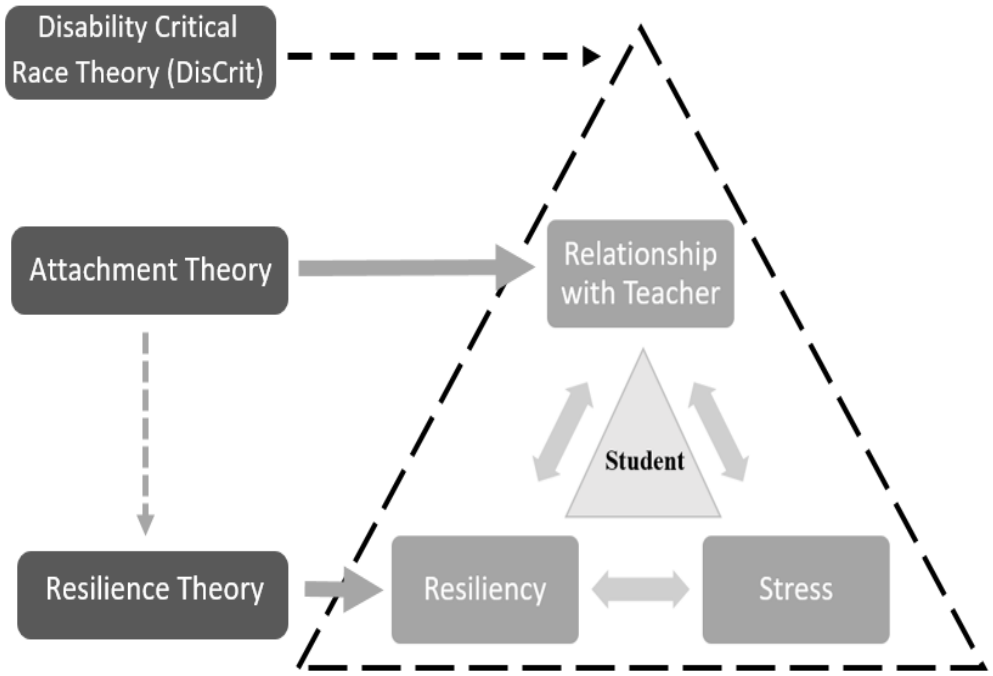
Resilience theory takes into account the individual's environment, past experiences, stress, and the stress's impact on the individual's development. Resilience theory acknowledges resilience as a dynamic evolving trait, which is dependent on interactions and relationships (Masten, 2001). The resilience of a child is dependent on the resources, supports, and secure attachments available to the individual (Atwool, 2006; Masten, 2001). This study further explored the intersection of stress, resilience, and the role of the student-teacher relationship.

Disability Critical Race Theory

DisCrit as a theoretical framework evaluates the ways race, racism, disability, and ableism are historically embedded into practices, procedures, and interactions within the education system and society (Annamma et al., 2013). For example, Black students are diagnosed with EBD and disciplined at significantly higher rates than their White peers (Johnson-Staub, 2017). When evaluating this problem through a DisCrit lens this is likely due to the historically racist practices and biases that are deeply rooted in a predominately White educational institution (Connor et al., 2019). Additionally, Black males with EBD are more likely to be pushed out of the traditional general education classroom, creating a modern day segregation (Annamma et al., 2014; Johnson-Staub, 2017). DisCrit acknowledges the current crisis and seeks to dismantle the dysfunctional educational environment that are segregating students by race and ability (Annamma & Morrison, 2018; Kulkarni et al., 2021). This study will explore a marginalized group of adolescents with EBD who have been removed from the general education classroom and are currently attending a self-contained school for students with behavioral disorders. This study is centered on better understanding students' lived experiences (i.e., stress, their relationship with their teacher) and embracing their narratives through qualitative research.

Figure 1

Conceptual Framework



Statement of the Problem

Adolescents are experiencing high levels of stress, which can have a detrimental impact on their overall brain development (APA, 2014; APA, 2018; Perry et al., 1995; Romeo, 2013; Rahdar & Galván, 2014). Extensive research has shown the positive effects a strong STR has on students' resiliency to counteract the negative effects of stress (Akin & Radford, 2018; Johnson, 2008; Masten et al., 2008; Mulloy, 2011; Sanders et al., 2016; Stewart & Sun, 2004). Unfortunately, these studies rarely include students with EBD. Students with EBD are more likely to have lower levels of resilience and often struggle forming a positive relationship with

their teachers, placing them at a greater risk of the negative effects of stress (Cullinan & Sabornie, 2004; Lambert et al., 2021; Murray & Greenberg, 2001). The current study addressed the research gap by exploring the relationship between stress, resilience, and students' relationship with their teachers among students with EBD.

Purpose of the Study

The purpose of the study was to explore the intersection of stress, resilience, and STR among students with EBD. This study further investigated the characteristics of STRs among students with EBD. Lastly, this study explored what students identify as current stressors in their lives and how students with EBD cope with their stress.

Research Questions

The following research questions guided this study:

Research Question 1: Is there a difference in student-teacher relationship rating between students with EBD and their teachers?

Research Question 2: What are the perceptions of students with EBD and their teachers regarding the characteristics of their current relationship?

Research Question 3: What do students with EBD identify as their current stressors?

Research Question 4: How do students with EBD describe how they cope with stress?

Research Question 5: What is the relationship, if any, between the perceptions of students with EBD about stress, resilience, and their perception of student teacher relationship?

Significance of the Research

Currently, there is a lack of understanding regarding the impact stress has on students' resiliency and the mediating effect of STRs, specifically for students with EBD. As a result of

this study, educators have a better understanding of the characteristics that define positive STRs. As a result of this study, the field has a better understanding of the impact STRs have on improving student resiliency and mediating the effects of stress. The results of this study will help inform the design and implementation of future interventions and practices. This is one of the first identified studies to investigate the intersection of these three variables on students with EBD.

Delimitations

While students of all abilities experience stress, the current study was limited to examining only students with EBD. It is possible that students without disabilities and students with other disabilities are also experiencing stress and are thereby vulnerable to the negative effects of stress, however this study only explored students with EBD. Additionally, STR and resiliency is important for students of all abilities and grade level. This study focused only on high school students because adolescents in high school are more likely to be able to conceptualize, identify, and verbally discuss their stress, relationships, and resilience.

Also, while there are many other factors that contribute to an individual's resiliency, this study focused solely on the impact STR has on students' resiliency. It is possible that other factors are contributing to an individual's resiliency, however STRs are within the scope of the school setting and were the primary focus of this study. Additionally, research suggests that relationships with others, such as STRs, are a significant factor to promote resiliency among students which is why this study singled out that variable instead of other factors.

Some of the questionnaires used for this study did require student self-reported data; students may not respond at all or may be swayed by social desirability and alter their responses. In an attempt to mitigate this limitation all responses were collected in a private setting away

from peers and teachers. Participants were also reminded that all responses are confidential and stored in a locked facility. Lastly, this study relied on the schools identification and determination of services for students with EBD and did not use any additional methods to confirm student's disability. It is important for this study that student's EBD diagnosis is present in the school setting, therefore, the school reported diagnosis and students Individualized Education Plan (IEP) were used to confirm which students are eligible (i.e., students receiving services for EBD). Having a school diagnosis is critical for receiving the proper services and accommodations needed, however students disability label (i.e., EBD) may alter teachers' perception and attitude towards students (Metzger & Hamilton, 2021; Scanlon et al., 2020).

Definition of Key Terms

Adolescence. Adolescence is "the period of human development that starts with puberty (10-12 years of age) and ends with physiological maturity (approximately 19 years of age)" (APA, 2020).

Characteristics of Student-Teacher Relationships. Student-teacher relationships (STR) are comprised of multiple characteristics which contribute to the relationships over all standing (i.e., positive/strong, negative/poor). Characteristics include but are not limited to closeness, mutual respect, empathy, supportive, and non-judgmental.

Emotional and/or Behavioral Disorders. Emotional and/or behavioral disorders (EBD) refers to students who engage in emotional and behavioral responses that interfere with their ability to learn, interpersonal relationships with others. For the purpose of this study, EBD will refer to students who are currently receiving services under the Individuals with Disabilities Education Act (IDEA; IDEA, 2004) definition.

Resilience. Resilience is defined as "dynamic process encompassing positive adaptation within the context of significant adversity" (Luthar et al., 2000).

Stress. Stress is a non-specific natural reaction to any stimuli that appears as a threat, change or pressure from outside sources (Selye, 1976). Stress can be positive or negative and can be acute or chronic. Chronic stress can lead to toxic stress which results in potential long term negative effects.

Student-Teacher Relationship. Student-teacher relationship (STR) refers to the cumulative interactions between a student and their teacher. STRs were referred to as "positive" or "strong" STR if the STR is mutual, respectful, and supportive (Bahr & Pendergast, 2006). "Negative" STR or "poor" STR were used when referring to a STR that is one directional and not perceived by both the student and the teacher.

CHAPTER TWO

LITERATURE REVIEW

Adolescents are experiencing stress at alarmingly high rates and researchers have observed a significant rise in psychological distress, major depression, and suicide (APA, 2014; APA, 2018; Twenge et al., 2019). This is of significant concern considering the detrimental impact stress can have on adolescents' overall development and well-being (Rahdar & Galvan, 2014; Romeo, 2013). More specifically, stress can result in permanently underdeveloped parts of the brain which can contribute to the development of mental health difficulties such as depression, anxiety, and emotional and behavioral problems (Bick et al., 2017; Perry et al., 1995; Cumming et al., 2018; Leonard et al., 2015; McLaughlin et al., 2009; Robinson et al., 1995; Slavich et al., 2019; Suldo & Huebner, 2004).

Students with EBD may possess certain characteristics making them more vulnerable to the negative effects of stress (Lewis, 1999; Lidz, 1983; McLaughlin et al., 2009). This is especially concerning considering over 30% percent of students have experienced a traumatic event (Mueser & Taub, 2008). Fortunately, researchers have identified the powerful impact STRs can have on students resiliency (Akin & Radford, 2018; Johnson, 2008; Masten et al., 2008; Mihalas et al., 2009; Mulloy, 2011; Sanders et al., 2016; Stewart & Sun, 2004). However, students with EBD often have poor relationships with others and report having the lowest quality relationships with their teachers (Cullinan & Sabornie, 2004; Lambert et al., 2021; Murray & Greenberg, 2001). Understanding the intersection of stress, resiliency, and STR and the impact these variables have on students with EBD is critical for developing future interventions aimed at increasing student resiliency and STR in an attempt to mitigate the negative effects of stress. Providing additional supports and interventions aimed at increasing student resiliency and

improving STR for students with EBD is critical. This literature review aims to explore common themes in the current literature related to the intersection of stress, resiliency, and STR among students with EBD.

Intersection of Stress, Resilience, and Student-Teacher Relationship

A thematic analysis design was used for this systematic literature review. The review was conducted searching four scholarly databases over the last 20 years, from 2002 to 2022. The databases used included *Academic Search Premier*, *Education Full Text*, *ERIC*, and *PsychInfo* with the search terms related to *resiliency*, *student-teacher relationship*, *stress*, and *adolescents*. This search resulted in 24 articles. Articles were then individually scanned by the researcher to determine if they matched the inclusion criteria or not. Five articles were removed for being a practitioner piece or review article, three articles were removed because the population did not include adolescents (one university population, one preschool population, one elementary school), two articles were removed for validating instruments, one article was removed for being a medical piece, and one article was removed for being a literature review. This resulted in a remaining 12 articles that fit the inclusion criteria for this search (refer to Table 1).

Results

After analyzing the journal articles two major themes emerged throughout the current research. Each article was read in its entirety and coded to highlight major themes. Articles were then grouped together by their common themes. The first theme was stress, which has subcategories exploring the type of stress, the effects of stress on academic achievement, mental health, and physical symptoms of stress. The second theme was protective factors which has subcategories discussing internal characteristics including resiliency, and external resources including relationships.

Table 1

Summary of the Literature Review Results Related to Stress, Resilience, and Student-Teacher Relationship among Adolescents

Author (Year)	Participants	Type of Stress	Effects of Stress	Protective Factors	Impact of Protective Factors
Baeva et al., 2016	437 students	Psychological violence, bullying	Anxious, aggressive, rigid, poor mental and emotional well-being	Psychological resources	Improved mental and emotional well-being
d'Abreu et al., 2020	Seven students and four parents	Economic hardship, immigration	Nightmares, sleep problems, bed wetting, hair loss	Sense of belonging, culture	Improved outlook on life/future, hopeful, grateful
Diers, 2020	One student	Violence, family stress, switching schools	Difficulty focusing on school, fearful	Resilience	Improved school achievement, motivated, involved

Gelkopf and Beger, 2009	114 students	Terror attacks	PTSD, excessive sweating, loss of appetite, sleep problems, compromised sense of safety, depression	Coping skills, emotional awareness, self-esteem	Decreased psychological distress, increased resiliency
Hoferichter et al., 2014	1,088 students	Perceived stress, test anxiety	Poor peer relationships	Relationships with peers and teachers	Decreased anxiety
Jaureguizar et al., 2018	481 students	Family stress, health	Depression	Self-concept, social skills, resilience	Decreased stress and depression

Kumi-Yeboah and Smith, 2017	60 students	Immigration	Academic performance, poor peer relationships	Teacher and parent support, caring school environment, resilience	Improved academic achievement
Lan & Zhang, 2019	371 transfer students, 742 non transfer students	Transferring schools	Poor emotional well being	Perseverance, teacher support	Improved psychological well-being
Martin and Marsh, 2008	598 students	Anxiety	Lower academic buoyancy	Relationships, self-efficacy, academic engagement	Improved academic buoyancy
Noor and Alwi, 2013	197 students	Stress, traumatic events	Life satisfaction, mental health	Resilience	Improved overall well-being
Solberg et al., 2007	789 students	School stress, violence, health	Psychological and emotional distress, poor	Family support, relationships	Higher academic achievement,

			grades, poor retention, poor health	with peers and teachers, motivation, self-efficacy	better health, better retention
Sulkowski and Simmons, 2017	539 students	Peer victimization, psychological distress	Psychological distress including depression, anxiety, stress	Teacher-student relationships	Less psychological distress

Types of Stress

Two main themes emerged to categorize the types of stress discussed in the 12 articles, those two categories are everyday stress and traumatic stress. Both everyday stress and traumatic stress were acute and chronic in length, although some articles did not provide enough detail to determine the length the adolescents were exposed to the stress. Interrater reliability was conducted by two colleagues to confirm the categorization of the articles. Of the 12 research articles, 11 of the articles researched everyday stress which included stressors on a daily basis related to their family, health, and school. Four of the articles used a general term of stress (i.e., total stress, perceived stress, psychological distress, psychological violence; Baeva et al., 2016; Hoferitcher et al., 2014; Jaureuizar et al., 2018; Sulkowski & Simmons, 2017). Three articles measure how much adolescents stress is related to their family problems, including economic

hardship (d'Abreu et al., 2021; Diers, 2020; Jaureguizar et al., 2018). Three articles explored school stress including test anxiety (Hoferitcher at al., 2014; Jaureguizar et al., 2018; Soldeberg et al., 2007). Two articles measured how much adolescents stress about their health (Jaureguizar et al., 2018; Solberg et al., 2007). Two articles explored the stress adolescents experience when emigrating from another country (d'Abreu et al., 2021; Kumi-Yeboah & Smith, 2016). Of the 12 research articles, 7 of the articles researched traumatic stress. The most prevalent form of traumatic stress among adolescents was related to traumatic events including being exposed to violence, bullying, and terror attacks (Baeva et al., 2016; Diers, 2020; Gelkopf & Berger, 2009; Kumi-Yeboah & Smith, 2017; Noor & Alwi, 2013; Solberg et al., 2007; Sulkowsi & Simmons, 2017).

Effects of Stress

After experiencing a type of stress (everyday stress or traumatic stress) adolescents were at risk to experience the negative side effects of stress which impacted their mental health, academics, and even resulted in physical health symptoms after experiencing stress.

Mental Health

Adolescents reported being more fearful after experiencing stress, and had an overall lack of sense of safety (Diers, 2020; Gelkopf & Berger, 2009). Exposure to violence is not necessarily geographically specific and actually relates more to an individual's sense of safety, or lack thereof (Gelopf & Berger, 2009). For example, adolescents who had not been physically impacted by violence or directly witnessed the violence, still reported high levels of stress likely due to the adolescent's sense of compromised safety (Gelkopf & Berger, 2009). However, adolescent's level of violence exposure places them at a greater risk for the effects of stress, suggesting adolescents who directly witnessed violence are more likely to develop even more

negative effects of stress than someone who just felt unsafe (Gelkopf & Berger, 2009; Soldberg et al., 2017). High levels of stress among adolescents was associated with high levels of psychological and emotional distress such as depression, anxiety, and neuroticism (Baeva et al., 2016; Hoferichter et al., 2014; Jaureguizar et al., 2018; Soldberg et al., 2007).

Effects on Academic Achievement

Experiencing stress had a negative impact on adolescent's academic achievement. For example, students with higher levels of stress had difficulty focusing on schoolwork, had lower academic grades, and lower rates of retention (Diers, 2020; Kumi-Yeboah & Smith, 2017; Martin & Marsh, 2008; Solberg et al., 2007). Students with higher levels of anxiety struggled more with academic setbacks and challenges that are typical of the ordinary course of school life including difficulty managing deadlines, exam pressure, difficulty completing schoolwork (Martin & Marsh, 2008).

Physical Effects of Stress

Some adolescents reported experiencing physical symptoms after experiencing stress. For example, adolescents experienced excessive sweating, loss of appetite, hair loss, nightmares, bed wetting, and difficulty falling asleep or staying asleep (d'Abreu et al., 2020; Gelkopf & Beger, 2009; Soldberg et al., 2007). Additionally, the more stress adolescent's experience, the more likely they were to experience significant problems with their health (Soldberg et al., 2007).

Protective Factors

Eleven of the articles addressed specific protective factors adolescents used to overcome the negative effects of stress. Protective factors were separated into two groups: internal characteristics which included traits or skills the individual possessed, and external characteristics which included resources and the individual's social environment.

Internal Characteristics

There are multiple characteristics an adolescent can possess that act as a protective barrier towards the negative effects of stress. For example, self-concept, which is described as an individual's cognitive appraisal of themselves based on their previous experiences, has been found to mediate the relationship between the negative effects of stress, especially depression (Baeva et al., 2016; Jaureguizar et al., 2018). In fact, adolescents who have higher levels of self-concept and experience high stress, are still more likely to have lower levels of depression. Self-concept could be such a powerful protective factor because adolescents with higher levels of self-concept have more resources to deal with depression when faced with stressful situations (Jaureguizar et al., 2018). Additionally, the attitude and mindset an individual with a high self-concept would have is incompatible with depressive symptoms, which could be another reason self-concept is a protective factor against stress (Baeva et al., 2016; Jaureguizar et al., 2018). Additionally, adolescents who have a positive mindset and perception of the world around them are also less likely to be affected by the negative psychological effects of stress (Baeva et al., 2016).

Another characteristic that has been found to act as a protective factor for adolescents is social skills. Social skills include communication skills, cooperating with others, assertiveness, responsibility, empathy, and involvement or participation in a shared activity (Baeva et al., 2016; Jaureguizar et al., 2018). Adolescents who have higher levels of social skills are less likely to develop depression as a result of experiencing high levels of stress (Jaureguizar et al., 2018). Similarly, adolescents who are satisfied and feel confident with their social skills also are less affected by the effects of stress (Baeva et al., 2016).

Lan & Zhang (2019) explored what they identified as two facets of grit and the impact it has on adolescents emotional wellbeing. They describe the two facets of grit to be consistency (not getting distracted) and perseverance (not getting discouraged). They found perseverance can mitigate the negative effects of stress adolescents often experience when switching schools (Lan & Zhang, 2019). Additionally, adolescent's sense of belonging, which includes their ties to their ethnicity and culture can also act as a protective factor (d'Abreu et al., 2021).

Resiliency

One of the main protective factors discussed in four of the articles is the adolescent's resiliency. Resilience is a trait that accumulates from several resources across different categories (personality, family, and school) (Noor & Alwi, 2013). Resilience was found to significantly mediate the effects of stress in adolescents with high levels of resilience (Noor & Alwi, 2013; Soldberg et al., 2007). Adolescents who had high levels of resilience were less likely to exhibit the negative effects of stress and had an overall positive wellbeing (Noor & Alwi, 2013; Soldberg et al., 2007). For example, resilience was shown to moderate the relationship between stress and depression (Jaureguizar et al., 2018). Students with higher levels of stress, who also had high levels of resilience, had low levels of depressive symptoms and psychological and emotional distress, suggesting their resiliency was acting as a buffer (Jaureguizar et al., 2018; Soldberg et al., 2007). Qualities associated with high levels of resilience among adolescents included strong personal and interpersonal assets such as high motivation, emotional stability, positive self-awareness, and self-efficacy (Diers, 2020). Adolescents with high levels of resilience had higher scores on personality, parent child communication, social support, school cohesion, and teacher support (Noor & Alwi, 2013).

External Resources

In addition to the internal characteristics that can protect adolescents from the effects of stress, researchers have identified external resources that can also act as a protective factor against stress for adolescents. Internal characteristics are not enough for adolescents to excel in life despite difficulties (Noor & Alwi, 2013). It is critical that adolescents have access to other factors at the social environmental level to strengthen their internal resiliency (Noor & Alwi, 2013). Noor and Alwi (2013) suggest adolescents who continue to do well despite facing adversities have a lot of external resources. External resources include playing sports, high financial status, engaging in community organizations, relationships with others, and parental support (Baeva et al., 2016; d'Abreu et al., 20201; Diers, 2020; Kumi-Yeboah & Smith, 2017).

Another valuable resource for adolescents is support, whether it is support from their family, teachers, or support from peers. In fact, students who feel supported by their teachers are more likely to be resilient when faced with adversity (Noor & Alwi, 2013). Additionally, adolescents who feel supported by their teachers are more likely to be more motivated to attend school and have an increase in their overall academic achievement (Diers, 2020). Teacher support includes engaging the student in discussion, allowing the student to feel like they are contributing to the classroom, and encouraging open communication between the student and teacher (Diers, 2020; Kumi-Yeboah & Smith, 2017). Allowing and encouraging open communication between the student and their teacher can also act as an effective coping strategy for some adolescents (Diers, 2020). Adolescents value the help and resources received from teachers (d'Abreu et al., 2021). Teacher autonomy support and perseverance were positively correlated with positive affect and negatively associated with negative affect (Lan & Zhang, 2019). Teacher support can also mitigate poor emotional wellbeing for adolescents switching

schools (Lan & Zhang, 2019). Conversely, adolescents who report lower perceived family support and lower teacher support are more likely to be at risk for the negative effects of stress, suggesting adolescent's perceived support plays an important role in mitigating the effects of stress (Solberg et al., 2007).

Relationships

Positive peer relations are associated with reduced stress, although adolescents who had high levels of stress reported having less relationships with others (Hoferichter et al., 2014). Strong parent-adolescent relationships also serve as a protective factor against the negative effects of stress on adolescents (d'Abreu et al., 2021; Noor & Alwi, 2013). However, if the family is a source of stress for the adolescent, then a strong relationship with their teachers can play a significant role and serve as a protective resource for the adolescent (Diers, 2020).

Solberg et al. (2007) used a cluster analysis to group students based on their levels of their individual levels of stress and resilience. Through this method, it was discovered the most distinguishing characteristic for youth in the "not at risk" cluster are the combination of low reported levels of exposure and high reported connection with teachers (Solberg et al., 2007). Conversely, adolescents who were in the "most vulnerable" group had high levels of stress, and the lower teacher and peer connections were most at risk for experiencing the negative effects of stress. Similarly, Diers (2020) suggests student-teacher relationships are the basis for resilience development in adolescents. STRs act as a protective factor against peer victimization and its negative psychosocial effects. For example, students who have a positive relationship with their teacher are more likely to have lower levels of peer victimization and psychological distress, whereas students with lower quality STRs are more likely to have higher levels of distress and displayed the greatest vulnerability (Sulkowski & Simmons, 2017). Students who had lower

teacher support also had lower psychological wellbeing, including lower life satisfaction and lower overall health, whereas students who perceived higher teacher support had a strong psychological wellbeing (Lan & Zhang, 2019).

However, the quality of the student-teacher relationship makes a difference on how impactful of a buffer it will be towards the negative effects of stress (Sulkowski & Simmons, 2017). Students are more likely to build a relationship with a teacher who is caring and attentive to their feelings, and they show they truly want the student to learn and succeed (d'Abreu et al., 2021). Allowing and encouraging students to talk about their problems with their teacher can become an important coping strategy for students (Diers, 2020). Trustful STR also correlates with a higher involvement in school which can have an overall impact on their academic achievement (Diers, 2020)

Summary

This systematic literature review revealed (a) the most common types of stress adolescents' experience, (b) the effects of experiencing stress, and (c) protective factors that protect adolescents from experiencing the negative effects of stress. Overall, the findings from this review suggest relationships play a critical role in developing an adolescent's resiliency to counteract the negative effects of stress. Further research is needed to understand the impact these variables have on students with emotional and behavioral disorders.

Intersection of Stress, Resilience, and Student-Teacher Relationship among Adolescents with Emotional and Behavioral Disorders

A second systematic literature review was conducted to further explore the research related specifically to adolescents with EBD. The review was conducted searching four scholarly databases over the last 20 years, from 2002 to 2022. The databases used included *Academic*

Search Premier, *Education Full Text*, *ERIC*, and *PsychInfo* with the search terms related to *resilience, student-teacher relationship, stress, adolescents,* and *emotional and behavioral disorders*. This search resulted in two articles, with one being removed for being a practitioner article, resulting in only one article exploring the intersection of these variables with students with EBD. The one article was also included in the previous literature search (Sulkowski & Simmons, 2017).

To further explore the research related to adolescents with EBD, the variables and search terms were separated into three independent searches. The same databases and inclusion criteria from the previous search were applied to the following searches. The first search consisted of the search terms related to *resilience, student-teacher relationship, adolescents,* and *emotional and behavioral disorders* which resulted in six peer reviewed research articles. One article was removed because the population was not adolescents, and a second article was removed for being a practitioner piece, resulting in a total of four journal articles for this search Sulkowski & Simmons (2017). The second search removed the term resilience, and used the terms related to *stress, student-teacher relationship, adolescents,* and *emotional and behavioral disorders* which resulted in 11 articles. Two articles were removed for being reviews and four articles were removed for not having an EBD population which resulted in a total of five articles for this search, including Sulkowski & Simmons (2017). The third search removed the term student-teacher relationship and used the terms related to *stress, resiliency, adolescents,* and *emotional and behavioral disorders* which resulted in 37 articles. Article abstracts where read and 34 were removed for not meeting the requirements resulting in a total of three journal articles. All of the remaining articles from the three searches regarding adolescents with emotional and behavioral

disorders were then combined to make a total of 10 articles for this literature review, only counting Sulkowski & Simmons (2017) once.

Results

After analyzing the 14 journal articles from the three separate searches related to students with EBD, two major themes appeared across all of the articles. The first theme was stress, which includes the type of stress, and coping with stress. The second theme is related to protective factors, which includes relationships, and characteristics of student-teacher relationships. Refer to Table 2 for the results of the literature review.

Table 2

Summary of the Literature Review Results Related to Stress, Resilience, and Student-Teacher Relationship among Adolescents with EBD

Author (Year)	Participants	Type of Stress	Effects of Stress	Protective Factors	Impact of Protective Factors
Baeva et al., 2016	437 students	Psychological violence	Mental and emotional	Psychological resources	Improved mental and emotional well-being

d'Abreu et al., 2020	Seven students and four parents	Economic hardship, immigration	Nightmares, sleep problems, bed wetting, hair loss	Sense of belonging, culture	Improved outlook on life/future, hopeful, grateful
Diers, 2020	One student	Violence, family stress, switching schools	Difficulty focusing on school, fearful	Resilience	Improved school achievement, motivated, involved
Gelkopf and Beger, 2009	114 students	Terror attacks	PTSD, excessive sweating, loss of appetite, sleep problems, sense of safety, depression	Intervention for increasing student coping skills, emotional awareness, self-esteem	Decreased psychological distress, increased resiliency

Hoferichter et al., 2014	1,088 students	Perceived stress, text anxiety	Poor peer relationships	Relationships with peers and teachers	Decreased anxiety
Jaureguizar et al., 2018	481 students	Family stress, health	Depression	Self-concept, social skills, resilience	Decreased stress and depression
Kumi-Yeboah and Smith, 2017	60 students	Immigration	Academic performance, poor peer relationships	Teacher support, parent support, caring school environment, resilience	Improved academic achievement
Lan & Zhang, 2019	371 transfer students, 742 non transfer students	Transferring schools	Poor emotional well being	Perseverance, teacher support	Improved psychological well-being
Martin and Marsh, 2008	598 students	Anxiety	Lower academic buoyancy	Relationships, self-efficacy,	Improved academic buoyancy

				academic engagement	
Noor and Alwi, 2013	197 students	Stress, traumatic events	Life satisfaction, mental health	Resilience	Improved overall well-being
Solberg et al., 2007	789 students	School stress, violence, health	Psychological and emotional distress, poor grades, poor retention, poor health	Family support, relationships with peers and teachers, motivation, self-efficacy	Higher academic achievement, better health, better retention
Sulkowski and Simmons, 2017*	539 students	Peer victimization, psychological distress	Psychological distress including depression, anxiety, stress	Teacher-student relationships	Less psychological distress

Note. * reflects journal article included in first literature review.

Stress

Adolescents who experienced traumatic stress developed high rates of emotional and behavioral problems including anxiety, depression, aggressive behavior, and highly reactive behavior (Dods, 2015; Klasen et al., 2010; Skrove et al., 2105). Adolescents reported feeling physically ill, weak, dizzy, and would frequently have panic attacks after experiencing stress (Dods, 2015). Additionally, chronic pain is more prevalent among adolescents with EBD (Skrove et al., 2015). Adolescents with EBD reported experiencing higher rates of stress than the general population (Little & Kobak, 2003). In fact, traumatic stress and life stressors can predict being diagnosed with an emotional and behavioral disorder (Klasen et al., 2010).

Researchers suggest there is no gender difference regarding mental health outcomes after experiencing stress, suggesting males and females are both equally at risk of developing a range of symptoms after experiencing stress (Klasen et al., 2010). However, the type of symptoms appear to differ between genders, for example females are more likely to develop post-traumatic stress disorder (PTSD; Mueser & Taub, 2008). Females are at a higher risk of being sexually abused, and adolescents who have experienced sexual abuse are a higher risk of developing PTSD (Mueser & Taub, 2008). Aside from sexual abuse, gender does not have any effect on the rate of trauma exposure (Mueser & Taub, 2008). However, an adolescents age does appear to have an impact on the development of symptoms, younger adolescents aged 11 to 13 years old experienced less symptoms including PTSD and depression than older adolescents aged 14 to 17 years old (Klasen et al., 2010). Adolescents who ran away from home, already had depression, or those with divorced parents were significantly more likely to develop PTSD symptoms after experiencing stress (Mueser & Taub, 2008).

Adolescents suggest the stressful events they experienced had a negative impact on their academic achievement (Dods, 2015). Adolescents reported going to class feeling unprepared for, struggling to complete assignments, and had difficulty concentrating (Dods, 2015). Adolescents reported being distracted, feeling always on guard, and anxious while at school, they struggled to stop thinking about their past trauma and current stressors (Dods, 2015). Teachers contributed to student stress by not being understanding of students outside stressors, by belittling student's experiences, worrying about the little things (e.g., smoking, swearing, etc.), and singling them out in class (Dods, 2015).

Types of Stress

The types of stress adolescents with EBD experienced varied and included stressors such as emotional neglect, emotional abuse, physical abuse, bullying, sexual abuse, witnessing murder, community violence, abduction, loss of parents or sibling, and threatened with death (Dods; Klasen et al., 2010; Mueser & Taub, 2008; Zolkoski et al., 2016).

Coping with Stress

After experiencing traumatic stress, adolescents with EBD reacted differently to stress, but almost all reactions involved a form of physically or emotionally distancing themselves from others (Dods, 2015; Mueser & Taub, 2008). In fact, dissociating or withdrawing from others emotionally or physically is one of the most common symptoms adolescents with EBD display after experiencing stress (Mueser & Taub, 2008). Some adolescents reported the school environment overwhelmed them and caused additional stress, the only way to get through class was to distract themselves by mentally or physically withdrawing from class (e.g., doodling, zoning out/daydreaming, or walking out of class; Dods, 2015). Adolescents also engaged in drug use to cope with their stress, self-harm, or other high risk dangerous activities (Dods, 2015;

Mueser & Taub, 2008). Some adolescent's choices in coping strategies resulted in them going to juvenile detention, an inpatient psychiatry clinic, or a group home (Dods, 2015).

Protective Factors

There were multiple protective factors discussed throughout the articles which included internal characteristics and external resources. High family socioeconomic status was found to be a protective external resource that prevented adolescents from developing PTSD (Klasen et al., 2010). Adolescents perceived spiritual support was also a significant protective resource, almost doubling the odds the individual would be resilient and not develop PTSD symptoms after experiencing stress (Klasen et al., 2010). Internal characteristics that protect adolescents from the negative effects of stress include high self-esteem, socially competent, and rarely feeling lonely or isolated (Skrove et al., 2015).

Relationships

Relationships are a critical protective factor in mitigating the development of emotional and behavioral disorders and other negative effects of stress among adolescents. Duchenese et al. (2009) suggests the relationship between children and their parents, especially their mothers, can predict their development of emotional and behavioral disorders. Adolescents who perceived their parents as warm and supportive had significantly higher self-esteem and were less likely to be effected by stressful events (Little & Kobak, 2003). Strong family cohesiveness was also found to mitigate the negative effects of stress on adolescents (Skrove et al., 2015).

Aside from the family relationships, student's relationships with their teachers can also serve as a protective factor to promote resilience and help students overcome their stress (Dods, 2015; Zolkoski, 2019). Additionally, STR are negatively associated with peer victimization and

psychological distress, and positively associated with peer relationships (Sulkowski & Simmons, 2017). A positive and close STR can mitigate the effects of negative stressful events on students' self-esteem (Little & Kobak, 2003). Whereas students with low STR, had a decrease in their self-esteem after negative stressful events. (Little & Kobak, 2003). Students with EBD and their teachers reported it was difficult to build and maintain a relationship with each other, and often reported more negative interactions than positive interactions (Dods, 2015; Little & Kobak, 2003; Zolkoski et al., 2016). Interestingly, students reported having better relationships with teachers at alternative schools than compared to their teachers in general education (Zolkoski et al., 2016). However, students with EBD did express a desire to build a relationship with teachers but insisted the teachers needed to initiate the relationship. Students reported really hoping a teacher would ask them what was wrong, to simply demonstrate that they care (Dods, 2015). Creating a safe environment where students can let their guard down, by not judging, not prying for information, but to focus on the academic work together (Dods, 2015). Adolescents with EBD often feel alone and isolated (Dods, 2015). Having a positive relationship with someone can play a pivotal role in the overall success for students with emotional and behavioral disorders.

Characteristics of Student-Teacher Relationships

The quality of STR appears to moderate the negative psychosocial effects of stress (Sulkowski & Simmons, 2017). One of the most important qualities of a high quality STR is for students to feel the teacher genuinely cares about them (Dods, 2015; Zolkoski et al., 2016; Zolkoski, 2019). Students felt their teachers cared for them when they expressed concern about their wellbeing by checking in on them, noticed small behavior changes, and when they allowed them to step outside of the classroom for a break (Dods, 2015; Zolkoski, 2019). Students also felt

their teachers cared about them when they were patient, took the time to help them with assignments, and extended assignment deadlines as needed (Dods, 2015; Zolkoski, 2019). Small gestures, such as exchanging a simple greeting, showed students that teachers cared (Dods, 2015). Adolescents reported these small gestures from teachers to be one of the only reasons they looked forward to going to school (Dods, 2015). It is also important for teachers to be understanding of students' lives outside of the classroom setting without prying for specific information (Dods, 2015). Students reported it was important to them how their teachers disciplined them, suggesting they liked their teachers who were lenient, used positive disciplinary procedures such as a point system, or helped them problem solve (Dods, 2015; Hickey et al., 2020; Zolkoski et al., 2016). Students also enjoyed smaller class sizes, suggesting it was easier to build a relationship with their teachers since it provide more time for one-on one teacher interaction (Little & Kobak, 2003; Zolkoski et al., 2016).

Summary

The results of the literature review suggest (a) adolescents who experience stress are at risk of developing emotional and behavioral disorders, (b) students with EBD often struggle with effective coping strategies to successfully overcome stress unharmed, and (c) student-teacher relationships may be more difficult to build with students with EBD who have experienced stress. The findings suggest once a student has developed a relationship with their teacher, student teacher relationships can play a pivotal role in mitigating the negative effects of stress.

Conclusion

The first literature review examined the three variables among all adolescents, while the second literature review examined the three variables among only adolescents with EBD. There were commonalities across the two populations, suggesting stressors and coping mechanisms

among adolescents without EBD and with EBD may not differ significantly. When examining the types of stress adolescent's experience, the first literature review provided a much more comprehensive review of the types of stress adolescent's experience, suggesting adolescents experience a wide array of stress from everyday stress to traumatic stress. Whereas the second literature review primarily discussed traumatic stress as the most common form of stressors adolescents with EBD experience.

Both literature reviews emphasized the importance of relationships in combatting the negative effects of stress. The first review discussed adolescents' relationships with their family, peers, and their teachers. Whereas the second review primarily discussed the importance of the adolescent's relationship with their teachers. The results of the two literature reviews suggest the characteristics of what makes up a high quality STR are similar between students without EBD and students with EBD. Both literature reviews suggested a high quality STR requires the teacher to genuinely care about the students, which they can do by helping them learn, and listening to them. However, journal articles from the second literature review did focus more heavily on the specific characteristics as compared to the first literature review, which could be because it is often more difficult for teachers to build and maintain relationships with students with EBD and researching these characteristics is valuable information.

While the second literature review heavily discussed the relationships, there was a clear lack of research regarding other protective factors. For example, the first literature review discussed multiple internal characteristics an individual can possess that would help mitigate the negative effects of stress in addition to various external resources an individual could access. Whereas the second literature review only briefly discussed a couple of internal characteristics (e.g., high self-esteem, social skills) and a couple of external resources (e.g., socioeconomic

status and spiritual support). There is an evident need to better understand protective factors among students with EBD.

The literature related to adolescents with EBD is scarce and there is evidently a need to expand the current research related to this population. Specifically, there is a need to further explore the stressors adolescents with EBD experience, to better understand how they cope with stress, and understand how resiliency and relationships with their teachers can better support and protect adolescents with EBD.

CHAPTER THREE

METHODS

Researchers suggest adolescents are currently experiencing high levels of stress, surpassing the levels of stress experienced by adults (APA, 2014, 2018). This is of great concern considering adolescents' brains are extremely vulnerable to the effects of stress (Rahdar & Galvan, 2014; Romeo, 2013). However, youth who exhibit high levels of resiliency are able to overcome and adapt to stressful situations with minimal negative changes across domains of functioning (Luthar et al., 2000; Perry et al., 1995). Similarly, positive relationships with an adult (e.g., a teacher) can contribute to the development of an individual's resilience, indirectly mitigating the negative effects of stress on adolescents (Perry, 2000; Willis & Nagel, 2015). Students with EBD often lack positive relationships with adults, including their teachers, potentially exposing this vulnerable population to the negative effects of stress (Murray & Greenberg, 2001).

While the negative effects associated with high levels of stress during adolescence is evident, there remains limited research aimed at understanding the impact it has on students with EBD. It is critical for researchers to explore the intersection of stress, resiliency, and the mitigating effect student-teacher relationships may have for students with EBD. Therefore, the proposed study used a convergent mixed methods design to explore the relationship between stress, resilience, and quality of relationship with teachers among students with EBD. Additionally, the proposed study explored the characteristics of student-teacher relationships (STR) for students with EBD. Lastly, the proposed study examined what students with EBD identify as current stressors and how they cope with stress. This chapter will describe the: (a) research questions, (b) setting, (c) participants, (d) research design, (e) description of the study

design, (f) data collection procedures, and (g) data analysis procedures that were used for this study.

Research Questions

The following research questions were answered by this study:

Research Question 1: Is there a difference in student-teacher relationship rating between students with EBD and their teachers?

Research Question 2: What are the perceptions of students with EBD and their teachers regarding the characteristics of their current relationship?

Research Question 3: What do students with EBD identify as their current stressors?

Research Question 4: How do students with EBD describe how they cope with stress?

Research Question 5: What is the relationship, if any, between the perceptions of students with EBD about stress, resilience, and their perception of student teacher relationship?

Settings

The study took place in a large urban school district located in the Southwestern United States. The school district has a total of 315,646 students currently enrolled in public school (K-12th). Approximately 4.7% of the students enrolled in public schools in this district are identified as having a disability (USDOE, 2021). Refer to Table 3 for the district's overall student demographic information. Sixty four percent of this population speak only English at home, 31% speak Spanish and English at home, and 5% speak Asian and Pacific Islander languages and minimal English at home (USEDOE, 2021). Sixty one percent of the student population in this district are economically disadvantaged and eligible for the federal free and reduced lunch program. The school district has 72 high schools (9th grade to 12th grade). There are currently

99,548 high school students, and 4,034 high school teachers with a student to teacher ratio average of 24 students to one teacher (USDOE, 2021).

Table 3

School District Demographic Information

Race and/or Ethnicity	Students	Teachers
Black or African American	15%	8%
Hispanic or Latinx	47%	13%
Pacific Islander	2%	1%
Asian	6%	7%
White or Caucasian	22%	63%
Other or Mixed	8%	8%
Total	**315,646**	**18,611**

Note. Students represents the total number of currently enrolled high school (K to 12th) students in this district. Teachers represent the total number of currently licensed teachers (K-12th) in this district.

This school district has a program specifically designed to support the needs of students with emotional and behavioral disorders. The program is in local elementary, middle, and high schools and is equipped with a comprehensive team that provides direct support and trains teachers to better address the social, emotional, behavioral, and mental health needs of students

with EBD. After receiving the necessary permission from the University Internal Review Board (IRB; see Appendix A) and the school district IRB (refer to Appendix B) ten public high schools that had this specially designed program for students with EBD were invited to participate in this study. The principal of one high school responded and gave their permission to conduct research on their campus by signing a Facility Acknowledgement Letter (refer to Appendix C; identifying information redacted from letter). This school is a self-contained high school that serves students with EBD from kindergarten through 12th grade and offered classes to high school students via a distance learning education platform and a traditional in person format (refer to Table 4 for participating high school demographic information).

Table 4

Demographic Information of the Participating High School

Characteristics	9th Grade	10th Grade	11th Grade	12th Grade	Total
Race or Ethnicity					
Black or African American	3	6	1	1	**11**
Hispanic or Latinx	3	2	1	2	**8**
Pacific Islander	0	0	1	0	**1**
Asian	0	0	0	0	**0**
White or Caucasian	1	2	2	2	**7**
Other or Mixed	1	0	0	1	**2**
Gender					
Male	7	8	2	6	**23**
Female	1	2	3	0	**6**
Total	**8**	**10**	**5**	**6**	**29**

Participants

Students currently enrolled in 9th, 10th, 11th, or 12th grade with EBD who attended school in person or virtually were invited to participate in this study. Every student who was under 18 years old and interested in participating in the study needed to receive parent permission in order to participate. Students were provided with parent permission forms to give to their parents.

Once permission was received, students under 18 years old were then provided with assent forms. Students who were over 18 years old and interested in participating in the study needed to sign consent forms. The parent permission, student assent, and student consent forms included two sections: the first section provided permission for the student to participate in the quantitative part of the study and complete the surveys, the second portion provided permission for the student to participate in the qualitative portion of the study and allow the interview to be audio recorded. Students and their parents or guardians could select to only participate in the quantitative portion (i.e., survey) or both (i.e., survey and interview).

Teachers who were currently teaching students with EBD in 9th, 10th, 11th, or 12th grade in person or virtually were invited to participate in this study and were provided with consent forms. All student participants and teacher participants provided permission, assent, and consent to participate in both the quantitative and qualitative portion of the study. To protect participants' privacy all student and teacher participants who completed permission, assent, and consent forms were provided with a form where they were instructed to identify and write down a 4 digit code for identification purposes that they would use for the duration of the study. The form instructed students and teachers to write down their first and last name, their school, and their 4 digit code that they would like to use. Only members of the research team had access to the completed code forms. Student participants' information was entered into an Excel spreadsheet and subsequently stored on a password protected Google Drive. The paper copies of the consent forms and identifying information, including the code forms, and all audio recordings were stored in a locked file drawer on UNLV campus that only the research team has access to for a period of three years. Three years after the completion of the study, the consent forms, code forms, and all information will be permanently deleted and shredded.

Students

The student participants in this study included students who were (a) currently enrolled in 9th, 10th, and 12th grades and (b) receiving services for EBD (refer to Table 5 for student self-reported demographic information).

Table 5

Demographic Information for Student Participants

Student	Gender	Race/Ethnicity	Grade	Age
Student1	Male	Mixed	12th grade	18 years old
Student2	Male	White/Caucasian	12th grade	18 years old
Student3	Female	White/Caucasian	9th grade	15 years old
Student4	Male	Mixed	10th grade	15 years old
Student5	Male	Black/African American	12th grade	18 years old

Teachers

Five teachers participated in this study (refer to Table 6 for teacher self-reported demographic information). Four of the teachers were the current teachers of the students who participated in the study; one teacher did not have any students participate in this study, but still participated in the qualitative portion of this study. One of the teachers had two students participating in the study.

Table 6

Demographic Information for Teacher Participants

Teacher	Gender	Race/Ethnicity	Years of Experience	Education
Teacher1	Male	Black/African American	1 – 3 years	Associates Degree
Teacher2	Female	Black/African American	8 – 10 years	Bachelor's Degree
Teacher3	Female	Black/African American	1 – 3 years	Bachelor's Degree
Teacher4	Female	White	8 – 10 years	Master's Degree
Teacher5	Female	Black/African American	10+ Years	Bachelor's Degree

Experimental Design

A convergent sequential mixed methods design was used to explore the research questions guiding this study. This experimental design was selected since both quantitative and qualitative data hold equal importance and neither will influence the other, rather results were merged to analyze for relationships across data (Creswell & Guetterman, 2019, p. 552). Quantitative data were collected first, followed by qualitative data.

Measures

This study used multiple measures to collect both quantitative and qualitative data. Demographic data including participant age, disability label, gender, race, ethnicity, and current grade level were collected through a survey for all student participants (refer to Appendix O). Demographic data including number of years teaching, current grade level teaching, highest level

of education completed, gender, race, and ethnicity was collected for all teacher participants through a survey (refer to Appendix T).

Quantitative Measures for Student Participants

Resiliency

Resiliency was measured using the *Child and Youth Resilience Measure* (CYRM-R; 2018). CYRM-R (2018) is a self-reported scale designed for youth between the ages of 10 and 23 years old. The scale consists of 17 questions rated on a 5-point Likert scale across two domains (i.e., personal resilience, caregiver resilience). The assessment of the first domain consists of 10 items that measure personal resilience ($\alpha = .82$) and measures the individual's intrapersonal and interpersonal characteristics. Personal resilience encompasses a variety of skills an individual possesses that helps them overcome stressful situations, such as emotional regulation, mental health, and their ability to adapt or cope. The second domain, caregiver resilience, consists of 7 items ($\alpha = .82$) and measures the characteristics associated with having a relationship with others. Caregiver resilience involves an individual's interactions with others in their environment and if they have caregivers they can receive support from. The Cronbach Alpha coefficient for the overall scale is $\alpha = .87$ (Jeffries et al., 2018). On average, this scale took approximately 10 minutes for students to complete.

Stress

Student stress was measured using the *Shortened Version of the Adolescents Stress Questionnaire* (ASQ-S; Anniko et al., 2018). The scale consists of 27 items using a 5-point Likert scale. The scale examined students' current levels of stress within nine domains including home life, school performance, school attendance, relationships, peer pressure, teacher interaction, future uncertainty, school-leisure conflict, and financial pressure. The Cronbach

Alpha coefficient for the entire scale overall is α = .93 (Anniko et al., 2018). On average, this scale took approximately 10 minutes for students to complete.

Student-Teacher Relationship

Student-teacher relationships were measured using the student version of the *Teacher-Student Relationship Inventory* (S-TSRI; Ang et al., 2020). The S-TSRI (2020) is a 14-question self-report scale that uses a 5-point Likert scale to assess students' perceptions of the quality of their relationship with their teachers. The scale has five items that measure satisfaction (α = .90), five items measuring instrumental help (α = .86), and four items measuring conflict with teachers (α = .85; Ang et al., 2020). This scale took approximately 5 minutes for students to complete.

Qualitative Measures for Student Participants

Individual semi-structured interviews were conducted with all of the student participants. Interviews consisted of five pre-determined questions that I verbally asked each participant (see Table 7). Interview sessions with student participants ranged from 4 minutes to 35 minutes with an average time of 15 minutes for each individual interview.

Table 7

Interview Questions for Students

Topic	Interview Question	Probe Question
Student Background	*Tell me about yourself.*	What do you like to do in you free time? What's your favorite subject in school?
Student-Teacher Relationship	*Tell me about your current relationship with your teacher.*	Do you get along with your teacher? Do you feel comfortable talking with your teacher? If you have a problem would you go talk to your teacher?
	What words would you use to describe your current relationship with your teacher?	What's your relationship like with your teacher? Can you give me an example supporting why you chose that word?

Stress	*Is there anything you worry about on a regular basis?*	What do you worry about?
Resilience	*What do you do when you feel worried?*	Can you give me an example of what you do when you are feeling worried?

Quantitative Measures for Teacher Participants

The *Teacher-Student Relationship Inventory* (T-TSRI; Ang, 2005) is a 14-question self-report scale that uses a 5-point Likert scale to assess teachers' perceptions of the quality of their relationship with their students, aged 12 to 17 years old. To measure the overall quality of the student-teacher relationship, the scale has five items that measure satisfaction ($\alpha = .95$), five items measuring instrumental help ($\alpha = .95$), and four items measuring conflict ($\alpha = .85$) (Ang, 2005). Teachers completed the surveys to measure their relationship with the specific students who participated in the qualitative portion of the study.

Qualitative Measures for Teacher Participants

I also conducted semi-structured interviews with teachers of students with EBD. Refer to Table 8 for a list of the interview questions.

Table 8

Interview Questions for Teachers

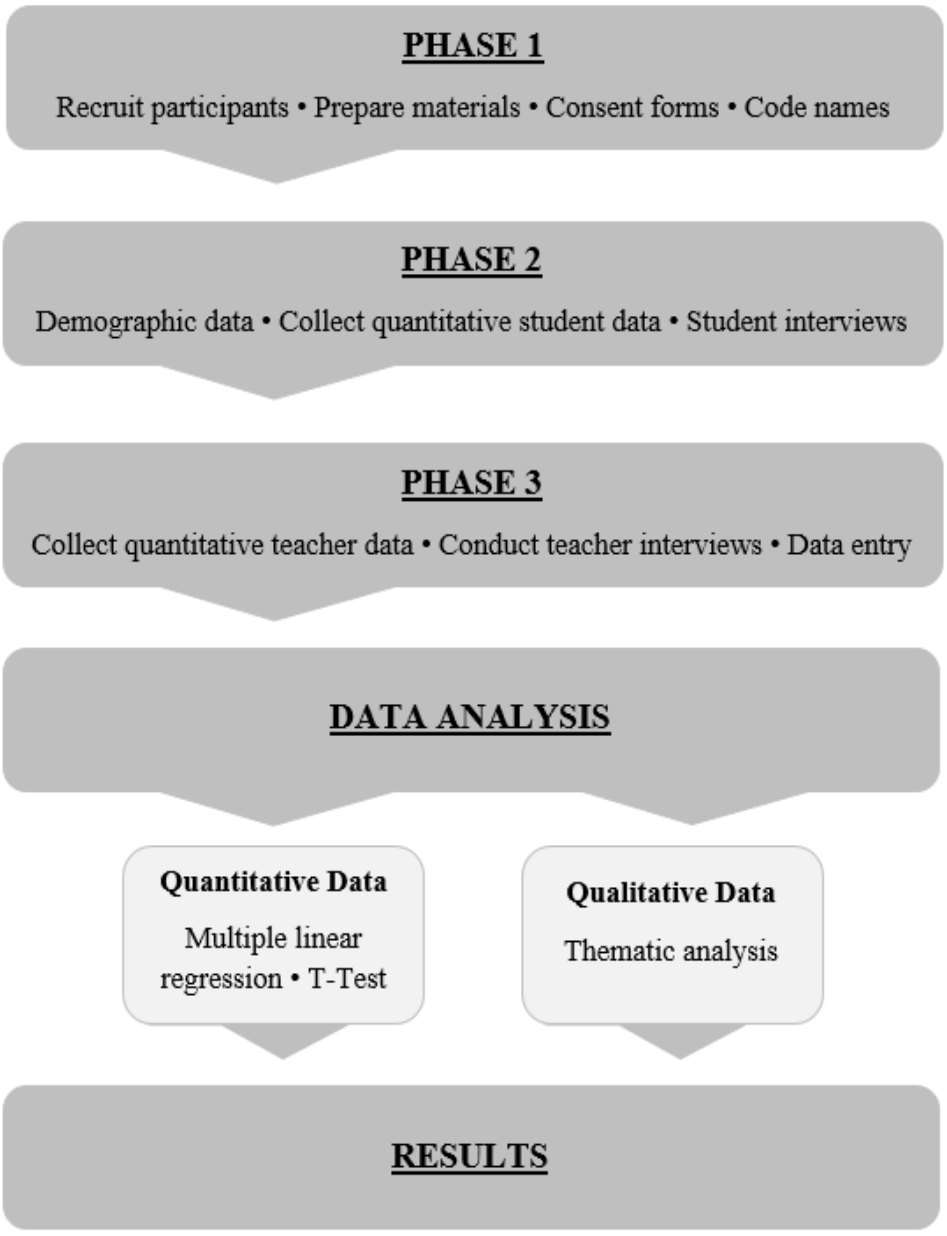
Topic	Interview Question	Probe Question
Teacher Background	*Tell me about yourself and your background.*	How long have you been teaching for? Do you enjoy your current position?
Student-Teacher Relationship	*Tell me about your current relationship with (insert specific student name).*	How long have you known this student? Do you get along with this student? What are typical interactions like with this student?
	What characteristics make up your current student-teacher relationship with this student?	What words would you use to describe your relationship with this student? Can you provide an example supporting why you chose this defining characteristic?

Procedures

The study consists of three phases as follows (refer to Figure 2):

Figure 2

Phases of Study



Phase One

During phase one, I recruited high schools, prepared the materials needed for the study, and completed consent forms, permission, and assent forms from all eligible and interested participants. Student and teacher participants who provided appropriate consent and assent also created an individual code to identify their data for the duration of the study.

Recruitment

The director of the EBD program at this school district identified eligible high schools and provided the researcher with the names of 10 high schools. The 10 high schools with EBD programs were identified and the principals of each high school were sent an email inviting their school to participate in the study (refer to Appendix D). Principals of each school needed to grant permission by signing a Facility Acknowledgement Letter. Once permission had been granted by the University's IRB (see Appendix A), the district (see Appendix B), and the principals (see Appendix C and Appendix D) of the high schools, I then invited teachers to participate in the study. Teachers who (a) expressed an interest in participating in the study to either their principal or the director and (b) had eligible students in their class (i.e., students identified as having EBD by a multi-disciplinary team) were invited to participate in the study. I met with teachers in person or emailed information about the study. Teachers who confirmed they were interested or responded to my email stating they were interested in participating in the study then scheduled a virtual meeting (i.e., via Zoom or Google Classroom) or an in-person meeting (i.e., in the teacher's classroom or another private space on campus) with myself to continue with the study procedure (i.e., consent form, data collection). The process for inviting students to participate in the study is discussed in detail under the consent and assent form section.

Prepare Materials

I collected and prepared all of the necessary materials for the study. Consent forms, parent permission forms, and assent forms, student and teacher code forms, demographic survey forms, questionnaires (CYR-M, 2018; ASQ-S, 2018; S-TSRI, 2020; T-TSRI, 2005), and interview questions (i.e., student interview questions and teacher interview questions) were printed on 8.5-inch by 11-inch standard printer paper. The quantitative student questionnaires and scales were stapled together to form one packet for each individual student. An electronic version of the packet and all of the forms were also created as a fillable PDF for student and teacher participants who were participating virtually.

Consent and Assent Forms

After the principal provided their permission (see Appendix C), then all of the teachers eligible to participate in the study were invited to participate and provided with printed consent forms (see Appendix E and Appendix H). All eligible teachers were already briefly informed of the study by their principal; the researcher then met with teachers or emailed the teachers who expressed an interest in participating in the study. Once the teachers provided their written or electronic consent, (Appendix H) I scheduled a time to speak to the teacher's class about the study and invite all eligible student participants to participate in the study. All eligible students who were under 18 years old were provided with a printed permission form explaining the purpose of the study, the risks, benefits, and my contact information for further details or questions for them to bring home to get signed by their parents (see Appendix G and Appendix I). The printed permission form was given to students on a Monday, and they were asked to bring it back to school completed and signed by Friday in order to be eligible to participate in the study. I collected all of the signed permission forms and provided those students with assent

forms (see Appendix J). Only students who turned in a permission form were provided with assent forms. Students who were 18 years old or older were provided with consent forms (see Appendix K). I verbally explained the study, along with explaining all possible risks and benefits associated with participating in the study, and discussed that student participation is voluntary and would have no impact on their school grades. I also informed students that they could choose to stop participating at any time during the study. I answered all of the students' questions. I informed students to only sign the assent forms (for minors with signed parent permission forms) or consent forms (for students 18 years or older) if they understood the information that was just covered and they were interested in participating in the research study. Once all interested students completed the necessary forms to participate, I confirmed with the principal of the high school that all participants were currently receiving services for EBD.

Collection of Student and Teacher Code Names

I then continued by handing each student and teacher participant a paper copy of the student or teacher code form (see Appendix L and Appendix S). I explained the purpose of the code form was to ensure their privacy throughout the study. Student and teacher participants were instructed to fill out the form by writing down a unique four digit code they would use for the duration of the study. I collected all completed forms.

Phase Two

During Phase Two, student participants' quantitative and qualitative data were collected (refer to Appendix M and Appendix N for the data collection steps). I went in person to the high school to administer the questionnaires and interviews during students' regularly scheduled class time. I brought paper copies of each questionnaire and extra pencils and pens. For the virtual students, I logged on and joined the teachers' Google Classroom. The teacher created a separate,

private breakout room for me and the student to complete the questionnaires and interviews in private.

Collection of Student Demographic Data

I identified all of the students who submitted permission and assent forms and individually escorted them to an empty room on campus (i.e., an empty classroom next door, the empty teachers break room, a private break out room on Google Classroom). Participants were asked if they would like an additional person of their choosing to sit in during this visit; all participants declined. I then continued by handing the participant the paper copy of the self-report student demographic form (see Appendix O). I collected the completed forms.

Data Collection Measuring Stress, Resiliency, and Student-Teacher Relationship

Following completion of the demographic form, I continued with data collection by passing out paper copies of the CYRM-R (2018), ASQ-S (2018), and S-TSRI (2020) stapled together to form a packet (see Appendix P, Appendix Q, and Appendix R). I asked the participants if they would prefer I read them the question or if they want to complete it individually. Three students chose to complete it individually and two students requested I read the questions out loud. The students were instructed to write their individual unique code at the top of the paper packet and begin completing the forms individually. Students were informed to stop at any time and ask me if they had a question. When students finished answering all of the questions, I collected all of the completed student questionnaires.

Student Interviews

After collecting the completed questionnaires, I asked the student if they would like to continue with the individual interview portion of the study or if they would like to take a break or do this another day. All participants waived taking a break or rescheduling and requested to

continue with the individual interview portion of the study. Student interviews consisted of semi-structured open ended questions conducted by myself face to face for the in person students and virtually via Google Meets for the students attending school online. Interviews were audio recorded with the permission of the participants and all interviews were conducted in English. I began by asking the participant if I could turn on the voice recorder; all participants said yes. I turned on the voice recorder and informed the participant that the voice recorder was now recording. I then introduced myself, thanked the participant for their time, and briefly explained the purpose of the interview. I asked the participant if they had any questions before we got started. I answered any questions at that time and continued by asking the participant the first question on the student interview questionnaire (refer to Table 7). I was actively listening to the respondent. I would ask an unscripted question to probe further into information the participant mentioned in their previous response (e.g., *"Can you give me an example of why you chose that word?"* and *"What does that look like?"*). This process of asking scripted questions and probe questions continued until all of the questions had been answered with sufficient detail to the researcher. Sufficient detail was considered met if the student response provided a deep understanding of their perspective to the question. Student interviews took between 4 minutes and 35 minutes with an average student interview taking 15 minutes. Individual interviews that lasted a shorter duration than average (i.e., one interview lasting 4 minutes) still provided enough data for analysis as the respondent focused primarily on using short, yet descriptive words when responding to each question.

Phase Three

Quantitative and qualitative teacher data were collected during Phase Three. Teacher interviews consisted of semi-structured open ended questions conducted by myself face to face

for the teachers in person and virtually via Google Meets for the virtual school teacher. Interviews were audio recorded with the permission of the participants. All interviews were conducted in English.

Data Collection Measuring Student-Teacher Relationship

I went to the teacher's classroom (i.e., in person or virtual Google Classroom) during their planning period or after school so no students were in the classroom during these times. Teachers then completed the demographic survey and wrote their code name at the top (see Appendix S). Teachers were verbally informed of their individual students participating in the study and teachers completed the T-TSRI (2005) to measure their relationship with each selected student participating. The teachers were then provided with a printed handout of the T-TSRI (2005) and were instructed to complete the questionnaire for each student participating (see Appendix U). Once the teacher completed the questionnaire, I collected the form and put the student's unique code number on the top of the completed survey and stored it in a folder for data entry at a later time. The questionnaire took a maximum of 10 minutes for teachers to complete for each student. I continued this process for all teachers participating until all teacher participants completed the surveys for all their students participating in the study.

Teacher Interviews

Teacher participants were also interviewed. After completing the questionnaires, I asked the teacher if we could continue with the individual interview portion of the study or if they needed a break or would like me to come back another day. All teachers requested we continue with the individual interview. Teacher semi-structured interviews consisted of open ended questions. Teacher interviews ranged from 6 minutes to 18 minutes with an average interview taking 10 minutes. Teacher interviews were structured similarly to student interviews and

followed the same protocol: begin recording interview, thank the participant for their time, provide a brief overview, and answer any questions the teacher had prior to beginning. I continued by asking the first question on the teacher interview questionnaire (refer to Table 8). I asked unscripted probing questions or asked if they could provide an example when further detail was needed to sufficiently answer the question (i.e., What are typical interactions like with this student? Can you provide an example supporting why you chose this defining characteristic?). Once all questions were answered with sufficient detail, the interview was complete and I thanked them for their time and participation.

Student and Teacher Data Entry

After all student and teacher quantitative data were collected, I entered the data into an Excel spreadsheet. I input the individual student code in the column, followed by inputting the individual students' demographic information, score from the stress scale, resilience scale, and student-teacher relationship scale. I then input the data collected from the teacher demographic survey and teacher questionnaire into the Excel spreadsheet. I continued this process until all questionnaire data had been processed into the Excel spreadsheet. Once completed, I confirmed the data had been accurately transferred to the Excel spreadsheet by visually inspecting all of the paper questionnaires and ensuring all of the data matches the spreadsheet for each student.

After all student and teachers qualitative data were collected, I transcribed each interview individually. I listened to the interview in its entirety and typed each word in a Word Document. Once all student and teacher interviews had been transcribed I read each interview and began highlighting key words and phrases. Once all interviews had highlighted key words and phrases, I then compared the key words and phrases across all of the student interviews to look for similarities and patterns. This was then repeated for all teacher interviews. I conducted a member

check to verify the data by meeting individually with the participants to provide them with the results of their individual transcription and analysis. Once approved by each participant, transcriptions were then uploaded to Dedoose to confirm the key words and patterns within the two participant groups.

Data Analysis Procedures

Research Question 1: Is there a difference in student-teacher relationship rating between students with EBD and their teachers?

Analysis. Data from the S-TSRI (2020) and the T-TSRI (2005) were entered into SPSS and an independent *t*-test was conducted to determine if the was a significant difference between students with EBD and their teachers.

Research Question 2: What are the perceptions of students with EBD and their teachers regarding the characteristics of their current relationship?

Analysis. Audio recordings from the student's interviews were transcribed. An open coding technique was utilized, the researcher read the transcription in its entirety and highlighted key words, quotes, and characteristics that describe participants current student-teacher relationship. I did this process for each interview individually. I conducted a member check to verify the data by meeting individually with the participants to provide them with the results of their individual transcription and analysis. During this time the individual participant could either confirm the information is an accurate portrayal of the interview questions or they corrected specific areas they see fit. Next, an axial coding technique was utilized, I reviewed the highlighted words and identified similarities and patterns to identify all of the themes. Data were analyzed for comparisons and similarities between student participants and teacher participants.

Transcripts were then uploaded to Dedoose, a web application used for analyzing qualitative data by identifying the most commonly used words in transcriptions. The main themes I found where then compared to the main themes Dedoose found to identify any discrepancies and confirm the accuracy of coding.

Research Question 3: What do students both with EBD identify as their current stressors?

Analysis. Audio recordings from the student's interviews were transcribed. An open coding technique was utilized, I read the transcription in its entirety and highlighted key words, quotes, and characteristics that describe student's current stressors. I did this process for each interview individually. I conducted a member check to verify the data by meeting individually with the participants to provide them with the results of their individual transcription and analysis. During this time the individual participant could either confirm the information is an accurate portrayal of the interview questions or they corrected specific areas they see fit. Next, an axial coding technique was utilized, I reviewed the highlighted words and identified similarities and patterns to identify all of the themes. Data was then analyzed for comparisons and similarities between student participants. Results from the qualitative data were compared to the results from the quantitative data collected from the ASQ-S (2018) to identify themes or explanatory information. Transcripts were then uploaded to Dedoose, a web application used for analyzing qualitative data by identifying the most commonly used words in transcriptions. The main themes I found where then compared to the main themes Dedoose found to identify any discrepancies and confirm the accuracy of coding.

Research Question 4: How do students with EBD describe how they cope with stress?

Analysis. Audio recordings from the student's interviews were transcribed. An open coding technique was utilized, the researcher read the transcription in its entirety and highlighted key words, quotes, and characteristics that describe student's current stressors. I did this process for each interview individually. I conducted a member check to verify the data by meeting individually with the participants to provide them with the results of their individual transcription and analysis. During this time the individual participant could either confirm the information is an accurate portrayal of the interview questions or they corrected specific areas they see fit. Next, an axial coding technique was utilized, the researcher reviewed the highlighted words and identified similarities and patterns to identify all of the themes. Data was then analyzed for comparisons and similarities between student participants. Results from the qualitative data were compared to the results from the quantitative data collected from the CYRM-R (2018) to identify themes or explanatory information. Transcripts were then uploaded to Dedoose, a web application used for analyzing qualitative data by identifying the most commonly used words in transcriptions. The main themes I found where then compared to the main themes Dedoose found to identify any discrepancies and confirm the accuracy of coding.

Research Question 5: What is the relationship, if any, between the perceptions of students with EBD about stress, resilience, and their perception of student teacher relationship?

Analysis. Data from CYRM-R (2018), ASQ-S (2018), and S-TSRI (2020) were entered into SPSS. Both a multiple linear regression analysis and a correlation analysis were conducted to determine the relationship, if any, between the variables.

CHAPTER FOUR

RESULTS

Adolescents who experience traumatic stress and life stressors often develop high rates of emotional and behavioral problems including anxiety, depression, aggressive behavior, and externalizing, reactive behavior (Dods, 2015; Klasen et al., 2010; Skrove et al., 2105). Adolescents with EBD report experiencing higher rates of stress and stressful events than the general population (Little & Kobak, 2003; 2015; Offerman et al., 2022). Previous research suggests the most prevalent types of stress adolescents with EBD experience include stressors such as emotional neglect, emotional abuse, physical abuse, bullying, sexual abuse, witnessing murder, community violence, abduction, loss of parents or sibling, and being threatened with death (Dods; Klasen et al., 2010; Mueser & Taub, 2008; Zolkoski et al., 2016). Previous research suggests adolescents with EBD use a variety of high-risk coping mechanisms (e.g., dissociating, engaging in drug use, self-harm) (Dods, 2015; Mueser & Taub, 2008). Internal characteristics that can serve as a protective factor for adolescents with EBD include having high self-esteem, being socially competent, and rarely feeling lonely or isolated (Klasen et al., 2010; Skrove et al., 2015). Additionally, research indicates that relationships with parents and teachers significantly mitigate the negative effects of stress for adolescents with EBD (Dods, 2015; Little & Kobak, 2003; Zolkoski et al., 2016; Zolkoski, 2019). However, students with EBD often have poor relationships with others, including their teachers and are more likely to lack essential coping strategies to overcome difficult situations (Cullinan & Sabornie, 2004; Lambert et al., 2021; Murray & Greenberg, 2001; Sullivan et al., 2015; Zolkoski et al., 2016). For these reasons, students with EBD are a vulnerable population and are in a unique position for being at risk for experiencing greater levels of stress than their peers. This study sought to expand the current

literature related to this population and used a convergent sequential mixed methods design to explore the relationship between stress, resilience, and relationship with teacher among students with EBD. This chapter will discuss the results for the five research questions that guided this study.

Research Question 1

Is there a difference in student-teacher relationship rating between students with EBD and their teachers?

The data from the S-TSRI (2020) and T-TSRI (2005) were analyzed using an independent *t*-test. The results indicate that the overall student-teacher relationship scores were not significantly different when comparing teacher scores (refer to Table 9 for results). The student and teacher scale has three domains that measure instrumental help, satisfaction, and conflict within the relationship. An independent t test was conducted to determine if there was a significant difference between student and teacher scores for each domain. The overall relationship, along with the two domains instrumental help and conflict within the relationship yielded no statistically significant differences between student's perception and teacher's perception of their student-teacher relationship. However, the domain measuring satisfaction within the relationship was found to be statistically significant.

Table 9

Comparing Student and Teacher Perspectives of Relationship

Relationship Domain	Student		Teacher				
	M	SD	M	SD	df	t	p
Overall Relationship	49	9.27	47	4.09	8	3.53	p = 0.103
Instrumental Help	18	3.9	20	3.58	8	-0.759	p = .826
Satisfaction	22	2.28	21	3.96	8	0.489	p = .031
Conflict	7	6.49	5	3.49	8	0.606	p = .337

Note. Results reflect the results reported by student participants on the S-TSRI (2020) and teacher participants on the T-TSRI (2005). The highest possible score for overall relationship = 70. The highest possible score for instrumental help = 25. The highest possible score for satisfaction = 25. The highest possible score for conflict = 20. The higher the score is for instrumental help and satisfaction, the more positive that domain is within their relationship. The lower the conflict score is, the lower the amount of conflict is within the relationship.

Research Question 2

What are the perceptions of students with EBD and their teachers regarding the characteristics of their current relationship?

Semi-structured individual interviews were conducted with all participants to identify how students (n = 5) and teachers (n = 5) describe their current student-teacher relationship.

Student participants were asked interview questions such as "*Tell me about your current relationship with your teacher"* and "*What words would you use to describe your current relationship with your teacher?"* Probe questions were asked to gain a deeper understanding of the participants' responses, such as "*Do you get along with your teacher?"*, *"Can you give me an example supporting why you chose that word?"* and *"If you have a problem would you go talk to your teacher?"* Teacher participants were asked similar questions such as "*Tell me about your current relationship with the [insert specific student name]*", and *"what words or characteristics would you use to describe your relationship with this student?"* Probe questions included *"what are your typical interactions with this student?"* and *"can you provide an example supporting why you chose that characteristic?"* All interviews were transcribed, an open coding technique was utilized to identify key words, quotes, and characteristics that described students' perspective of their current student-teacher relationship. An axial coding technique was then utilized to identify similarities and patterns to categorize themes. Data were then analyzed for comparisons and similarities between student and teacher participants.

Data collected through the individual, semi-structured interviews with students and teachers revealed three main themes (i.e., caring, respectful, dependable) and three subthemes (i.e., informal interactions, involved, and real). Refer to Appendix V for a table of the representative student and teacher samples. Refer to Table 10 for a visual representation of the distribution and overlap in student and teacher perception of the characteristics that comprise their current student-teacher relationship. Students used a variety of descriptive words, such as cool, nice, respectful, chill, helpful, dependable, and real to define the characteristics that comprise their current relationship with their teacher. Teachers used a variety of characteristics

to describe their relationship with their students such as respectful, caring, trustful, genuine, organic, collaborative, and solid.

Table 10

Distribution of Student and Teacher Perception of Characteristics

Characteristic	Percentage of Student Participants	Percentage of Teacher Participants	Total Percentage of Student and Teacher Response Overlap
Caring	100%	100%	100%
Informal Interactions	80%	100%	90%
Involved	60%	100%	80%
Respectful	60%	100%	80%
Dependable	80%	80%	80%

Note. This table reflects the characteristics of student-teacher relationships identified from the individual interviews with student participants (n = 5) and teacher participants (n = 5).

Caring

The first theme identified was caring and was discussed in some form by all five student participants. Caring was described by student participants as the teacher by engaging in informal interactions, and by being involved such as by being helpful, observant, and advocating for

students. Three teachers and one student identified the specific word caring as a characteristic of their relationship, however all five students and all five teachers defined scenarios that are encapsulated by the word caring. The subthemes of caring were identified by grouping commonly identified responses reported by students and teachers.

Informal Interactions

All five of the teachers discussed the importance of having a genuine relationship by truly getting to know each individual student, understanding their likes and dislikes, their triggers, what is important to them, and what they're good at. One teacher provided a specific scenario of this, explaining how one of his students is a skilled mechanic, so the teacher brought in some bikes and scooters for him to practice his skills on taking them apart and putting them back together. Through this experience, they were also able to strengthen their relationship with each other, and with other students in the class who decided to also engage in the activity. Teachers also discussed other scenarios of using shared activities to help build their relationship with their students. Three teachers described playing board games, card games, joking around, and taking walks around the track or playing sports to help build a genuine relationship in a naturalistic and organic manner. Student participants also described their experience of participating in shared activities, such as games, as an effective and enjoyable way to build their relationship with their teacher. One teacher explained organic as a key characteristic of her relationship with her students. When asked to explain this further she said "it's very natural and organic, I kind of feed off their emotions and how they're feeling".

Four of the student participants explained their teacher cares for them because the teacher will provide treats, snacks, games, and incentives to earn throughout the school day. When asked "what are some words used to describe your relationship with your teacher?" one student

responded by saying “she cares”, when asked to describe what that looks like, the student responded by explaining “she gives us treats… we get incentives”. One student went into detail explaining how his teacher will buy food for the whole class, emphasizing that the teacher spent his own money to do this for them. Another student felt their teacher cared because the teacher took their own time, outside of school, to plan and provide incentives for their students and then created opportunities for students to earn these incentives throughout the school day and the school week. Two students seemed to acknowledge the value of money and time, as they stressed the fact the teacher was spending their own time and money (when they didn’t have to) in order to engage in informal interactions for them to be an indicator that the teacher cares about them.

One teacher also discussed how they show their students that they care for them by doing daily affirmations, motivational speaking, and providing a lot of positive feedback throughout the day as a way of encouraging the student and boosting their self-confidence and self-esteem. She also said: “I motivate them to not look at past mistakes but look at their future”. One student discussed how they like when their teacher is positive, saying: “he always has a smile on his face, he’s positive, optimistic”.

Involved

Being involved was the second subtheme of caring. All of the teachers and three students described scenarios where teacher involvement was an act of caring and a critical part of their relationship. Students described involvement as their teacher helping them and teachers described being involved as being observant.

Helpful. Three students described their teacher as helpful. When students were asked to further explain what this looks like, one student responded by saying

> "if kids are having a hard time at school like with the work, he (the teacher) will actually sit down with you and help you with it (schoolwork)… he will walk around and make sure every person is doing good… we can always ask him for help and he will help us".

Students felt cared for when their teacher seemed invested in their education. For example, one student shared a specific scenario where their teacher individualized their teaching specifically to help the student: "he found a website and puts it on just for me so I can learn how to read". Another student described their teacher as caring and invested in their education by saying "she teaches useful stuff, she actually prepares us for the real world, for life outside of school". Another student described how their teacher cares for their success because the teacher "keeps us in check, she gives us warnings so we don't go straight to punishment". Another student further explained how their teacher is helpful saying:

> "She's real helpful… if somethings like difficult to explain, she explains it the best way she can, she explains it how it Is, she explains how the world works, which is good because it's really gonna help us as young adults to know how to fully do stuff".

Another student expressed their teacher cares for them by being helpful and providing warnings to help them monitor their behavior, the student explained:

> "she [the teacher] doesn't really get angry at us, she's [the teacher] not strict she's not like "do this or else I'll take away this" she gives us strikes, like we would get two strikes and we won't get our incentive at the end of the day… so instead of [the teacher] going like "you got in trouble, go straight to punishment" this keeps us [students] in check, because if we didn't have strikes like you go straight to punishment, no one would have fun".

Observant. All of the teacher participants described observant as a critical and prevalent characteristic of their relationship with their students. Many of the teachers described the importance of noticing small changes in student's behavior and being able to identify certain cues if something is off with the student or bothering the student, then checking in with the student privately to see if they need help with anything. For example, one teacher explained

> "I try to be intentional… notice just anything different. Certain kids walk, just the pace, certain amount of time, certain kids sleep. Like that's new for [student name] to put himself in there and close the door and kind of just be out like that, he's the one who's usually in the halls… making sure I'm always checking in with him".

Two teachers provided similar scenarios where they are observant of changes in their students' lives, and try to support and accommodate them accordingly. Another teacher said "it's important to let them [students] know we love them". Three teachers also discussed being observant of their experiences outside of school: "dealing with kids, or students, who have been in trauma who have had trauma, just being patient, understanding". Another teacher also discussed showing they care for their students by being informed of their life's circumstances. One teacher described this by saying:

> "if something happens at home on the weekend prior, it's still on their mind, it's still fresh, and it's still bothering them, that's going to determine the kind of day they have here, cause their angry, their upset, they cannot channel those emotions so I give them space to decompress, obviously they can't do it at home so you have a safe space here to do it, sometimes it's things going on at home or sometimes they don't notice it [their change of behavior]".

One student described their teacher as caring because the teacher allowed students to rest when needed during class time. The student explained that when their teacher notices they are tired, he encourages them to take a break and take a nap in the back of the room on the classroom couch: “he has couches just for us kids so if someone gets tired they can go sleep on the couch”.

Advocacy. Three teachers indicated that they show they care for their students by advocating for their students and are available to help them with anything they need. Another teacher suggested they help show their students they care by providing resources:

> “if students come to me and say hey you know my parents or my mom can’t pay the rent or we don’t have a lot of food so like we have all these resources too we have a resource person here so I put all the stuff up [points to tack board with various printed flyers tacked on it] and then I write things down so there parents can you know they have those phone numbers or those resources or whatever they don’t have to struggle to find them”.

Teachers also discussed being involved with students, collaborating with them and with the other adults in the student’s life such as their parents, case worker, or anyone else. For example, one teacher said:

> “I have a student who is unfortunately in the hospital type facility you know situation right now but um when things happened, when they started happening and all that, I have his cps [Child Protective Services] worker in my phone, I have contact with her… he was missing services so I contacted them so he could get his services back in… I try to advocate a lot [for my students]”.

Respectful

The second theme identified and discussed by five teachers and three students as a key characteristic of their relationship is respect. When asked "what are some words used to describe your relationship with your teacher?", one student responded by saying "he's respectful". When asked to describe what that looks like, the student responded by explaining how a previous teacher he had would say negative remarks in the classroom about his reading level and this made him feel embarrassed. However, his current teacher who he defined as respectful, doesn't ever make him feel bad about himself and has never said negative remarks towards him or about him. Two other students also discussed respect as a characteristic of their STR. One student described a characteristic of their relationship as nice, when asked to further explain this, the student said "he's respectful, the way he talks to you, and he listens to you". Another student described a specific scenario explaining how their teacher is respectful because she embraces the student's unique identity by calling them by their correct and preferred pronouns and doesn't use their deadname even though the name has not been legally changed and is still reflected on all school documentation. They said: "she [the teacher] respects people's pronouns… we can't just change our names on here but she [the teacher] knows our [correct] names and pronouns".

Teachers also described their relationship with students as respectful. For example, one teacher said: "I don't' judge them or condemn them". Another teacher said:

> "I don't treat them as if I'm the warden and you know, they're down here… I show them respect, it's not like I'm your teacher and you better listen to me. If you come with that mentality you're not going to get anywhere".

Other teachers described respect as treating students with dignity; one teacher said "I talk to them like regular kids, I talk to them as if would talk to someone on the street". Another teacher discussed how she treats her students with respect and dignity by talking to them and treating

them age appropriately. Another teacher described a situation in which they respect their students by not forcing them to speak out in class if they don't want to, saying: "he might not be as confident to speak on it in front of the other students because he might not be sure he's saying the right thing". Two other teachers also discussed respecting student's autonomy by giving them space if they ask for it or need it.

Real

Five teachers and two students identified honesty or "real" as a form of showing respect and a prime characteristic of their relationship. One student described their relationship with their teacher as "real". When asked to further explain what makes the teacher real, the student described it as: "nothing is sugar coated. She keeps it real. That's what I want, you should tell it how it actually is". One teacher said "I'm just myself with it, you can ask any questions, whatever, they're going to get honesty from me". Another teacher also explained

> "It has to make sense for them. With elementary [students] you can kind of distract them from being upset, kind of joke with them, talk about whatever, then they're ready to come back in… with high school [students] you have to address their concern, make it make sense… Once they think I'm trying to fool them, then it's over".

Another teacher said "I have to just be straight up… I have to be completely transparent and honest [with the students]".

Dependable

The third theme identified was being dependable and this was discussed by four teachers and four students. One teacher suggested: "trust and consistency is the foundation of the relationship". Student participants described their teacher as dependable by saying "she's always there for me". Another student described it by saying "she [the teacher] got my back" and another student said "we can always ask him for help and he will help us". Another student

described their teacher being dependable by saying “She will always help any student if any student has any issue”.

One teacher discussed trust, suggesting trust is a critical foundational characteristic for all student-teacher relationships:

> “With any new student, or any person you meet, you have to build that trust, so I always start from a foundation of trust and I let them know hey you can trust me, whatever we talk about is confidential, however I can assist I’m here for you, so I slowly build it and eventually it’s like hey I need to talk to you, so I’m really big on trust”.

Another teacher said:

> “If I say I’m gonna do something then I’m gonna try do it… I’m not going to give you false promises or false hope”. Another teacher said: “I follow through so they know that I care” and another said “letting them know that I’m there, I’m all in, and I show up every day because they’re here, so that’s my main focus is just showing up because they’re here.”

Teachers also viewed their relationship as a resource for students, suggesting their students know they can go to the teacher for help with problems. Teachers discussed how they collaborate with other adults in the students’ life, and provide resources to their family whether it’s about food assistance, medical assistance, internet access, or something else they could help with. Another teacher said:

> “If I see them in a crisis I always try to offer help, like hey you okay? And if I see they’re not reciprocal of my assistance then I kind of give them space, I just try to learn each student individually”.

Another aspect of dependable was listening. This was discussed by every teacher and one student as an important characteristic of their relationship. One teacher said:

> "A lot of times students just want to vent and tell you whats happening or what they're going through and it's not always for us to figure out how to solve it, it's just they need somebody to listen to them, so my biggest thing is I try to listen."

Another teacher said "the main thing I try to be intentional with is just listening, making sure I'm always able to listen [to the students]". One student described his teacher as nice, when asked to provide an example of what being nice looks like, he responded by saying: "he [the teacher] listens to you".

Table 11

Definition Table of Student-Teacher Relationship Characteristics

	Student Defined:	**Teacher Defined:**
Caring	Informal interactions, involved, helpful	Informal interactions, involved, helpful, observant, advocate
Informal Interactions	Teacher provides treats/food, plans activities, creates opportunities for students to earn incentives, have fun	Get to know students, incorporate playing games in class, provide snacks, motivational/positive

Involved	Helpful, explains difficult concepts, prepares for the real world, keeps students in check with point system, provides breaks/naps	Helpful, observant of small changes and checks in with student, understanding, advocate for students
Respectful	Respects student individual identities with correct name and pronouns, doesn't use racial slurs or derogatory comments	Treat students with dignity, respecting their autonomy and individuality, no judgement
Real	No sugar coating	Honest with students, transparent, straight up
Dependable	Always there for the student, looking out for the students interests, always available to help when needed, reliable person who listens	Consistent, trust, follow through, show up, stable resource, foundational aspect of relationship, reliable person for student to vent to

Note. This table reflects the characteristics of student-teacher relationships identified from the individual interviews with student participants (n = 5) and teacher participants (n = 5).

Research Question 3

What do students with EBD identify as their current stressors?

The data collected through semi-structured individual interviews revealed students currently stress about school, family, and their future. Refer to Appendix W for the representative student samples of stress. Student stress was measured using the ASQ-S (2018) which consisted of 27 items using a 5-point Likert scale to measure student's current stress across nine domains. A descriptive analysis was conducted with the data collected from the ASQ-S (2018) and sorted from most stressful to least stressful to identify student's levels of stress within the 9 domains (refer to Table 11 and Figure 3.). The results suggest students stress most about future uncertainty ($\mu = 9.6$), their home life ($\mu = 9.2$), and school performance ($\mu = 8.6$). The quantitative data results from the questionnaire strongly support the results from the qualitative interviews.

Table 12

Results from ASQ-S (2018) Identifying Student Stressors

Type of Stress	Mean	Median	SD	Min	Max
1. Future Uncertainty	9.6	9	3.58	5	15
2. Home Life	9.2	7	5.45	4	16
3. School Performance	8.6	8	3.91	5	15
4. School/Leisure Conflict	8.2	7	4.38	3	15
5. Peer Pressure	7.8	5	6.87	4	20
6. Teacher Interaction	7.2	6	5.02	3	15
7. Romantic Relationships	6.6	6	3.78	3	11
8. Financial Pressure	5.6	4	4.1	2	10
9. School Attendance	5.2	6	3.34	2	10

Future Uncertainty and Responsibilities

The most stressful domain for students on the ASQ-S (2018) scale was future uncertainty. This theme was also evident during interviews and included future responsibilities. When asked what do you stress about, one student replied by saying "life". When asked to explain it further, they said:

> "I'm about to be 16, so I want to get a job, I want to get a car, but like a job is going to be hard… I don't know how it's gonna be like… hard and stuff… I don't like getting up in the morning I'm tired and stuff".

Another student discussed their concern about the future and the unknown. They said:

> "Death. You never know when you're gonna die... sometimes when I'm like laying down about to fall asleep I think of stuff my mind starts running around and my mind be like the hell and my heart start racing and sometimes my heart stops beating".

Another student expressed concern over where they're going to live after graduating, discussing their desire to move to Canada, and explained how they are stressing over how to obtain a passport, how to find an apartment in Canada, needing reading glasses, and needing a car.

Another student explained how he is frequently concerned about seeing police officers or ambulances or hearing emergency vehicle sirens. He said:

> "I have a fear of hospitals or ambulances or police in general because when I was a kid I would always get taken to hospitals or treatment centers in an ambulance so anytime I would hear noises like weewooweewoo [emergency vehicle siren noise] it gets to me and it makes my heart pound… it would make my mouth dry and everything".

He explained this uncertainty of when he could randomly see or hear an emergency vehicle or employee can be disruptive to his day as the stress causes him physical symptoms.

Family and Home Life

The second most stressful domain was home life, which was also evident in the interviews as participants discussed their family. Two participants indicated that they worry about the deteriorating health of their family members. One participant said:

> "My mom is getting old, she's 62, she should've been retired by now but she has to work… the thing is she has arthritis and back problems and high blood pressure, I don't think I can take care of her, I don't have the confidence in myself if she were to get injured".

Another student discussed “[I stress] about losing my grandpa… he has some problems”.

School Performance

School performance was identified as the third most stressful domain for students on the ASQ-S and was discussed by every participant during interviews. One student participant explained:

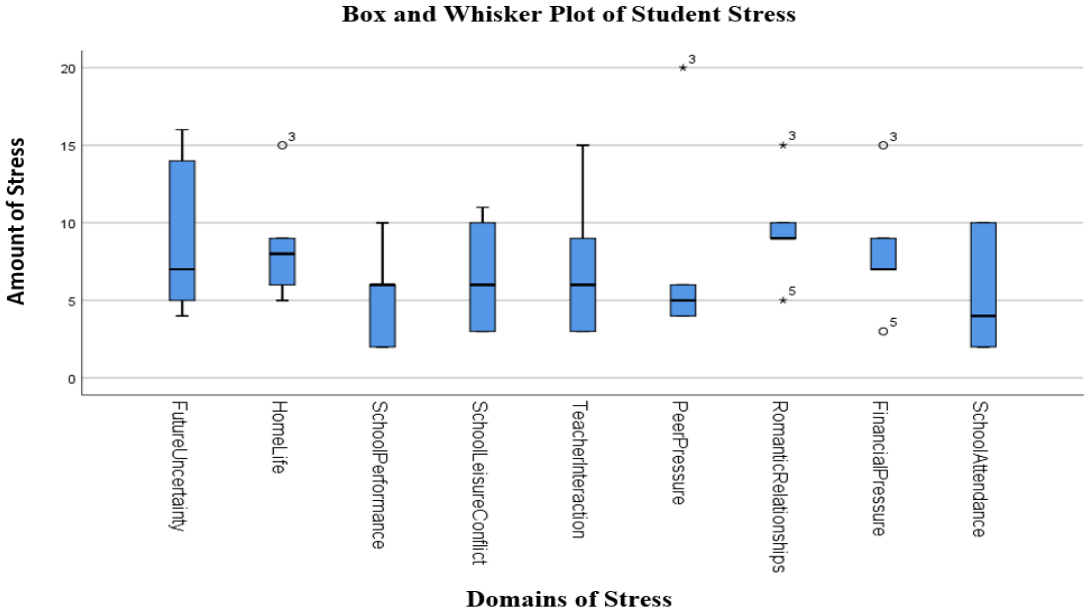
> “I worry about my grades because the thing is this school, the work load is decreased to about half... It’s a huge difference. I worry about college. It’s not gonna work out well”.

When asked what you stress about, one student replied:

> “Graduating. I’m stressed about graduating, my GPA [grade point average] when I graduate, I wana go to college. I’m not graduating this year though, they say I’m a little bit behind so I should graduate by like December”.

Figure 3

Box and Whisker Plot of Student Stress Results



Note. The box and whisker plot of student stress reflects a visual of the minimum, maximum, median, and outliers reported by the students (n = 5) when asked to rate their levels of stress related to each of the nine domains.

Research Question 4

How do students with EBD describe how they cope with stress?

Results from the CYRM-R (2018) measuring student resiliency suggested student participants in this study have moderate levels of resiliency as defined by the scale provided in the user manual for the CYRM-R (2018). Results from the semi-structured individual interviews were analyzed to identify common themes among students related to how they cope with stress (refer to Appendix X for representative student samples and refer to Table 12 for descriptive

statistics) Students provided a variety of responses related to how they cope with stress during the individual semi-structured interviews.

Table 13

Results from CYRM-R (2018) Examining Student Resiliency

Type of Resilience	Mean	SD	Min	Max
Overall Resiliency	66.6	10.80	56	79
Caregiver/Relational Resilience	27.6	4.56	23	35
Personal Resilience	39.6	6.42	33	48

Note. The user manual for the CYRM-R (2018) suggests the following thresholds for an individual's overall resiliency score: Low resilience: < 63. Moderate resilience: 63 – 70. High resilience: 71 – 76. Exceptional resilience: ≥ 77. The maximum score for the caregiver/relational resilience subscale is 35. The maximum score for the personal resilience subscale is 50.

Coping Mechanisms

Students described a variety of coping mechanisms, such as exercise, talking to someone, playing with a pet, accessing resources, playing video games, eating, staying to themselves, difficulty regulating emotions, and problem solving. Coping mechanisms were separated into two categories: (a) external resources, and (b) internal attributes.

External Resources

Some students identified talking to someone such as a teacher, friend, or significant other can be helpful for them. One student said: “I’d talk to my wifey… girlfriend… online we see each other quite often… she helps me better than anyone else which is crazy”. All of the students said they felt comfortable talking with their teacher or independent living worker and would go to them if they had a problem they couldn’t solve on their own. However, four of the student participants said they would not go to their parents or guardians for help with a stressful situation. Most of the reasoning was because they argue with their parents or guardians. For example, one student explained:

> “My mom, we’re not really on good terms all the time, we argue a lot. We argue about the smallest stuff, literally, she would say did you know bees were like so and so? Yes, I play Minecraft every day, then she would get angry what does the game have to do with it, well because in Minecraft you get the honey by putting smoke”.

Internal Attributes

Some students discussed how they access multiple resources to try to solve their problem. For example, one student said “First I would go online and I would search. If I didn’t have access to internet then I would go to nearby quick care and ask for help”. Another student responded by saying: “It depends on the situation, but like I don’t know… Use my coping skills, I’ll go for a walk, go for a jog, work out”. Other students discussed playing basketball, playing with their dog, or playing with their guinea pig.

One student discussed how they have changed their mindset to better handle their stress. They explained:

> "really taking my time and planning things, I'm not on any timer… oh I have to hurry and do this but I'm like I don't really have to because I can take my time with it and doing that it's gonna be way more better than compared to rushing it… sometimes those thoughts creep back up on… I just gotta take things slow and do things day by day cause like what was that saying? I think its Rome wasn't built in a day, and I imagine all that stuff took like a long time to do".

Some students also discussed coping with stress by listening to music, getting a tasty treat to eat or drink, or playing a video game. One student responded by saying: "Get a Dr. Pepper, listen to my music, and really just chill out you know, or maybe get a vanilla Frappuccino". The student continued to explain how video games help them destress, by saying:

> "play a video game to help you chill out… when you're in the video game you're definitely not controlled by anything which can put a lot of relief on your mind, and this is mainly for people who don't feel like they have a lot of control in their life. I'd recommend getting a gang load of video games, I don't care what kind, if it helps you feel like you control something, or better yet, get some Legos, build that… control that, as long as it gives you that bit of sensation that you feel like you are in control of something, then that definitely do it, atleast for me".

When asked "what do you do when you feel stressed" one student replied: "I explode… Like a volcano". She described how she has difficulty managing her emotions when she feels stressed. Another student described how they would rather stay to themselves to avoid stressful situations all together. The student continued to say if a student instigates a fight then they will fight back:

"I try to stay away from people for the most part, like if someone tries to fight me, I say if you punch me, I will fight back, I will start hitting back, but other than that if you don't punch me, you don't attack me, I'm alright".

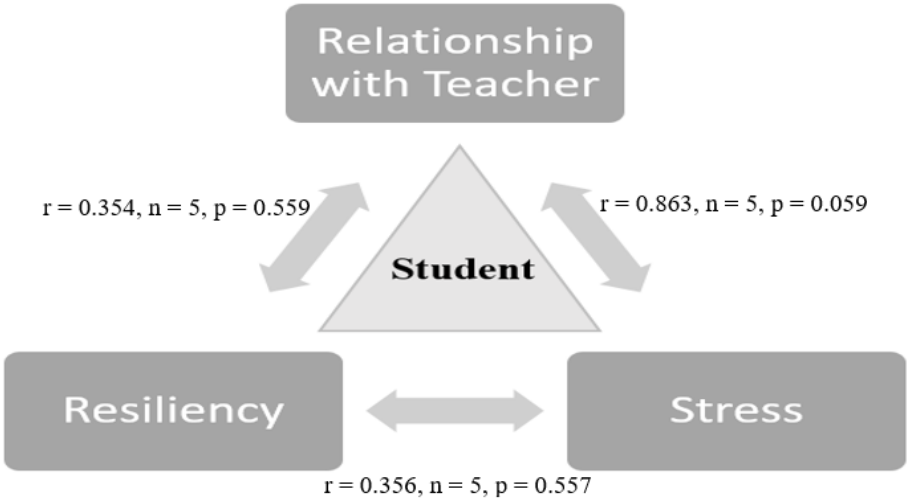
Research Question 5

What is the relationship, if any, between the perceptions of students with EBD about stress, resilience, and their perception of student teacher relationship?

A Pearson product moment correlation was conducted to determine the relationship between stress, resiliency, and STR. There was a strong, positive correlation between stress and STR, but it was not statistically significant ($r = 0.863$, $n = 5$, $p = 0.059$). There was a moderate, positive correlation between resiliency and STR ($r = 0.354$, $n = 5$, $p = 0.559$), and a moderate, positive correlation between resiliency and stress ($r = 0.356$, $n = 5$, $p = 0.557$); again, neither of those correlations were statistically significant. Refer to Figure 4 for a visual representation of the results. A multiple regression analysis was used to test if STR significantly predicted stress and resiliency. The results of the regression indicated STR explained 74.8% of the variance ($R^2 = .748$, $F(2, 2) = 2.996$, $p > .05$). It was found STR did not significantly predict stress ($p > .05$) or resiliency ($p > .05$).

Figure 4

Relationship between Stress, Resilience, and Student-Teacher Relationship



CHAPTER FIVE

DISCUSSION

Experiencing high levels of stress can contribute to the development of EBD or exacerbate existing EBDs (Cumming et al., 2018; Leonard et al., 2015; Mueser & Taub, 2008; Offerman et al., 2022). Previous research has demonstrated the mitigating role a strong relationship with others can have on an individual's resiliency and act as a buffer towards the negative effects of stress. More specifically, students who have a strong, positive relationship with an adult, such as their teacher, are more likely to have higher levels of resiliency which equips individuals with the skills needed to overcome stressful situations (Akin & Radford, 2018; Johnson, 2008; Masten et al., 2008; Mihalas et al., 2009; Mulloy, 2011; Sanders et al., 2016; Stewart & Sun, 2004). However, the relationship between stress, resiliency, and student-teacher relationships is understudied in the field of EBD. This is of concern considering students with EBD are more likely to have higher levels of stress, lower levels of resilience, and often struggle forming a positive relationship with their teachers, all of which makes them more vulnerable to the negative effects of stress (Cullinan & Sabornie, 2004; Lambert et al., 2021; Mueser & Taub, 2008; Murray & Greenberg, 2001; Offerman et al., 2022).

The purpose of this mixed methods study was to explore the relationships between student stress, resiliency, and STR among students with EBD and their teachers. Participants included high school students with EBD (n = 5) and their teachers (n = 5). Student participants completed the *Shortened Version of the Adolescents Stress Questionnaire* (ASQ-S; Anniko et al., 2018) to measure their current stress levels, the *Child and Youth Resilience Measure* (CYRM-R; 2018) to measure their resiliency, and the student version of the *Teacher-Student Relationship Inventory* (S-TSRI; Ang et al., 2020) to measure their relationship with their teacher. Teacher

participants completed the *Teacher-Student Relationship Inventory* (T-TSRI; Ang, 2005) to measure their relationship with their student participating in the study. In order to gain a deeper understanding of the variables all student and teacher participants participated in semi-structured individual interview. Results from quantitative surveys and qualitative semi-structured interviews suggest (a) the STR is being perceived similarly between students with EBD and their teachers, (b) caring, respectful, and dependable were identified by students and teachers as defining characteristics of students relationship with their teachers, (c) students with EBD most commonly report stressing about future uncertainty, their home life, and school performance, (d) students with EBD use a variety of coping mechanisms such as exercise, talking to someone, and problem solving, and lastly (e) there is a moderate to strong, positive correlation between stress, resiliency, and STR among students with EBD. This chapter will summarize the research findings in relation to previous research and current literature related to students with EBD. This chapter will also review the limitations of the study, provide suggestions for future research, and discuss implications for practice.

Student-Teacher Relationships

Participating students and teachers used a variety of words to describe their relationship with each other. The results of this study extend the current literature by providing a deeper understanding of students with EBD's perspectives of their relationship with their teacher. The results suggest the most important characteristics that comprise a STR consist of being caring, respectful, and dependable. These findings support and extend previous research suggesting students with EBD value specific characteristics including caring, warmth, understanding, flexibility, authenticity/honesty, and patience from their teachers (Capern & Hammond, 2014; Dods, 2015; Kennedy et al., 2022; Zolkoski et al., 2016; Zolkoski., 2019). The current study

contributes to the field by suggesting additional characteristics that students with EBD and their teachers identified as important characteristics of their relationship, including listening to students, being respectful, and being dependable. Both students and teachers spoke extensively about the importance of these characteristics and provided examples of how they are evident within their current STR.

In the present study, student participants explained how they enjoyed when their teacher used a warning system to monitor their behavior rather than immediately providing disciplinary consequences which supports previous research finding that students with EBD prefer positive disciplinary procedures like those discussed by participants in this study (Hickey et al., 2020 Zolkoski et al., 2016; Zolkoski., 2019). While previous research has demonstrated the benefits of class-wide monitoring systems, level systems, and utilizing positive reinforcement in the classroom for student behavior (Cancio & Johnson, 2007; Kern et al., 1994; Weeden et al., 2016) recent research has also expanded this to evaluate the benefits it has on student's perception of their relationship with their teacher (Hickey et al., 2020 Zolkoski et al., 2016; Zolkoski., 2019). For example, in the present study a student described how they like how their teacher provides warnings, instead of immediately providing punishments and how students can earn various reinforcements daily and weekly based on their behavior (i.e., food, snacks, and fun activities).

While the words students and teachers used to describe their relationship with each other differed slightly, there was a significant overlap between student and teacher perspectives. For example, both students and teachers described their relationship as respectful, genuine (students chose the word "real"), and dependable. Dependable was a recurring theme among both student and teacher participants. Students described their teachers as always there for them, implying the relationship is stable and dependable. All of the teacher participants also discussed the

importance of being a constant and dependable person in the student's life. This supports previous research suggesting the most important characteristic of a STR in student and teacher opinion is consistency and predictability (Capern & Hammond, 2014; Kennedy et al., 2022).

Informal interactions were the most discussed characteristic of STRs by teachers and students. Student participants in the current study discussed joking around with their teacher, playing games, and engaging in other shared activities as a sign their teacher cares for them. Similarly, teacher participants also discussed how they use games, activities, snacks, and jokes as a way to build their relationship with their students. Playing games and having fun are critical components of building a relationship with students with EBD. In fact, one of the most important teacher behaviors rated by students with EBD was their teacher's ability to be able to have fun and play around with student, such as telling jokes (Capern & Hammond, 2014; (Kennedy et al., 2022).

One main theme from the results of this study was teachers being respectful of students; this was described by student participants as teachers being real or honest, and identified by teacher participants as organic or genuine. All of the teacher participants in this study emphasized the importance of getting to know each student in order to fully understand them as individuals, including their likes and dislikes, and suggested that doing this will allow the relationship to develop organically over time which previous research has identified this process a critical component of a successful, strong, STR (Kennedy et al., 2022). All of the teacher participants in this study emphasized the importance of getting to know each student. They described this process as seeing students for their individual selves, and understanding students likes and dislikes. Teachers suggested that doing this will allow the relationship to develop organically over time which previous research has identified this process a critical component of

a successful, strong, STR (Kennedy et al., 2022). Similarly, student participants also discussed scenarios that showed how their teachers respected them for who they are, acknowledging their identity, and respecting their voice (Kennedy et al., 2022; Zolkoski et al., 2016; Zolkoski., 2019). Lastly, student participants also described scenarios in which they felt respected when their teachers were honest and real with them; this also supports previous research suggesting the important of authenticity and trust (Kennedy et al., 2022).

Many of the characteristics identified by student and teacher participants (i.e., caring, respectful, dependable, involved, informal interactions) are similar to the characteristics outlined in a trauma informed approach and healing centered approach. Trauma informed approach incorporates six key characteristics including (a) safety, (b) trustworthy and transparency, (c) peer support, (d) collaboration and mutuality, (e) empowerment, and (f) cultural, historical, and gender (Substance Abuse and Mental Health Services Administration [SAHMSA], 2015). Similarly, healing centered approach also encompasses many of the same features including (a) culture, (b) agency, (c) relationships, (d) meaning, and (e) aspirations (Ginwright, 2018). The overlap of characteristics between this study and these two approaches is of interest. A review exploring the current research related to trauma informed practices in schools identified 33 articles, of these studies, only five articles incorporated students' voices (Thomas et al., 2019). The current study contributes to the existing literature examining student perspectives of these specific characteristics (i.e., caring, respectful, dependable, involved, informal interactions).

Lastly, one student mentioned a negative interaction they had with one of their previous teachers. They were explaining that their current teacher is nice because their current teacher doesn't make racist or derogatory remarks towards them, like their previous teacher. Although this was only mentioned by one participant (out of five student participants) it is important to

acknowledge the prevalence of race based incidents, especially in the school setting and the stress this can induce. In fact, previous research suggests youth of color experience racial stress in the school setting by peers and teachers (Alvarez et al., 2016; Anderson et al., 2019).

Perspectives of Student-Teacher Relationship

The vast overlap of characteristics from both student and teacher perspectives suggests students and teachers perceive their relationship similarly. For example, three main themes (i.e., caring, respectful, dependable) and three subthemes (i.e., involved, informal interactions, and real) were identified. All three main themes (i.e., caring, respectful dependable) were identified as characteristics of their STR and discussed by both student and teacher participants. When examining the three subthemes, all three of the subthemes (i.e., involved, informal interactions, and real) were identified and discussed by both student and teacher participants, however the subtheme "involved" was discussed different by students and teachers. Students used the word "helpful" to describe their teacher's involvement. Teachers described scenarios that required them to be "observant" in order to show their involvement in their students' life. This is likely because these two characteristics are more role specific, meaning only a student would identify "helpful" as a characteristic, as teachers likely aren't asking students for help on a regular basis. Similarly, students may not realize how observant their teachers are in order to show they care. For example, a teacher is observant of a student's behavior, notices a change in the student's behavior and verbally checks in with them, the teacher provides resources to them based off of their observation. In this scenario the student likely acknowledges the teacher checking in with them and/or providing resources as the teacher caring and being helpful, but this interaction only started because the teacher was being observant of the student's nonverbal cues. This was also supported by the first research question which explored if there was a difference in student and

teacher ratings of their relationship. An independent *t*-test determined there was not a significant difference in student and teachers overall relationship score, suggesting that students and teachers have similar views of their relationship and the relationship is being perceived similarly by both involved parties. Additionally, the domain measuring student and teacher satisfaction on their relationship was found to be significant, suggesting students and teachers in this study are satisfied with their current relationship.

The specific characteristics students and teachers identified to describe their perceptions of their STR (e.g., being caring, respecting students, being consistent, and being dependable) likely contributed to the relationship being perceived similarly by both student and teacher as these characteristics have been shown to be fundamental in building strong relationships with students with EBD (Capern & Hammond, 2014; Kennedy et al., 2022). Previous research has found students and teachers may perceive their relationship characteristics vastly differently, suggesting the relationship is not being perceived similarly, this is especially more prevalent in relationships where care and respect are not evident (Ibrahim & Zaatari., 2020).

However, it is interesting to note that the one area there was a difference between student and teacher opinions of their relationship was with the subcategory of "Instrumental Help". Teachers rated higher for questions such as *"This student depends on me for advice"* and *"If the student has a problem at home, he/she is likely to ask for my help"* whereas student participants rated lower for questions such as *"If I have a problem at home, I will ask this teacher for help"*, *"I depend on this teacher for advice"*, and *"If I need help, I will go to this teacher"*. This aspect of the relationship was not reciprocated with students as they put a much a lower score suggesting they may not always go to their teachers if they need help. This is contrary to what student participants discussed in their individual interviews when discussing coping mechanisms,

stating they would go to their teacher if they needed help. This is also contrary to previous research which suggests students who have a positive relationship with their teacher are likely to seek help from them when and if needed (Guo et al., 2020). Future research should further explore this variable of student-teacher relationships to better understand the contextual situation(s) wherein students with EBD might reach out to their teachers for support.

Student Stress

The results from this study suggest the most prevalent stressors among students with EBD are (a) future uncertainty, (b) home life, and (c) school; these findings support previous research that have found the previously discussed stressors as common stressors among all adolescents (Anniko et al., 2019; De Anda et al., 2000; Leonard et al., 2015). The results from the individual interviews with student participants confirmed and supported the results from the ASQ-S (Anniko et al., 2018) questionnaire measuring student stress.

The most common stressors described in this study were everyday stressors, which is contrary to previous literature related to students with EBD that suggests students with EBD more often experience traumatic stress (Dods; Klasen et al., 2010; Mueser & Taub, 2008; Offerman et al., 2022; Zolkoski et al., 2016). During the individual interviews with students it appeared that student participants had difficulty identifying and verbalizing their stressors. For example, when students were asked questions about their relationship with their teachers they provided in depth, detailed responses. Whereas when they were asked questions about their current stressors, many student participants had to think about it, then provided short, and brief one word responses. This could be because adolescents may not realize what is stressful in the moment as perceived stress is different from emotional distress. For example, during this study one participant described a situation where they got arrested and were currently on parole,

however they did not identify or discuss this as a current stressor. This could also suggest students are thinking about the day to day, rather than the bigger picture, which is similar to previous research that suggest adolescents often underestimate the impact stress can have on their development (APA, 2014). Student participants may also have felt uncomfortable sharing and discussing other stressors with the researcher. For example, two students tone of voice (i.e., voice got quieter, became more hesitant with their response) and body language (i.e., crossed arms, looked away or looked down at the ground) changed when discussing their ill family members, suggesting this may have been an uncomfortable subject from them to talk about.

All of the student participants discussed stressing about school. While stressing about school is a common stressor among adolescents, this is of particular interest considering students with EBD historically have poor academic achievement and low graduation rates (Bradley et al., 2008). In the current study, student participants expanded on stressing about school by specifically discussing their worries about graduating from school, attending college after high school, and their current academic achievement. One student provided details stating his concern related to the academic rigor of the self-contained school he is currently attending is not held to the same academic standards and rigor in public schools, and therefore he will be academically disadvantaged when entering college, this is similar to previous research suggesting students with EBD feel academically underprepared for post-secondary education (Dods et al., 2015)

Student Resiliency

Previous research suggests that students with EBD often lack effective coping skills needed to overcome stressful situations (Sullivan et al., 2015; Zolkoski et al., 2016). The results from the quantitative scale completed in this study suggest that students with EBD have moderate resiliency. During the individual interviews, students discussed a variety of coping

skills they use when they feel stressed such as exercise, playing with a pet, talking to someone, and problem solving.

Two students discussed how they would play with their dog or pet their guinea pig at home as a method used to destress. Using pets and animals as a form of therapeutic intervention has been well researched and is a healthy coping mechanism. For example, researchers suggest adolescents with a pet companion are less likely to feel socially isolated than their peers who do not have a pet (Charmaraman et al., 2020). However, researchers have recently expanded this body of literature to investigate its usefulness for students with EBD (Knowles et al., 2021). They found having a pet in the self-contained classroom for students with EBD can help improve student's emotional regulation and improve their overall attitude towards school (Knowles et al., 2021).

One student discussed how they would get a dessert, candy, and/or drink (i.e., Starbucks coffee, caffeinated beverage, etc.) whenever they feel stressed. They even suggested having a treat in each hand helps them cope with stress. Previous researchers suggest the more stressed adolescents are, the more likely they are to use food as an emotional coping tactic, especially foods high in sweets (Hill et al., 2020; Malmir et al., 2022). This coping tactic could develop into a problem over time as many eating disorders begin as a way to cope with stress (Hill et al., 2020).

The results from the scale used to measure resiliency among student participants show students tend to rely more on their internal resilient attributes than they do on their relationships with others for support. This is of interest considering previous research suggests students often lack internal resilience skills (Sullivan et al., 2015; Zolkoski et al., 2016). If students with EBD are relying on their internal attributes, then it is important to ensure they are equipped with the

resiliency attributes needed. This finding also reiterates the notion that researching an individual's resilience is a difficult to concept to explore (King et al., 2021). However, this finding does support previous research that indicates adolescents often rely on their personal attributes such as optimism, calmness, and competence (Phillips et al., 2019). In the current study, students' internal attributes that contribute to their overall resiliency included shifting their mindset to regain perspective, staying calm or chill, brainstorm ideas to problem solve, and access resources such as Google or facilities in the neighborhood. Additionally, students discussed how they would go for a walk, exercise, or listen to music as a way to cope with stress which are all common healthy coping mechanisms among adolescents (Phillips et al., 2019).

Results from the individual interviews with student participants suggested students did have few relationships with others; this supports the literature suggesting students with EBD struggle building and maintaining relationships with others (Cullinan & Sabornie, 2004; Lambert et al., 2021; Murray & Greenberg, 2001). Two students discussed having a poor relationship with their parent and said they would not go to them if they had a problem; this is similar to previous research suggesting students with EBD don't feel as supported by their parents or caregivers as they do by their teachers (Yeager et al., 2020). Only one student identified a positive relationship with an individual in their life (i.e., their girlfriend). However, all of the students did discuss they would go to their teacher if they needed to, and how their teacher listening to them can reduce their stress.

Students discussed wanting to feel "in control" and suggested that feeling a lack of control over their life can contribute to their stress. One student discussed how they would play video games as a way to reduce stress as it helps them feel in control. Video games have been found to be an effective coping tactic and reduce stress among adolescents when used in

moderation (Pallavicini et al., 2021; Palanichamy et al., 2020). Additionally, providing more opportunities in the classroom setting for students to have more autonomy and responsibility can help them receive that sense of control. Strategies such as providing choices or implementing person centered planning with student IEP's could provide students with more of a sense of control by increasing their self-determination skills and provide autonomy over their life (Zirkus & Morgan, 2020). While students discussed a wide range of coping skills, determining the actual effectiveness of the discussed coping skills beyond the scope of the study and future research is needed.

Understanding the Intersection of Stress, Resiliency, and Student-teacher Relationship

The study sought to explore the relationship between stress, resiliency, and STR among students with EBD. The fifth research question specifically looked at the intersection of these variables. There was a strong, positive correlation between student stress and students relationship with their teacher ($r = 0.863$, $n = 5$, $p = 0.059$). Although it was not statistically significant, this finding would likely be significant with a larger sample size. There was also a moderate correlation between resiliency and STR and resiliency and stress. There was not a large enough sample size to run an accurate multiple linear regression as originally planned ($n = 5$). A multiple regression analysis was used to test if students' relationship with their teacher significantly predicted student stress and student resiliency. The results of the regression indicated STR explained 74.8% of the variance ($R^2 = .748$, $F(2, 2) = 2.996$, $p > .05$). It was found STR did not significantly predict student stress ($p > .05$) or student resiliency ($p > .05$). A larger sample size would likely yield different results.

In the current study, based on results from the quantitative surveys, student participants on average had moderately high levels of stress, moderate levels of resiliency, and overall

positive relationships with their teacher. These findings support previous research suggesting students with EBD attending self-contained schools have positive relationships with their teachers. Similarly, this supports previous research related to students with EBD which suggest students with experience high levels of stress (Mueser & Taub, 2008; Offerman et al., 2022). However, the results of this study are contrary to previous research suggesting students with EBD have low levels of resiliency, as the current study found students with EBD use a variety of coping skills (i.e., exercise, talking, problem solving, playing video game, etc.) and reported moderate levels of resiliency ($\mu = 66.6$, threshold for high resilience is 71 – 76).

Based on the correlation analysis, there is a strong relationship between stress and students' relationship with their teacher. This suggests that the less stress students have, the more positive their relationship with their teacher may be, and the more stress they have, the less positive their relationship with their teacher may be. This could possibly be due to the mitigating effects the STR has on student stress. Based on this finding it is important for future research to extend these findings to explore the impact stress is having on students relationships outside of school (i.e., relationship with parents, siblings, friends, peers, etc.)

The results from the scale measuring student resiliency revealed students rely more on their internal characteristics than they rely on their relationship with others. All students had relatively low scores when measuring their relationship with others. On this scale, relationship with others included parents/caregivers. However, the scale used to measure students relationship with their teachers and the individual interviews conducted with students revealed they believe they have a strong relationship with their teacher, suggesting student participants in this study may depend more on their relationship with their teacher than they do with their parents/caregivers. However, the results from the scale measuring STR suggests students may

not always go to their teacher if they need help, implying students with EBD may not seek outside help from others and will rely on themselves to cope with stress, which supports the findings from the resiliency scale suggesting students rely more on their internal characteristics.

Previous research suggests STRs can increase student resiliency and serve as a protective factor by mitigating the negative effects of stress (Akin & Radford, 2018; Johnson, 2008; Masten et al., 2008; Mihalas et al., 2009; Mulloy, 2011; Sanders et al., 2016; Stewart & Sun, 2004). Although STR may directly increase student resiliency, the results from the current study suggest STR and an adolescent's resiliency may act as two separate resources, and STR may provide effective buffering towards the negative effects of stress even for an adolescent with low to moderate levels of resiliency. This is similar to previous research specifically with students with EBD, suggesting the impactful role STRs serve in students' lives (Dods, 2015; Willis & Nagel, 2015; Zolkoski, 2019). This suggests STR and an adolescent's resiliency may act as two separate resources, and STR may provide effective buffering towards the negative effects of stress even for an adolescent with low to moderate levels of resiliency.

Conclusions

Overall, this mixed methods study supported and expanded the current literature related to students with EBD. Surveys were used to identify common stressors, coping mechanisms, and measure student's relationship with their teacher. Individual interviews were then conducted to explore these variables on a deeper level. Based on the results of this study, several conclusions can be drawn. These include:

- In the current study, students with EBD attending the participating specialized, self-contained school, reported strong, positive relationships with their teacher that is being perceived similarly between student and teacher.
- In the current study, students and teachers identified three main characteristics (i.e., caring, respectful, dependable) and three subthemes (i.e., involved, informal interactions, and real) to define their STR.
- The results from semi-structured interviews and a survey measuring stress suggest students stress most about future uncertainty, their home life, and school performance.
- Although not significant, there was a positive linear relationship between STR, stress, and resiliency among students with EBD.
- There was a strong a relationship between student stress and STR among students with EBD, although not significant.

Limitations

Although much planning went into this study, it was not without limitations. The following are limitations of this study:

One major limitation of this study was the small sample size. Although 11 public high schools with EBD programs were contacted and invited to participate, only one high school agreed to participate. The small sample size also likely contributed to whether there was a significant relationship or not. All of this could have contributed to both the collected data and the results. Findings, therefore may not be an accurate representation for all students with EBD, especially those attending a public school.

This study took place during the middle of the COVID-19 pandemic which likely contributed to the difficulty recruiting high school students and teachers resulting in a small sample size. During this time, many school districts experienced a teacher shortage, increasing the daily work demand on the current teachers. During the recruitment phase of this study principals and teachers expressed being overworked and overwhelmed, and therefore denied participating in the current study. Additionally, many schools also had health safety protocols in place to deter unnecessary guests from entering the school classrooms in an attempt to reduce the exposure of COVID-19.

All of the participants completed the quantitative portion of the study prior to beginning the interview; this could have inadvertently and unconsciously impacted their responses during the interview. For example, the questions related to the stress questionnaire could have had an impact on what they described when they were asked what are their current stressors. Additionally, all of the quantitative results are self-reported scales, there were no other methods to measure and confirm student stress and student resiliency. Lastly, this study design allowed all of the data to be collected during one interaction, it might have been better to analyze the survey results first then use the interview to further explore results.

Due to time constraints and limited resources, the primary researcher was not able to spend an extensive amount of time with the students to build a better rapport prior to interviewing them. This limitation could have had an impact on how comfortable and students felt opening up and being honest when responding to interview questions and completing the questionnaire.

Additionally, all of the participants attended a specialized, self-contained, behavioral high school that focuses on specifically addressing the needs of students with EBD. Students with

EBD are often served in self-contained settings (Lane et al., 2005; Lanterman et al., 2021) which are more likely to have smaller class sizes than a general education class at a public school (Kumm et al., 2020). This high school had an average class size of four to six students to one teacher and one teacher aide. Although no participants in this study discussed their small class size, it is possible the small class sizes contributed to the quality of relationship students have with their current teacher. Previous research related to STR's among students with EBD identified the impact small classrooms provide for building and maintaining high quality STR's (Zolkoski et al., 2016). Similarly, other researchers also suggests the smaller the classroom size the more interactions student and teachers have, regardless of students behavioral characteristics (Folmer-Annevelink et al., 2010).

Future Research

Based on the results of this study in light of the identified limitations, there is still a need for future research to continue to explore the intersection of stress, resiliency, and STR, especially among students with EBD.

The following are suggestions for future research:

- A replication of the current study should be conducted with an increased sample size for a more accurate representation of the population, including students without disabilities to see how divergent or convergent the perspectives of students with EBD are with students without EBD.
- In addition to replicating the current study, future research should extend the participant selection of the study to include students with EBD in general education classrooms in

public schools, to expand the results beyond students with EBD in alternative/self-contained schools.

- There is a need to better understand what proactive factors can be implemented to increase student resiliency and reduce the negative effects of stress, especially for students with EBD.
- Future research should use a component analysis to investigate the effectiveness of specific coping skills for students with EBD.
- Additional research should explore the quality of STRs in different classroom settings and sizes, in order to determine if the same quality of relationship achieved in self-contained classrooms with a low student-teacher ratio can be achieved in a general education classroom with a larger student-teacher ratio.
- Future research should explore teacher's purposeful and intentional integration of relationship building strategies and techniques they use with their students.
- Further research should continue to explore proactive strategies to increase personal and relational resiliency among students with EBD.
- Future research should seek to better understand and assess the existing internal resiliency skills students with EBD poses.
- Future research needs to explore racial stress, especially related to students of colors with EBD, and identify strategies to dismantle the existing racist structures in the school setting (i.e., teacher bias, discipline, testing, identification of disability, cultural norms, etc.).
- Future research should expand the literature related to the effects of implementing trauma informed and/or healing centered approach practices within the school environment.

- Future research needs to identify supports that can be implemented to better support students with EBD and their transition to college in an attempt to reduce student's current stress.
- Future research should explore the impact various reinforcmenet systems and punishment strategies have on STRs.

Implications for Practice

In spite of its limitations, the results from the current study will contribute to the field of special education, particularly as it relates to students with EBD. Practitioners can use the information to improve their relationships with their students with EBD. For example, educators can ensure they are actively incorporating the characteristics of an effective relationship into their classroom environments with students with EBD, including showing they care, being respectful, and being dependable to students. Educators should be cognizant of the potential impact their relationship with their students can have on their student's resiliency and stress.

The results of the current study suggest students with EBD rely more on internal attributes than relationship resources when it comes to coping with stress. Even with a strong STR, students with EBD still might not seek help from their teacher. Educators should ensure they are focusing on building students social capital, strengthening student's networks, and sharpening and promoting these internal skills among students with EBD so they are fully equipped with the skills and resources needed to overcome stress. Since students with EBD are more likely to solve their problems independently, educators can ensure they are continuing to provide supports, and resources to students so they can access them on their own like the results suggest they prefer. Educators should continue to offer their supports and help to students so students may feel comfortable going to them for help in the future for help.

Considering future uncertainty and school performance is a major stressor for students with EBD, it is critical teachers and administrators take this into consideration and apply more of an emphasis on students' future and students educational success for students with EBD. This involves collaborating directly with the individual students to discuss their individual goals, and a specific plan for how to achieve those goals. Students also stressed about not feeling in control of their life, by including students in the decisions that impact their future is critical for student autonomy and will allow them to feel more in control of their life.

Summary

In spite of its limitations, the results of this study support and extend the current literature related to students with EBD. Prior to this study, limited research had explored the impact of the intersection of stress, resiliency, and relationship with teacher among students with EBD. The results of this study support and extend the current literature related to better understanding the characteristics that comprise a STR. Students and teachers identified three main characteristics (i.e., caring, respectful, dependable) and three subthemes (i.e., involved, informal interactions, and real) to define their current relationship. The results of this study extend the current literature, suggesting high school student with EBD stress about their future, their home life, and school performance which are typical stressors for adolescents (Anniko et al., 2019; De Anda et al., 2000; Leonard et al., 2015). Considering the historically poor academic outcomes for students with EBD (Bradley et al., 2008), it is critical further supports are put in place (e.g., transition planning, person centered IEP planning) to help reduce the stress students experience about their future and school performance. Results from this study suggest students with EBD rely more on their internal attributes, even when they a positive relationship with their teacher.

This is of concern considering students with EBD may lack internal attributes needed to successfully overcome stressful situations (Sullivan et al., 2015; Zolkoski et al., 2016).

Future research should continue to explore strategies to increase students internal resiliency attributes so they are equipped with the skills and resources needed. Dismissing the alarmingly high rates of stress adolescents are experiencing as normative developmental experiences is detrimental to adolescent's overall development and it is critical additional supports are put in place to (a) decrease student stress, specifically regarding student stressors teachers have control over such as school stress and future uncertainty, (b) equip students with skills and resources needed to increase their interpersonal resiliency, and (c) strengthen students social capital by improving their relationship with their teacher. The information gained through this study will help inform future intervention design and implementation related to reducing stress and increasing resiliency among students with EBD. Future research should further continue to explore the intersection of stress, resiliency, and student's relationship with their teacher with a larger sample size and in more class settings.

APPENDICES

Appendix A: University IRB Approval

UNLV-2021-249 - Initial: Initial - Expedited External Inbox

do-not-reply@cayuse.com Mon, Jan 31, 8:26 AM
to joseph.morgan, me

UNLV

Social/Behavioral - Expedited Review

Approval Notice

DATE: January 31, 2022

TO: Joseph Morgan
FROM: Social/Behavioral

PROTOCOL TITLE: UNLV-2021-249 Exploring the Intersection of Stress, Resilience, and Relationship with Teacher among Students with EBD
SUBMISSION TYPE: Initial

ACTION: Approved
APPROVAL DATE: January 31, 2022
NEXT REPORT DUE: December 31, 2999
REVIEW TYPE: 5. Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).
6. Collection of data from voice, video, digital, or image recordings made for research purposes.
7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Children's Finding 46.404

Thank you for submission of materials for this proposal. The Social/Behavioral IRB has approved your study. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission. Only copies of the most recently submitted and approved/acknowledged Informed Consent materials may be used when obtaining consent.

This study has been determined to be minimal risk.

PLEASE NOTE:
Should there be any change to the study, it will be necessary to submit a **Modification** for review. No changes may be made to the existing study until modifications have been approved/acknowledged.

All unanticipated problems involving risk to subjects or others, and/or serious and unexpected adverse events must be reported promptly to this office. All FDA and sponsor reporting requirements must also be followed where applicable.

Any non-compliance issues or complaints regarding this protocol must be reported promptly to this office.

All approvals from appropriate UNLV offices regarding this research must be obtained prior to initiation of this study (e.g., IBC, COI, Export Control, OSP, Radiation Safety, Clinical Trials Office, etc.).

If you have questions, please contact the Office of Research Integrity - Human Subjects at IRB@unlv.edu or call 702-895-2794. Please include your study title and study ID in all correspondence.

Appendix B: School District IRB Approval

[redacted]Research Application Review System - Your Letter of Intent was approved External Inbox ×

[redacted] Mon, Feb 14, 11:30 AM

to me

Scotia,

Your letter of intent (ID #637) to conduct research in the [redacted]County School District has been reviewed and accepted. The next step in the process of obtaining approval for your project requires you to complete the research application.

You can continue with the application process at [redacted]. Please log in using the same information you used to register when you first submitted the Letter of Intent and visit the *Research Application and Release of Student (Information System)*.

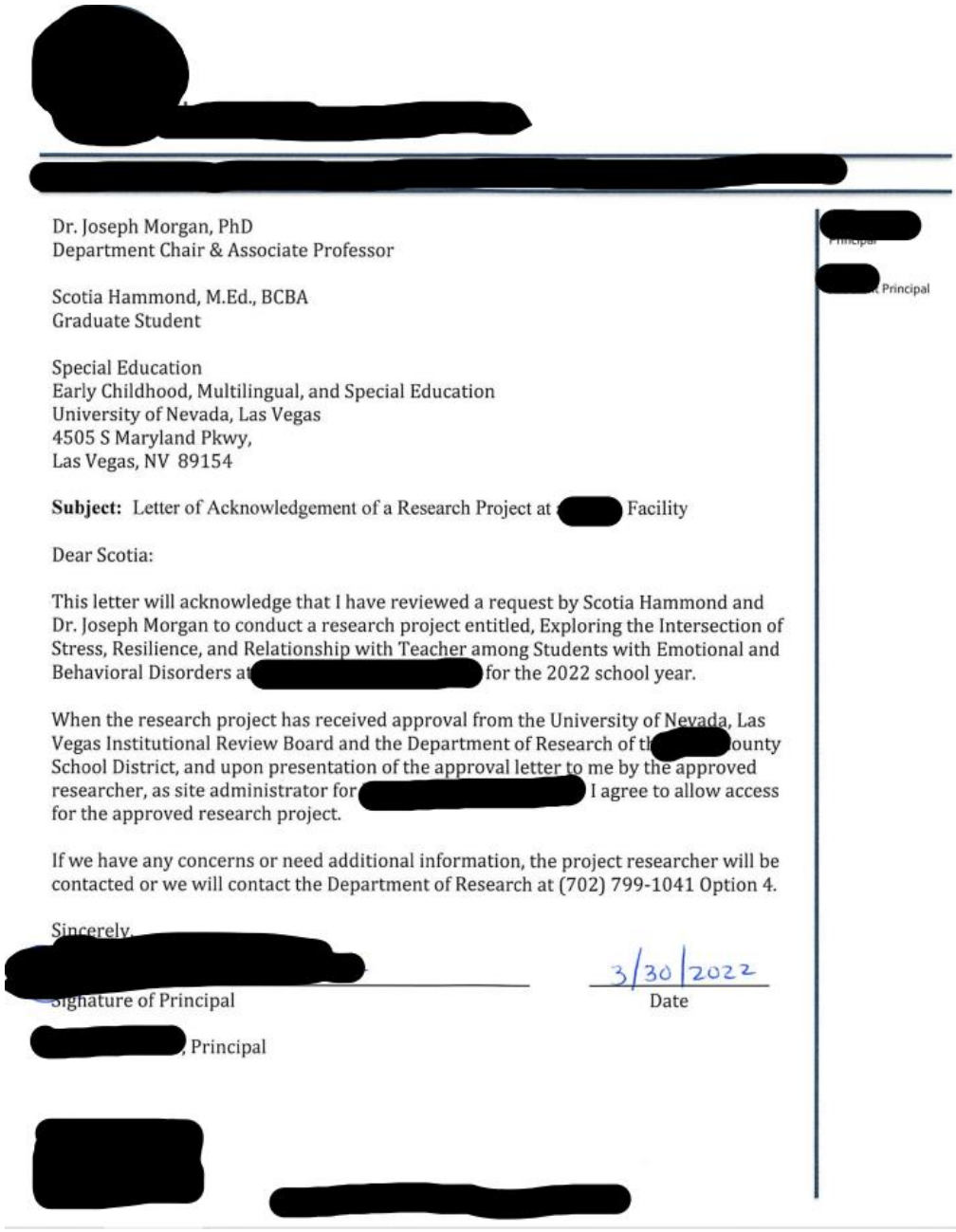
Once you are logged in, you should be able to view your research application and complete it by clicking on the **Action** button next to the pending application.

Thank you again for your interest in conducting research with [redacted]County School District. We look forward to reviewing your full application.

Best regards,

[redacted]County School District
Research Department
Assessment, Accountability, Research & School Improvement Division

Appendix C: Facility of Acknowledgement Approval Letter from Principal



[redacted]

Dr. Joseph Morgan, PhD
Department Chair & Associate Professor

Scotia Hammond, M.Ed., BCBA
Graduate Student

Special Education
Early Childhood, Multilingual, and Special Education
University of Nevada, Las Vegas
4505 S Maryland Pkwy,
Las Vegas, NV 89154

Subject: Letter of Acknowledgement of a Research Project at [redacted] Facility

Dear Scotia:

This letter will acknowledge that I have reviewed a request by Scotia Hammond and Dr. Joseph Morgan to conduct a research project entitled, Exploring the Intersection of Stress, Resilience, and Relationship with Teacher among Students with Emotional and Behavioral Disorders at [redacted] for the 2022 school year.

When the research project has received approval from the University of Nevada, Las Vegas Institutional Review Board and the Department of Research of th[redacted]ounty School District, and upon presentation of the approval letter to me by the approved researcher, as site administrator for [redacted] I agree to allow access for the approved research project.

If we have any concerns or need additional information, the project researcher will be contacted or we will contact the Department of Research at (702) 799-1041 Option 4.

Sincerely,

[redacted]

Signature of Principal

3/30/2022
Date

[redacted], Principal

[redacted]

[redacted]

[redacted] Principal

Appendix D: Recruitment Letter for Principal

Dear Principal (Name),

Hello, my name is Scotia Hammond and I am a doctoral student at the department of Early Childhood, Multilingual, and Special Education at the University of Nevada, Las Vegas. My advisor and research partner is Dr. Joseph Morgan. We are conducting a research study to understand the relationship between student stress, student resilience, and student-teacher relationships. Your school is invited to participate in a research study titled Exploring the Intersection of Stress, Resilience, and Students Relationship with Their Teachers among Students with EBD.

If you would like to participate in the study, 9^{th}-12^{th} grade students currently receiving services for Emotional Disturbance will be invited to participate in the study. Students who receive parent permission would be asked to (1) create a four digit code to protect their privacy, (2) complete a demographic survey, (3) complete a questionnaire measuring stress, (4) complete a questionnaire measuring resilience, and (5) complete a questionnaire measuring their relationship with their teachers. These surveys are expected to take a maximum of 45 minutes and will be conducted during regularly scheduled class time and students participating in the study will be removed individually to complete the surveys in a private location on classroom (library, conference room, etc.). Six students with ED will be selected to participate in a 15-20 minute individual semi-structured interview with the research team. The interviews will be audio recorded so the researchers can transcribe the interview afterwards. The audio file will be stored in a locked facility on UNLV campus and only the research team will have access to it. Lastly, the researchers will request access to the student participant's educational records (IEP) to confirm the diagnosis of ED and document the services they are currently receiving.

Teachers of the students who participate who give their consent to participate in the study would be asked to (1) create a four digit code to protect their privacy, (2) complete a demographic survey, (3) complete a questionnaire measuring their relationship with their students, and (4) participate in a semi-structured 10-15 minute audio recorded interview with the research team. Teacher surveys are expected to take a maximum of 15 minutes and teacher interview will take 10 to 15 minutes. Teacher surveys and interviews will take place during the teacher's free period, after school, or before school.

The risks associated with this study are minimal. Participants may feel uncomfortable answering some questions. Additionally, there is a risk of losing confidential data that could reveal participant's identity and responses. Four digit codes will be used on all surveys and questionnaires to help protect participant privacy. All electronic data will be password protected and stored on Google Drive that only the research team has access to. Paper data will be stored in

a locked facility and will be permanently destroyed 3 years after the completion of the study. Participation is voluntary and there are no consequences for not participating in the study and participants can decide to withdraw at any time.

There may not be direct benefits to your students and staff as a participant in this study. However, we hope to learn how students stress and resilience are effected by their relationship with their teacher to better inform future intervention design and implementation.

Any additional questions regarding the study you may contact Scotia at 941-448-6419 or Dr. Joseph Morgan at 702-895-3329.

Thank you for your time and consideration,

Scotia Hammond, M.Ed., BCBA

Joseph Morgan, Ph.D.

Appendix E: Recruitment Letter for Teachers

Dear Teachers,

Hello, my name is Scotia Hammond and I am a doctoral student at the department of Early Childhood, Multilingual, and Special Education at the University of Nevada, Las Vegas. My advisor and research partner is Dr. Joseph Morgan. We are conducting a research study to understand the relationship between student stress, student resilience, and student-teacher relationships. You are invited to participate in a research study titled Exploring the Intersection of Stress, Resilience, and Students Relationship with Their Teachers among Students with EBD.

Teachers who are teaching self-contained 9^{th}-12^{th} grade students currently receiving services for Emotional Disturbance will be invited to participate in the study. Teachers will be asked to (1) create a four digit code to protect their privacy, (2) complete a demographic survey, (3) complete a questionnaire measuring their relationship with their students, and (4) participate in a semi-structured 10-15 minute audio recorded interview with the research team. The audio file will be stored in a locked facility on UNLV campus and only the research team will have access to it. Teacher surveys are expected to take a maximum of 15 minutes and interviews will take 10 to 15 minutes and will take place during the teacher's free period, after school, or before school. The interviews will be audio recorded so the researchers can transcribe the interview afterwards.

The risks associated with this study are minimal. Participants may feel uncomfortable answering some questions. Additionally, there is a risk of losing confidential data that could reveal participant's identity and responses. Four digit codes will be used on all surveys and questionnaires to help protect participant privacy. All electronic data will be password protected and stored on Google Drive that only the research team has access to. Paper data will be stored in a locked facility and will be permanently destroyed 3 years after the completion of the study. Participation is voluntary and there are no consequences for not participating in the study and participants can decide to withdraw at any time.

There may not be direct benefits to you or your students for participating in this study. However, we hope to learn how students stress and resilience are effected by their relationship with their teacher to better inform future intervention design and implementation.

Any additional questions regarding the study you may contact Scotia at 941-448-6419 or Dr. Joseph Morgan at 702-895-3329.

Thank you for your time and consideration,

Scotia Hammond, M.Ed., BCBA

Joseph Morgan, Ph.D.

Appendix F: Recruitment Letter for Parents

Dear Parents,

Hello, my name is Scotia Hammond and I am a doctoral student at the department of Early Childhood, Multilingual, and Special Education at the University of Nevada, Las Vegas. My advisor and research partner is Dr. Joseph Morgan. We are conducting a research study to understand the relationship between student stress, student resilience, and student-teacher relationships. Your child is invited to participate in a research study titled Exploring the Intersection of Stress, Resilience, and Students Relationship with Their Teachers among Students with EBD.

If you would like your child to participate in the study, 9^{th}-12^{th} grade students currently receiving services for Emotional Disturbance will be invited to participate in the study. Students who receive parent permission would be asked to (1) create a four digit code to protect their privacy, (2) complete a demographic survey, (3) complete a questionnaire measuring stress, (4) complete a questionnaire measuring resilience, and (5) complete a questionnaire measuring their relationship with their teachers. These surveys are expected to take a maximum of 45 minutes and will be conducted during regularly scheduled class time and students participating in the study will be removed individually to complete the surveys in a private location on classroom (library, conference room, etc.). Six students with ED will be selected to participate in a 15-20 minute individual semi-structured interview with the research team. The interviews will be audio recorded so the researchers can transcribe the interview afterwards. The audio file will be stored in a locked facility on UNLV campus and only the research team will have access to it. Lastly, the researchers will request access to the student participant's educational records (IEP) to confirm the diagnosis of ED and document the services they are currently receiving.

The risks associated with this study are minimal. Participants may feel uncomfortable answering some questions. Additionally, there is a risk of losing confidential data that could reveal participant's identity and responses. Four digit codes will be used on all surveys and questionnaires to help protect participant privacy. All electronic data will be password protected and stored on Google Drive that only the research team has access to. Paper data will be stored in a locked facility and will be permanently destroyed 3 years after the completion of the study. Participation is voluntary and there are no consequences for not participating in the study and participants can decide to withdraw at any time.

There may not be direct benefits to your students and staff as a participant in this study. However, we hope to learn how students stress and resilience are effected by their relationship with their teacher to better inform future intervention design and implementation.

Any additional questions regarding the study you may contact Scotia at 941-448-6419 or Dr. Joseph Morgan at 702-895-3329.

Thank you for your time and consideration,

Scotia Hammond, M.Ed., BCBA

Joseph Morgan, Ph.D.

Appendix G: Recruitment Letter for Students

Dear Student,

Hello, my name is Scotia Hammond and I am a doctoral student at the department of Early Childhood, Multilingual, and Special Education at the University of Nevada, Las Vegas. My advisor and research partner is Dr. Joseph Morgan. We are conducting a research study to understand the relationship between student stress, student resilience, and student-teacher relationships. Your school is invited to participate in a research study titled Exploring the Intersection of Stress, Resilience, and Students Relationship with Their Teachers among Students with EBD.

If you would like to participate in the study, 9^{th}-12^{th} grade students currently receiving services for Emotional Disturbance will be invited to participate in the study. Students who receive parent permission would be asked to (1) create a four digit code to protect their privacy, (2) complete a demographic survey, (3) complete a questionnaire measuring stress, (4) complete a questionnaire measuring resilience, and (5) complete a questionnaire measuring their relationship with their teachers. These surveys are expected to take a maximum of 45 minutes and will be conducted during regularly scheduled class time and students participating in the study will be removed individually to complete the surveys in a private location on classroom (library, conference room, etc.). Six students with ED will be selected to participate in a 15-20 minute individual semi-structured interview with the research team. The interviews will be audio recorded so the researchers can transcribe the interview afterwards. The audio file will be stored in a locked facility on UNLV campus and only the research team will have access to it. Lastly, the researchers will request access to the student participant's educational records (IEP) to confirm the diagnosis of ED and document the services they are currently receiving.

The risks associated with this study are minimal. Participants may feel uncomfortable answering some questions. Additionally, there is a risk of losing confidential data that could reveal participant's identity and responses. Four digit codes will be used on all surveys and questionnaires to help protect participant privacy. All electronic data will be password protected and stored on Google Drive that only the research team has access to. Paper data will be stored in a locked facility and will be permanently destroyed 3 years after the completion of the study. Participation is voluntary and there are no consequences for not participating in the study and participants can decide to withdraw at any time.

There may not be direct benefits to you as a participant in this study. However, we hope to learn how students stress and resilience are effected by their relationship with their teacher to better inform future intervention design and implementation.

Any additional questions regarding the study you may contact Scotia at 941-448-6419 or Dr. Joseph Morgan at 702-895-3329.

Thank you for your time and consideration,

Scotia Hammond, M.Ed., BCBA

Joseph Morgan, Ph.D.

Appendix H: Teacher Consent Form

INFORMED CONSENT

Department of Early Childhood, Multilingual, and Special Education

---

TITLE OF STUDY: Exploring the Relationship between Stress, Resilience, and Students Relationship with Their Teachers

INVESTIGATOR(S): Scotia Hammond, M.Ed., BCBA and Joseph Morgan, Ph.D.

For questions or concerns about the study, you may contact Scotia at 941-448-6419 or Dr. Joseph Morgan at 702-895-3329.

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact **the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 888-581-2794 or via email at IRB@unlv.edu.**

Purpose of the Study

You are invited to participate in a research study. The purpose of these study is to understand the relationship between student stress, student stress, and student's relationship with their teacher.

Participants

You are being asked to participate in the study because you fit this criteria: special education teacher who provides instruction to high school students in 9th through 12th grade being served under the label "Emotional Disturbance".

Procedures

If you volunteer to participate in this study, you will be asked to do the following: (1) complete a 5 minute survey about how long you have been teaching and your demographic information, (2) complete a 10 minute survey about your current relationship with your students participating in the study, (3) be interviewed for 10-15 minutes by the research team regarding your current relationship with the student. The interviews will be audio recorded so the researchers can transcribe the interview afterwards. The audio file will be stored in a locked facility on UNLV

campus and only the research team will have access to it. During each stage of the study you will use a code to ensure confidentiality and privacy.

Benefits of Participation

There may not be direct benefits to you as a participant in this study. However, we hope to learn how your relationship with your students effects their stress and resiliency.

Risks of Participation

There are risks involved in all research studies. This study may include only minimal risks. You may feel uncomfortable answering questions about your relationship with your student. You do not have to answer any question during the interview or on the surveys and you may ask the researcher to stop the interview at any time. There is a risk of loss of confidentiality of data. If confidentiality is breached, potentially negative statements made during interviews could be released and could reflect poorly on the teacher. To limit this risk, a code in place of your name will be used on all documents and materials.

Cost /Compensation

There will not be financial cost to you to participate in this study. The study surveys will take approximately 10 minutes per survey for each student participating and the interview will take 10 to 15 minutes. Participating in both the survey and interview will take a total of 20 to 25 minutes of your time. If you have more than one student participating in the study, then the total time will increase an additional 10 minutes per student for the survey you will be asked to complete. You will not be compensated for your time.

Confidentiality

All information gathered in this study will be kept completely confidential. Participants will create four digit codes at the beginning of the study and will be used and written on all documents. The code form which identifies participant's identity and their individual code will be securely stored in a locked facility on UNLV campus which only the researchers will have access to. An electronic master key will be created which links participants identifying information to their four digit code and it will be password protected and stored on Google Drive that only the research team has access to, along with all other electronic data. Paper data will be stored in a locked facility and will be permanently destroyed 3 years after the completion of the study.

Voluntary Participation

Your participation in this study is voluntary. Your decision whether or not to participate in this study will not affect your employment. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with UNLV. You are encouraged to ask questions about this study at the beginning or any time during the research study.

Participant Consent:

I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. A copy of this form has been given to me.

_____ _____

Signature of Participant Date

_____

Participant Name (Please Print)

Audio Taping:

I agree to participate in the individual interviews and to be audio recorded during the interview for the purpose of this research study.

_____ _____

Signature of Participant Date

_____

Participant Name (Please Print)

Appendix I: Parent Permission Form

PARENT PERMISSION FORM

Department of Early Childhood, Multilingual, and Special Education

---

TITLE OF STUDY: Exploring the Intersection of Stress, Resilience, and Students Relationship with Their Teachers among Students with Emotional and Behavioral Disorders

INVESTIGATOR(S): Scotia Hammond, M.Ed., BCBA and Joseph Morgan, Ph.D.

CONTACT PHONE NUMBER: Scotia at 941-448-6419 or Dr. Joseph Morgan at 702-895-3329

Purpose of the Study

Your child is invited to participate in a research study. The purpose of this study is better understand how stress, student resilience, and student's relationship with their teachers effect each other.

Participants

Your child is being asked to participate in the study because he/she is a current 9th-12th grade student currently in special education receiving services for "Emotional Disturbance".

Procedures

If you allow your child to volunteer to participate in this study, your child will be asked to do the following: (1) complete a form describing their demographic information, (2) take a survey measuring their overall stress, (3) take a survey assessing their current levels of resilience, (4) take a survey measuring their relationship with their teacher. Students will be randomly selected to participate in individual interviews. If your child is selected and you allow your child to participate, your child will be asked to (5) participate in an individual interview with the research team which is expected to take 15 to 20 minutes. The interviews will be audio recorded so the researchers can transcribe the interview afterwards. The audio file will be stored in a locked facility on UNLV campus and only the research team will have access to it. Lastly, the

researchers will be requesting access to your child's educational records to confirm and document the services they are receiving for ED. Students who participate in the study will be removed from the classroom to complete the survey and interview (if selected) in a private setting on school campus (such as the library, conference room, empty classroom, etc.). Students who do not participate in the study will remain in their regularly scheduled class.

Benefits of Participation

There may not be direct benefits to your child as a participant in this study. However, we hope to learn how students stress and resilience are effected by their relationship with their teacher.

Risks of Participation

There are risks involved in all research studies. This study may include only minimal risks. Your child may feel uncomfortable answering questions about their relationship with their teacher or describing current stressors in their life. Your child can request to have you or another trusted adult present during the interview. Your child may request to stop the interview or stop answering survey questions at any time. There is also a minimal risk of loss of confidentiality of data from interviews or surveys. To limit this risk, all participants will create a four digit code that will be used on all documents and materials and will be securely stored.

Cost /Compensation

There will not be financial cost to you to participate in this study. The study will take 45 minutes of your child's time to complete the survey portion of the study. If your child also participates in the individual interviews this will take an additional 15 to 20 minutes of your child's time. Your child will not be compensated for their time.

Contact Information

If you or your child have any questions or concerns about the study, you may contact Scotia at **941-448-6419** or Dr. Joseph Morgan at **702-895-3329.** For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact **the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 888-581-2794, or via email at IRB@unlv.edu.**

Voluntary Participation

Your child's participation in this study is voluntary. Your child may refuse to participate in this study or in any part of this study. Your child may withdraw at any time without prejudice to your relations with the university. You or your child is encouraged to ask questions about this study at the beginning or any time during the research study. Your decision whether or not to allow your child to participate in this study will not affect your child's grades or participation in school.

Confidentiality

All information gathered in this study will be kept completely confidential. Participants will create four digit codes at the beginning of the study and will be used and written on all

documents. The code form which identifies participant's identity and their individual code will be securely stored in a locked facility on UNLV campus which only the researchers will have access to. An electronic master key will be created which links participants identifying information to their four digit code and it will be password protected and stored on Google Drive that only the research team has access to, along with all other electronic data. Paper data will be stored in a locked facility and will be permanently destroyed 3 years after the completion of the study.

Participant Consent:

I have read the above information and agree to allow my child to participate in this study. I am at least 18 years of age. A copy of this form has been given to me.

Signature of Parent	Child's Name (Please print)
Parent Name (Please Print)	Date

Individual Interview with Audio Taping

I agree to allow my child to participate in the individual interviews and to be audio recorded during the interview for the purpose of this research study.

Signature of Parent	Child's Name (Please print)
Parent Name (Please Print)	Date

Appendix J: Student Assent Form

ASSENT TO PARTICIPATE IN RESEARCH

Exploring the Intersection of Stress, Resilience, and Students Relationship with Their Teachers among Students with Emotional and Behavioral Disorders

1. My name is Scotia Hammond. My research partners name is Dr. Joseph Morgan.

2. We are asking you to take part in a research study because we are trying to learn more about students stress, resilience, and student's relationship with their teachers.

3. If you agree to be in this study you will be asked to complete four surveys. The first survey will collect your demographic information including your age, race, and current grade level. The second survey will measure your current levels of stress, the third survey will measure your resilience, and the fourth survey will measure your relationship with your teacher. These surveys are expected to take a maximum of 45 minutes.
   Six students will be randomly selected to participate in an individual 15-20 minute interview with the researchers. If you are agree to participate, and are selected, you will be asked questions about your current stressors and your current relationship with your teacher. The interviews will be audio recorded so the researchers can transcribe the interview afterwards. The audio file will be stored in a locked facility on UNLV campus and only the research team will have access to it. If you agree to participate in the study or not, you will not have any changes to your classes at school. Besides the surveys and interview there are no other unique activities that you will experience if you participate in the study. Students who participate in the study will be removed from the classroom to complete the survey and interview (if selected) in a private setting on school campus (such as the library, conference room, empty classroom, etc.). Students who do not participate in the study will remain in their regularly scheduled class.

4. There is only a small level of risk associated with participating in this study. You may feel uncomfortable answering questions on the survey or during the interview. You do not have to answer any questions that you do not want to. You may ask for a parent or teacher to be present during the interviews if you feel more comfortable. You can ask the researchers to stop the interview at any time. There is a small risk that the information you share on the surveys and during interviews could be connected to you. To prevent this from happening you will create a four digit code that you will use on all materials. The information will be securely stored and will be permanently deleted three years after the study.

5. You will not receive any compensation for participating in this study. Your decision whether or not to participate in this study will not affect your grades or participation in school.

6. Please talk this over with your parents before you decide whether or not to participate. We will also ask your parents to give their permission for you to take part in this study. But even if your parents say "yes" you can still decide not to do this. If you or your parent decide not to participate in the study then the research team will not call you to come out of your class.

7. If you don't want to be in this study, you don't have to participate. Remember, being in this study is up to you and no one will be upset if you don't want to participate or even if you change your mind later and want to stop.

8. You can ask any questions that you have about the study. If you have a question later that you didn't think of now, you can call Scotia at 941-448-6419, or Dr. Joseph Morgan at 702-895-3329. You may call either of us at any time to ask questions. If we have not answered your questions or you do not feel comfortable talking to us about your question, you or your parent can call the UNLV Office of Research Integrity – Human Subjects at 702-895-2794 or toll free at 888-581-2794.

9. Signing your name at the bottom means that you agree to be in this study. You and your parents will be given a copy of this form after you have signed it.

_____ _____

Print your name Date

_____

Sign your name

Individual Interview with Audio Taping

I agree to participate in the individual interviews and to be audio recorded during the interview for the purpose of this research study.

_____ _____

Signature of Participant Date

_____

Participant Name (Please Print)

Appendix K: Informed Consent (Student 18+)

INFORMED CONSENT

Department of Early Childhood, Multilingual, and Special Education

---

TITLE OF STUDY: Exploring the Intersection of Stress, Resilience, and Students Relationship with Their Teachers among Students with Emotional and Behavioral Disorders

INVESTIGATOR(S): Scotia Hammond, M.Ed., BCBA and Joseph Morgan, Ph.D.

For questions or concerns about the study, you may contact Scotia at 941-448-6419 or Dr. Joseph Morgan at 702-895-3329.

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact **the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 888-581-2794 or via email at IRB@unlv.edu.**

Purpose of the Study

You are invited to participate in a research study. The purpose of these study is to understand the relationship between student stress, student stress, and student's relationship with their teacher.

Participants

You are being asked to participate in the study because you are currently enrolled in 9^{th} – 12^{th} grade and are receiving special education services for "Emotional Disturbance".

Procedures

If you volunteer to participate in this study you will be asked to complete four surveys. The first survey will collect your demographic information including your age, race, and current grade level. The second survey will measure your current levels of stress, the third survey will measure your resilience, and the fourth survey will measure your relationship with your teacher. These surveys are expected to take a maximum of 45 minutes. Six students will be randomly selected to participate in an individual 15-20 minute interview with the researchers. If you are agree to participate, and are selected, you will be asked questions about your current stressors and your

current relationship with your teacher. The interviews will be audio recorded so the researchers can transcribe the interview afterwards. The audio file will be stored in a locked facility on UNLV campus and only the research team will have access to it. Lastly, the researchers will be requesting access to your educational records to confirm and document the services you receiving for ED. If you agree to participate in the study or not, you will not have any changes to your classes at school. Besides the surveys and interview there are no other unique activities that you will experience if you participate in the study. Students who participate in the study will be removed from the classroom to complete the survey and interview (if selected) in a private setting on school campus (such as the library, conference room, empty classroom, etc.). Students who do not participate in the study will remain in their regularly scheduled class.

Benefits of Participation

There may not be direct benefits to you as a participant in this study. However, we hope to learn more about students stress, resilience, and student's relationship with their teachers.

Risks of Participation

There is only a small level of risk associated with participating in this study. You may feel uncomfortable answering questions on the survey or during the interview. You do not have to answer any questions that you do not want to. You may ask for a parent or teacher to be present during the interviews if you feel more comfortable. You can ask the researchers to stop the interview at any time. There is a small risk that the information you share on the surveys and during interviews could be connected to you. To prevent this from happening you will create a four digit code that you will use on all materials. The information will be securely stored and will be permanently deleted three years after the study.

Cost /Compensation

There will not be financial cost to you to participate in this study. You will not receive any compensation for participating in this study. Your decision whether or not to participate in this study will not affect your grades or participation in school. If you decide to participate in this study you will spend a maximum of 45 minutes completing surveys. If you also participate in the individual interview portion of the study that will take an additional 15 to 20 minutes.

Confidentiality

All information gathered in this study will be kept completely confidential. Participants will create four digit codes at the beginning of the study and will be used and written on all documents. The code form which identifies participant's identity and their individual code will be securely stored in a locked facility on UNLV campus which only the researchers will have

access to. An electronic master key will be created which links participants identifying information to their four digit code and it will be password protected and stored on Google Drive that only the research team has access to, along with all other electronic data. Paper data will be stored in a locked facility and will be permanently destroyed 3 years after the completion of the study.

Voluntary Participation

Your participation in this study is voluntary. Your decision whether or not to participate in this study will not affect your grades or participation in school. If you don't want to be in this study, you don't have to participate. Remember, being in this study is up to you and no one will be upset if you don't want to participate or even if you change your mind later and want to stop.

Participant Consent:

I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. A copy of this form has been given to me.

_____ _____

Signature of Participant Date

_____

Participant Name (Please Print)

Audio Taping:

I agree to participate in the individual interviews and to be audio recorded during the interview for the purpose of this research study.

_____ _____

Signature of Participant Date

_____

Participant Name (Please Print)

Appendix L: Student Code Form

Student (Made-Up) Code Form

Your Full Name: _____

School: _____

Teacher's Name: _____

To protect your privacy and confidentiality, create a 4 digit code to be used in the study.

4 digit code: _____

Please use this 4 digit code on all forms. Do not use real names on surveys or interviews. See the consent form for additional information regarding privacy and confidentiality. This form were stored securely to connect real names to codes.

Appendix M: Steps of Quantitative Data Collection Process

1. Escort student out of their classroom, to a private room on campus (i.e., empty classroom, empty teacher break room, virtual breakout room).
2. Reviewed the study with the student, provided the student with a paper handout of the student assent form, students were instructed to sign the form only if they understand and would like to participate in the study. Students were reminded they can stop participating at any time.
3. Ask student if they would like a trusted adult to accompany them (i.e., teacher, teacher's aide, or any school staff members).
4. Provide student with a paper copy of the packet that includes the demographic information form, CYRM-R, ASQ-S, and S-TRSI questionnaire.
5. Briefly review and explain the instructions for each questionnaire, ask the student if they would like to complete the packet independently or if they would like me to verbally read out loud the questions
6. Once all forms have been completed, thank the student for their time, and ask them if they would like to continue with the qualitative portion of the study, take a break, or complete the qualitative portion of the study on another day.
7. Return student to classroom if they chose to complete the qualitative portion another day, continue with the steps outlined in the qualitative data collection process if student choses to continue.

Appendix N: Steps of Qualitative Data Collection Process

1. Escort participant out of the classroom, to a private room on campus (i.e., empty classroom, empty teacher break room, virtual breakout room) or stay in the current room if student selected to continue to do qualitative portion of the study immediately after quantitative portion of the study.
2. Ask student if they would like a trusted adult to accompany them (i.e., teacher, teacher's aide, or any school staff members).
3. Confirm with the participant that they consent to this interview being audio-recorded. Turn on the audio recorder.
4. Being introducing yourself, thank participant for their time, review the purpose of this interview, and remind participant they can stop at any time. Answer any questions during this time.
5. Begin interview by asking first interview question (refer to Table 7 for student questions and Table 8 for teacher questions).
6. Ask unscripted question to probe further into information.
7. Continue this process of asking scripted questions and probe questions until all of the questions had been answered with sufficient detail to the researcher.
8. End the interview by thanking participant for their time, asking them if they have any questions, and returning them to their classroom.

Appendix O: Student Demographic Survey

Student Demographics Survey

1. Write your code created for the study: _____

2. What is your gender?
    a. Female
    b. Male
    c. Non-binary
    d. Prefer not to answer

3. What is your race/ethnicity?
    a. Asian/Pacific Islander
    b. Black/African American
    c. Latinx
    d. Mixed:_____
    e. White/Caucasian
    f. Other:_____
    g. Prefer not to answer

4. How old are you? _____

5. What grade are you in? _____

Appendix P: Child and Youth Resilience Measure

Student Code #_____

		1 Not at all	2 A little	3 Somewhat	4 Quite a bit	5 A lot
1	I get along with people around me	**1**	**2**	**3**	**4**	**5**
2	Getting an education is important to me	**1**	**2**	**3**	**4**	**5**
3	I know how to behavior/act in different situations (such as school, home and church)	**1**	**2**	**3**	**4**	**5**
4	My parent(s)/caregiver(s) really look out for me	**1**	**2**	**3**	**4**	**5**
5	My parent(s)/caregiver(s) know a lot about me (for example, who my friends are, what I like to do)	**1**	**2**	**3**	**4**	**5**
6	If I am hungry, there is enough to eat	**1**	**2**	**3**	**4**	**5**
7	People like to spend time with me	**1**	**2**	**3**	**4**	**5**
8	I talk to my family/caregiver(s) about how I feel (for example when I am hurt or sad)	**1**	**2**	**3**	**4**	**5**
9	I feel supported by my friends	**1**	**2**	**3**	**4**	**5**
10	I feel that I belong at my school	**1**	**2**	**3**	**4**	**5**

Student Code #_____

		1 Not at all	2 A little	3 Somewhat	4 Quite a bit	5 A lot
11	My family/caregiver(s) care about me when times are hard (for example if I am sick or have done something wrong)	**1**	**2**	**3**	**4**	**5**
12	My friends care about me when times are hard (for example if I am sick or have done something wrong)	**1**	**2**	**3**	**4**	**5**
13	I am treated fairly in my community	**1**	**2**	**3**	**4**	**5**
14	I have chances to show others that I am growing up and can do things by myself	**1**	**2**	**3**	**4**	**5**
15	I feel safe when I am with my family/caregiver(s)	**1**	**2**	**3**	**4**	**5**
16	I have chances to learn things that will be useful when I am older (like cooking, working, and helping others)	**1**	**2**	**3**	**4**	**5**
17	I like the way my family/caregiver(s) celebrates things (like holidays or learning about my culture)	**1**	**2**	**3**	**4**	**5**

Appendix Q: Shortened Version of the Adolescents Stress Questionnaire

Student Code #_____

		1 Not at all stressful (or has not happened)	**2 A little stressful**	**3 Moderately stressful**	**4 Quite stressful**	**5 Very stressful**
1.	Arguments at home	1	2	3	4	5
2.	Disagreement between your parents	1	2	3	4	5
3.	Disagreement between you and your mother	1	2	3	4	5
4.	Disagreement between you and your father	1	2	3	4	5
5.	Having to study things you do not understand	1	2	3	4	5
6.	Teachers expecting too much from you	1	2	3	4	5
7.	Keeping up with school work	1	2	3	4	5
8.	Getting up early in the morning to go to school	1	2	3	4	5
9.	Going to school	1	2	3	4	5
10.	Getting along with your boy/girl-friend	1	2	3	4	5
11.	Breaking up with your boy/girl-friend	1	2	3	4	5
12.	Making the relationship with your boy/girl-friend work	1	2	3	4	5

Student Code #_____

		1 Not at all stressful (or has not happened)	**2 A little stressful**	**3 Moderately stressful**	**4 Quite stressful**	**5 Very stressful**
13.	Pressure to fit in with peers	1	2	3	4	5
14.	Being hassled for not fitting in	1	2	3	4	5
15.	Peers hassling you about the way you look	1	2	3	4	5
16.	Being judged by your friends	1	2	3	4	5
17.	Lack of respect from teachers	1	2	3	4	5
18.	Not being listened to by teachers	1	2	3	4	5
19.	Getting along with your teachers	1	2	3	4	5
20.	Concern about your future	1	2	3	4	5
21.	Having to make decisions about future work or education	1	2	3	4	5
22.	Putting pressure on yourself to meet your future goals	1	2	3	4	5
23.	Not getting enough time for leisure	1	2	3	4	5

Student Code #_____

		1 Not at all stressful (or has not happened)	**2 A little stressful**	**3 Moderately stressful**	**4 Quite stressful**	**5 Very stressful**
24.	Not enough time for activities outside of school hours	1	2	3	4	5
25.	Having too much homework	1	2	3	4	5
26.	Not enough money to buy the things you need	1	2	3	4	5
27.	Not enough money to buy the things you want	1	2	3	4	5

Appendix R: Student Version of the Teacher-Student Relationship Inventory

Student Code #_____

		1 Almost never true	**2 Seldom true**	**3 Sometimes true**	**4 Often true**	**5 Almost always true**
1.	I enjoy attending the class of this teacher.	1	2	3	4	5
2.	My relationship with this teacher is positive.	1	2	3	4	5
3.	If this teacher retires or leaves the school, I will miss him/her.	1	2	3	4	5
4.	I am happy with my relationship with this teacher.	1	2	3	4	5
5.	I like this teacher.	1	2	3	4	5
6.	If I have a problem at home, I will ask this teacher for help.	1	2	3	4	5
7.	I share about my personal life with this teacher.	1	2	3	4	5
8.	If I need help, I will go to this teacher.	1	2	3	4	5
9.	If I need someone to listen to me, I will go to this teacher.	1	2	3	4	5
10.	I depend on this teacher for advice.	1	2	3	4	5
11.	This teacher frustrates me more than other teachers who teach my class.	1	2	3	4	5

Student Code #_____

		1 Almost never true	2 Seldom true	3 Sometimes true	4 Often true	5 Almost always true
12.	I cannot wait for this year to be over because I do not want to be taught by this teacher again.	1	2	3	4	5
13.	If this teacher is absent, I feel relieved.	1	2	3	4	5
14.	If I am not taught by this teacher, I were able to enjoy my class more.	1	2	3	4	5

Appendix S: Teacher Code Form

Teacher (Made-Up) Code Form

Your Full Name: _____

School: _____

To protect your privacy and confidentiality, create a 4 digit code to be used in the study.

4 digit code: _____

Please use this code on all forms. Do not use real names on surveys or interviews. See the consent form for additional information regarding privacy and confidentiality. This form were stored securely to connect real names to codes.

Appendix T: Teacher Demographics Survey

Teacher Demographics Survey

1. Write your code created for the study: _____

2. What is your gender?
    e. Female
    f. Male
    g. Non-binary
    h. Prefer not to answer

3. What is your race/ethnicity?
    h. Asian/Pacific Islander
    i. Black/African American
    j. Latinx
    k. Mixed:_____
    l. White/Caucasian
    m. Other:_____
    n. Prefer not to answer

4. What grade level are you currently teaching?
    a. 9th grade
    b. 10th grade

5. How many years have you been teaching?
    a. 1-3 years
    b. 4-7 years
    c. 8-10 years
    d. 10 or more years

6. What is your highest level of education (completed)?
    a. Associates Degree
    b. Bachelor's Degree
    c. Master's Degree
    d. Doctoral Degree
    e. Other: _____
    f. Prefer not to answer

Appendix U: Teacher-Student Relationship Inventory

Teacher Code #_____

Student Code #_____

		1 Almost never true	**2 Seldom true**	**3 Sometimes true**	**4 Often true**	**5 Almost always true**
1.	I enjoy having this student in my class.	1	2	3	4	5
2.	If the student has a problem at home, he/she is likely to ask for my help.	1	2	3	4	5
3.	I would describe my relationship with this student as positive.	1	2	3	4	5
4.	This student frustrates me more than most other students in my class.	1	2	3	4	5
5.	If this student is absent, I will miss him/her.	1	2	3	4	5
6.	The student shares with me things about his/her personal life.	1	2	3	4	5
7.	I cannot wait for this year to be over so that I will not need to teach this student next year.	1	2	3	4	5
8.	If this student is absent, I feel relieved.	1	2	3	4	5
9.	If this student needs help, he/she is likely to ask me for help.	1	2	3	4	5

		1 Almost never true	2 Seldom true	3 Sometimes true	4 Often true	5 Almost always true
10.	The student turns to me for a listening ear or for sympathy.	1	2	3	4	5
11.	If this student is not in my class, I were able to enjoy my class more.	1	2	3	4	5
12.	The student depends on me for advice or help.	1	2	3	4	5
13.	I am happy with my relationship with this student.	1	2	3	4	5
14.	I like this student.	1	2	3	4	5

Appendix V: Representative Student and Teacher Statements on Characteristics of Student-Teacher Relationship

Characteristic	Student Statement	Teacher Statement
Caring	*"if kids are having a hard time at school like with the work, he [the teacher] will actually sit down with you and help you with it [schoolwork]… he will walk around and make sure every person is doing good… we can always ask him for help and he will help us*"	*"let them [students] know we love them".*
	"*he found a website and puts it on just for me so I can learn how to read"*	*"dealing with kids, or students, who have been in trauma who have had trauma, just being patient, understanding"*
	"She's real helpful… if somethings like difficult to explain, she explains it the best way she can, she explains it how it is, she	*"if something happens at home on the weekend prior, it's still on their mind, it's still fresh, and it's still bothering them, that's going to determine the kind of day they have here, cause their angry, their upset, they cannot channel those emotions so I give them space to decompress, obviously they*

	explains how the world works, which is good because it's really gonna help us as young adults to know how to fully do stuff" *"he has couches just for us kids so if someone gets tired they can go sleep on the couch"* "*she [the teacher] doesn't really get angry at us, she's [the teacher] not strict she's not like "do this or else I'll take away this" she gives us strikes, like we would get two strikes and we won't get our incentive at the end of the day… so instead of [the teacher] going like "you got in trouble, go straight to punishment" this keeps us*	*can't do it at home so you have a safe space here to do it".* *"if students come to me and say hey you know my parents or my mom can't pay the rent or we don't have a lot of food so like we have all these resources too we have a resource person here so I put all the stuff up [points to tack board with various printed flyers tacked on it] and then I write things down so there parents can you know they have those phone numbers or those resources or whatever they don't have to struggle to find them"*

	[students] in check, because if we didn't have strikes like you go straight to punishment, no one would have fun".	
Respectful	*"he's respectful, the way he talks to you, and he listens to you"* *"nothing is sugar coated. She keeps it real. That's what I want, you should tell it how it actually is"*	*"I don't treat them as if I'm the warden and you know, theyre down here… I show them respect, it's not like I'm your teacher and you better listen to me. If you come with that mentality you're not going to get anywhere."*
	"I mean you know the kids are having a hard time at school and like with the work he'll actually sit down with you and help you with it. Like my other teacher, Ms. whatever her name is, I	*"I don't' judge them or condemn them"* *"I talk to them like regular kids, I talk to them as if would talk to someone on the street".*

forgot her name, she use to just throw packets on the table and tell me to read it, and I can read like small words but it was like history, like really hard words, and I'm like I can't read it and I'll ask her for help and she would call me like [racist slur] or say I can't read and stuff"

"he might not be as confident to speak on it in front of the other students because he might not be sure hes saying the right thing"

"I'm just myself with it, you can ask any questions, whatever, they're going to get honesty from me"

"I have to just be straight up… I have to be completely transparent and honest [with the students]"

		"It has to make sense for them. With elementary [students] you can kind of distract them from being upset, kind of joke with them, talk about whatever, then they're ready to come back in [the classroom]… with high school [students] you have to address their concern, make it make sense… Once they think I'm trying to fool them, then it's over"
Dependable	*"she's always there for me"*	*"I follow through so they know that I care"*
	"*she [the teacher] got my back"*	*"If I say I'm gonna do something then I'm gonna try do it… I'm not going to give you false promises or false hope"*
	"we can always ask him for help and he will help us"	

"[I like] when someone talks to me"

"she [the teacher] listens to me"

"Letting them know that I'm there, I'm all in, and I show up every day because theyre here, so that's my main focus is just showing up because they're here."

"With any new student, or any person you meet, you have to build that trust, so I always start from a foundation of trust and I let them know hey you can trust me, whatever we talk about is confidential, however I can assist I'm here for you, so I slowly build it and eventually it's like hey I need to talk to you, so I'm really big on trust"

"*A lot of times students just want to vent and tell you whats happening or what they're going through and it's not always for us to figure out how to solve it, it's just they need somebody to listen to them, so my biggest thing is I try to listen*."

"the main thing I try to be intentional with is just listening, making sure I'm always able to listen [to the students]"

Appendix W: Representative Student Samples on Stress

Type of Stress	Student Statement
School Performance	*"I worry about my grades because the thing is this school, the work load is decreased to about half... It's a huge difference. I worry about college. It's not gonna work out well"*
	"Graduating. I'm stressed about graduating, my GPA (grade point average) when I graduate, I wana go to college... I'm not graduating this year though, they say I'm a little bit behind so I should graduate by like December"
Family and Home Life	*"About losing my grandpa… he has some problems".*
	"My mom is getting old, she's 62, she should've been retired by now but she has to work… I don't think I can take care of her, I don't have the confidence in myself if she were to get injured".

Future Uncertainty and Responsibilities	*"I'm about to be 16, so I want to get a job, I want to get a car, but like a job is going to be hard… I don't know how it's gonna be like… tired and stuff"*.
	"Death, you never know when you're gonna die... sometimes when I'm like laying down about to fall asleep I think of stuff my mind starts running around and my mind be like the hell and my heart start racing and sometimes my heart stops beating".
	"I have a fear of hospitals or ambulances or police in general because when I was a kid I would always get taken to hospitals or treatment centers in an ambulance so anytime I would hear noises like weewooweewoo [emergency vehicle siren noise] it gets to me and it makes my heart pound… it would make my mouth dry and everything

Appendix X: Representative Student Samples on Coping

Coping Strategies	Student Statement
Exercise	*"It depends on the situation, but like I don't know… Use my coping skills, I'll go for a walk, go for a jog, work out".*
Avoid	*"I will usually try to walk away… I try to stay away from people for the most part, like if someone tries to fight me me, I say if you punch me, I will fight back, I will start hitting back, but other than that if you don't punch me, you don't attack me, I'm alright".*
	"I explode… Like a volcano"
Talking	*"I'd talk to my wifey… girlfriend… online we see each other quite often… she helps me better than anyone else which is crazy"*
Problem Solve	*"really taking time my time and planning things, I'm not on any timer… oh I have to hurry and do this but I'm like I don't really have to because I can take my time with it and*

	doing that it's gonna be way more better than compared to rushing it… sometimes those thoughts creep back up on… I just gotta take things slow and do things day by day cause like what was that saying? I think its Rome wasn't built in a day, and I imagine all that stuff took like a long time to do".
Access Resources	*"First I would go online and I would search. If I didn't have to access to internet then I would go to nearby quick care and ask for help".*
Sense of Control	*"play a video game to help you chill out… when you're in the video game you're definitely not controlled by anything which can put a lot of relief on your mind, and this is mainly for people who don't feel like they have a lot of control in their life. I'd recommend getting a gang load of video games, I don't care what kind, if it helps you feel like you control something, or better yet, get some Legos, build that… control that, as*

	long as it gives you that bit of sensation that you feel like you are in control of something, then that definitely do it, atleast for me".
Food	*"Get a Dr. Pepper, listen to my music, and really just chill out you know, or maybe get a vanilla Frappuccino"*

REFERENCES

Ainsworth, M. S. (1979). Infant–mother attachment. *American Psychologist, 34*(10), 932–937. https://doi.org/10.1037/0003-066X.34.10.932

Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*(4), 333. https://doi.org/10.1037/0003-066X.46.4.333

Akin, I., & Radford, L. (2018). Exploring the development of student self-esteem and resilience in urban schools. *Contemporary Issues in Education Research*, 11(1), 15-22. http://dx.doi.org/10.19030/cier.v11i1.10118

Alvarez, A., Milner, H. R., & Delale-O'Connor, L. (2016). Race, trauma, and education: What educators need to know. In But I don't see color (pp. 27-40). Brill.

American Psychological Association (2014). *Stress in America: Are teens adopting adults' stress habits?* Retrieved from: https://www.apa.org/news/press/releases/stress/2013/stress-report.pdf

American Psychological Association (2018). *Stress in America: Generation Z.* Retrieved from https://www.apa.org/news/press/releases/stress/2018/stress-gen-z.pdf

American Psychological Association (2020). *APA dictionary of psychology.* Retrieved from https://dictionary.apa.org/adolescence

Anderson, R. E., Saleem, F. T., & Huguley, J. P. (2019). Choosing to see the racial stress that afflicts our Black students. *Phi Delta Kappan*, 101(3), 20. https://doi.org/10.1177/0031721719885911

Ang, R. P. (2005). Development and validation of the teacher-student relationship inventory using exploratory and confirmatory factor analysis. *The Journal of Experimental Education*, *74*(1), 55-74. https://doi.org/10.3200/JEXE.74.1.55-74

Ang, R. P., Ong, S. L., & Li, X. (2020). Student version of the teacher–student relationship inventory (S-TSRI): Development, validation and invariance. *Frontiers in Psychology, 11*(1724), 1-13. https://doi.org/10.3389/fpsyg.2020.01724

Annamma, S., Connor, D., & Ferri, B. (2013). Dis/ability critical race studies (DisCrit): theorizing at the intersections of race and dis/ability. *Race Ethnicity and Education*, 16(1), 1-31. https://doi.org/10.1080/13613324.2012.730511

Annamma, S., Morrison, D., & Jackson, D. (2014). Disproportionality fills in the gaps: Connections between achievement, discipline and special education in the School-to-Prison Pipeline. *Berkeley Review of Education*, 5(1), 53-87. https://doi.org/10.5070/B85110003

Anniko, M. K., Boersma, K., & Tillfors, M. (2019). Sources of stress and worry in the development of stress-related mental health problems: A longitudinal investigation from early- to mid-adolescence. *Anxiety, Stress & Coping: An International Journal, 32*(2), 155–167. https://doi.org/10.1080/10615806.2018.1549657

Anniko, M. K., Boersma, K., van Wijk, N. P. L., Byrne, D., & Tillfors, M. (2018). Development of a Shortened Version of the Adolescent Stress Questionnaire (ASQ-S): Construct validity and gender invariance in a large sample of Swedish adolescents. *Scandinavian Journal of Child and Adolescent Psychiatry and Psychology*, *6*(1), 4-15. https://doi.org/10.21307/sjcapp-2018-001

Ansari, A., Hofkens, T. L., & Pianta, R. C. (2020). Teacher-student relationships across the first seven years of education and adolescent outcomes. *Journal of Applied Developmental Psychology*, *71*(101200), 1-12. https://doi.org/10.1016/j.appdev.2020.101200

Areba, E. M., Taliaferro, L. A., Forster, M., McMorris, B. J., Mathiason, M. A., & Eisenberg, M. E. (2021). Adverse childhood experiences and suicidality: school connectedness as a protective factor for ethnic minority adolescents. *Children and Youth Services Review*, 120(105637), 1-9. https://doi.org/10.1016/j.childyouth.2020.105637

Atwool, N. (2006). Attachment and resilience: Implications for children in care. *Child Care in Practice*, *12*(4), 315-330. https://doi.org/10.1080/13575270600863226

Baeva, I. A., Zinchenko, Y. P., & Laptev, V. V. (2016). Psychological resources of modern Russian adolescents' resilience to violence in the educational environment. *Psychology in Russia*, 9(3), 159-172. http://dx.doi.org/10.11621/pir.2016.0311

Bahr, N., & Pendergast, D. (2006). Adolescence: A useful concept for this millennium. Curriculum Perspectives, 26(1), 67-73.

Barwick, M. A., Cohen, N. J., Horodezky, N. B., & Lojkasek, M. (2004). Infant communication and the mother–infant relationship: The importance of level of risk and construct measurement. *Infant Mental Health Journal: Official Publication of the World Association for Infant Mental Health*, *25*(3), 240-266. https://doi.org/10.1002/imhj.20000

Berchiatti, M., Ferrer, A., Badenes-Ribera, L., & Longobardi, C. (2021). School adjustments in children with attention deficit hyperactivity disorder (ADHD): Peer relationships, the quality of the student-teacher relationship, and children's academic and behavioral competencies. *Journal of Applied School Psychology*, 38(3), 241-261. https://doi.org/10.1080/15377903.2021.1941471

Bergin, C., & Bergin, D. (2009). Attachment in the classroom. *Educational Psychology Review*, 21(2), 141-170. https://doi.org/10.1007/s10648-009-9104-0

Bick, J., Fox, N., Zeanah, C., & Nelson, C. A. (2017). Early deprivation, atypical brain development, and internalizing symptoms in late childhood. *Neuroscience*, *342*, 140-153. https://doi.org/10.1016/j.neuroscience.2015.09.026

Blacher, J., Baker, B. L., & Eisenhower, A. S. (2009). Student–teacher relationship stability across early school years for children with intellectual disability or typical development. *American Journal on Intellectual and Developmental Disabilities*, 114(5), 322-339. https://doi.org/10.1352/1944-7558-114.5.322

Bradley, R., Doolittle, J., & Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education, 17*(1), 4-23. https://doi.org/10.1007/s10864-007-9058-6

Calvete, E., Orue, I., & Hankin, B. L. (2013). Transactional relationships among cognitive vulnerabilities, stressors, and depressive symptoms in adolescence. *Journal of Abnormal Child Psychology*, *41*(3), 399-410. https://doi.org/10.1007/s10802-012-9691-y

Cancio, E. J., & Johnson, J. W. (2007). Level systems revisited: An important tool for educating students with emotional and behavioral disorders. *International Journal of Behavioral Consultation and Therapy*, 3(4), 512–527. https://doi.org/10.1037/h0100820

Capern, T., & Hammond, L. (2014). Establishing positive relationships with secondary gifted students and students with emotional/behavioural disorders: Giving these diverse learners what they need. *Australian Journal of Teacher Education (Online)*, *39*(4), 46-67. http://doi.org/10.14221/ajte.2014v39n4.5

Carballo, J. J., Llorente, C., Kehrmann, L., Flamarique, I., Zuddas, A., Purper-Ouakil, D., Hoekstra, P. J., Coghill, D., Schulze, U., Dittmann, R. W., Buitelaar, J. K., Castro-Fornieles, J., Lievesley, K., Santosh, P., Arango, C., & STOP Consortium (2020). Psychosocial risk factors for suicidality in children and adolescents. *European Child and Adolescent Psychiatry*, 29(6), 759–776. https://doi.org/10.1007/s00787-018-01270-9

Charmaraman, L., Mueller, M.K. & Richer, A.M. (2020). The role of pet companionship in online and offline social interactions in adolescence. *Child Adolescent Social Work Journal*, 37, 589–599. https://doi.org/10.1007/s10560-020-00707-y

Cianfarani, S., & Pampanini, V. (2021). The impact of stress on health in childhood and adolescence in the era of the COVID-19 pandemic. *Hormone Research in Paediatrics,* 94(5-6), 0-4. http://dx.doi.org/10.1159/000517460

Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science, 1*(3), 98-101. https://doi.org/10.1111/1467-8721.ep10768783

Cohen, S. (2004). Social relationships and health. *The American Psychologist*, *59*(8), 676–684. https://doi.org/10.1037/0003-066X.59.8.676

Connor, D., Cavendish, W., Gonzalez, T., & Jean-Pierre, P. (2019) Is a bridge even possible over troubled waters? The field of special education negates the overrepresentation of minority students: a DisCrit analysis. *Race Ethnicity and Education*, 22(6), 723-745, https://doi.org/10.1080/13613324.2019.1599343

Cullinan, D., & Sabornie, E. J. (2004). Characteristics of emotional disturbance in middle and high school students. *Journal of Emotional and Behavioral Disorders*, *12*(3), 157–167. https://doi.org/10.1177/10634266040120030301

Cumming, M. M., Smith, S. W., & O'Brien, K. (2018). Perceived stress, executive function, perceived stress regulation, and behavioral outcomes of adolescents with and without significant behavior problems. *Psychology in the Schools*, 56(9), 1359-1380. http://dx.doi.org/10.1002/pits.22293

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage Publications.

d'Abreu, A., Castro-Olivo, S., Ura, S. K., & Furrer, J. (2021). Hope for the future: A qualitative analysis of the resettlement experience of Syrian refugee adolescents and parents. *School Psychology International*, 42(2), 132-156. https://doi.org/10.1177/0143034320983595

Danese, A., Smith, P., Chitsabesan, P., & Dubicka, B. (2020). Child and adolescent mental health amidst emergencies and disasters. *The British Journal of Psychiatry*, *216*(3), 159-162. http://dx.doi.org/10.1192/bjp.2019.244

De Anda, D., Baroni, S., Boskin, L., Buchwald, L., Morgan, J., Ow, J., ... & Weiss, R. (2000). Stress, stressors and coping among high school students. *Children and Youth Services Review*, *22*(6), 441-463.

Diers, M. (2020). Strengthening resilience in school--A narrative examination of how teachers promote resilience by providing social support. *International Dialogues on Education: Past and Present*, *7*(1), 128-137. https://doi.org/10.1002/pits.22293

Dods, J. (2015). Bringing trauma to school: Sharing the educational experience of three youths. *Exceptionality Education International*, *25*(1), 112-135. http://dx.doi.org/10.5206/eei.v25i1.7719

Englund, M. M., Kuo, S. I.-C., Puig, J., & Collins, W. A. (2011). Early roots of adult competence: The significance of close relationships from infancy to early

adulthood. *International Journal of Behavioral Development*, *35*(6), 490–496. https://doi.org/10.1177/0165025411422994

Eppelmann, L., Parzer, P., Lenzen, C., Bürger, A., Haffner, J., Resch, F., & Kaess, M. (2016). Stress, coping and emotional and behavioral problems among German high school students. *Mental Health & Prevention*, *4*(2), 81-87. https://doi.org/10.1016/j.mhp.2016.03.002

Farrell, A. K., Simpson, J. A., Carlson, E. A., Englund, M. M., & Sung, S. (2017). The impact of stress at different life stages on physical health and the buffering effects of maternal sensitivity. *Health Psychology*, 36(1), 35. https://doi:10.1037/hea0000424

Folmer-Annevelink, E., Doolaard, S., Mascareño, M., & Bosker, R. J. (2010). Class size effects on the number and types of student-teacher interactions in primary classrooms. *The Journal of Classroom Interaction*, 45(2) 30-38.

Forster, M., Gower, A. L., Borowsky, I. W., & McMorris, B. J. (2017). Associations between adverse childhood experiences, student-teacher relationships, and non-medical use of prescription medications among adolescents. *Addictive Behaviors*, *68*, 30-34. https://doi.org/10.1016/j.addbeh.2017.01.004

Franke, H. A. (2014). Toxic stress: effects, prevention and treatment. *Children*, *1*(3), 390-402. http://dx.doi.org/10.3390/children1030390

Freire, S., Pipa, J., Aguiar, C., Vaz da Silva, F., & Moreira, S. (2020). Student–teacher closeness and conflict in students with and without special educational needs. *British Educational Research Journal*, *46*(3), 480-499. https://doi.org/10.1002/berj.3588

Frydenberg, E., & Lewis, R. (2000). Teaching coping to adolescents: when and to whom? *American Educational Research Journal, 37*(3), 727-745. http://dx.doi.org/10.3102/00028312037003727

Gage, N. A. (2013). Characteristics of students with emotional disturbance manifesting internalizing behaviors: A latent class analysis. *Education & Treatment of Children, 36*(4), 127–145. https://doi.org/10.1353/etc.2013.0038

Garcia, LM, R., Arizala, A., & Garcia, FJ. (2018). The importance of social relationships as a mechanism to improve the health and quality of life of the elderly, from an interdisciplinary perspective. *Spanish Journal of Geriatrics and Gerontology*, *53*(5), 268-273.

Gartland, D., Riggs, E., Muyeen, S., Giallo, R., Afifi, T. O., MacMillan, H., ... & Brown, S. J. (2019). What factors are associated with resilient outcomes in children exposed to social adversity? A systematic review. *BMJ open*, *9*(4), 1-14. http://dx.doi.org/10.1136/bmjopen-2018-024870

Gelkopf, M., & Berger, R. (2009). A school-based, teacher-mediated prevention program (ERASE-Stress) for reducing terror-related traumatic reactions in Israeli youth: A quasi-randomized controlled trial. *Journal of Child Psychology and Psychiatry*, 50(8), 962-971. https://doi.org/10.1111/j.1469-7610.2008.02021.x

Ginwright, S. (2018, May 31). The future of healing: Shifting from trauma informed care to healing centered engagement. Retrieved from https://medium.com/@ginwright/the-future-of-healingshifting-from-trauma-informed-care-to-healing-centered-engagement-634f557ce69c

Guo, J., Liu, L., Zhao, B., & Wang, D. (2020). Teacher support and mental well-being in Chinese adolescents: the mediating role of negative emotions and resilience. *Frontiers in Psychology*, 10(3081), 1-11. http://doi.org/10.3389/fpsyg.2019.03081

Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625-638. https://doi.org/10.1111/1467-8624.00301

Herman, S. L., & Lester, D. (1994). Physical symptoms of stress, depression, and suicidal ideation in high school students. *Adolescence*, *29*(115), 639-641.

Hickey, G., Smith, S., O'Sullivan, L., McGill, L., Kenny, M., MacIntyre, D., & Gordon, M. (2020). Adverse childhood experiences and trauma informed practices in second chance education settings in the Republic of Ireland: An inquiry-based study. *Children and Youth Services Review*, *118*(105338), 1-16. http://dx.doi.org/10.1016/j.childyouth.2020.105338

Hill, D. C., Moss, R. H., Sykes-Muskett, B., Conner, M., & O'Connor, D. B. (2018). Stress and eating behaviors in children and adolescents: Systematic review and meta-analysis. *Appetite*, *123*, 14-22. https://doi.org/10.1016/j.appet.2017.11.109

Homan, K. J. (2018). Secure attachment and eudaimonic well-being in late adulthood: The mediating role of self-compassion. *Aging and Mental Health*, *22*(3), 363-370. https://doi.org/10.1080/13607863.2016.1254597

Hoferichter, F., Raufelder, D., & Eid, M. (2014). The mediating role of socio-motivational relationships in the interplay of perceived stress, neuroticism, and test anxiety among adolescent students. *Psychology in the Schools*, 51(7), 736-752. https://doi.org/10.1002/pits.21778

Hornor, G. (2015). Childhood trauma exposure and toxic stress: What the PNP needs to know. *Journal of Pediatric Health Care, 29*(2), 191-198. https://doi.org/10.1016/j.pedhc.2014.09.006

Ibrahim, A., & El Zaatari, W. (2020). The teacher–student relationship and adolescents' sense of school belonging. *International Journal of Adolescence and Youth*, *25*(1), 382-395. https://doi.org/10.1080/02673843.2019.1660998

Jaureguizar, J., Garaigordobil, M., & Bernaras, E. (2018). Self-concept, social skills, and resilience as moderators of the relationship between stress and childhood depression. *School Mental Health*, 10(4), 488-499. https://doi.org/10.1007/s12310-018-9268-1

Jefferies, P., McGarrigle, L., & Ungar, M. (2019). The CYRM-R: A Rasch-validated revision of the Child and Youth Resilience Measure. *Journal of Evidence-Based Social Work, 16*(1), 70-92. https://doi.org/10.1080/23761407.2018.1548403

Jeong, J., Franchett, E. E., Ramos de Oliveira, C. V., Rehmani, K., & Yousafzai, A. K. (2021). Parenting interventions to promote early child development in the first three years of life: A global systematic review and meta-analysis. *PLOS Medicine*, 18(5), 1-51. https://doi.org/10.1371/journal.pmed.1003602

Johnson, B. (2008). Teacher–student relationships which promote resilience at school: A micro-level analysis of students' views. *British Journal of Guidance & Counselling*, 36(4), 385-398. https://doi.org/10.1080/03069880802364528

Johnson-Staub, C. (2017). Equity Starts Early: Addressing Racial Inequities in Child Care and Early Education Policy. *Center for Law and Social Policy.* Retrieved from: https://eric.ed.gov/?id=ED582788

Jones, E. A., Mitra, A. K., & Bhuiyan, A. R. (2021). Impact of COVID-19 on mental health in adolescents: A systematic review. *International Journal of Environmental Research and Public Health*, 18(5), 1-9. http://doi.org/10.3390/ijerph18052470

Kassis, W., Artz, S., Maurovic, I., & Simões, C. (2018). What doesn't kill them doesn't make them stronger: Questioning our current notions of resilience. *Child Abuse and Neglect*, 78, 71-84. https://doi.org/10.1016/j.chiabu.2017.12.011

Keizer, R., Helmerhorst, K. O., & van Rijn-van Gelderen, L. (2019). Perceived quality of the mother–adolescent and father–adolescent attachment relationship and adolescents' self-esteem. *Journal of Youth and Adolescence*, *48*(6), 1203-1217. https://doi.org/10.1007/s10964-019-01007-0

Kennedy, A. M., Haydon, T., & Plano Clark, V. L. (2022). Building student-teacher relationships in an alternative education setting: a qualitative interview study. *Preventing School Failure: Alternative Education for Children and Youth*, 1-12. https://doi.org/10.1080/1045988X.2022.2109564

Kern, L., Dunlap, G., Childs, K. E., & Clarke, S. (1994). Use of a classwide self-management program to improve the behavior of students with emotional and behavioral disorders. *Education and Treatment of Children*, 17(4), 445-458.

King, L., Jolicoeur-Martineau, A., Laplante, D. P., Szekely, E., Levitan, R., & Wazana, A. (2021). Measuring resilience in children: A review of recent literature and recommendations for future research. *Current Opinion in Psychiatry*, 34(1), 10-21. https://doi.org/10.1097/YCO.0000000000000663

Klasen, F., Oettingen, G., Daniels, J., Post, M., Hoyer, C., & Adam, H. (2010). Posttraumatic resilience in former Ugandan child soldiers. *Child development*, *81*(4), 1096-1113.

Knowles, C., Shannon, E. N., & Lind, J. R. (2021). Animal-assisted activities in the classroom for students with emotional and behavioral disorders. *Children and Youth Services Review*, *131*(106290), 1-8. https://doi.org/10.1016/j.childyouth.2021.106290

Kulkarni, S., Nusbaum, E., & Boda, P. (2021). DisCrit at the margins of teacher education: informing curriculum, visibilization, and disciplinary integration. *Race Ethnicity and Education*, *24*(5), 654-670. https://doi.org/10.1080/13613324.2021.1918404

Kumi-Yeboah, A., & Smith, P. (2017). Cross-cultural educational experiences and academic achievement of Ghanaian immigrant youth in urban public schools. *Education and Urban Society*, 49(4), 434-455. https://doi.org/10.1177/0013124516643764

Kumm, S., Wilkinson, S., & McDaniel, S. (2020). Alternative education settings in the United States. *Intervention in School and Clinic*, 56(2), 123-126. https://doi.org/10.1177/1053451220914895

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, *71*(3), 543-562. https://doi.org/10.1111/1467-8624.00164

Ladd, G. W., & Burgess, K. B. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development*, *70*(4), 910-929. https://doi.org/10.1111/1467-8624.00066

Lambert, M. C., Cullinan, D., Epstein, M. H., & Martin, J. (2021). Differences between students with emotional disturbance, learning disabilities, and without disabilities on the five dimensions of emotional disturbance. *Journal of Applied School Psychology*, 38(1), 58-73. https://doi.org/1080/15377903.2021.1895399

Lan, X., & Zhang, L. (2019). Shields for emotional well-being in Chinese adolescents who switch schools: the role of teacher autonomy support and grit. *Frontiers in Psychology*, 10(2384), 1-11. https://doi.org/10.3389/fpsyg.2019.02384

Lane, K. L., Wehby, J. H., Little, M. A., & Cooley, C. (2005). Students educated in self-contained classrooms and self-contained schools: Part II—How do they progress over time? *Behavioral Disorders*, 30(4), 363-374. https://doi.org/10.1177/019874290503000408

Lanterman, C., Lockwood, A. B., Sealander, K., Winans, S., & Novelli, M. (2021). Expanding the gaze and moving the needle: Inclusion for students with EBD. *Preventing School Failure: Alternative Education for Children and Youth*, 65(3), 185-193. https://doi.org/10.1080/1045988X.2020.1852526

Leonard, N. R., Gwadz, M. V., Ritchie, A., Linick, J. L., Cleland, C. M., Elliott, L., & Grethel, M. (2015). A multi-method exploratory study of stress, coping, and substance use among high school youth in private schools. *Frontiers in Psychology*, *6*(23) 1-16. https://doi.org/10.3389/fpsyg.2015.01028

Lewis, J. (1999). Research into the concept of resilience as a basis for the curriculum for children with EBD. *Emotional and Behavioural Difficulties*, *4*(2), 11-22. https://doi.org/10.1080/1363275990040203

Lidz, C. S. (1983). Emotional disturbance in preschool children. *Teaching Exceptional Children*, 15(3), 164–167. https://doi.org/10.1177/004005998301500310

Lin, H., Yusoff, M. (2013). Psychological distress, sources of stress and coping strategy in high school students. *International Medical Journal*, 20(6) 1-6.

Little, M., & Kobak, R. (2003). Emotional security with teachers and children's stress reactivity: A comparison of special-education and regular-education classrooms. *Journal of Clinical Child and Adolescent Psychology,* 32(1), 127-138. http://doi.org/10.1207/S15374424JCCP3201_12

Longobardi, C., Settanni, M., Prino, L. E., Fabris, M. A., & Marengo, D. (2019). Students' psychological adjustment in normative school transitions from kindergarten to high school: Investigating the role of teacher-student relationship quality. *Frontiers in Psychology, 10*(1238), 1-9. https://doi.org/10.3389/fpsyg.2019.01238

Makhnach, A. V. (2016). Resilience in Russian youth. *International Journal of Adolescence and Youth, 21*(2), 195-214. https://doi.org/10.1080/02673843.2013.815116

Malmir, H., Mahdavi, F. S., Ejtahed, H. S., Kazemian, E., Chaharrahi, A., Mohammadian Khonsari, N., ... & Qorbani, M. (2022). Junk food consumption and psychological distress in children and adolescents: a systematic review and meta-analysis. *Nutritional Neuroscience*, 25(1) 1-21. https://doi.org/10.1080/1028415X.2022.2094856

Marsh, R. J., Higgins, K., Morgan, J., Cumming, T. M., Brown, M., & McCreery, M. (2019). Evaluating school connectedness of students with emotional and behavioral disorders. *Children & Schools*, 41(3), 153-160. https://doi.org/10.1093/cs/cdz013

Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology,* 46(1), 53-83. https://doi.org/10.1016/j.jsp.2007.01.002

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*(3), 227. https://doi.org/10.1037//0003-066X.56.3.227

Masten, A. S. (2018). Resilience theory and research on children and families: Past, present, and promise. *Journal of Family Theory & Review, 10*(1), 12-31. https://doi.org/10.1111/jftr.12255

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53*(2), 205–220. https://doi.org/10.1037/0003-066X.53.2.205

Masten, A. S., & Wright, M. O. (2010). Resilience over the lifespan: Developmental perspectives on resistance, recovery, and transformation. In J. W. Reich, A. J. Zautra, & J. S. Hall (Eds.), *Handbook of adult resilience* (pp. 213–237). The Guilford Press.

Masten, A. S., Herbers, J. E., Cutuli, J. J., & Lafavor, T. L. (2008). Promoting competence and resilience in the school context. *Professional School Counseling,* 12(2), 76-84. https://doi.org/10.1177/2156759X0801200213

McGrath, K. F., & Van Bergen, P. (2015). Who, when, why and to what end? Students at risk of negative student–teacher relationships and their outcomes. *Educational Research Review*, 14, 1-17. https://doi.org/10.1016/j.edurev.2014.12.001

Mclaughlin, K. A., Fairbank, J. A., Gruber, M. J., Jones, R. T., Lakoma, M. D., Pfefferbaum, B., Sampson, N. A., & Kessler, R. C. (2009). Serious emotional disturbance among youths exposed to Hurricane Katrina 2 years post disaster. *Journal of the American Academy of Child and Adolescent Psychiatry, 48*(11), 1069–1078. https://doi.org/10.1097/CHI.0b013e3181b76697

Metzger, A. N., & Hamilton, L. T. (2021). The stigma of ADHD: teacher ratings of labeled students. *Sociological Perspectives*, *64*(2), 258-279. http://dx.doi.org/10.1177/0731121420937739

Mihalas, S., Morse, W. C., Allsopp, D. H., & Alvarez McHatton, P. (2009). Cultivating caring relationships between teachers and secondary students with emotional and behavioral disorders: Implications for research and practice. *Remedial and Special Education, 30*(2), 108-125. https://doi.org/10.1177/0741932508315950

Milas, G., Martinović Klarić, I., Malnar, A., Saftić, V., Šupe-Domić, D., & Slavich, G. M. (2021). The impact of stress and coping strategies on life satisfaction in a national sample of adolescents: A structural equation modelling approach. *Stress and Health*. 37(5), 1026–1034. https://doi.org/10.1002/smi.3050

Morrison, G., Allen M. (2007). Promoting student resilience in school contexts. *Theory Into Practice,* 46(2), 162-169, https://doi.org/10.1080/00405840701233172

Mueser, K. T., & Taub, J. (2008). Trauma and PTSD among adolescents with severe emotional disorders involved in multiple service systems. *Psychiatric Services, 59*(6), 627–634. https://doi.org/10.1176/ps.2008.59.6.627

Mulloy, M. (2011). School-based resilience: How an urban public high school reduced students' risk exposure and promoted their social-emotional development and academic success. *Advances in School Mental Health Promotion,* 4(1), 4-22. https://doi.org/10.1080/1754730X.2011.9715619

Murray, C., & Greenberg, M. T. (2001). Relationships with teachers and bonds with school: Social emotional adjustment correlates for children with and without disabilities. *Psychology in the Schools, 38*(1), 25-41. https://doi.org/10.1002/1520-6807(200101)38:1%3C25::aid-pits4%3E3.0.co;2-c

Neal, D. (2017). Academic resilience and caring adults: The experiences of former foster youth. *Children and Youth Services Review*, 79, 242-248. https://doi.org/10.1016/j.childyouth.2017.06.005

Noor, N. M., & Alwi, A. (2013). Stressors and well-being in low socio-economic status M alaysian adolescents: The role of resilience resources. *Asian Journal of Social Psychology*, 16(4), 292-306. https://doi.org/10.1111/ajsp.12035

Offerman, E. C., Asselman, M. W., Bolling, F., Helmond, P., Stams, G. J. J., & Lindauer, R. J. (2022). Prevalence of adverse childhood experiences in students with emotional and behavioral disorders in special education schools from a multi-informant perspective. *International Journal of Environmental Research and Public Health*, 19(6), 3411. https://doi.org/10.3390/ijerph19063411

Palanichamy, T., Sharma, M. K., Sahu, M., & Kanchana, D. M. (2020). Influence of Esports on stress: A systematic review. *Industrial Psychiatry Journal*, 29(2), 191.

Pallavicini, F., Pepe, A., & Mantovani, F. (2021). Commercial off-the-shelf video games for reducing stress and anxiety: systematic review. *JMIR Mental Health*, 8(8), e28150. https://doi.org/10.2196/28150

Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, *25*(1), 104-112. https://doi.org/10.1080/02673843.2019.1596823

Perkins, K. N., Carey, K., Lincoln, E., Shih, A., Donalds, R., Kessel Schneider, S., ... & Green, J. G. (2021). School connectedness still matters: The association of school connectedness and mental health during remote learning due to COVID-19. *The Journal of Primary Prevention*, 42(6), 641-648. http://dx.doi.org/10.1007/s10935-021-00649-w

Perry, B. D. (2009). Examining child maltreatment through a neurodevelopmental lens: Clinical applications of the neurosequential model of therapeutics. *Journal of Loss and Trauma*, 14(4), 240-255. https://doi.org/10.1080/15325020903004350

Perry, B. D., Pollard, R. A., Blakley, T. L., Baker, W. L., & Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation, and "use-dependent" development of the brain: How "states" become "traits". *Infant Mental Health Journal*, 16(4), 271-291. https://doi.org/10.1002/1097-0355(199524)16:4%3C271::aid-imhj2280160404%3E3.0.co;2-b

Phillips, S. P., Reipas, K., & Zelek, B. (2019). Stresses, strengths and resilience in adolescents: a qualitative study. *The Journal of Primary Prevention*, 40(6), 631-642. http://dx.doi.org/10.1007/s10935-019-00570-3

Pikulski, P. J., Pella, J. E., Casline, E. P., Hale, A. E., Drake, K., & Ginsburg, G. S. (2020). School connectedness and child anxiety. *Journal of Psychologists and Counsellors in Schools, 30*(1), 13-24. http://doi.org/10.1017/jgc.2020.3

Pollard, J. A., Hawkins, J. D., & Arthur, M. W. (1999). Risk and protection: Are both necessary to understand diverse behavioral outcomes in adolescence? *Social Work Research, 23*(3), 145–158. https://doi.org/10.1093/swr/23.3.145

Prince-Embury, S. (2015). Risk behavior and personal resiliency in adolescents. *Canadian Journal of School Psychology*, *30*(3), 209-217. https://doi.org/10.1177/0829573515577601

Rahdar, A., & Galván, A. (2014). The cognitive and neurobiological effects of daily stress in adolescents. *Neuro Image*, *92*, 267-273. https://doi.org/10.1016/j.neuroimage.2014.02.007

Robinson, N. S., Garber, J., & Hilsman, R. (1995). Cognitions and stress: direct and moderating effects on depressive versus externalizing symptoms during the junior high school transition. *Journal of Abnormal Psychology, 104*(3), 453-463. https://doi.org/10.1037/0021-843x.104.3.453

Romeo, R. D. (2013). The teenage brain: The stress response and the adolescent brain. *Current Directions in Psychological Science, 22*(2), 140-145. https://doi.org/10.1177/0963721413475445

Roorda, D. L., & Koomen, H. M. (2021). Student-teacher relationships and students' externalizing and internalizing behaviors: A cross-lagged study in secondary education. *Child Development, 92*(1), 174-188. https://doi.org/10.1111/cdev.13394

Rudasill, K. M., Reio Jr, T. G., Stipanovic, N., & Taylor, J. E. (2010). A longitudinal study of student–teacher relationship quality, difficult temperament, and risky behavior from childhood to early adolescence. *Journal of School Psychology, 48*(5), 389-412. https://doi.org/10.1016/j.jsp.2010.05.001

Sabin, E. P. (1993). Social relationships and mortality among the elderly. *Journal of Applied Gerontology, 12*(1), 44–60. https://doi.org/10.1177/073346489301200105

Sanders, J., Munford, R., & Liebenberg, L. (2016). The role of teachers in building resilience of at risk youth. *International Journal of Educational Research, 80*, 111-123. https://doi.org/10.1016/j.ijer.2016.10.002

Scanlon, G., McEnteggart, C., & Barnes-Holmes, Y. (2020). Attitudes to pupils with EBD: An implicit approach. *Emotional and Behavioural Difficulties, 25*(2), 111-124. https://doi.org/10.1080/13632752.2020.1729609

Selçuk, E. B., Demir, A. Ç., Erbay, L. G., Özcan, Ö. Ö., Gürer, H., & Dönmez, Y. E. (2021). Anxiety, depression and post-traumatic stress disorder symptoms in adolescents during the COVID-19 outbreak and associated factors. *International Journal of Clinical Practice*, 75(11), e14880. http://dx.doi.org/10.1111/ijcp.14880

Selye, H. (1976). Forty years of stress research: principal remaining problems and misconceptions. *Canadian Medical Association Journal*, *115*(1), 53.

Skinner, E. A., & Saxton, E. A. (2020). The development of academic coping across late elementary and early middle school: Do patterns differ for students with differing motivational resources? *International Journal of Behavioral Development*, *44*(4), 339-353. https://doi.org/10.1177/0165025419896423

Skrove, M., Romundstad, P., & Indredavik, M. S. (2015). Chronic multisite pain in adolescent girls and boys with emotional and behavioral problems: the Young-HUNT study. *European Child & Adolescent Psychiatry*, 24(5), 503-515. http://dx.doi.org/10.1007/s00787-014-0601-4

Slavich, G. M., Stewart, J. G., Esposito, E. C., Shields, G. S., & Auerbach, R. P. (2019). The Stress and Adversity Inventory for Adolescents (Adolescent STRAIN): Associations with mental and physical health, risky behaviors, and psychiatric diagnoses in youth seeking treatment. *Journal of Child Psychology and Psychiatry*, 60(9), 998-1009. https://doi.org/10.1111/jcpp.13038

Sointu, E. T., Savolainen, H., Lappalainen, K., & Lambert, M. C. (2017). Longitudinal associations of student–teacher relationships and behavioural and emotional strengths on academic achievement. *Educational Psychology*, 37(4), 457-467. https://doi.org/10.1080/01443410.2016.1165796

Solberg, V. S. H., Carlstrom, A. H., Howard, K. A., & Jones, J. E. (2007). Classifying at-risk high school youth: The influence of exposure to community violence and protective factors on academic and health outcomes. *The Career Development Quarterly*, 55(4), 313-327.

State, T. M., & Kern, L. (2017). Life satisfaction among high school students with social, emotional, and behavioral problems. *Journal of Positive Behavior Interventions, 19*(4), 205-215. https://doi.org/10.1177/1098300717714573

Stewart, D., & Sun, J. (2004). How can we build resilience in primary school aged children? The importance of social support from adults and peers in family, school and community settings. *Asia Pacific Journal of Public Health, 16*(1), 37-41. https://doi.org/10.1177/10105395040160OS10

Substance Abuse and Mental Health Services Administration, National Center for Trauma-Informed Care. (2015). Trauma-informed approach. Retrieved from http://www.samhsa.gov/nctic/trauma-interventions

Suedfeld, P. (1997), Reactions to societal trauma: distress and/or eustress. *Political Psychology*, 18(4), 849-861. https://doi.org/10.1111/0162-895X.00082

Suldo, S. M., & Huebner, E. S. (2004). Does life satisfaction moderate the effects of stressful life events on psychopathological behavior during adolescence? *School Psychology Quarterly, 19*(2), 93-105. https://doi.org/10.1521/scpq.19.2.93.33313

Sulkowski, M. L., & Simmons, J. (2018). The protective role of teacher–student relationships against peer victimization and psychosocial distress. *Psychology in the Schools*, 55(2), 137-150.

Sullivan, T. N., Sutherland, K. S., Lotze, G. M., Helms, S. W., Wright, S. A., & Ulmer, L. J. (2015). Problem situations experienced by urban middle school students with high incidence disabilities that impact emotional and behavioral adjustment. *Journal of Emotional and Behavioral Disorders*, *23*(2), 101-114. https://doi.org/10.1177/1063426614528243

Thakur, H., & Cohen, J. R., (2022) Short-term and long-term resilience among at-risk adolescents: The role of family and community settings, *Journal of Clinical Child & Adolescent Psychology*, 51:5, 637-650, https://doi.org/10.1080/15374416.2020.1756296

Thomas, M. S., Crosby, S., & Vanderhaar, J. (2019). Trauma-informed practices in schools across two decades: An interdisciplinary review of research. *Review of Research in Education*, 43(1), 422-452. https://doi.org/10.3102/0091732X18821123

Twenge, J. M., Cooper, A. B., Joiner, T. E., Duffy, M. E., & Binau, S. G. (2019). Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005–2017. *Journal of Abnormal Psychology*, *128*(3), 185-199. https://doi.org/10.1037/abn0000410

U.S. Department of Education. (2020). *42nd annual report to Congress on the implementation of the Individuals with Disabilities Education Act, 2020*. Retrieved from https://sites.ed.gov/idea/files/42nd-arc-for-idea.pdf

U.S. Department of Education. (2021) *Institute of Education Sciences, National Center for Education Statistics, CCD Public school district data for the 2020-2021, 2021-2022 school years.* Retrieved from http://nces.ed.gov

Vance, J. E., Fernandez, G., & Biber, M. (1998). Educational progress in a population of youth with aggression and emotional disturbance: The role of risk and protective

factors. *Journal of Emotional and Behavioral Disorders*, *6*(4), 214-221. https://doi.org/10.1177/106342669800600403

Vergunst, F., Zheng, Y., Domond, P., Vitaro, F., Tremblay, R. E., Nagin, D., ... & Côté, S. M. (2021). Behavior in childhood is associated with romantic partnering patterns in adulthood. *Journal of Child Psychology and Psychiatry*, 62(7), 842-852. https://doi.org/10.1111/jcpp.13329

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1997). Fostering educational resilience in inner-city schools. *Children and Youth: Interdisciplinary Perspectives* (pp. 119–140). Sage Publications, Inc.

Wang, C., Hatzigianni, M., Shahaeian, A., Murray, E., & Harrison, L. J. (2016). The combined effects of teacher-child and peer relationships on children's social-emotional adjustment. *Journal of School Psychology*, *59*, 1-11. http://dx.doi.org/10.1016/j.jsp.2016.09.003

Walsh, W. A., Dawson, J., & Mattingly, M. J. (2010). How are we measuring resilience following childhood maltreatment? Is the research adequate and consistent? What is the impact on research, practice, and policy? *Trauma, Violence, & Abuse*, *11*(1), 27-41. http://doi.org/10.1177/1524838009358892

Weeden, M., Wills, H. P., Kottwitz, E., & Kamps, D. (2016). The effects of a class-wide behavior intervention for students with emotional and behavioral disorders. *Behavioral Disorders*, 42(1), 285–293. https://doi.org/10.17988/BD-14-12.1

Willis, A. S., & Nagel, M. C. (2015). The role that teachers play in overcoming the effects of stress and trauma on children's social psychological development: evidence from

Northern Uganda. *Social Psychology of Education*, *18*(1), 37-54. https://doi.org/10.1007/s11218-014-9282-6

Yeager, K. H., Morgan, J. J., Brown, M. R., Higgins, K., Jackson, I. (2020) Transition-related social support of high school students with emotional and behavioral disorders, *Preventing School Failure: Alternative Education for Children and Youth*, 64:3, 230-239, https://doi.org/10.1080/1045988X.2020.1732283

Yildiz, M., Demirhan, E., & Gurbuz, S. (2019). Contextual socioeconomic disadvantage and adolescent suicide attempts: a multilevel investigation. *Journal of Youth and Adolescence*, 48(4), 802-814. https://doi.org/10.1007/s10964-018-0961-z

Zimmerman, M. A. (2013). Resiliency theory: A strengths-based approach to research and practice for adolescent health. https://doi.org/10.1177/1090198113493782

Zirkus, K. J., & Morgan, J. J. (2020). Enhancing self-determination skills for students with emotional and behavioral disorders. *Intervention in School and Clinic*, 55(4), 238-244. https://doi.org/10.1177/1053451219855743

Zolkoski, S. M. (2019). The importance of teacher-student relationships for students with emotional and behavioral disorders. *Preventing School Failure: Alternative Education for Children and Youth*, 63(3), 236-241. https://doi.org/10.1080/1045988X.2019.1579165

Zolkoski, S., Bullock, L., & Gable, R. (2016). Factors associated with student resilience: perspectives of graduates of alternative education programs. *Preventing School Failure: Alternative Education for Children and Youth*, 60(3), 231-243. https://doi.org/10.1080/1045988X.2015.1101677

CURRICULUM VITAE

SCOTIA HAMMOND

scotiahammond@gmail.com

EDUCATION

2022 **Ph.D. – Special Education**
University of Nevada, Las Vegas
Committee: Dr. Joseph Morgan (Chair), Dr. Wendy Rodgers, Dr. Heather Van Ness, Dr. Wendy Hoskins
Dissertation: Exploring the Intersection of Stress, Resilience, and Relationship with Teacher among High School Students with Emotional and Behavioral Disorders

2018 **M.Ed. – Special Education**
University of Nevada, Las Vegas
Track: Emotional Disturbance with Association for Behavior Analysis International Verified Course Sequence

2017 **BA – Psychology**
University of Nevada, Las Vegas

UNIVERSITY TEACHING EXPERIENCE

Fall 2022

Instructor (In person) EDSP 423: Collaborative Consultation in Special Education
University of Nevada, Las Vegas

Instructor (Online) EDSP 432: Serving Individuals with Disabilities and Their Families
University of Nevada, Las Vegas

Instructor (In person) EDSP 453: Behavior Management Techniques for Students
University of Nevada, Las Vegas

Instructor (In person) ESP 717B: Seminar in Advanced Curriculum Development
University of Nevada, Las Vegas

Summer 2022

Instructor (Online) EDSP 411: Students with Disabilities in General Education Settings
University of Nevada, Las Vegas

Spring 2022

Instructor (In person) EDSP 431: Legal Aspects of Special Education
University of Nevada, Las Vegas

Fall 2021

Instructor (Online) EDSP 411: Students with Disabilities in General Education Settings
University of Nevada, Las Vegas

Instructor (Hybrid) EDSP 423: Collaborative Consultation in Special Education
University of Nevada, Las Vegas

Spring 2021

Instructor (Online) EDSP 411: Students with Disabilities in General Education Settings
University of Nevada, Las Vegas

Fall 2020

Instructor (Online) EDSP 411: Students with Disabilities in General Education Settings
University of Nevada, Las Vegas

Instructor (Online) EDSP 441: Characteristics and Inclusive Strategies for Students with Mild to Moderate Disabilities
University of Nevada, Las Vegas

Spring 2020

Instructor (Online) EDSP 411: Students with Disabilities in General Education Settings
University of Nevada, Las Vegas

Instructional Assistant for Dr. Heather Van Ness (Hybrid) ESP 733: Management and Modification of Students with Special Needs
University of Nevada, Las Vegas

Fall 2019

Instructor (Online) EDSP 411: Students with Disabilities in General Education Settings
University of Nevada, Las Vegas

Instructor, under the advisement of Dr. Wendy Rodgers (In person) ESP 705: Psychological and Sociological Problems of Students with Emotional Disabilities
University of Nevada, Las Vegas

Instructor, co-taught with Nancy Brown (In person) ESP 717B: Seminar in Advanced Curriculum Development
University of Nevada, Las Vegas

PRESENTATIONS

Hammond, S., Huff, S. (2022, November). *A Systematic Literature Review: Exploring Outcomes Related to Students with Emotional and Behavioral Disorders who Transition to Postsecondary Education.* Presentation at the Teacher Educators for Children with Behavior Disorders (TECBD) conference.

Hammond, S. (2022, November). *Exploring the Dynamics of Resiliency in Students with Emotional and Behavioral Disorders.* Presentation at the Teacher Educators for Children with Behavior Disorders (TECBD) conference.

Hammond, S. (2022, November). *Building Bridges between Student Stress, Resiliency, and Student-teacher Relationship.* Conversation table at the Teacher Education Division (TED) for the Council for Exceptional Children (CEC).

Hammond, S. (2022, November). *Building Bridges between Students with Emotional and Behavioral Disorders and Their Teachers.* Kaleidoscope poster presentation at the Teacher Education Division (TED) for the Council for Exceptional Children (CEC).

Hammond, S., Hammond. T., Morgan, J. (2022, November). *Building Bridges between Virtual Learning and High School Students with Emotional and Behavioral Disorders.* Poster presentation at the Teacher Education Division (TED) for the Council for Exceptional Children (CEC).

Hammond, S. (2022, July). *Exploring the Complexities of Student Stress among High School Students with Emotional and Behavioral Disorders*. Poster presentation at Building Bridges Virtual Conference (BBV).

Hammond, S. (2019, November). *Identifying the Effects of Trauma on a Student: A Review of the Literature.* Kaleidoscope poster presentation at the Teacher Education Division (TED) for the Council for Exceptional Children (CEC).

Hammond, S. (2019, October). *Issues in Early Childhood and Adolescent Behavior*. Invited to guest lecture for EDSP 453: Behavior Management Techniques for Students with Disabilities at the University of Nevada, Las Vegas.

Hammond, S. (2019, October). *Supporting Students Social, Emotional, and Behavioral Needs within the Classroom.* Invited to lead a professional development workshop for Nevada Partnership for Inclusive Education.

GRANTS WRITTEN

Office of Special Education Programs Grant (OSEP). Field Initiated 14, Initial Careers 84.324N. *Project Power* (for class credit ESP 789: Grant Writing for Human Services).

PUBLICATIONS

Hammond, S., Taylor, J., Hammond, T., Morgan, J. (in progress). *Investigating the impact of virtual learning on high school students with emotional and behavioral disorders.* Submitting to Beyond Behavior.

Lee, R., Hammond, S. (in progress). *Cultural responsiveness in the field of applied behavior analysis.*

OTHER WORK EXPERIENCE

2022 - Current	Visiting Lecturer University of Nevada, Las Vegas, Nevada
2022 – Current	Board Certified Behavior Analyst (BCBA) Tandem Therapy Services, Las Vegas, Nevada
2017 - 2020	Registered Behavior Technician (RBT) Tandem Therapy Services, Las Vegas, Nevada
2010 – 2014	Youth Development Assistant, All God's Children Preschool Non-Profit Organization, Bradenton, Florida

VOLUNTEER ACTIVTIES

2022 – Current	Board Certified Behavior Analyst Mentor at LEARN Behavioral For-Profit Organization, Las Vegas, Nevada
2020 – 2022	Vice President, Student Academic Authors Organization at University of Nevada, Las Vegas Non-Profit Organization, Las Vegas, Nevada
2019 – 2020	Secretary, Student Academic Authors Organization at University of Nevada, Las Vegas Non-Profit Organization, Las Vegas, Nevada

2012 – 2015	Youth Mentor and Community Outreach Coordinator Non-Profit Organization, Bradenton, Florida
2010 – 2014	Community and Youth Engagement Volunteer Non-Profit Organization, Bradenton, Florida

RESEARCH EXPERIENCE

Fall 2022	Co-Investigator Principal Investigator: Dr. Jabari Taylor, Ph.D University of Nevada, Las Vegas Invited by principal to conduct a program evaluation. Collected de-identifiable student Individualized Education Plan data for analysis. Collaborated with three other colleagues on this project.
Summer 2016	Research Assistant Principal Investigator: Dr. Jennifer Rennels, Ph.D. University of Nevada, Las Vegas Baby and Child Rebel Lab at University of Nevada, Las Vegas Coding the data related to researching perceptual learning for infants and toddlers. Audit surveys.

AWARDS

2022	Rodman Endowment Professional Development Award
2017	Dean's List, University of Nevada Las Vegas
2015	Semi-Finalist Undergraduate Transfer Scholarship, Jack Kent Cooke Foundation
2015	Most Influential Leader, Project InVEST, Invest Financial Company
2015	Best Essay, Project InVEST, Invest Financial Company
2013 – 2015	Phi Theta Kappa, State College of Florida Manatee-Sarasota
2012 – 2015	Dean's List, State College of Florida Manatee-Sarasota

LICENSURE

2021 – Current	Board Certified Behavior Analyst – 1-21-56818
2021 – Current	Licensed Behavior Analyst, Nevada – LBA0607
2017 – 2022	Registered Behavior Technician – BACB367886

PROFESSIONAL MEMBERSHIPS

Association for Behavior Analysis International (ABAI)

Divisions:

- Behavioral Development
- Forensic Behavior Analysis Special Interest Group
- Positive Behavior Support

Council for Exceptional Children (CEC)

Divisions:

- Teacher Education Division (TED)
- Teacher Educators for Children with Behavior Disorders (TECBD)

Council for Learning Disabilities (CLD)