EVALUATION OF SUCCESSFUL PRACTICES THAT LEAD TO RESILIENCY, GRIT,
AND GROWTH MINDSETS AMONG AT-RISK STUDENTS

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AUTHORIZATION TO SUBMIT DISSERTATION

This dissertation of Trenton Hansen, submitted for the degree of Doctor of Philosophy in Education with a major in Educational Leadership and titled "Evaluation of Successful Practices That Lead to Resiliency, Grit, and Growth Mindsets Among At-Risk Students," has been reviewed in final form. Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.

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DEDICATION

This work is dedicated to those wonderful students who face difficult circumstances in their lives and, yet, find a way to be successful in their academic endeavors. Our society depends on every one of you to be committed to your education, to fight through adversity, and to succeed beyond the stereotypes that are placed upon you. There are many of us that believe in you and see your endless capabilities, and it is my hope that you, too, see yourselves the way that God sees you and that you reach your full potential.

ABSTRACT

The United States is losing millions of students from its educational systems each year, leading researchers to exclaim that reducing the dropout rate is the top priority for educators throughout the country. As educators wrestle with the charge to educate and prepare every child to be successful in a global society, they seek answers about those students who are faced with serious adverse conditions leaving them statistically at risk of failure. While the national statistics for high school dropouts are high and deserve much concern, there are many students who are conquering the challenges that have caused many to dropout, and instead, are succeeding in their educational endeavors. The intent of this study is to share with professionals in the educational community effective strategies that will foster resiliency, grit, and growth mindsets in at-risk students. This study uses research and real life experiences of at-risk students succeeding in school to provide effective strategies for fostering resilience with students in danger of failing school.

This mixed-methods study identified effective strategies and programs that fostered resiliency in at-risk students who were academically successful in high school. The qualitative and quantitative data indicated that schools can become havens for implementing strategies and programs that will support at-risk students overcome the adverse conditions that they experience. The study identified protective factors that are both external and internal to the individual at-risk student, and when fostered, lead to academic success. The four major themes that emerged as critical to the development of resilience, grit, and growth mindsets in at-risk students are involvement, high expectations, positive reinforcement, and fortitude. When these critical components are effectively nurtured, at-risk students have shown to overcome the challenges they face, and attain academic achievement.

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Chapter I

Introduction

Yesterday, as one child came home from school, another 7,200 students were dropping out (Swanson, 2010). With our nation's schools losing 7,200 students per day, the United States faces a crisis that supersedes many foreign threats and could have a range of long-term negative consequences for our country (Swanson, 2010). The national dropout rate is reaching a tipping point, and educators are grappling desperately with the problem as it slips closer to the edge. In the United States, only four out of five students complete high school within four years (Stetser & Stillwell, 2014). At a time when an increasingly complex global economy demands more from students, teachers, and institutions, more than 32 million Americans over age 18 have yet to complete high school; and in the time it takes to read this study, another 7,200 students may be added to that total (Swanson, 2010).

While the national dropout trend is a challenge in and of itself, Hispanic and other minority students are leaving school at an even higher rate than the student population as a whole (Gandara & Contreras, 2009). For example, fewer than 50% of Hispanic students graduate in four years, and fewer than 37% of Hispanic adults have a high school diploma (U.S. Census Bureau, 2010). These numbers are alarming because Hispanics are the fastest-growing minority group in the United States, according to the U.S. Census Bureau (2010). In the span of a decade, the White, non-Hispanic population grew by 4%, while the Hispanic population grew by nearly 30% (Fry & Gonzales, 2008). More recent studies have concluded that by 2025, one in four students will be Latino, and the U.S. Hispanic population will continue to grow rapidly (Gandara & Contreras, 2009). The Department of Education's National Center for Educational Statistics (NCES) found that while the dropout rate among all students ages 16 through 24 was 8.7% in

2007, it was 21.4% for Hispanics (Cataldi, KewalRamani, & Chapman, 2009). These data come from the Current Population Survey (CPS), but only report the percentage of individuals who are not in school and have not earned a high school diploma or equivalency credential within a specified time period (Cataldi et al., 2009). However, the data do not consider the number of Hispanics who are migrating to this country in search of employment and not education. Therefore, most of these immigrants are males seeking financial security for themselves or others in their care and as a result, dropout of school shortly after enrollment. Consequently, Hispanic dropout rates far exceeds those of the White and Black subgroups, in part because Whites and Blacks are not immigrating to the United States at the same rate as Hispanics (Cataldi et al., 2009).

Although other minority groups are dropping out, Hispanics compose more than a third of the U.S. dropout population today (Gandara & Contreras, 2009). In 2013, the dropout rate for Hispanics was 12% – nearly two and half times the rate of Whites (5%), and almost twice the rate of Blacks (7%). Our nation has never before "been faced with a population group on the verge of becoming the majority in significant portions of the country that is also the lowest performing academically; and never before has the economic structure been less forgiving to the undereducated" (Gandara & Contreras, 2009, p. 18).

In a competitive global economy, businesses seek the critical thinking and technical skills acquired by those who continue their education, and many employers require a high school diploma as a minimum qualification for employment (Orfield, Losen, Wald, & Swanson, 2004). At the same time, a dangerously high percentage of students vanish from U.S. school systems before they finish high school (Orfield et al., 2004).

On a community scale, areas with high concentrations of dropouts tend to be more economically disadvantaged than those with higher proportions of high school graduates (Fry & Gonzales, 2008; Gandara & Contreras, 2009; Kimball, 2006; Rotermund, 2007). In turn, it becomes increasingly difficult for municipalities to recruit and sustain profitable businesses and economic growth when regions have large concentrations of uneducated workers (Chapman, Laird, Ifill & KewalRamani, 2011; Kimball, 2006).

High school dropouts also are more apt to commit crimes, become pregnant in their teenage years, and depend upon government programs such as subsidized health care, food stamps, and housing (Chapman et al., 2011). Local and federal governments devote numerous resources to social programs because of the correlation between high school dropouts and circumstances that require additional public services and funding (Chapman et al., 2011). As the Alliance for Excellent Education (2011) stated, "Dropouts represent a tremendous loss of human potential and productivity, and they significantly reduce the nation's ability to compete in a global economy" (p. 3).

High school dropouts hinder growth and development of the U.S. economy, as well (Burrus & Roberts, 2012; Chapman et al., 2011; Rotermund, 2007). In many cases, high school dropouts squander their lives by remaining unemployed, utilizing government assistance, or rotating through the prison system (Patterson, Beltyukova, Berman, & Francis, 2007). If the nation's secondary schools adequately increased graduation rates, the U.S. economy could gain $154 billion in sustained income throughout the lifetime of all of the nation' total dropouts (Stuit & Springer, 2010). In addition, when recession grips the economy, high school dropouts are less likely to stay employed and will rely heavily on federal resources for their well-being. The Bureau of Labor Statistics (2010) reported that the unemployment rate for students who do not

complete high school was 15.6%, compared to 10.5% for high school graduates. In fact, high school dropouts are three times more likely to live a life of poverty (Patterson et al., 2007) and eight times more likely to serve jail time than high school graduates (Kimball, 2006). Students who fail to complete high school will make $9,634 less per year than high school graduates (Alliance for Excellent Education, 2011), and research clearly shows that students with a high school diploma earn significantly more over their lifetimes than high school dropouts (Alliance for Excellent Education, 2011; Burrus & Roberts, 2012). More personal income enables more spending, and more spending spurs economic growth. These connections underscore the value of high school graduation for individuals and broader society alike (Burrus & Roberts, 2012).

Meanwhile, the aggregate price of under-education is staggering: Each year, high school dropouts cost the nation more than $260 billion in social services, unrealized financial gains, and uncollected taxes (Hoyle & Collier, 2006). If trends in the research continue, the United States will have more than 13 million dropouts in the next 10 years, portending an economic loss to the U.S. economy of $3 trillion (Alliance for Excellent Education, 2011, Chapman et al., 2011; Stuit & Springer, 2010).

Statement of the Problem

The United States faces a dropout crisis that threatens the economic and educational future of the nation and impairs the U.S. capacity to contend in a global economy (Burrus & Roberts, 2012; Chapman et al., 2011; Hoyle & Collier, 2006; Stuit & Springer, 2010). The crisis becomes even more dangerous since high school dropouts exhibit at-risk behaviors early on, raising the question as to why schools and districts are not doing more to mitigate the problem (Gandara & Contreras, 2009; Stuit & Springer, 2010).

The failure of some students to graduate high school is, of course, not a new issue. Over the past 40 years, U.S. graduation rates have declined overall. The gap in high school completion rates between Whites and minority students, however, has steadily widened. (Heckman & LaFontaine, 2007). Sum, Khatiwada, and McLauglin (2013) report that nearly $4 billion was allocated annually by President Carter starting in 1980 to help students continue their education toward a high school diploma. The program was intended to provide at-risk youth with a credit recovery program that would restore a path to high school graduation.

Over the years, researchers have published various studies on factors contributing to the U.S. dropout epidemic and what institutions might do to address the problem (Bridgeland, Dilulio, & Morison, 2006; Gandara & Contreras, 2009; Wilson, 2014). This study focused on factors that most attribute to resiliency skill development, student grit, and growth mindsets in students who face multiple risk factors in their lives.

Background

A sound education remains the basic engine of upward mobility in America: "Education is the single most effective way to integrate the burgeoning population of Latinos into the U.S. economy and society" (Gandara & Contreras, 2009, p. 13). This study will identify which academic, social, and emotional strategies have most effectively helped at-risk students in Southern California, where the Hispanic population is increasing at a rate higher than in any other part of the United States (California Department of Education, 2014; Stuit & Springer, 2010).

Some critical questions that are discussed amongst educators are as follows: Why do some at-risk students show resolve and thrive academically, while others, faced with similar circumstances, fail to complete high school? Why, despite the multiple risk factors confronting

disadvantaged students, do some graduate at the top of their class and attend major universities to continue their education? What and/or who prompted these students to persevere despite considerable adversity along the way? What specific programs and policies can schools develop and implement to foster such academic success? These queries provide a foundation for more specific inquiry.

Research Questions

This study will address three research questions:

1. What factors do successful at-risk students identify as key contributors to their resilience, grit, and growth mindset?

2. What strategies and instructional programs most clearly foster resilience and growth mindsets in at-risk students?

3. What variables are most strongly correlated among risk factors and growth mindset attributes in at-risk students with high academic achievement?

These questions are directly germane to the American dropout crisis. U.S. culture has established a "credentialed" philosophy that deems a student eligible for employment upon receipt of a diploma or degree (Lam, 2014). Therefore, understanding the factors that lead students to leave school without credentials is crucial to society's economic health and progression.

In some cases, indicators of classroom struggles emerge early and allow for student placement in programs that support academic improvement (Lam, 2014; McClure, Yonezawa, & Jones, 2010). Although there are some advantages to this approach, tracking also can sharpen adverse academic consequences for some students in low socioeconomic circumstances (Lam, 2014).

For example, students from low socioeconomic backgrounds typically lack the learning prerequisites that place students in classes that produce superior academic results (Andersen & Hansen, 2012; Lam, 2014). In poor families, a dearth of money often translates into an absence of cultural capital in children. According to Lam (2014), cultural capital includes an introduction to music, drama, history, literature, and various forms of speech at an early age. Bradley and Corwyn (2002) supported this notion in their research by confirming that children from impoverished families do not have the money to take trips, visit libraries and museums, or participate in other activities that build cognitive skills in children. Poor parents also are less likely to purchase books or other academic materials to help foster cognitive and problem-solving skills (Bradley & Corwyn, 2002; Dufur, Parcel, & Troutman, 2013). Financially challenged parents are less apt to regulate television watching at home, creating a climate that impedes learning opportunities and erodes the learning motivation of children (Bradley & Corwyn, 2002; Graham, 2009; Payne, 2008).

In comparison, wealthier families read to their children more often, have more conversations that stimulate learning, and provide other cognitive activities that enrich a child's speech and vocabulary (Bradley & Corwin, 2002; Dufur, Parcel, & Troutman, 2013; Krasny, Kalbacker, Stedman, & Russ, 2015). Children who lack this environment have shown limitations in both intellectual development and the ability to cope with others (Bradley & Corwyn, 2002; Graham, 2009; Payne, 2008).

Poverty in the family often has a strong bearing on a child's academic performance (Gaddis, 2013; Lam, 2014; Poudel et al., 2014). It is crucial to carefully consider the socioeconomic background of students entering the educational system to ensure a clear plan for any child facing this risk factor.

Significance of Study

Analysis of the research reveals a gap in the academic literature on America's dropout crisis for Hispanics and other minority at-risk students. The research has centered on the description of risk factors and their effects on students, rather than identifying protective factors that promote resiliency in young people (Altundağ & Bulut, 2014; Brooks-Gunn & Duncan, 1997; Burrus & Roberts, 2012; Chappel, Suldo, & Ogg, 2014; Wilson, 2014). Many studies have explored why students drop out, analyzing data to identify characteristics leading to academic failure (Bradshaw, O'Brennan, & McNeely, 2008; Downey, 2008; Masten & Coatsworth, 1998). Hickman, Bartholomew, Mathwig, and Heinrich (2008), stated that:

> Researchers should examine students who graduated high school but were once on the
>
> developmental pathway of becoming a high school dropout. What factors or buffers did
>
> these students have? What experiences in their lives altered the developmental pathway
>
> and prevented them from dropping out of high school? (p. 12)

Other researchers agree there is extensive analysis on the predictors of why students quit high school but very little research on factors that might have altered the course of students who are exceptions to the anticipated pathway (Englund, Egeland, & Collins, 2008).

However, despite the quantity of research available on high school dropout risk factors, very few studies have addressed resiliency development in at-risk students who remained on track to graduate at the top of their classes. Some economically disadvantaged Hispanic students who suffer English deficiency and other risk factors have achieved tremendous academic success (Edwards, Mumford, & Serra-Roldan, 2007; Hassinger & Plourde, 2005). This analysis of why such students succeed despite adverse conditions will help fill the gap in current research on the dropout epidemic in the United States.

Description of Terms

The educational profession is notorious for its multitude of definitions and acronyms. The section clearly defines some of the important definitions and acronyms that are found throughout this study.

Adverse conditions. Any condition or event that significantly impacts or alters the life of a student in a negative way (Gordon-Rouse, 2001). Examples vary depending on the normative or non-normative situation a child faces (Chappel et al., 2014).

Average Freshmen Graduation Rates (AFGR). Graduates include only the students who have received a diploma and do not include those that obtained a GED or other certificate of completion (Chapman et al., 2011).

Belonging. Feeling valued and part of the school community (Sagor, 1996).

Cultural capital. The ideas and knowledge that people draw upon as they participate in social life (Lam, 2014).

Cultural reproduction. The instruments by which steadiness of cultural experience is maintained across time. It often results in social reproduction, or the practice of transferring facets of society from generation to generation (Azaola, 2012).

Dropout. A student who has left school prior to earning a high school diploma (Englund et al., 2008).

Experiential canalization. The developmental process by which regular occurring experiences and biology combine with another (Blair & Raver, 2012).

Experiential patterns. A series of experiences that pattern the way we think, interact, respond to situations, and develop intellectually (Lam, 2014).

Fixed mindset. An individual's belief that abilities, intelligence, and learning is static and cannot be developed (Dweck, 2006).

Graduation Equivalency Degree (GED). The GED is awarded after a student successfully completes a series of examinations equivalent to mandatory high school courses (Chapman et al., 2011).

Growth mindset. An individual's belief that abilities, intelligence, and learning can be developed through effort and commitment (Dweck, 2006).

Hispanic or Latino. The terms Hispanic or Latino refer to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race (U.S. Census Bureau, 2010).

Local Education Agency (LEA). A local education agency is a commonly used synonym for a school district, an entity which operates local public primary and secondary schools in the United States.

Non-normative event. Non-normative transitions are categorized as major life events that a person cannot control (Chappel et al., 2014).

Normative event. Normative events can be defined as typical developmental relationships such as transitioning from childhood to adolescence or moving from middle school to high school (Chappel et al., 2014).

Poor child. A student who is part of a family with an income below the national poverty threshold (Houck & Kurtz, 2010).

Poverty. The relationship between the incomes within a household with categorized level of income that differs based on family size and economic inflation (Brito & Noble, 2014)

Potency. The degree of empowerment an individual experiences (Sagor, 1996).

Protective factors. Protective factors are traits that help protect individuals from adverse conditions and assist in mitigating negative outcomes for students (Kitano & Lewis, 2005).

Resiliency. To some, resiliency entails making positive adjustments in the context of significant risk (Masten & Reed, 2002). Others define resiliency as a capacity to overcome and endure adverse events and grow more skillful and self-assured in facing future trials (Muller, Dodd, & Fiala, 2014). From an educational perspective, resiliency involves overcoming adverse conditions and attaining success even as all risk indicators suggest imminent educational failure (Benard, 2004).

Sense of competence. Experiencing authentic academic success (Sagor, 1996).

Social reproduction. The emphasis on the structures and activities that transfer social inequality from one generation to the next (Azaola, 2012).

Socioeconomic status. Refers to the accessibility of economic and social resources available to an individual, including benefits and social standing (Brito & Noble, 2014).

Usefulness. When a student recognizes that they have contributed (Sagor, 1996).

Zero tolerance. Zero tolerance is strict, uncompromising, and automatic punishment intended to extinguish unwanted or poor behavior (Wilson, 2014).

Overview of Research Methods

This study is based on a mixed-methods design and examines the demographic, academic, and identified risk factors for a targeted sample of high school students who rank highest in their class despite facing at least two identified risk factors. Mixed-methodology allows the researcher to examine data qualitatively and quantitatively in order to present and predict outcomes based on input from the participants and the correlating data, linking the two together (Creswell & Garrett, 2008).

This study identifies eight students at an economically disadvantaged high school with a high concentration of Hispanic students who are designated as English language learners. Each of the participants will graduate in the top ten percent of their class while facing at least two risk factors that statistically lead to academic failure. The students were identified and interviewed with permission from the university, district administration, school site administration, and parents or guardians of the students. The students participated in individual interviews that answered a series of questions that identified risk factors in each student's life, and explored the mitigating protective factors that helped cause resiliency development.

In relation to the quantitative portion of this study, a survey was given to a sample of 12th grade students to determine the level of grit that they were perceived to have. The Grit Survey that was developed by Angela Duckworth was administered to the students using Qualtrics, a data survey platform, for the purposes of identifying grit in relationship to other risk factors that the students possessed. The risk factors were identified through a series of demographical questions at the beginning of the survey in order to provide data to assess relationships between risk factors and grit levels. Permission was granted by the Duckworth Lab and the University of Pennsylvania to administer the validated survey for educational purposes and studies. In addition to the qualitative and quantitative data collection, the researcher analyzed student demographic, academic, attendance, and language data to provide insight into the adverse conditions that students face and the risk factors some students overcome while in high school.

A descriptive case study was chosen for this particular research study as opposed to ethnographic research so that focused and detailed propositions and questions could be carefully scrutinized and ultimately articulated at the end of the project to provide greater insight as to why some students succeed while other fail despite facing adverse conditions. An ethnographic study

requires a close study of cultures through observations, reading of prior research and interpretations of the identified behaviors. The chosen descriptive case study allows the researcher to focus on specific propositions and questions relating to the topic, and although observations, readings and interpretations may be pursued in a descriptive study, the focus on testing hypotheses through data analysis and observation provides a stronger argument in favor of a descriptive case study as the research method. The model takes preliminary understanding of a concept and investigates various viewpoints which in turn spiral into a deeper understanding of the issues while identifying plausible solutions to the identified problems.

Conclusion

In order to effectively identify variables that contribute to the development of grit, resiliency, passion, and student motivation in at-risk students, one must first identify, acknowledge, and mitigate the risk factors that exist in their lives. In theory, identification, acknowledgement, and mitigation of risk factors in a child's life will lay the foundation for new research to discover effective strategies, programs, and processes that lead to the development of grit, resiliency, motivation, and passion in at-risk students.

The intent of this study was to further research the risk factors that cause the largest barriers on the development of resiliency, grit, and perseverance in students, and cause them to be characterized as "at-risk."

Therefore, theoretically, the formula for successful fostering and development of resiliency, grit, and perseverance in at-risk students was as follows: (a) identification of high risk factors, (b) implementation of effective mitigation strategies, and (c) development of programs, policies, and procedures that support resiliency, grit, and perseverance in at-risk students.

Chapter II

The Literature Review

The literature review will present the concept of resilience and deliver a framework for how to foster this quality in at-risk students who face adverse conditions. The review will offer an overview of the ability to grow and develop traits that can mitigate a student's risk of failure. The assessment will continue with a snapshot of school settings and factors that promote resilience inside and outside of the classroom. The chapter will conclude with a summary of key literature and an outline of implications for future research.

Defining Student Resiliency & Grit

Resiliency among schoolchildren became a topic of interest in the early 1970s when psychologists and psychiatrists noticed that some at-risk children were more adept than others at overcoming physical, environmental, social, and genetic circumstances (Masten, 2001). Over the years, researchers have adopted different perspectives on resiliency in education. Fundamentally, scholastic resiliency occurs when children, despite exposure to adverse conditions, do not succumb to the academic failure predicted for them (Benard, 2004).

Through studies conducted over 40 years ago, a clinical definition of resiliency was established as "a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development" (Masten, 2001, p. 228). Over the years, researchers have adopted different perspectives when defining the term resiliency in education. Gordon-Rouse (2001) referred to educational resiliency as the ability to thrive, mature, and increase competence when faced with certain adversity or challenges. A more complex idea was introduced as the ability to rebound and adapt in challenging times while developing social, academic, and vocational skills even when a significant amount of stress and anxiety exists in the student's life (Henderson &

Milstein, 1996). Surprisingly, resilience research shows that the phenomena are ordinary and quite common when the operation of basic human adaptation systems are protected and in good working order. In these cases, a person's development is resolute even when facing adverse circumstances (Masten, 2001). In contrast to reviews of the various definitions that have been used by researchers, Bellin and Kovacs (2006) concluded no universally acknowledged definition of the term resiliency exists. Grotberg (2003) explained resilience to be the human ability to cope with, defeat, study from, and be changed by difficulty. On the other hand, others have debated that resiliency entails one being successful against all odds (Crosnoe & Elder, 2004). Resilience has been described as making positive adjustments in the perspective of significant risk (Masten & Reed, 2002). Researchers are finding that developed outcomes are greatly enhanced by the manifestation of internal assets like problem solving, empathy, self-efficacy, and goal setting (Noble, Tottenham, & Casey, 2005).

It is clear that student resiliency has been defined in many different ways. Specifically, the aspects of resiliency scholars agree upon include an individual who has faced a major difficulty in life, but who still manages to succeed despite their adverse conditions (Karimshas et al., 2013; Pashak, Hagen, Allen, & Selley; 2014; Williams & Bryan, 2013).

Academic resilience refers to the quality that produces accomplishments regardless of adversities caused by early traits, conditions, and experiences (Benard, 2004; Gafoor & Kottalil, 2009). Some researchers have argued academic resiliency requires a student to have the capability to overcome academic difficulties, stress, and pressure, which is linked to academic expectations (Martin, 2002). Many researchers and practitioners have gone beyond simply identifying risk factors and prevention strategies, and are now examining how to develop strengths and capabilities that will equip students with the skills to avoid adverse circumstances

(Linda, 2002). A review of various studies by different scholars suggests a range of strategies can help foster resiliency in at-risk students (Bradshaw et al., 2008; Englund et al., 2008; Lam, 2014). Key factors include: relationships that are both caring and supportive with at least one person, consistent high expectations that are clear and shared with the student, and opportunities for students to take part in and contribute significantly to the social environment (Benard, 2004).

What is more difficult to identify is what makes one child more inquisitive, positive, and social, while another child is withdrawn, negative, and anti-social. When children have certain positive experiences at school, it leaves them feeling optimistic about their personal and educational future (Willier & Lystad, 2015; Sagor, 1996). These key experiences include achieving authentic academic success (sense of competence), feeling valued and part of the school community (belonging), recognizing when they have contributed (usefulness), and experiencing empowerment (potency). Instilling these positive feelings in students will not come from pep talks, self-esteem assemblies, or other superficial activities (Ginsburg & Jablow, 2005; Sagor, 1996). Instead, resiliency is built through planned educational exercises and providing opportunities for students to experience success on a regular basis. Administrators and staff should collaboratively create daily structures and opportunities for students to feel competent, valued, useful, empowered, and optimistic, in order to develop resiliency and mitigate risk factors (Dufur, Parcel, & Troutman, 2013; Johnson, 2009; Sagor, 1996).

The Dropout Crisis in America

To track the students who lack such resiliency and quit school, the National Center for Educational Statistics identifies dropouts in the following categories: status completion rates, status dropout rates, event dropout rates, and average freshmen graduation rates (AFGR). Status completion rates calculate the percentage of students who are not in high school but have earned

a high school diploma or equivalent certificate (Chapman et al., 2011; Stetson & Stillwell, 2014). An event dropout rate identifies students who left high school and never earned a diploma through graduation or an equivalent certificate of completion (Chapman et al., 2011; Stetson & Stillwell, 2014). The status dropout rate recognizes the percentage of students between the ages of 16 through 22 who are no longer enrolled in school and have not earned a high school diploma or equivalent certificate of completion (Chapman et al., 2011; Stetson & Stillwell, 2014). Lastly, the AFGR estimates the number of students who will graduate four years after starting their 9th grade year of high school (Chapman et al., 2011; Stetson & Stillwell, 2014).

It is salient, again, that high school dropouts play a significant role in the economic evolution of the state. The California Department of Education has indicated that more than 98,000 students dropped out of school in 2007-2008 alone. In other words, 19% of California high school students will drop out sometime between grades 9-12. Another sobering statistic is that nearly 25% of Hispanic students, the state's largest minority group, will drop out in grades 9-12 (Rumberger, 2009; Suh, Suh, & Houston, 2007). California dropouts will have a difficult time finding work in a state that boasts the largest university and college system in America. In fact, California dropouts are twice as likely to end up living in poverty as those that have graduated high school (Rumberger, 2009; Suh et al., 2007). The diminished earnings of California's dropouts cost the state nearly $54 billion per year in taxable income, and each dropout pays $225 less per year in state taxes than he would had he graduated high school (Stuit & Springer, 2010). As districts and schools continue to address graduation and dropout rates, the state economy will benefit from further progress. Each high school dropout prevented yields $28,000 for the California economy, and cutting the dropout rate in half would bring more than $1.4 billion of direct gross economic benefit to the state (Stuit & Springer, 2010).

In addition to the lack of contributions they make to state coffers, California dropouts report greater health concerns than those who graduate high school. This means that high school dropouts in California will require more public health services than their graduating counterparts, adding up to more than $1 billion in added expenses for the 4 million high school dropouts living in the state (Stuit & Springer, 2010). Dropouts have also been linked to higher incarceration rates which cost significant public resources. California's imprisonment costs could decline by as much as $1.4 billion if those who dropped out and were incarcerated instead graduated from high school (Stuit & Springer, 2010).

Such data have led California to make increasing high school graduation rates a statewide priority for school districts. In 2014, the California Department of Education reported a steady increase in graduation rates along with a decline in dropout rates throughout the state, producing an 80.2% graduation rate. In other words, more than eight out of 10 students graduated high school within four years of starting in the 9th grade. Additionally, graduation rates among Hispanic students increased nearly 2% from the prior year (California Department of Education, 2014). Data also show a significant decrease in California dropout rates – which fell to 12% – for the first time in nearly a decade. The dropout rates for Hispanic students declined by 2%, as well, slipping to just over 14% of the subgroup dropping out prior to graduation (California Department of Education, 2014).

Reducing these rates depends, in part, on identifying when students tend to drop out of school. Districts, schools, policymakers, and educators can create and implement prevention programs once they understand student dropout patterns (Taylor, 2014; Thomsen, 2002). In California, the dropout trend over the past 17 years has shown a decrease in dropout rates in grades seven through 11, while dropout rates in the 12th grade have doubled (Taylor, 2014).

California reports 52.2% of all dropouts in the state were 12th grade students – nearly four times the number of 9th grade dropouts and three times the number of 11th grade dropouts (Taylor, 2014). These trends are significant because they show that students are staying in school longer before opting to drop out, suggesting that educators can develop targeted programs to reduce and prevent dropouts going forward (Taylor, 2014).

Identified Risk Factors in Children

Addressing a range of risk factors in children's circumstances at home and at school can also help mitigate dropout rates. In 1992, The National Center of Education Statistics issued a report on at-risk children; the report followed a longitudinal study on national education in 1988. The latter study focused on eighth-grade students and assessed demographics, qualities of the schools attended, and family backgrounds. Researchers quantified school performance through standardized tests, reading skills, and school dropout rates (Kominski, Jamieson, & Martinez, 2001).

Other researchers have analyzed multiple streams of data to determine the environments of children and particular outcomes these children experience as they begin to mature into early childhood (Kominski et al., 2001). Most of these studies focus on specific detriments that make the lives of children more difficult as they progress through school to adulthood. These conditions include individual characteristics, family situations, education, and/or community-based circumstances (Natriello, McDill, & Pallas, 1990).

Data on risk factors, including unemployment, and household income, are available from the Current Population Survey (CPS). In 1999, CPS used supplementary questions to help pinpoint specific risk characteristics of students. The factors addressed a child's proficiency in English, personal disability challenges, and whether the child had been held back in one of his

school grade levels. In addition to these three personal questions, CPS considered family dynamics to identify at-risk conditions in the U.S. school age population (Kominski et al., 2001). In their research for the U.S. Census Bureau, Kominski et al. (2001) cited the following risk factors: lack of a child's father, mother, or both, in the home; having at least one parent who was born in another country; reporting a household income at or below the poverty line; and the presence of at least one parent or guardian who is unemployed in the household. The study ultimately identified multiple factors as adverse conditions for school age students across various demographic and geographic variables.

Single Parent Homes and Divorce

Divorce is a leading risk factor for school-age students, and most studies in the literature on divorce have shown that a child's development is adversely affected by parental separation (Kim, 2011; Moon, 2011; Thomas & Gibbons, 2009). Kim (2011) discovered through meta-analysis that children from divorced families were significantly more disadvantaged than children from intact families in a variety of life outcomes, including cognitive skill development and the probability of dropping out of high school. Children of divorce struggle with the new make-up of their familial situation, and, as a result, often show declines in their interpersonal skill development (Kim, 2011). These students' poor interpersonal skills impair their ability to create and maintain friendships and express positive ideas and opinions, both of which hinder their academic progress (Kim, 2011; Kirp, 2010). The negative effects of divorce are most prominent while the divorce itself is taking place, and, during this window, a child is more likely than his counterparts from intact families to experience loneliness, anxiety, depression, and low self-esteem (Kim, 2011).

The research shows that nearly 1.5 million children in the United States face parental divorce each year, and 40% of children will live with a divorced parent sometime before age 16 (Thomas & Gibbons, 2009). In their research, Thomas and Gibbons (2009) tread beyond the scope of interpersonal development impediments related to parental divorce, adding that parental divorce is directly linked to flawed academic and behavioral outcomes in children. There are fewer consequences for negative behavior and academic competence can decline in children of divorce. When viewing the group as a whole, children from divorced families show a lower level of academic and vocational attainment – and a 33% higher dropout rate – than their peers from intact families (Thomas & Gibbons, 2009).

The event of divorce itself, while difficult, is not the sole cause of adverse conditions derived from parental separation. The aftereffects of divorce also pose harm to children. For example, divorce can decrease a family's standard of living and can trigger changes in residence, schools, and associations with others (Thomas & Gibbons, 2009). Often, post-divorce economic hardships limit children's activities and routines, including participation in sports leagues and other organizations. The available resources after a divorce become scarcer, allowing fewer academic and vocational opportunities for children (Thomas & Gibbons, 2009).

Divorce is closely related to another critical component of the dropout crisis: Fatherlessness, too, inhibits academic progress (Mackey & Mackey, 2012; Thomas & Gibbons, 2009). The father is an integral part of a family's structure, and fathers are vital to the normative development of children (Mackey & Mackey, 2012; Thomas & Gibbons, 2009). A father's presence in the home enhances educational attainment by providing the foregone conclusion that his child will graduate high school (Kim, 2011; Mackey & Mackey, 2012). The presence of a

father in the familial context – more so than the father's employment status – significantly increases a child's likelihood of graduating high school (Mackey & Mackey, 2012).

Equally impactful is the risk that arises due to single parent homes. A social trend that has continuously increased over the last half-century is the disadvantage of children raised in low-income families (Ziol-Guest, Duncan, & Kalil, 2015). Achievement levels in math and reading are substantially different based on the income levels of students and the gap continues to widen despite the efforts to close such gaps. Contributing to the issue is the rise in single-parent families, a trend that is transcendent among racial and ethnic backgrounds. In the last 40 years, our nation has experienced a rise in single-parent homes with this statistic more than doubling in African-American families and more than tripling in white homes (Ziol-Guest et al., 2015).

Research suggests that a single-parent family structure adversely affects a child's educational outcome and that there is a correlation between single-parent families and socioeconomic status (Schleider, Patel, Krumholz, Chorpita, & Weisz, 2014; Ziol-Guest et al., 2015). One could argue that single-parent families are at risk of establishing a lower socioeconomic status, placing children in those families at greater risk of attaining educational success (Schleider et al., 2014; Ziol-Guest et al., 2015). Furthermore, children living in low-income and single-parent households are highly more likely to develop social and emotional problems, causing adverse effects on their education (Schleider et al., 2014). Impoverished conditions in family households has become the primary indicator for student failure after other possible confounds such as parental education, maternal birth age, and size of household have been accounted for (Schleider et al., 2014; Ziol-Guest et al., 2015).

A Lack of Parental Involvement and its Lasting Effects

Busy schedules notwithstanding, parental involvement is a crucial component in developing resiliency in at-risk students (Bagby & Sulak, 2015; Sawhill, 2015). Often, in homes afflicted by poverty or other conditions that place students at risk, parental involvement is nearly nonexistent. This is the case because so many at-risk students come from families with single parents or a broken parental structure (Bagby & Sulak, 2015; Sawhill, 2015). The effects of neglectful parenting are clear: Research shows that students from single parent homes and whose guardians are disengaged in the child's education are more likely to quit high school, more likely to be involved in crime, more likely to become pregnant as teenagers, and more likely to develop other behaviors that impede success in life (Sawhill, 2015). Not every child from a single parent home will face these consequences, but, again, a single parent has fewer resources for building the cultural, social, and educational capital students need to succeed in school (Gorski, 2014; Hill & Taylor, 2004; Sawhill, 2015). It is estimated that poverty rates for single-parent families exceed those of married-parent families by more than five times (Sawhill, 2015).

Regardless of such resource disparities, parents' involvement in their children's education should transcend assistance with homework. Even some educators consider a parent's help with homework a productive path to student achievement (Bagby & Sulak, 2015). On the contrary, research indicates that parental involvement in, or monitoring of, homework does not necessarily lead to student success (Bagby & Sulak, 2015). Researchers have found other approaches to be more effective: Hong and Ho (2005) have deemed high expectations critical to a child's success in school when the expectations are communicated in a supportive and edifying manner. The expectations can be proximal (short-term) or distal (long-term), depending on the circumstances, with the distal producing lasting, long-term effects on the child (Yamamoto &

Holloway, 2010). Proximal expectations may come in the form a prospective grade on a project that is fast approaching the due date, whereas a distal expectation might be a career path a child would like to pursue. Parents can communicate these expectations through conversations about the importance of acquiring a quality education, while teaching the child his or her role in meeting those expectations (Bagby & Sulak, 2015). This strategy is easy to incorporate at home and is a valuable form of parental involvement that leads to student achievement (Bagby & Sulak, 2015).

Another benefit to parental assistance in a child's education is that parents can gain extensive knowledge and understanding of their children through school involvement (Davarics & O'Brien, 2011; Noel, Stark, & Redford, 2013). Often, teachers provide parents with indirect information about their children's social and academic growth and development (Chung et al., 2014). Parents who participate in teacher conferences, back to school nights, and other interactions with teachers build knowledge about their child's classroom conduct, peer relationships, and any areas of concern at school, which in turn helps parents communicate with their children about rules and expectations (Chung et al., 2014). Although these approaches require some time and consideration, they can be adopted by single and married parents alike, leading to an increase in student achievement (Bagby & Sulak, 2015).

Epstein (2001) identified six areas for programmatic parental involvement in school. Although broad, each of the areas can be successfully implemented among parents of at-risk students. The areas identified are: parenting, communicating, volunteering, at-home learning, decision-making, and community collaboration (Epstein, 2001). Of the six areas, parenting, and at-home learning are proven to be viable solutions to foster resiliency in students categorized as

being at risk of failure (Nitsch, Hannon, Rickard, Houton, & Sharry, 2015; Noddings, 2014; Oostdam & Hooge, 2013; Toldson & Lemmons, 2013).

Teaching parenting strategies in public education settings has become both controversial and confrontational. (Nitsch et al., 2015; Noddings, 2014; Oostdam & Hooge, 2013; Toldson & Lemmons, 2013). Many feel that districts and schools should focus their time, energy, and dollars on educating children and not adults. Furthermore, some parents take offense to the notion that they could benefit from parenting strategies taught by school officials (Nitsch et al., 2015; Noddings, 2014; Oostdam & Hooge, 2013; Toldson & Lemmons, 2013). However, low socioeconomic communities are consistently tied to under-educated families (Gandara, 2010, Gandara & Contreras, 2009). Bourdieu (1977) attributes this connection as generational obstacle that will not be broken without a proper education among adults and children. In order to solicit parental involvement, schools should dedicate resources on professional development for parents with a focus on parent language, understanding concrete vs. abstract thinking children, and establishing an effective home environment conducive to learning (Dweck, 2007, Ginsburg & Kinsman, 2014; Hattie, 2006; Nitsch et al., 2015; Noddings, 2014; Oostdam & Hooge, 2013; Toldson & Lemmons, 2013).

Concrete vs. Abstract: No more lectures.

Parent and teacher training related to child psychology are essential in creating a solid foundation for growth mindset development. Parents and teachers tend to use adult-type strategies when using corrective measures for child and adolescent behaviors. It is an adult's nature to enter into lecture when they observe a child's shortcomings. Many adults suppose a reasoned explanation linking consequences to choices will teach children to do the appropriate thing (Forstadt, Cooper, & Andrews, 2015; Ginsburg & Jablow, 2005; Wessner Blais, 2015;

Whillier & Lystad, 2015). Unfortunately, this type of mindset creates a setting that children do not understand.

If parents or teachers want to learn why children do not get the cause-and-effect lectures, they must first understand how children think (Forstadt et al., 2015; Ginsburg & Jablow, 2005; Wessner Blais, 2015; Whillier & Lystad, 2015). Simply put, children think concretely. Thinking concretely eliminates them from considering future consequences, instead, only how their present behavior affects them (Ginsburg & Jablow, 2005; Wessner Blais, 2015; Whillier & Lystad, 2015). Consider the child that is given the choice to use a dollar to buy bubble gum or invest it in his college education. The child will choose the bubble gum every time because of their concrete way of thinking.

More importantly is to understand that when a child is in stress they nearly always think concretely (Ginsburg & Jablow, 2005; Wessner Blais, 2015). One of the major contributing factors to categorizing a student at risk of failure is the amount of stress they endure due to the uncontrollable circumstances that they face (Forstadt et al., 2015; Ginsburg & Jablow, 2005; Wessner Blais, 2015; Whillier & Lystad, 2015). However, as children grow towards adolescence they become more inclined to experiment with abstract concepts. Abstractions become the thoughts and possibilities that they do not see but understand may be available to them. Abstract thinkers recognize that decisions they make now will affect their future outcomes. Parent and teacher trainings that teach this concept and assist adults in practicing and implementing strategies at home and at school that lead to abstract thinking will increase the probability of resiliency development and growth mindsets for at-risk students.

Home Environment: Out of or in our control?

The home environment is often a sore topic among educators and the large majority feels as if it is out of their control. Granted, most at-risk children experience divorce, death of family members, abuse, poverty, and familial dysfunction at a much higher rate than students not categorized at risk of failure (Elkund, Tanner, Stoll, & Anway, 2015). However, schools can control the home environment to a certain extent with parenting trainings focused on effective strategies that foster learning in the home (Carneiro, Meghir, & Parey, 2013; Hattie, 2006). Hattie's (2006) research studied a variety of contributing factors from the home and their impact on student achievement. His research found the only reliable contribution from the home to student achievement was the home environment itself (Hattie, 2006). Furthermore, maternal involvement, variety, and play materials were the most highly correlated factors with achievement (Carneiro et al., 2013; Hattie, 2006; Wessner, 2015).

Additional research supports the home environment as being a critical component to student achievement and resiliency development (Pinto, Pessanha, & Aguiar, 2013; Sutherland, Facer, Furlong, & Furlong, 2000). The research indicates that capital at home is just as important as capital at school (Bourdieu, 1977; Fox & Wilson, 2015; Krasny, Kalbacker, Stedman, & Russ, 2015). Bourdieu (1977) concludes that the amount of capital one gains determines the social class status of the individual. He concludes that social capital gain tends to be generational determining that if one does not increase their social and educational capital, they remain stagnant in their ascent within class status. Therefore, schools can train parents and provide opportunities for at-risk students to participate in activities that increase their social and educational capital both at and away from the home environment. Providing effective strategies for parents to implement in the home and how to structure an environment that promotes

learning will prove to be a significant contributor to resiliency development (Dweck, 2007, Ginsburg & Kinsman, 2014, Hattie, 2006, Nitsch et al., 2015; Noddings, 2014; Oostdam, & Hooge, 2013; Toldson & Lemmons, 2013).

Each of these three areas, when targeted specifically in parent trainings, are critical to parental involvement related to developing, fostering, and sustaining resilience and growth mindsets in communities with high probability of student failure due to the risk factors the child endures while in school (Altschul, 2012; Dweck, 2007; Fox & Wilson, 2015; Ginsburg & Kinsman, 2014; Hattie, 2006; Nitsch et al., 2015; Noddings, 2014; Oostdam & Hooge, 2013; Toldson & Lemmons, 2013; Watkins et al., 2015).

The Effects of Poverty

A family's socioeconomic well-being is a factor that most studies on educational resilience have focused on. (Gray, Padron, & Waxman, 2003; Brooks-Gunn & Duncan, 1997; Blackwell & Pinder, 2014). Nearly 14 million children in the United States have lived in families with an income below the official U.S. poverty level (Brooks-Gunn & Duncan, 1997). Of the children in America who have ever been poor, 15% remained in poverty for 10 years or more (Brooks-Gunn & Duncan, 1997). Economic status is directly correlated with the academic success or failure of students (Schleider et al., 2014; Ziol-Guest et al., 2015). Sixteen percent of students who graduate high school live in households with a yearly income of less than $20,000, and 50% of high school graduates reside in homes slightly above the poverty line with an annual income of less than $50,000 (Blackwell & Pinder, 2014).

Students of low socioeconomic circumstances, particularly minority students, find difficult challenges in their educational pathways (Blackwell & Pinder, 2014). For example, developmental delays that include both limited and long-term deficits are 1.5% higher in poor

children than in more affluent children. Learning disabilities among poor children are more than 2% higher than in students from well-off households (Brooks-Gunn & Duncan, 1997). A student's academic achievement is often dependent on the socioeconomic status of the student (Brooks-Gunn & Duncan, 1997; Blackwell & Pinder, 2014; Gorski, 2012; Griffin & Green, 2012; Wallenstein, 2012). Impoverished students are twice as likely as those who are not poor to repeat a grade (Brooks-Gunn & Duncan, 1997; Schleider et al., 2014; Ziol-Guest et al., 2015). Student behavior is linked to the socioeconomic status of a student, as well. One study found that poor students were suspended or expelled at a rate two times that of affluent children, necessitating intervention strategies at school sites (Brooks-Gunn & Duncan, 1997; Schleider et al., 2014). Finally, poor children have been twice as likely as wealthier students to drop out of school (Brooks-Gunn & Duncan, 1997). The data are troubling given that educational attainment is a widely accepted predictor of a student's success in life (Wallenstein, 2012).

Despite the evidence linking socioeconomic background with educational achievement, many researchers caution against stereotyping poor students and their families (Blackwell & Pinder, 2014; Gorski, 2012). A common stereotype is that low-income families do not value education (Gorski, 2012; Hill & Taylor, 2004). In some cases, schools and teachers blame low-income parents for a lack of interest in the educational process when they fail to show up to parent conferences and other opportunities for parental involvement at school (Gorski, 2012). However, this lack of attendance may stem from the fact that low-income parents have little employment flexibility: Often, they are working multiple jobs to support the family, handling jobs that do not offer paid leave, or completing jobs that pay based on daily attendance (Compton-Lilly, 2003; Gorski, 2014; Hill & Taylor, 2004). There is little proof in the research that poor families value education less than their wealthier counterparts do (Gorski, 2014; Hill &

Taylor, 2004). The perception of a poor family's demonstration of resiliency is providing for the

family is consistent with the perception that wealthy families value education by being attentive

to opportunities for their involvement in the educational process (Gorski, 2014; Hill & Taylor,

2004).

Impact of Stress

Attaining positive achievements such as good grades, consistent attendance, completed

homework, and appropriate social behaviors can be particularly difficult for students coping with

family-related stress (Chappel et al., 2014; Condly, 2006; Dweck, 2000). Some of the most

adverse outcomes in youth come from stress caused within the family relationship and context

(Chappel et al., 2014). Factors tied to familial stressor outcomes include major events that alter

the family make-up, economic hardships, changes in family structure, and recognizable conflict

between parents (Chappel et al., 2014). Such stressors are often detrimental to feelings of

satisfaction in a child's life. By comparison, an absence of family-related stress is a positive

indicator of psychological well-being, which extends into a child's academic environment

(Chappel et al., 2014).

Generally, emotional stress has been a major contributing factor to students' failure to

achieve in the classroom (Benard, 2004; Condly, 2006; Dweck 2000; Finley, 1994; Martin

2002). Some researchers have focused on individual differences in processing trauma, some have

focused on high-risk students who have generated successful outcomes, and others have focused

on resiliency as the ability to overcome adverse conditions (Benard, 2004).

What is clear from the research is that stressful life conditions impede academic

achievement for many students (Garmezy, Masten, & Tellegen, 1984). After studying 200

children and their families for 10 years, researchers found that various stressful life conditions

decreased the students' academic performance (Garmezy et al., 1984).

Poverty, Stress, and Brain Development

Poverty and stress are intimately connected due the cause and effects of low

socioeconomic living (Blair & Raver, 2012; Brito & Noble, 2014). Consider the possible

circumstances surrounding a child living in poverty. The surroundings could include a lack of

shelter, food, clothing, parental stability, taking the role of an adult at an early age, homelessness

or instability of housing, crime associated with impoverished neighborhoods, and other situations

not mentioned (Blair & Raver, 2012; Brito & Noble, 2014). Each, all, or some of these factors

can cause significant stress in the life of a child or adolescent trying to gain an education (Blair

& Raver, 2012; Brito & Noble, 2014; Evans, 2006). Children living in poverty lack resources

and experiences associated with cognitive, linguistic, and social development that are necessary

to maintain at-level gains in their education (Blair & Raver, 2012; Brito & Noble, 2014). A child

living in poverty is less likely to have conversations that stimulate problem-solving and critical

thinking (Blair & Raver, 2012; Brito & Noble, 2014; Noble et al., 2015). Cultural capital found

in middle and high social classes can greatly differ from the cultural and social capital found in a

low socioeconomic household (Blair & Raver, 2012). The stress variables associated with

poverty negatively shape behaviors, experiences and cognitive development in children and

adolescents (Blair & Raver, 2012; Brito & Noble, 2014). A child facing the stressors associated

with poverty have a more difficult time listening in class, completing homework due to outside

stress factors, participating in discussions or classwork, and engaging in the educational process

because of the multiple stressors they face while living in poverty (Blair & Raver, 2012). These

types of behaviors are influenced by experiential canalization, a developmental process by which regular occurring experiences and biology combine with one another (Blair & Raver, 2012).

The environment and social connections of a person can have a lasting effect on the development of cognitive and social skills (Anderson & Armstead, 1995; Blair & Raver, 2012; Brito & Noble, 2014; Brooks-Gunn & Duncan, 1997; Evans, 2006; Gottfried, Gottfried, Bathurst, Guerin, & Parramore, 2003; McLoyd, 1997). Advances in neuroimaging have made it possible to assess brain development based on both genetic and environmental factors (Brito & Noble, 2014). In recent years, the connection to socioeconomic status (SES) and changes in brain structure have been substantiated through investigative research, and brain development related to SES has been specifically linked to memory, executive control, and emotion (Blair & Raver, 2012; Brito & Noble, 2014; Noble et al., 2015). SES is complex and includes a variety of factors such as education, occupation, income, and cultural capital found within social classes (Blair & Raver, 2012; Brito & Noble, 2014; Bourdieu, 1977; Noble et al,. 2015). Census data shows that nearly 47 million people in the United States live below the official poverty line (United States Census Bureau, 2012). The concern is that numerous studies indicate that socioeconomic disparities greatly affect the mental well-being, physical health and cognitive development of children. Approximately 20% of the variance in a child's IQ has been linked to SES (Anderson & Armstead, 1995; Blair & Raver, 2012; Brito & Noble, 2014; Brooks-Gunn & Duncan, 1997; Evans, 2006; Gottfried et al., 2003; McLoyd, 1997). Furthermore, chronic poverty, causing significant stress on a child, has shown a six to 13 point reduction in a child's IQ before the age of five (Brito & Noble, 2014).

Cultural reproduction relating to poverty becomes generational as cognitive development in the brain is greatly diminished, leaving a child significantly disadvantaged when entering

school (Blair & Raver, 2012; Bordieu, 1977; Brito & Noble, 2014; Noble et al., 2015). Children living in socioeconomically disadvantaged circumstances are less likely to experience linguistic, social, and cognitive stimulation from parents or guardians in their home environments than that of children living in more advantaged SES homes (Blair & Raver, 2012; Bordieu, 1977; Brito & Noble, 2014; Noble et al., 2015). To add to the severity of the situation, children living in poverty or low SES households tend to experience more stressful events in their lives than a child living in higher SES households (Brito & Noble, 2014). Biological responses and the physical development of the brain have been found to be negatively impacted when faced with multiple stressors connected to poverty (Blair & Raver, 2012; Brito & Noble, 2014; Noble et al., 2015). The negative effects of stress impact the development of the hippocampus, the amygdala, and the prefrontal cortex; all of which are linked together functionally and anatomically (Anderson & Armstead, 1995; Blair & Raver, 2012; Brito & Noble, 2014; Brooks-Gunn & Duncan, 1997; Evans, 2006; Gottfried et al., 2003; McLoyd, 1997). The prefrontal cortex is the chief executive officer in the brain and is the most plastic and malleable in ages 0-5, with another surge in development coming in the adolescent years (Anderson & Armstead, 1995; Blair & Raver, 2012; Brito & Noble, 2014; Brooks-Gunn & Duncan, 1997; Evans, 2006; Gottfried et al., 2003; McLoyd, 1997). Robert Knight, director of the Helen Wills Neuroscience Institute stated, "kids from lower socioeconomic levels show brain physiology patterns similar to someone who had damage in the frontal lobe as an adult" (Sanders, 2008, p. 1).

Therefore, if a child experiences high levels of stress and lacks cognitive, linguistic, and social stimulation due to low SES environments, the likelihood of educational competency is significantly reduced (Anderson & Armstead, 1995; Blair & Raver, 2012; Brito & Noble, 2014; Brooks-Gunn & Duncan, 1997; Evans, 2006; Gottfried et al., 2003; McLoyd, 1997).

Protective Factors that Mitigate Adverse Conditions

To develop resiliency in students through early intervention, educators must identify the presence of two "mitigating factors": adversity and an ability to overcome it. Students cannot acquire resiliency unless they face some type of adverse condition that threatens failure.

Researchers have various ways of categorizing "adverse conditions," but examples include poverty and stressful environments (Gordon-Rouse, 2001). Academically, a stressful environment is considered from both biological and psychological perspectives without any unanimous definition among researchers. In education, stress derives from negative circumstances that cause a student to lose focus and fall behind academically (Brown, 2014; Copeland, Keeler, Angold, & Costello, 2007). Negative stress is present when uncontrollable and unstable situations arise in a child's life, leading to behavioral, emotional or psychological distress over a prolonged time span. Students who face such circumstances – caused by a divorce, for example – are at higher risk of failing academically and may incur social and emotional development deficiencies (Brown, 2014; Copeland et al., 2007).

In terms of uncontrollable and stressful situations in a child's life, divorce can be considered as a severe adverse condition for children. The divorce rate is increasing in society, and the negative impact on children can have catastrophic consequences for academic success (Altundağ & Bulut, 2014). One might think that divorce is a problem among adults but in reality, other family members, primarily the children, are severely affected emotionally and psychologically throughout the process (Altundağ & Bulut, 2014). The effects certainly can be considered adverse and put children at risk of academic failure. The most common reactions that children develop after divorce are fear, anxiety, sadness, loneliness, feeling abandoned, and anger which all lead to a child being at risk of failure (Altundağ & Bulut, 2014).

The second mitigating factor of resiliency is the ability to overcome adverse conditions and achieve success. Historically, research has focused on recognizing protective factors, both individually and environmentally, that promote resilient behaviors (Muller et al., 2014). Current research has shifted to *investigating* the internal and external factors that shield children from adverse conditions. These protective factors can range from a series of experiences to opportunities that engage a child both inside and outside the learning environment (Muller et al., 2004). This shift in research has placed greater emphasis on strategies, programs, and policies that promote positive traits and establish an environment that helps students and teachers thrive (Muller et al., 2014).

Indeed, students cannot demonstrate resiliency without reaching some level of easily identifiable success. Examples of such achievement include obtaining a certain grade point average (Gordon-Rouse, 2001), earning the necessary credits for high school graduation, or gaining acceptance to and attending college (Morales, 2010). Other studies have defined success as establishing an independent household, building financial security, and maintaining reliable employment (Shetgiri et al., 2009). The definition of success for this study is based on the studied population and its members' perceptions of personal success, along with their class rank, grade point average, and graduation from high school. In this study, resiliency will be defined as the ability to conquer adverse conditions and achieve an established level of success that delivers high achievement in a social, academic environment when predictive clues would suggest inevitable failure.

Research has identified several approaches to nurturing this resiliency in at-risk students. One common thread is that affirmation from teachers creates a relationship for students which increases their confidence and therefore enhances academic achievement (Hurlington, 2010). By

getting to know students, including the students' home environments, teachers can help foster

resilience. As researchers note, teachers must be aware of at-risk students' surroundings when

they are not in school because those environments can either be enriching or problematic

(McClendon, Nettles, & Wigfield, 2000). When teachers familiarize themselves with their

students' environments, they are able to intervene early when adverse conditions are present or

threaten to arise in the future (Hurlington, 2010).

     A specific approach to enhancing resiliency requires the teacher to understand the

circumstances of the student rather than trying to fix any deficiencies that teachers may find

among their students (Condly, 2006). When instructors acknowledge that each student comes to

school with different cultural norms, strengths, and weaknesses, then teachers are better

equipped to foster academic success by using the strengths of each student to nurture resilience

(Condly, 2006).

     Motivation is another tool for enhancing resilience. Encouraging students to get to know

each other and develop good relationships among themselves has instilled resilient traits in at-

risk students (Hurlington, 2010). This approach, used in combination with other strategies, can

prompt students to work together and help each other with difficulties they might have in

common (Hurlington, 2010). The teacher's primary objective should be to promote a sense of

accomplishment and belonging among students.

     Another effective way to nurture academic resilience is to set high expectations for

students (McClendon et al., 2000). By establishing high standards, teachers can inspire students

to overcome their weaknesses and focus on achievement (McClendon et al., 2000). As students

reach these expectations, they gain confidence in their abilities, creating academic resilience. In

many cases, students improve academic performance even when they do not meet the high

targets. It is important, too, that educators and policymakers view students not as problems to be corrected, but as assets to be safeguarded (Finley, 1994).

Other research has divided the sources of resilience into two categories: internal factors and external factors (Rak & Patterson, 1996). Internal factors that fortify resilience include social capability, sense of purpose, independence, and the ability to problem-solve. Resilience-building external factors are loving parents, opportunities to serve others, unfailing discipline, social capability, and parental involvement.

Early Identification and Intervention of At-Risk Students

Another key to student achievement is early recognition and intervention for those at risk of dropping out (Burrus & Roberts, 2012). Educational institutions should emphasize the need to identify which students might leave school early and adopt programs that enhance these students' prospects of graduation. Multiple studies outline a range of risk factors that educators should consider, including low socioeconomic status, high absenteeism, an older sibling who fails to graduate high school, sexual activity before the age of 15, frequent behavioral problems, status as a male minority, a learning disability, lack of a caring adult in the student's life, limited English skills, and a history of poor academic performance (Burrus & Roberts, 2012; Kominski et al., 2001; Patterson et al., 2007; Suh & Suh, 2007). Students who face more than one of these conditions have an exponentially increased risk of dropping out (Suh & Suh, 2007).

For students facing these concerns, early intervention is key to initial child development as well as to cultivating a child's resilience to classroom challenges. One study found that more than half of the IQ gap between at-risk students and their peers stemmed from how mothers relate to their children (Brooks-Gunn & Markham, 2005). The approaches of black mothers, for example, ranked much lower on parenting measures such as nurturance, language, availability of

books in the home, and conversations with their children (Brooks-Gunn & Markham, 2005). Hart and Risley (1995) determined in their psychological study that children in poor families engaged in thousands fewer conversations than did children from wealthier families, which left low-income children with less than half the vocabulary of their well-off counterparts by age three.

Such findings demonstrate that signs of heightened dropout risk out appear early, long before a student enters high school. Even more tangibly, students at risk for dropping out display recognizable warning signs one to three years before they decide to leave school (Neild & Balfanz, 2006; Rumberger, 2004). In fact, the majority of students who quit school will do so in their early high school years.

Regardless of when a student decides to leave, indicators of dropout risk center on demographic factors and school performance. These clues include absenteeism rates averaging 31 days per year, low scores in all subjects, behavioral issues that generate high numbers of referrals, suspension rates, alternative program placements in special education, and language development (Hernandez & Nesman, 2004). In an additional warning sign, many at-risk dropouts live in low socioeconomic conditions identified by the Free and Reduced School Lunch Program (Hernandez & Nesman, 2004).

Students themselves have also helped clarify dropout risks. In an extensive study, researchers interviewed more than 460 dropouts from diverse backgrounds in a face-to-face setting (Bridgeland et al., 2006). Most of those interviewed in the focus groups said they had the capacity to earn a high school diploma. Of those interviewed, 70% thought they might have graduated had they stayed in high school, and 66% said they would have given more effort if their parents and teachers had attached higher expectations regarding learning and graduation.

The focus group study therefore provided insight into students' perspective on certain dropout risk factors and individual identity (Burrus & Roberts, 2012; Casillas et al., 2012).

Other predictors that students will drop out of school relate to personality and motivation. These predictors, characterized as psychosocial factors, consider the extent to which students, teachers and parents are actively engaged in the educational process (Burrus & Roberts, 2012; Davalos, 1999; Lipscomb, 2007). This engagement is multidimensional and includes the degree of identification a student has with the school and the nature of his relationships with teachers and peers. Forty-seven percent of students who participated in a set of research interviews said they did not deem their educational experience interesting, and cited this as the reason they dropped out (Bridgeland et al., 2006; Rubie-Davies, Hattie, & Hamilton, 2006). Moreover, the same students said they did not think teachers cared about their jobs or showed much interest in student learning. These students thought that teachers were more concerned with getting through the day than with providing engaging lessons (Burrus & Roberts, 2012; Rubie-Davies et al., 2006). This low level of rigor and lackluster teaching contributed to students' lack of motivation to finish school.

In order to combat the risk of failure in students facing adverse conditions, educators must intervene early and focus on research based strategies that yield student success. A key component to implementing proven strategies is to accompany them with growth mindset strategies early on so that students learn that their growth and development is not fixed but has the ability increase with time and effort (Dweck, 2007; McClure, Yonezawa, & Jones, 2010). As educators implement strategies in the classroom, they must reinforce the idea that challenges in learning are not stop signs in their growth, but instead that they are opportunities to expand their capacity to learn and problem solve. Dweck (2007) emphasizes that a major component in

developing a growth mindset is to teach at-risk students early on how to confront deficiencies

and correct them. Dweck's research has shown in nearly every study that students with growth

mindsets are eager to fix their deficiencies (Dweck, 2007). Although poor performance on a task

is disappointing, students with a growth mindset deal with the failure head on. It is perceived as

an opportunity to learn, grow, and improve one's level of performance in taking the next step to

reaching a fuller potential (Dweck, 2007; Mueller & Dweck, 1998). At-risk students with

teachers that assist them in their understanding of the brain and how it grows and develops

through challenges are found to develop growth mindsets at a much higher rate than those

students who lack that support from their teachers (Dweck, 2007). Therefore, paralleling growth

mindset strategies with effective instructional strategies in early education will have a higher

likelihood of developing a growth mindset in at-risk students long before a fixed mindset and

sense of incompetence sets in (Coggshall, Osher, & Colombi, 2013; Dweck, 2007).

School Culture and Building Resiliency

A strong and supportive school environment is fundamental to resilience, as well.

Educators should create a school culture that promotes learning and conveys the value of gaining

an education. Policies that instead alienate or exclude students create a pathway toward dropping

out (Wilson, 2014). Schools can improve their approach by eliminating negative practices such

as "zero tolerance" discipline programs, eliciting community support and engagement, and

providing opportunities for students to engage in the educational process (Benard, 1997; Wilson,

2014). Schools also can build resiliency by creating an environment that prizes caring for others

and relationship-building (Benard, 1997).

Teachers can express authentic support for students by being attentive to them and

showing them kindness and compassion (Meier, 1995; Henderlong & Lepper, 2002). Moreover,

teachers should not be judgmental of students, but should understand that many students are giving their best efforts (Meier, 1995; Phillipo & Stone, 2013). Furthermore, to help overwhelmed families, teachers and institutions should seek assistance from social services providers, particularly when the basic needs of families and students are unmet in the home (Meier, 1995; Forstadt, Cooper, & Andrews, 2015).

In addition to these strategies, teachers should adopt a student-centered philosophy by creating ways to utilize the strengths and interests of their students in order to maximize their education (Johnson et al., 2011; Seligman, 1995). Instructors, again, should set high expectations for their pupils (Delpit, 1996; Jamar & Pitts, 2005). Educators should remember that a school's setting contributes to the success or failure of at-risk students in fundamental ways. For example, a school's attitude toward the acceptance of various cultures and languages on campus is a "supportive factor" to student success (Hernandez & Nesman, 2004). When adults on campus model a passion for learning, coupled with high expectations and rigorous, engaging curricula, at-risk students attain higher levels of academic achievement (Hernandez & Nesman, 2004; Pashak et al., 2014).

Student resiliency is further promoted when educators give students meaningful opportunities to use skills and competencies (Edwards, Mumford, & Serra-Roldan, 2007; Henderson & Milstein, 1996). Toward this goal, teachers often provide opportunities for students to make choices, solve problems, and work as part of a team. By offering students an environment where they can develop their strengths, the students become responsible for their actions (Azzam, 2013; Kohn, 1993; Sadowski, 2013).

Researchers have also developed a strategic support system that schools can use to better serve at-risk students (Benson & Poliner, 2013; McMillan & Reed, 1994). Under this model, four

different environmental factors in schools combine to create a support system and fortify certain traits that lead to resiliency. These factors are significant adult relationships, motivation, positive use of time, and acknowledgement (Dweck, 2010; Henderson, 2013; Mueller & Dweck, 1998; Pisapia & Westfall, 1994).

Positive Adult Relationships Impact on At-Risk Students

Relationships with successful, caring adults are one key to increasing student resiliency, and leaders in education should urge counselors, teachers, administrators, and parents to create positive relationships with at-risk students. Pisapia and Westfall (1994) cite Judith Jones' 1989 study, stating that, "There is growing evidence that the involvement and caring of even one adult in the life of an at-risk child can prevent lifelong disadvantage" (p. 1). Clearly, it is imperative for parents to create substantial relationships with their children. There are many ways parents can be meaningfully involved in their child's life; these include working collaboratively with the child's teacher, assisting the teacher in the classroom, communicating with teachers when concerns arise, making sure the child has a quiet environment for studying, modeling skills and behaviors that lead to success, and discussing goals and reinforcing skills (Dauber & Epstein, 1993; Oostdam & Hooge, 2013; Pisapia & Westfall, 1994). Providing such support is not the province of parents alone, however. Teachers and counselors exert considerable influence not only on students' learning, but also on their attitude toward earning a high school diploma (Pisapia & Westfall, 1994). Given this responsibility, schools should ensure effective professional development that directs teachers and counselors to recognize and be understanding of the needs of at-risk students (MacIver & Farley, 2003).

Effectively assisting these students requires school leaders who stress academic achievement, impart positive standards, create self-confidence in students, and maintain a

disciplined and orderly environment (Dweck, 2000). Too often, at-risk students feel disconnected from school. To help eliminate this barrier, schools have implemented various programs that allow teachers, counselors, and administrators to reinforce their concern for the well-being of students (Bruce, 1995; McClure, Yonezawa, & Jones, 2010).

Positive Use of Time

Similarly, educators should encourage students to use their time wisely at school – another approach that helps boost resiliency. Schools do well to provide opportunities for participation in hobbies, clubs, extracurricular activities such as sports, music and theater, and even community service groups. Studies have concluded that it is not race or ethnicity that determines resilient characteristics and outcomes, but instead, a variety of factors surrounding the student, including school programs (Anthony, Alter, & Jenson, 2009; Borman & Rachuba, 2001).

Schools with large populations of at-risk students need to expand opportunities for extracurricular activities, which help students increase involvement with school and feel a sense of belonging to the school community. Many at-risk students feel disconnected from school and will not voluntarily join such a program (Anthony et al., 2009). For this reason, it is imperative that teachers, administrators, and coaches personally invite students to participate.

Increasing Motivation in At-Risk Students

It bears re-emphasizing that students will become more resilient when schools set high expectations and encourage students to be successful. In order to do this, teachers and administrators should receive the training and encouragement necessary to model and develop positive attitudes and behaviors for at-risk students (Downey, 2008). Encouragement can come from any adult in a student's life, and "at-risk students need to work with teachers who can

develop strong, positive, and personal relationships characterized by respect, trust, care and cohesiveness" (Downey, 2008, p. 55). Teachers should complement behaviors that invite success and be quick to recognize students who are succeeding. As teachers and administrators offer praise, they should ensure it is timely and pertinent to the behavior and attitudes demonstrated by students (Morales, 2010). It is equally valuable for educators to provide negative feedback in a positive way, so students learn not only that bad behavior does not bring success but also feel the genuine concern of the adult. Research dependably shows that teachers who motivate students by encouraging high standards will get more resilient pupils in return (Borman & Overman, 2004; Werner, 1990). Still, students must know that expectations for success are not limited to certain student subgroups, but are expected from all. Moreover, high expectations should be realistic, and students must receive the necessary supports to meet the high expectations (Morales, 2010). In-classroom activities need to emphasize academic achievement while teaching skills that build confidence and self-assurance. Good classroom curricula will comprise academic tasks, peer collaboration, result indicators, and positive reinforcement when students exhibit expected skills and behaviors (Brooks, 2006).

Positive Reinforcement and Self-Efficacy

Reinforcement and recognition – along with a belief in children's capabilities – are crucial to building resiliency in students (Borman & Overman, 2004; Morales, 2010; Pisapia & Westfall, 1994; Werner, 1990). Although there has been extensive research on the U.S. student dropout crisis, few studies have included teachers' and administrators' perspectives on the issue. Although many teachers and administrators voice concern for the nation's dropout epidemic, less than 33% think schools should expect all students to reach high standards toward graduation (Bridgeland, Dilulio, & Balfanz, 2009). Sadly, the same percentage of educators also opposed

requiring extra support and interventions to help students meet high demands, and called it unrealistic for all students to complete college-level work.

Such attitudes do not help produce resiliency in students. At-risk students are far more likely to succeed when schools, teachers, and principals not only recognize student accomplishments, but when they truly believe students can reach high expectations (Bridgeland et al., 2009; Hattie, 2012). When educators place faith in students, the pupils feel a sense of support and see themselves as part of a system that values their contributions. A student's self-esteem grows as teachers provide the student with recognition, encouragement, and appreciation for the efforts the student is giving (Pisapia & Westfall, 1994). However, in his summary of a seminar given by Carolyn Dweck, Fensterwald (2015) stated that prodding students to try harder, and telling them they would have done better with more effort, isn't enough (Fensterwald, 2015). Teachers that fail to suggest learning strategies when students are stuck or offer assistance at the right time leave students feeling more incompetent (Fensterwald, 2015). The "keep trying and you'll get it" method does not instill a growth mindset, nor does it cause a development of resiliency in at-risk students (Fensterwald, 2015).

Educators can draw on a range of techniques to provide a student with respect and recognition. Of course, adults should speak to students respectfully and actively listen when students express their needs. But teachers must be mindful of their nonverbal communication, as well. When students feel disrespected by a teacher, they typically point not to words but to nonverbal signals. Research shows that students who feel disrespected or negatively judged by a teacher show diminished motivation and effort (Alam, 2015).

Teachers also need to realize that students might be struggling with life circumstances, and they should demonstrate both concern for the student's well-being and a willingness to

provide assistance if a student faces anxiety (De La Cruz, 2008). The best educators spend time sitting individually with students to show they are interested in all facets of students' life and not just schoolwork.

Finally, educators should always convey the belief that all students are capable. Praise is connected to how students view their own intelligence (Cimpian, Arce, Markman, & Dweck, 2007; Pisapia & Westfall, 2004). Students, after all, vary in their perceptions of their own capabilities and brainpower. Some students think their ability to think critically and problem-solve is a fixed trait and that their intelligence cannot grow or develop. This mindset causes students to be overly concerned with how intelligent they may be. These students focus on activities that demonstrate their intellectual abilities, while avoiding any tasks that might expose their lack of knowledge (Dweck, 2006). Other students believe their intelligence can grow and develop with perseverance and a focus on learning (Kitano & Lewis, 2005). In this case, students think highly intelligent and accomplished people had to endure years of effort to become the individuals they are today. These students do not necessarily dwell on how smart they are individually, but instead focus on facing challenges that encourage intellectual development.

For many years, educators hoped to maximize student effort and confidence simply by praising student intelligence (Henderlong & Lepper, 2002; Mueller & Dweck, 1998). Nevertheless, research shows that for students of all ages and in all settings, lauding students' intelligence provides them with a surge of self-confidence – followed by a series of negative outcomes (Dweck, 2000). Such findings suggest that rather than praising students' intelligence outright, teachers would do well to compliment students' positive habits and achievements.

The School Setting as a Protective Factor

Stressful life conditions can also lead to behavioral problems in children (Chappel et al., 2014; Condly, 2006; Dweck, 2000). In the wake of highly publicized school shootings on U.S. campuses, schools in recent decades adopted a "zero tolerance" stance on school discipline and behavior management for students. American schools essentially emulated U.S. courts, subjecting problematic students to removal and/or alternate placement. In fact, while the United States is home to only 5% of the world's population, it houses 25% of the world's prisoners (Wilson, 2014).

Sadly, the zero tolerance approach has blocked the academic progression of many students facing poverty and other adverse conditions. In some cases, teachers with poor classroom management skills use zero tolerance rules to eliminate "problem students" so they only have to teach those who "want to learn." This practice has caused a significant imbalance in urban schools by eliminating minority students and leading many to enter the juvenile justice system (Wilson, 2014). Moreover, a student's relationships with school staff, family, and community leaders are damaged in the expulsion process, in direct contravention of research on the importance of ensuring caring adults in the lives of at-risk students (Coggshall et al., 2013). Excluding kids from school only inhibits resiliency-building and compounds the U.S. dropout crisis. Schools can address defiance and behavioral issues in more constructive ways.

At the same time, minimizing risk and students' vulnerability to risks can increase a student's self-respect and provide new opportunities for students to grow and develop academically (Rutter, 1987). Establishing relationships among churches, schools, and businesses; training teachers; involving parents; encouraging academic performance; and carefully allocating resources all contribute toward reducing risk and instilling resiliency in students (Swanson &

Spencer, 1991). Non-resilient students may need help on this front because they often require assistance in becoming more involved in school and other organizations that connect to the school setting (Csikszentmihalyi, 1997).

Research has been conducted to identify factors to guard students from being at risk (Benard, 2004; Condly, 2006; Dweck 2000; Finley, 1994; Martin 2002). The research suggests a variety of intervention and prevention approaches that will foster productive outcomes. Masten and Coatsworth (1998) recommended three specific tactics. First, the design of a program should prevent risk factors from being its primary focus. Second, when the risk becomes evident, one must increase resources to help mitigate the future risk(s). Finally, prevention and intervention is a process that can be built. For example, self-reliance, attachment, and social supports encourage one to adjust to school and gain competence vital to child development (Masten & Coatsworth, 1998). Parental support of adolescents has proven as a positive factor that fosters resilience, especially close, caring relationships with parental figures (Garmezy, 1985; Masten, Best, & Garmezy, 1990; Oostdam & Hooge, 2013). The sample in the study focused on students characterized as impoverished, with poor English speaking skills and reading and math proficiency that are considered far below the standard. A glaring fact within the study was that parents want more interaction around academic concerns, yet high schools focus their communication on rules and problems. An area that has often been neglected in resilience research is the impact that extra-curricular activities or participating in other activities outside of the regular school day has on the enhancement of resilience and optimism in school engagement (Garrett, Antrop-Gonzalez, & Velez, 2010). Lastly, school environments can protect against the effects of identified adverse conditions, helping to increase competence in students who are considered to be at risk (Comer, 1985; Edmonds, 1979; College & Perry, 1993).

On campus, teachers can take specific steps to foster resiliency in at-risk students. These include providing opportunities to develop relationships with parents, increasing students' grasp of standards, developing social and academic capabilities, minimizing stressors, and creating school and community resources that serve the needs of the children (Bruce, 1995).

Teachers and schools have the ability to transform lives, but they need to feel supported in their environment. Resilience research shows that what teachers do matters – and for some students, instructors can tip the scale away from academic failure and toward resilience and scholastic success (Hattie, 2012). A teacher is the most positive influence in a child's life outside of the family circle (Werner & Smith, 1989; Voke, 2003). Therefore, it is critical that school districts support educators by providing time for them to work collaboratively with their colleagues. Such teamwork builds a sense of community within the school, helps sustain progress toward change, and improves academic achievement (Joyce & Calhoun, 2010; McLaughlin & Talbert, 1993). According to Csikszentmihalyi (1997) some of the children who are considered to be at risk know how to selectively disregard some of their situations and focus their mindset to be more self-centered. They exhibit high self-esteem and they always focus on achieving their goals.

As already noted, students who are considered to be non-resilient require assistance in becoming more involved in school and other organizations that connect to the school setting. According to Csikszentmihalyi (1997), the two main aspects that enable students to become more involved include knowing how to focus on a goal and offering prompt feedback on the activities undertaken by the students. In other words, classrooms should concentrate on experiences that engage students in challenging lessons that enhance new skills and assist students to learn to concentrate.

In most cases, the classroom setting for students who are vulnerable to failure in their studies requires direct instructional strategies where instructors teach the entire class at the same time and facilitate the entire classroom with productive discussions (Waxman, Padrón, & Arnold, 2001). The direct instructional model as noted by Stephen, Varble, and Taitt (1993) focuses on teaching, assessments and activities that are aimed at ensuring that the students fully understand the subject being taught. However, researchers such as Haberman (1991) dismissed the approach by noting that the teachers are mainly held responsible for student performance even though the performance will be mainly dependent on the effort the student gives to his or her goal(s). There is a big disconnect between what the students are interested in and what is being taught by the teachers.

Productive classroom instruction for students who are non-resilient focuses on adopting teaching strategies that are considered to be effective for at-risk students. According to Waxman et al. (2001), some of the approaches that have been considered to be effective in enhancing academic performance of at-risk students include strategies that are cognitively conducive to learning. Culturally responsive instruction, for example, ensures that the lesson is technically enriched, collaborative in nature, and elicits instructional conversations that inspire and engage the learner despite their cognitive abilities.

Grit, Perseverance & Growth Mindsets

The school setting is one of several factors fundamental to a child's motivation to learn, which, is a key asset for success in school and career (Christensen, 2014). In assessing human characteristics most likely to bring success, researchers have focused in part on the concept of grit (Christensen, 2014; Duckworth & Quinn, 2009; Schechtman, DeBarger, Dornsife, Rosier, & Yarnall, 2013).

In 2013, The U.S. Department of Education published a study highlighting tenacity and perseverance as key predictors of educational achievement and critical factors to success in a 21st century global society (Christensen, 2014). Grit differs from resilience in that grit entails not only transcending adverse conditions, but also showing a deep, sustained, and long-term commitment to major goals (Perkins-Gough, 2013). Studies show that students with grit are less likely to drop out or quit before accomplishing their educational goals (Duckworth, Peterson, Matthews, & Kelly, 2007; Duckworth & Quinn, 2009; Perkins-Gough, 2013). New research has pushed schools to embrace the need to foster and support grit among at-risk students (Christensen, 2014).

Studies like the Grit Scale look at changes in grit behaviors over time and have determined that scores do not differ among genders (Duckworth & Quinn, 2009). Furthermore, based on grit scale results, adults with higher levels of grit completed higher levels of education and stayed in the same profession continuously for more years than did those with lower levels of grit (Duckworth & Quinn, 2009). Research has also found differences between an ability to persevere through minor challenges and a determination to accomplish major goals. One researcher identifies two different constructs related to grit. The first relates to persistence toward achieving a certain goal, while the second involves consistent interest in one thing over time (Christensen, 2014).

Another study offers guidance to parents on how to build grit in at-risk children (McMurray, 2014). Parents should let children fail when they make poor choices that invite failure, resist any temptation to shield children from challenges, allow children to devise solutions to challenges through critical thinking, teach children to set goals and develop plans to achieve them, and model grit themselves so their children can see it in action (McMurray, 2014).

On a less promising note, state and federal school accountability regimes in recent years have undermined efforts to instill grit and resiliency in at-risk children. Standards-based testing gained widespread traction with the passage of the federal No Child Left Behind Act (NCLB) in 2001, posing a new set of challenges for schools and districts (Laursen, 2015). Local Education Agencies (LEAs) responded to NCLB by shifting programs and priorities to meet state and federal demands for higher student achievement (Laursen, 2015). With the test-centered school reform in place, strategies for effective learning and student engagement became more challenging to apply to at-risk students (Laursen, 2015).

Although legislators intended NCLB to address inequity in U.S. schools, educational outcomes, in fact, disfavored at-risk and minority students (Laursen, 2015). Sanctions for subpar overall test scores led districts and schools to focus on boosting pass rates for students who were nearly passing already. This dynamic proved costly to low and high performing students alike as schools' emphasis shifted away from the educational needs of both (Laursen, 2015). The narrow, test-focused approach to gauging student competencies significantly reduced resiliency development in at-risk students and grossly failed to prepare them for real-world experiences (Duckworth et al., 2007; Laursen, 2015).

To ensure that at-risk students can compete in an increasingly complex society, education officials should focus less on testing and more on cultivating broader skill-sets in children. This skill development might include collaboration with peers and lessons emphasizing problem-solving and critical thinking (Duckworth et al., 2007; Laursen, 2015). One key is for parents and educators to foster grit, tenacity, and a growth mindset in at-risk students both in and out of the classroom setting (Duckworth et al., 2007; Dweck, 2006; Laursen, 2015).

Dweck (2006) contends that there are two distinct mindsets: fixed and growth. At-risk students, who tend to have fixed mindsets, believe their talents and intelligence are finite and nothing can change them. They worry about their abilities and inadequacies while trying to prove to themselves and others that they can do more (Dweck, 2006). Students with this mindset experience academic growth in the context of perceived limitations. By contrast, students with a growth mindset acknowledge their talents as traits they can develop through perseverance, effort, and a commitment to successful outcomes (Dweck, 2006; Laursen, 2015). Developing this healthier mindset in at-risk students requires teachers to provide opportunities for students to attain gradual success through practice and improvement. In this way, students grow to understand the connection between resiliency and success (Laursen, 2015). The key to developing resiliency in at-risk students, then, is to teach and reinforce the growth mindset as students experience success over time (Duckworth et al., 2007; Dweck, 2006; Laursen, 2015).

The Grit Scale

The concept of resiliency in human beings has been a discussion that has taken place over decades among scholars and researchers in the field of psychology and education alike. In the early 20th century, questions were being raised regarding what makes certain people succeed while others fail, and how we as human beings must tap into an inner strength in order for us to reach our full potential, and succeed at a high level.

Compared with what we out to be, we are only half awake. Our fires are damped, our drafts are checked. We are making use of only a small part of our possible mental resources…men the world over possess amounts of resource, which only exceptional individuals push to their extremes of use. (James, 1907, p.322-323)

Currently, there is a lack of research that adequately measures and validates attributes that develop grit, resiliency, perseverance, and passion for long-term goals (Duckworth & Yeager, 2015). The question is raised, why do some individuals accomplish more than others of equal intelligence and circumstances? Psychologists have researched human behaviors for decades to identify the types of human abilities and the means by which they unleash these abilities. The "unleashing" of abilities and having stamina to achieve goals is a critical factor in the reasoning of why some at-risk students succeed while others fail in school. Grit is defined as resiliency and passion for achieving long-term goals (Duckworth et al., 2007). Grit as a human ability encompasses a committed work ethic towards challenges, establishing a dedicated effort and interest over a long period of time despite failures, adversity, and plateaus in personal growth, and development (Duckworth & Yeager, 2015).

Intelligence is widely thought to be the best predictor of achievement based on reliable and valid measures of IQ (Gottfredson, 1997; Hartigan & Wigdor, 1989). However, other studies comparing mentally gifted children showed that the most accomplished males had an IQ that was a mere five points higher than their less accomplished counterparts (Duckworth et al., 2007). Other researchers have established a descriptive framework on traits that predict success that is referred to as The Big Five (Goldberg, 1992; John & Srivastava, 1999; Tupes & Christal, 1992). The personality traits identified as predictors to success include openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Contrarily, other researchers have found that any given personality trait minimally contributes to achievement or success, and, when compared to IQ, personality has no consequence. (Tett, Jackson, & Rothstein, 1991).

Duckworth and Yeager (2015) concluded that IQ and personality are not the sole contributors to grit, resiliency, and passion to achieve long-term goals (Duckworth & Yeager,

2015). In fact, IQ and personality traits appear to have a minimal effect, if any, on the development of grit, resiliency, passion, and commitment to achieving long-term goals in students faced with challenges, failures, and adversity (Duckworth et al., 2007). Educators commonly understand curricula, instructional strategies, and how to deliver the content while assessing achievement both formatively and summatively in the classroom (Duckworth & Gross, 2014). However, the educational system fails to understand student learning from a motivational and psychological perspective (Duckworth & Gross, 2014). The lack of understanding contributing factors to motivation, grit, resiliency, and psychological impediments is magnified among students facing adverse conditions in their lives. Shockingly, little is known about grit, the science behind grit, and effective ways to develop grit (Duckworth & Yeager, 2015). As a result, the questions can be asked, what if doing well in school and in life depends on much more than IQ, personality traits, and the ability to learn quickly and easily? What if there are verifiable strategies, programs, and determinants that can increase the development of grit, resiliency, perseverance, and passion to achieving long-term goals by overcoming challenges, adversity, failures, and progress plateaus among at-risk students?

Duckworth attempts to answer the question through an instrument that she calls the Grit Scale. Due to the lack of existing measures in the educational world that validate the development of grit, Duckworth and her staff developed a self-report questionnaire to help fill this gap (Duckworth et al., 2007). Based on previous research, grit was expected to be directly related to self-control and the conscientiousness attribute of the Big Five Framework (Duckworth et al., 2007). Duckworth et al.'s (2007) Grit Scale is comprised of 12 specific statements focused on characteristics related to grit and resiliency. These statements are:

1. I have overcome setbacks to conquer an important challenge.

2. New ideas and projects sometimes distract me from previous ones.

3. My interests change from year to year.

4. Setbacks don't discourage me.

5. I have been obsessed with a certain idea or project for a short time but later lost interest.

6. I am a hard worker.

7. I often set a goal but later choose to pursue a different one.

8. I have difficulty maintaining my focus on projects that take more than a few months to complete.

9. I finish whatever I begin.

10. I have achieved a goal that took years of work.

11. I became interested in new pursuits every few months.

12. I am diligent.

The Grit Scale led to the belief that grit accounts for more variance in outcomes than IQ and any of the identified Big Five traits (Duckworth et al., 2007). Achievement is a product of both talent and effort given to a task. Effort is the highest contributor to achievement and varies based on the intensity, direction, and duration of an individual's exertion toward any given goal (Duckworth & Yeager, 2015). Higher intensity, clearer direction, and longer sustained duration determines the level of grit an individual possesses.

Theoretical Framework

Cultural reproduction theory, Dweck's (2006) Growth Mindset theory, and Duckworth and Quinn's (2009) Grit Scale are used as theoretical frameworks of this research study because

its questions investigate the barriers that at-risk students face throughout their educational careers. Ensuing is an outline of the theory that will influence this research study.

Some argue that teacher effectiveness is the factor most critical to student learning, and that high school dropouts can be prevented with high quality, engaging instruction (Darling-Hammond, 2008; Darling-Hammond & Richardson, 2009). However, each child comes to the classroom with different challenges, expectations, prior knowledge, and other factors that lead to the academic success or failure of that particular child. The most difficult child to educate is the one that faces multiple challenges and barriers in their life. The adverse conditions that these children face can disrupt or diminish their development of resiliency, grit, and perseverance, all of which greatly assist a child throughout their academic years. In order to mitigate the adverse conditions that children face, one must first identify the risk factors that are impeding the development of the child and causing barriers to their educational success. The more adverse factors a child experiences, the more at-risk the child becomes to fail in school and to eventually drop out. When risk factors are identified, a parent, teacher, educational institution, or other major influence in the child's life can begin to mitigate the risk factors. Effective mitigation can provide successful implementation of strategies, programs, and policies that will develop and foster resiliency skills in at-risk students.

Cultural Reproduction Theory

Bourdieu (1977) concluded that two major concepts exist in cultural reproduction; cultural capital and habitus. This research study focuses primarily on cultural capital. Essentially, cultural reproduction is when social class privilege is reproduced from generation to generation. Cultural capital is considered the cultural background, dispositions, proficiencies, and intelligence delivered from one generation to another (Bourdieu, 1977). It is a critical component

of resiliency development in children since competencies, experiences, and cultural norms result in the character traits of an individual (Payne, 2008). Inherited cultural capital deals specifically with the hidden rules that exist among social classes, influencing certain tendencies that lead to the development of resilience, grit, and perseverance in a child, or the lack thereof (Payne, 2005). Although some of the traits and experiences are not taught in schools, awareness of the hidden rules, cultural norms, and personal experiences of each child can certainly lead in the right direction to resiliency development for at-risk students (Payne, 2005).

It is important to note that children in higher socioeconomic classes inherit a set of cultural capital that is much different than those children coming from working-class families or those that are identified as living in poverty (Payne, 2005). Experiential patterns cause certain socioeconomic classes to gain more cultural capital than others (Lam, 2014). Experiential patterns can be the difference between going to theatrical production and going to the movies; Students born into and raised in poverty would be more likely to go to the cinema to watch a movie while those in a higher socioeconomic class would have experiences in attending a theatrical production (Lam, 2014). These experiential patterns cause students from a high socioeconomic class to be more successful in school because of their exposure to higher order thinking, problem solving, vocabulary, literacy, and other factors that develop the brain in ways that are advantageous to student learning (Harrison, McLeod, Berthelsen, & Walker, 2009; Lam, 2014; Lee & Bowen, 2006; Payne, 2005).

Bourdieu (1977) defined habitus as an arrangement of dispositions which operate at every moment as a template of perceptions and actions. The experiences of everyday life provide acquisition of lifestyle, values, expectations, and dispositions of a given social group. Through these various acquisitions, the structure of the mind is developed to reflect preferences and

actions of future embodiment (Reay, 2004). Values within a given social class are internalized,

causing the development of one's attitude, actions, and responses to given situations they face. In

other words, habitus disposes an individual to think, and act in certain ways leading to the

individual's social world to be regulated based on past experiences.

Cultural capital in education makes the assumption that possession of cultural capital

varies among social classes, and that the educational system will be impacted by the difference in

cultural capital experiences of its students. Educational success becomes challenging for at-risk

students who possess little cultural capital.

By doing away with giving explicitly to everyone what it implicitly demands of

everyone, the educational system demands of everyone alike that they have what it does

not give. This consists mainly of linguistic and cultural competence and that relationship

of familiarity with culture which can only be produced by family upbringing when it

transmits the dominant culture (Bourdieu, 1977, p. 494).

Regardless of the disadvantages at-risk children face in their quest to succeed in school,

the educational system is meritocratic and therefore legitimizes the differences that exist. With a

system such as this, it is perceived that education in America is a key contributor to maintaining

the status quo (Bourdieu, 1974). Education perpetuates the existing social pattern by providing

justification for social inequalities through meritocratic measures (Bourdieu, 1974). Cultural

capital is more prominent in higher social classes, leading the higher class student to gain a better

education than students who are considered to be at-risk and have minimal cultural capital. As a

result, higher class individuals maintain their socioeconomic status, causing a continuous

elevated position in social culture that remains from generation to generation (Bourdieu, 1974).

However, some students facing serious challenges that put them at risk for failing will succeed in

school and begin the process of eliminating the cycle of poverty, social capital deficiency, and social position.

Dweck's Growth Mindset Theory

Resilience is the balance between risks and protective factors that a person endures during a given point in their life. Individuals are able to cope with adverse conditions if the balance of protective factors is manageable. Resiliency and grit are closely related; each of which benefit from having a growth mindset instilled within the individual. In order to develop and foster these important skills, one must consider the implications that exist both in and out of school (see Figure 1). Risk factors can be mitigated when schools focus on strategies and programs that support the protective factors.

Figure 1

Theoretical Framework for Developing Resiliency, Grit & Growth Mindsets in At-Risk Students

Identify High Risk Factors

| Divorce | English as Second Language | Poverty | Cultural Capital | Brain Development | Stress |

AT-RISK STUDENTS

Identify Successful Mitigating Factors

Out of School Factors

In School Factors

Cultural Capital

Parental Involvement

Vocabulary & Literacy Development

Blended Factors

Early Recognition

Educational Expectations

Positive Reinforcement

Engaging Instruction

Caring Adult Relationships

Motivation

Self-Efficacy

Resiliency, Grit & Growth Mindsets

However, for most children raised in poverty and facing additional adverse conditions in their lives, the risks can become overwhelming with few protective factors present throughout their early life. When such risk factors are present in a child's life, their potential for educational success greatly diminishes. However, as risks are enveloped by protective factors, a door is open to changing the mindset of the individual and in doing so, creating a pathway to resilience and grit development in at-risk students.

A prominent researcher in resilience development and growth mindsets is Carolyn Dweck. Her research has shown that a student's mindset has a direct influence on their academic outcomes (Dweck, 2010a, 2010b). When educators dedicate time teaching students how to develop a growth mindset, both grades and academic achievement will rise (Dweck, 2010a). Dweck (2006) has identified two types of mindsets; a fixed mindset and a growth mindset. Individuals that have a fixed mindset believe that qualities, personalities and intelligence are fixed and cannot change (Dweck, 2006). Individuals with a growth mindset believe that your basic qualities, personality and intelligence are things that can be cultivated with energy and effort (Dweck, 2006). Educators constantly are discussing equity in education, and typically the discussions revolve around brick and mortar schools and are easily quantified. The more difficult issue to address is when administrators, teachers, and even students believe that intelligence is fixed based on the race, culture, poverty, or other contributing risk factors in a life of a child. Research has shown that two beliefs exist among educators, and even the student, when it comes to a student's intelligence and ability to learn (Dweck, 2006, 2010a, 2010b). Educators and students with a fixed mindset believe that intelligence is a static trait, and that, based on multiple external and internal factors, some students are smart and others are not (Dweck, 2006, 2010a, 2010b). This type of thinking is prominent in school districts with high concentrations of poor

students coming from Hispanic or African-American communities and is a cause for much

discussion and finger-pointing when it comes to academic achievement in schools (Dweck,

2010a). There are those educators and students with a growth mindset, however, that believe

intelligence can be developed through strategic efforts, whether it be programs, policies,

procedures, or, most importantly, high quality, engaging instruction in the classroom. A growth

mindset does not imply that all students learn the same and that abilities are dependent on the

environment or circumstances of the child. Instead the implication is that a student's intellectual

ability can be cultivated, nourished, and grown through effective strategies that generate self-

efficacy and perseverance in students facing multiple adverse circumstances in their life (Dweck,

2006, 2010b).

Dweck's research is nearly a decade old now and the educational world has grasped onto

the importance of developing a growth mindset. The popular concept has led the gaming industry

to create growth mindset games, publishing companies to write "quick guides" to developing a

growth mindset, textbook companies to incorporate growth mindset activities into curricula, and

a variety of other trends. The problem with popularization is oversimplification without a clear

understanding of what is truly necessary to accomplish the goal (Fensterwald, 2015). The biggest

challenge that teachers, parents, and schools now face when attempting to implement Dweck's

work is the misapplication of strategies due to a lack of understanding of the foundational

principles of a growth mindset (Fensterwald, 2015; Mueller & Dweck, 1998).

In a recent Education Writers Association seminar at Stanford University, Dweck

explained the often used simplification of strategies (Fensterwald, 2015). She highlighted the

example of praising a child's intelligence and stressed that doing that actually creates a fixed

mindset. When a child is given a belief of how smart they are, the governing factor in their mind

becomes the idea that they can or can't do something, thus, creating a fixed mindset (Fensterwald, 2015; Henderlong & Lepper, 2002; Mueller & Dweck, 1998). The adverse outcome is that when the child becomes stumped on a problem, they lean towards giving up and conclude that they just aren't smart enough or good at that particular subject (Fensterwald, 2015; Henderlong & Lepper, 2002; Mueller & Dweck, 1998). The misapplication of the strategy is detrimental and causes a child to be less resilient when faced with difficult situations, leaving the formation of a growth mindset damaged or defeated (Fensterwald, 2015; Henderlong & Lepper, 2002; Mueller & Dweck, 1998). Proper application is to teach children that the brain functions like a muscle and that continuous practice and repetition strengthens its development (Fensterwald, 2015; Mueller & Dweck, 1998). This strategy reinforces perseverance and resiliency by connecting the cause and effect of mindset development (Fensterwald, 2015; Henderlong & Lepper, 2002; Mueller & Dweck, 1998).

Conclusion

Academic research clearly indicates that there are, in fact, various factors that can instill resiliency in at-risk students (Jones, Mucherah, & Nettles, 2000). These factors are a combination of creating an appropriate environment, providing educators who understand the needs of the students and are dedicated to student success, allocating resources to programs that foster achievement, recognizing and reinforcing success when it manifests, building upon protective factors in students, and providing caring adults who can address any educational shortfalls and offer positive mentorship. These factors are proven to greatly increase the chances of at-risk students growing resilient in their education.

Chapter III

Design and Methodology

The United States face a serious problem with students deciding to drop out of school prior to receiving a high school diploma. To the detriment of our nation's future, over 7,000 students drop out of school every day (Swanson, 2010). Only 68.8% of high school students complete their high school education within their 9th through 12th grade years (Swanson, 2010). Many of the nation's students who end up dropping out of high school are, or were, considered to be at-risk at some juncture in their educational pathway. At-risk students face a variety of obstacles and barriers that contribute to their ultimate failure in K-12 education including a lack of motivation, disinterest in education, and sense of low self-worth (Swanson, 2010). The impact from this disappointing reality will inevitably cause a serious blow to our nation's economy if we are not able to identify the contributing factors that lead to academic failure and the effective strategies that both mitigate and eliminate these negative factors (Burrus & Robert, 2012; Kimball, 2006; Patterson et al., 2007). The Bureau of Labor Statistics (2010) reported a combined estimate of $154 billion in economic stability is lost over the lifetime of those that have dropped out of high school. In addition to lost revenues to the economy, high school dropouts are more likely to live in poverty and access government assistance programs (Patterson et al., 2007). Furthermore, high school dropouts are more likely to commit crimes, become pregnant in their teens, and rely on welfare to support their negative habits (Kimball, 2006). These issues show that high school dropouts are not contributing to the growth and development of our economy, but instead are stifling it. (Alliance for Education, 2011; Burrus & Roberts, 2012).

This study, however, will research the negative factors associated with students being at-risk and identify positive strategies and solutions to assist them in developing behaviors and characteristics that will lead to academic success despite the adverse conditions that they face.

Purpose

The purpose of this study was to identify key factors that lead to educational resilience of students who are faced with adverse conditions. The intent was to gather information and data to determine if, in fact, there are strategies that can be used in school settings that will result in an increase of resiliency in students who are considered to be at-risk. The research will be used to assist local education agencies in developing a framework to help mitigate the high school dropout crisis in school districts.

Research Design and Questions

The preferred methodology for this study is a mixed methods study. This method was chosen to measure the overlapping but different factors leading to resilience in at-risk students. A mixed method study allows researchers to seek associations between quantitative and sociocultural (qualitative) data (Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007). This study was used to augment traditional methods for assessing and monitoring impacts of social issues in order to overcome the lack of understanding and knowledge that exists in student resiliency for those that are considered to be at risk. Qualitative and quantitative data was collected simultaneously, and the results addressed the research problem of fostering resiliency among at-risk students. Creswell (2013) states that this design method allows for one data collection form to supply the necessary strengths to offset the weaknesses of the other form. This design allowed for a more complete comprehension of this research problem than would result from only collecting qualitative or quantitative data. In their research, Marshall and Rossman (2014) argued

that the actions of a human being cannot be interpreted without first assigning a meaning to their actions. Only then can a clear understanding of the actions can be identified. This study utilized a successive, clarifying mixed methods design, and began with quantitative survey and student interviews being collected and analyzed. The qualitative student interviews then brought a voice to the outcomes of the quantitative results, giving a structured balance to the findings.

The specific research questions to be addressed are:

1. What factors do successful at-risk students identify as key contributors to their resilience, grit, and growth mindset?

2. What strategies and instructional programs most clearly foster resilience and growth mindsets in at-risk students?

3. What variables are most strongly correlated among risk factors and growth mindset attributes?

Participants

Before any data was gathered, permission was obtained from Northwest Nazarene University's Human Research Review Committee (HRRC) (Appendix A). Permission was also obtained from the district superintendent (Appendix C). Because the majority of students who were studied were under the age of 18, parental consent was given before any subject participated in the interview or Likert Scale assessment (Appendix F, K & L). In addition, the superintendent has been highly interested in the outcome and has supported the researcher with relevant data and information to assist in the study. He recognized the study as a possible solution to a growing problem in districts with high concentrations of English language learners, foster youth, and students who come from families living in poverty status.

The qualitative subjects were high school students who attended schools in a low-socio economic district with a high percentage of the students identified as free and reduced lunch, English language learners, foster youth, and members of single parent families. ABC School District is located in an urban area of southern California and has been given a pseudonym to protect its identity. ABC school district was comprised of three comprehensive high schools, one alternative high school, one community day school where expelled students are assigned, and one online high school. The students interviewed, however, were selected from the three comprehensive high schools in the district in order to better identify a standard for continual progress in school without being redirected to an alternative high school. Each of the high schools have a different student population ranging from more affluent to more impoverished; this provided differentiated environments and resulted in a broad sample set inclusive of regular education students, English language learners, foster youth, students on free and reduced lunch (poverty status), and special education students. The subjects came from three main ethnicities of Caucasian, Hispanic, and African-American descent, which make up the largest subgroups in the district. Hispanics and African-American students are identified as two of the highest at-risk subgroups in the nation (Cataldi et al., 2009). The sample groups had two or more at-risk characteristic from the definitions stated in Chapter 1. The individuals studied in the sample met all of the criteria to be in the study and willingly participated in the interviews (Appendix F).

The qualitative data collected consisted of eight interviews (four male students and four female students) conducted with students from various backgrounds, all of whom experience multiple adverse conditions in their lives. After the interviews were conducted, a debrief statement was given to each participant to allow for feedback (Appendix G). The conditions that each student faces are what research has shown to be risk factors for student achievement and

success. The interviews focused on the strategies, programs, and conditions that schools and districts can implement in their systems to foster student resiliency, grit, motivation, and growth mindsets among at-risk students who are facing serious challenges while attending school. This chapter described the backgrounds and experiences of these students. Each student faced serious adverse conditions, however, they excelled academically, are on track to graduate in the top ten percent of their senior class, and are concurrently enrolled in community college earning post-secondary credits. Each interview as transcribed and coded to establish emerging theme that resulted from the participants' responses (Appendix M). A research assistant was used to assist in the transcription process and provided a signed confidentiality agreement for the protection of the participants' identities (Appendix O).

As directed by the administration of the participating high schools, students were recommended by the school counselors before the researcher contacted them electronically to request face-to-face interviews (Appendix D). The recommendations were based on the various risk factors an individual student encountered in their lives, and their success at school. In addition, teachers within the program provided a survey to students to identify various risk factors that each student faced (Appendix N). The extensive research took place over the course of two months, during which individual interviews with at-risk students were conducted. The researcher asked each student a series of questions in order to better capture information regarding the adversities being faced as well as the factors that contributed to overcoming them. The study caused minimal risk to students, and each student had the opportunity to opt out of the interview or cease the interview at any time they felt uncomfortable with the questions being asked. In addition, they could choose to skip a question and move on if there were any feelings of discomfort or embarrassment.

In order to make the student more comfortable, each interview was conducted at the student's school in or close to the main office, but in a setting that allowed for confidentiality. An effective study requires that the researcher protects all of the participants and respects their privacy and anonymity (Marshall & Rossman, 2016). The integrity of the study was effectively maintained through the protective measures put forth by the researcher and through strict adherence to the laws that protect individual privacy. The Family Educational Rights and Privacy Act (FERPA) served as a guide to best and acceptable practices for maintaining privacy for each participant. The participation consent form that was given to students reflected the purpose, scope, and length of the study, and it disclosed specific information that was pertinent to the student, parents/guardians, and the study (Appendix E). A parent consent form clearly explaining the process and procedures for conducting the research was given to each student under the age of 18 (Appendix H).

Purposeful samples of students were selected by counselors and administrators of each individual school based on the criteria and scope of the study. The criteria for selection was primarily based on the combination of the student's academic achievement and having two or more identified risk factors that would limit their success in school. The identified risk factors included, but were not limited to: divorced parents, English as a second language, poverty (NSLP status), single parent home, loss of an immediate family member, or another major life event. Creswell (2008) suggests that researchers appropriately choose populations that will significantly increase understanding of the problem that is being researched. As such, eight students who were on track to graduate in the top ten percent of their class while experiencing multiple risk factors characterized in this study, were selected for interviews. The students who were selected provided a myriad of insights on various challenges that they faced, and they

provided tangible strategies that could easily be implemented in the educational setting to foster resiliency among all at-risk students.

The quantitative portion of the study was based on students that had experienced failure in their past but had reestablished themselves as academic achievers. In 2012, ABC School District researched and implemented a 9th grade transition program for a selection of the most at-risk 8th graders that were due to start high school. Due to the fact that the district does not retain or exclude failing 8th graders from promoting and entering high school, there is a significant portion of students who fail their middle school courses but yet are allowed to promote and continue their high school education. High school principals and the Director of Secondary Education, with the support of district leadership, researched and evaluated solutions for early intervention for students who statistically are on the path to failure or dropping out of high school. After a year of research, preparation, and implementation, a 9th grade academy was established for the highest risk incoming 9th grade students. Students were selected based on their academic history, which consisted of the failure of three or more core classes, attendance, behavior, and state standardized test scores. The students participated in the program for their 9th grade year and then transitioned back to their resident high school at the beginning of their 10th grade year. The first cohort of 9th graders became seniors in the 2015-2016 school year. The quantitative subjects for this study were comprised of 12th grade students who were part of the original cohort.

Data Collection

In order to be considered an ethical researcher, specific training and certifications were conducted through the National Institute of Health (Appendix B). The researcher was able to receive permission from the Superintendent of ABC School District in order to conduct the

interviews and to gain access to analyze student data (Appendix C). Consent was also granted by

the Human Research Review Committee (HRRC) at Northwest Nazarene University prior to

beginning this study (Appendix A).

The purpose of this study is to identify and understand effective strategies that foster

resilience, grit, and perseverance among students with adverse conditions. The study examines

how at-risk students are viewed and what their needs are to be successful. To this end, the data

collection was done in two different ways: a Likert Scale survey called the Grit Scale (Appendix

K) was conducted, using Qualtrics, and examined in relation to the exhibited exertion of grit in

the students, and student interviews were conducted.

Cultural reproduction theory assumes that a child's exposure to risk is based on the

experiences they encounter within their environment throughout their life and that the

experiences are common throughout generations. The theory suggests that if external or internal

adverse conditions are present within a generation, similar adverse conditions will be present

throughout following generations unless certain protective factors are in place. Like risk factors,

protective factors might be considered external or internal. For example, the loss of a parent in

the home would be considered an external risk factor, while feeling alone or depressed might be

considered an internal factor. Using these same examples, an external protective factor would

include another caring adult to figuratively step into the void that is left by the non-existent

parent, thus, causing a new sense of belonging to be felt by the child. With this in mind, the data

collection was intended to gather the risk factors that exist with the sample sets, identify the

generational tendencies, and investigate effective protective factors that can be implemented

externally and developed internally for at-risk students.

The dependent variable considered in the quantitative study was the amount of grit an at-risk student perceives themselves to have and was based on their responses to the Grit Scale. The analyzed data of the Grit Scale was factored based on ordinal data showing a low perception of grit and high perception of grit in each student. The independent variable consisted of four categorical, independent groups marking the risk factors that were present in the student's life at the time of the survey. These variables include single parent household because of divorce or loss of a parent, English as a second language, and socioeconomic status. The independent variables were obtained through a series of questions provided prior to completing the Grit Scale (Appendix L).

In addition aggregate reports were obtained from the ABC district using all students who targeted in the research study. These reports included the following variables: grade level, gender, socioeconomic status, family configuration, educational level of the parent, and English as first language in the home. Any identifying student information was scrubbed from the documents prior to submitting the data for research. By doing so, the established data is considered anonymous.

Analytical Methods

Data analysis took place using IBM SPSS Statistical Software Version 2.3. Analysis was conducted to determine a correlation between risk factors, the amount of grit at-risk students possess, and effective strategies that lead to the development of resilience and grit within at-risk students. Multiple tests were administered to seek correlating outcomes, both positive and negative, in relation to the identified risk factors for each student.

A round of interviews was completed with each student individually for a total of eight interviews. Each interview was paired with observation of participants' body language, field

notes, and setting, with the intent to assist in identifying themes throughout the data analysis process (Creswell, 2013; Marshall & Rossman, 2016). After each interview was conducted and field notes completed, a comprehensive overview of the observations and initial thoughts were recorded to accurately detail the experience. Each interview was recorded and transcribed, and detailed notes were written as common themes emerged from the responses of the participants. Transcripts were gathered, read, and coded based on the information that was discovered as the literature regarding the subject was reviewed. Follow up interviews were conducted as needed for further clarification and discussion. All of the data was saved to two protected USB drives and stored in a locked filing cabinet only accessible by the researcher. Each of the devices were encrypted for security with a password that only the researcher could access. The data will be kept for three years to be in compliance with the Federal Assurance Code (45 CRF 46.117), after which it will be permanently destroyed.

Prior to conducting the interviews, interview questions were piloted among three male and two female students from the alternative high school who experienced multiple risk factors and were back on track in earning a high school diploma. Each of the students provided feedback on the interview process and the questions that were asked. Based on the feedback, changes were made to the questions after the pilot. The environment for conducting the interviews was a priority, and, therefore, multiple settings were used to identify the best possible environment. The settings included: (a) main office conference room, (b) in a student's classroom with the door open, and (c) in the district office. After careful reflection of the pilot, it was determined that not all of the questions were necessary and that the student's story could lead to alternate questions that were not on the list because of the challenge that they were describing. Each of the pilot participants was a stranger to the researcher, so the setting was very close to what the

experience would be for the study participants. The pilot confirmed that the scope of the study and questions were appropriate and that an accurate study would exist through the interview process.

Identifying and coding interview data can be complex, but it is necessary so that the researcher can effectively understand the results (Bryman, 2006; Edwards & Lampert, 2014). Coding began with looking for distinct concepts and categories in the data causing a basic formulation of analysis. The data was broken down into concepts and subheadings. Every time an interviewee consistently talked about a specific theme or idea it was highlighted a specific color. Each of the subheadings for the overarching concept would be highlighted the same color. Additionally, underlining and writing in the margins proved to be beneficial in the coding process. After the coding exercise, the information was placed into a brief outline using Microsoft Excel, with the concepts being the main heading and the categories within those concepts becoming the subheadings (Bryman, 2007). The Excel document was used to easily collapse and sort the various themes that emerged through the interview process (Creswell, 2008). Concepts and categorized subheadings began with anticipated themes that were identified in the review of literature, and included both risk factors and mitigating factors to the identified risk. Marshall and Rossman (2016) explain that analytic memos are to be used to make accurate interpretations when new or unexpected themes arise. After each interview, the researcher identified areas that needed to be followed up on and reached out to the participant for a following interview. When transcripts were finished being read, Excel was used to sort, organize, and tally the responses from the participants to accurately identify similarities and differences among responses. Once each of the transcripts was reviewed and the research process concluded, a verifying notification was sent to each participant. The notification provided an avenue to share

with the participant the emerging themes that were identified within the process to ensure that their responses were being represented accurately (Bryman, 2007).

The quantitative data was analyzed using a Pearson Correlation test. The Pearson Correlation test compares significant correlations between two independent variables and identifies the confidence level of the relationship (Tanner, 2012). The research study assumed multiple conclusions based on the theoretical framework and review of literature. Due to this fact, the Pearson Correlation test was the most practical test as it allowed the researcher to draw different conclusions about the data depending on the assumed distribution of data.

In order for the Pearson Correlation test to be used to analyze data, a researcher must successfully evaluate its use based on a null hypothesis stating that the correlation does not exist (Tanner, 2012). The test establishes a model for investigating the relationship between two continuous variables and the coefficient (r) measures the strength of the relationship. The researcher determined through data analysis that the Pearson Correlation test did, in fact, result in multiple significant correlations at both the $p<.05$ and $p<.01$ confidence levels.

Role of the Researcher

Researchers are not without bias. I have worked my entire career in an urban district with a high concentration of English language learners and low socioeconomic conditions. I have taught this demographic in the classroom setting, as a site administrator, and as a district administrator. However, it is important to note that I have had no previous interactions with the participant group. My experience has provided insight on the challenges students with certain risk factors face and the role that education has in students' social, academic, and psychological development. I strongly believe that educators can teach and incorporate strategies and behaviors that will give at-risk students the most effective protective factors to combat the adverse

conditions that they face and that they can be the catalyst for mitigating at-risk behaviors and outcomes. My role in this research is that of observer, earnestly seeking effective strategies, practices, and procedures that will greatly reduce, if not prevent, at-risk students from dropping out of school.

Limitations and Delimitations

There are limitations to every research study. This study was limited by the degree to which the interviews and survey questions were answered honestly and accurately. Furthermore, the study was exposed to the limitations of the researcher bias on the topic and the adverse conditions that the studied subjects faced in their lives. Another limitation to the study is the fact that the participants were part of an Early College Program. Many at-risk students may not be a part of like educational programs. Programs like AVID and Upward Bound are not implemented in all schools and that could be considered a limitation to this study as well. Finally, the study focused primarily on the perspectives of students. Teachers or parents were not part of the data collection process, therefore, limiting the study.

Interviews are considered to be essential sources of case study information. Therefore, permission was obtained to interview students, families, teachers, and administrators using a series of guiding questions about educational resilience. One issue was the fact that my position as an administrator carries an authority that could cause the participant to be leery of sharing information. The purpose of the interviews was to determine if there are common strategies that have proven effective in fostering resilience in students who are faced with adverse conditions. Through extensive interviews and conversations, the researcher was able to study the effects of adult relationships, instructional strategies, in school programs, after school programs and educational expectations to determine which strategies and programs were proven effective in

building resilience. In addition to the interviews, a survey was conducted and sent to administrators at the various school sites and surrounding high schools.

Marshall and Rossman (2016) reveal that research is an ongoing effort to insure that participants are treated fairly, their voice is heard, and data is interpreted based on the research findings.

Summary

The main focus of this chapter was to provide the statistical methods used to answer the specific research questions within the study. The research methodology was a descriptive case study that drew conclusions as to which strategies yield the highest contributing factors to educational resiliency. Students and administrators from various high schools participated in the study, and the instrumentation design, validity, reliability, and data collection and analysis were outlined in the chapter.

Chapter IV

Results

Introduction

A growing concern in education has been the fact that more and more students are being identified as at risk of academic failure (Eklund, Tanner, Stoll, & Anway, 2015; Jones & Zambone, 2009). The identification of students comes from a variety of identified risk factors the student has encountered throughout their childhood and adolescent years (Eklund et al., 2015). Most of the educational research is limited to the identification of factors causing risk, a risk factor's effect on the child, or possible strategies to implement that could positively mitigate the risks (Bridgeland et al., 2006; Gandara & Contreras, 2009; Wilson, 2014). The intent of this study is to identify the factors, strategies, and programs which at-risk students attribute as part of their success in developing growth mindsets and overcoming their adverse conditions. The mixed methods study allows for the qualitative data and quantitative data to enrich one another. The student interviews provide the answers to research questions one and two, while, the intent of the quantitative data is to answer research question three which identifies risk factors most strongly correlated with grit levels. Together the data provide guidance and direction for mitigating those individual risk factors. The questions guiding this dissertation study were:

1. What factors do successful at-risk students identify as key contributors to their resilience, grit, and growth mindset?

2. What strategies and instructional programs most clearly foster resilience and growth mindsets in at-risk students?

3. What variables are most strongly correlated among risk factors and growth mindset attributes in at-risk students with high academic achievement?

In order to answer the research questions introduced in this study, a combination of qualitative and quantitative data was collected. Three primary instruments were used in gathering qualitative and quantitative data: (a) 12th grade student interviews, (b) pertinent demographic data gathered from ex post facto student records, and (c) The Grit Scale developed as a survey in Qualtrics (Appendix K and L).

Educational research has indicated that there are connections between demographic data and student failure (Eklund et al., 2015; Jones & Zambone, 2009). In addition, experiential circumstances that a child endures have been linked to student failure and are deemed student risk factors (Ayvazo & Aljadef-Abergel, 2014; Ginsburg & Kinsman, 2014; Lewis, 2015). Participants from this study attended a comprehensive high school with a high concentration of demographic and experiential risk factors, as specified in Table 1.

Table 1

Demographics on Comprehensive High School Ex Post Facto Data

Variable	Number	Percentage
Male	769	51%
Female	758	49%
9th grade	409	26%
10th grade	398	26%
11th grade	341	23%
12th grade	379	25%
White	73	4%
African-American	51	4%
Hispanic	1384	90%

American Indian	5	<1%
Native Hawaiian or other Pacific Islander	14	1%
Other/Undefined	0	0%
Declined to State	0	0%
Special Education Population	123	8%
English Language Learners	1030	66%
Free Lunch Program	1280	82%

Note. n=1527

A unique academic program embedded into the comprehensive high school includes college courses that students can begin taking at the age of 16. The program is part of a partnership with a local community college that placed an annex campus on the high school's campus to provide college classes to the impoverished community. The high school stipulated that, as a part of the agreement to allow the community college to utilize the high school facilities for its classes, a section of the college course slots would be reserved for the existing high school students from that campus. The high school students attending the program received free tuition and books, and their class schedule was a blend of high school courses attended with their high school peers and college courses attended on the college campus with other college students. Although the program was quite rigorous, students with multiple risk factors were selected to participate, most of which were first generation college attendees. The demographic data for the participants in this study are indicated in Table 2.

Table 2

Demographics on Early College High School Demographic Data

Variable	Number	Percentage
Male	62	39%
Female	94	41%
10th grade	61	39%
11th grade	50	32%
12th grade	45	29%
White	12	7%
Hispanic	134	86%
Native Hawaiian or other Pacific Islander	4	3%
Other/Undefined	6	4%
English Language Learners	95	61%
Free Lunch Program	129	83%

Note. n=156

Each of the participants selected came from the same comprehensive high school and early college program represented in the data. The eight participants were part of an early college program intended to provide college classes to juniors and seniors attending high school. The participants selected for this study were seniors (12th graders) who came from the early college program. Each of the students selected had experienced at least two categorized risk factors in their life, and proved to be successful in high school by graduating in the top ten percent of their class. In addition to their high school success, each participant had successfully earned at least two semesters worth of college credits in both core academic areas and elective courses.

Research Question #1

Research suggests that certain protective factors can mitigate the negative consequences of adverse conditions that a child experiences (Coggshall, Osher & Colombi, 2013; Karimshah et al., 2013; Williams & Bryan, 2013). Often, the adverse conditions that children face are a duplicate of conditions that their parents faced, causing a cycle of failure prominent throughout a family's generations (Dufur, Parcel & Troutman, 2013; Pressman et al., 2015). It is of utmost importance that protective factors be effectively established within at least one generation in order for the at-risk cycle to be fragmented. With this fact in mind, the research question presented in this study asks:

What factors do successful at-risk students identify as key contributors to their resilience, grit, and growth mindset?

There are numerous studies that suggest which protective factors are most critical to mitigating risk factors in children (Ayvazo & Aljadef-Abergel, 2014; Brooks, Magnusson, Spencer, & Morgan, 2012; Ginsburg & Kinsman, 2014; Lewis, 2014; Rose & Espelage, 2012). For the scope of this study, seven protective factors were examined against six major risk factors to determine whether or not at-risk students deemed contributing to their overall academic success. Academic success was defined by the grade point average (GPA), overall ordinal GPA status, and college course completion of each participant. The protective factors identified were: parental involvement, parent and teacher expectations, student-teacher relationships, positive reinforcement, engaging instruction, interpersonal strategies, and targeted educational programs. Each of these protective factors were tested against the following risk factors: divorce or separation of parents, English as a second language, poverty as defined by the free lunch program, stress, experiencing a tragedy, and deficient brain development linked to poverty and

stress. Some of these risk variables were selected based on the research that supports the negative effects they have on children's academic success. Others were chosen because each of the participants interviewed experienced two or more of the variables in their lives. The protective factors were identified based on what research indicates as being critical to a child's academic success. Each of the student interview questions focused on each of the protective factors as critical mitigating measures to the adverse conditions that the child faced.

The information from the interviews was obtained through face-to-face interviews on the students' campus that were audio-taped, documented, transcribed, and coded for themes to promote a deeper evaluation. The information from the ex post facto data was provided by the district's student information system. Each participant was given a pseudonym, as suggested by Creswell (2008) and Marshall and Rossman (2016), to protect their identities, and their academic profiles are presented in the order in which they were interviewed (see Table 3).

Table 3

Participant Synopsis

Pseudonym	Age	Gender	Grade	GPA	Class Rank	Race	College Credits
Jacob	17	Male	12th	3.7	18/380	Hispanic	18
Ben	18	Male	12th	3.3	42/380	Hispanic	19
Pablo	17	Male	12th	3.9	5/380	Hispanic	26
Jamie	17	Female	12th	4.0	4/380	Nigerian	14
Karina	18	Female	12th	3.5	32/380	Hispanic	27
Jose	18	Male	12th	3.5	30/380	Hispanic	14
Lupita	17	Female	12th	3.6	13/380	Hispanic	27
Ally	17	Female	12th	3.4	40/380	Hispanic	27

In order for reliable data specific to this study to be obtained through the interview process, students must be able to acknowledge which protective factors most attributed to their success. It is a challenge to determine the perceptions the student has regarding the attributing factors without dedicating some time depicting the individual experiences that the student has had in their personal and academic life. An increased understanding of the participant allows the reader to establish an archetype for an educator's role in establishing successful strategies and programs targeted to support academic success for at-risk students.

As stated previously, each student who was interviewed has experienced two or more risk factors in their life. Of the eight students interviewed, six experienced a divorce or separation of parents, and one student experienced the death of a parent at an early age. Seven of the eight students were designated as English language learners and experienced significant language barriers at some grade level or another throughout their schooling. All eight of the students interviewed qualified for the free lunch program based on their economic status. Seven of the eight students were first generation college students and had parents with less than a high school education. Finally, all eight students experienced a significant tragedy in their life and suffered from intense stress at various times throughout their childhood and adolescent years. Table 4 describes the demographics and risk factors that each participant experienced in their life.

Table 4

Student Demographics and Risk Factors

Pseudonym	Single Parent	ELL	Free Lunch	Tragedy	Stress	Parent Education
Jacob	Y	Y	Y	Y	Y	< high school
Ben	Y	Y	Y	Y	Y	< high school
Pablo	N	Y	Y	Y	Y	< high school
Jamie	Y	N	Y	Y	Y	post-secondary
Karina	N	Y	Y	Y	Y	< high school
Jose	Y	Y	Y	Y	Y	< high school
Lupita	Y	Y	Y	Y	Y	< high school
Ally	Y	Y	Y	Y	Y	< high school

Jacob is a young man in his senior year of high school. Jacob qualifies for free lunch, is designated an English language learner, shares a home with numerous relatives, and has parents that are divorced and living separately. Jacob lives with his father in a house shared by an uncle, aunt, and cousins. As Jacob spoke of his living conditions he was visibly distraught about the fact that his parents are no longer together. He explained that his mother lives about 30 miles away in another city, and that he gets to see her on the weekends. He is the only child, but his mother recently had a little girl. When asked what it is like to have a new stepsister, he responded with a big smile, "It's pretty great!" Both of Jacob's parents have limited education. Jacob's father immigrated to the United States about 20 years ago, and his highest level of education was 4th grade. His mother received her high school diploma but never continued her education after high school.

Jacob is extremely motivated and highly successful when it comes to his education. He currently has a 3.75 GPA and is ranked in the top 20 overall in a senior class of 380 students. Jacob is concurrently enrolled in an Early College Program that is housed on the high school campus, allowing Jacob to earn college credits while attending high school. Jacob has already completed his general studies credits for his first year of college in conjunction with attending high school. Jacob has set a goal to become a doctor and wants to attend a University of California institution, majoring in the biological sciences. As we spoke about his future and his ambitions, his demeanor began to become more confident. He shared with me a story about when he was young and he broke his arm. He was very traumatized by the event but the doctor that took care of him was very kind and gentle. The doctor treated his broken arm with such care that Jacob felt no pain or discomfort during his treatment or since the arm has healed. Jacob expressed a deep desire to be able to help others the way that he felt he was helped through that experience.

Although Jacob's parents are limited in their education, both parents push the importance of education in the home. He acknowledges the fact that his parents encourage him to set goals, work hard, and dedicate time to his education so that he can become successful. They provide time for him to study and take care of his homework. Sometimes the pressure to succeed becomes overwhelming for Jacob. He stated, "They (parents) do push me a lot, but they don't know how much stress I'm under. They don't understand that sometimes it's ok to get a B." His demeanor changed again when talking about the pressure he feels at times from his parents to earn good marks in his classes. Jacob feels that parental involvement is evident in his life but it comes through conversations and checking on his grades on occasion. Jacob's parents rarely attend back-to-school nights or meet with teachers because they lack the confidence to interact

with teachers. Although Jacob feels they are active in his education, he expressed the desire for his parents to have more communication with his teachers. Jacob feels that he has been quite independent in his education during his high school years and wishes that his parents would reach out to teachers more to find out if there are other things he can do to improve.

Jacob expressed his challenges in dealing with depression and stress. The separation of his parents was very difficult for him. He was confused by the situation and was never told why he was to live with his father instead of his mother. The separation made him feel that maybe his mother did not want him around as much and that he was a burden in her life. He also dealt with a lot of ridicule as a kid because of his physique, something that plagued him until high school when he joined the cross country team. Jacob explained that this past summer he experienced a depression so deep that he did not know if he could overcome it. The events started right after he found out that his mother was pregnant. She was in financial hardship, got evicted from her home, and was thrown in jail for a few weeks. At the same time he was attending a running camp in the mountains with the cross country team and was notified that his father was hospitalized with pneumonia, and he had to leave camp early to rush home to take care of his father. Despite these challenges, Jacob maintained a 3.75 GPA during the first semester of his senior year and successfully ran cross country for the high school team.

Jacob attributes much of his success in overcoming these challenges to self-motivation, family support, and support from his coaches and teachers. He acknowledged that he knows when teacher pull up his records that there is an alert that shows that his parents are divorced. He realized that his teacher never would ask for both parents to sign materials or come meetings, and that made it easier for him. He felt that they knew what he was going through and that they were sensitive to his situation, which he really appreciated. Jacob explained that his success in

the classroom stems from a teacher's high expectations to reach his potential no matter what that may look like. He explained that high expectations and potential do not always equate to "A" marks in the gradebook. He feels that teachers are most effective when they expect the best out of each student and encourage them to push the limits on their potential.

Jacob has a mature outlook on self-motivation, grit, and growth mindsets. When he has faced a challenge in his life, he has always faced it head on with the understanding that he can overcome it with hard work. He stated,

> You learn and understand that you can't let all these problems at home always affect your education…If you do, then every little problem you face is going to destroy you and going to make you weaker. You gotta find a way to be a strong individual yourself and you just gotta understand that sometimes life is unfair.

Jacob seeks solutions immediately when there is a concept that he may not understand in class. He goes to the classroom during lunch and after school to get help from his teachers or he uses YouTube™ to find solutions to the mistakes he is making in classes such as math and science. Being involved in extra-curricular activities like running helps alleviate the stress and provides another set of peers that are dealing with some of the same things. Having them to relate to and work side by side with has contributed to Jacob's mindset that goals can be accomplished when effort is involved and challenges are confronted. He is extremely motivated to be successful and focused on overcoming challenges. He recognizes the obstacles he faces as a male, Hispanic student with multiple risk factors and is motivated to overcome the stereotypes that come with them.

Ben loves animals and wants to attend college to pursue veterinary science. Ben's primary language at home is Spanish. His parents are divorced and he receives free lunch at

school. Ben's mother "lays a finger" on top of his education and is very involved with communicating with the school and his teachers. Her support and involvement has been a key contributor of Ben's academic success. When talking about his mother he said, "She usually gives me tips or ways to help me. She's like my motivation right now. She tells me not worry about her and just do me."

Despite the adverse challenges that Ben faces in his life, his academic achievement are extremely high. His GPA ranks in the top 15% of his senior class, and he has been attending college classes while attending high school since the 11th grade. A teacher's high expectations for students has been a factor that Ben attributes most to his success. He related that there is a real sense of accomplishment for students when teachers identify clear expectations of the learning objectives while providing the necessary supports for high achievement. Ben clarifies that being part of the learning process and receiving a well-prepared lesson allows students to grasp concepts more easily, while becoming self-assured of their abilities. He defines three traits as being critical for a teacher's interactions with students. Teachers must be charismatic or energetic so students feel the passion that exists in education. He also indicates that clear communication and openness regarding the issues that exist with a student's progress is very important. Finally, Ben ranks teachers being there for students when they are dealing with difficult situations and showing that they really care as a key factor that fosters resiliency in students.

Jamie is a 12th grade student that comes from Nigeria. She moved to the United States when she was in the 6th grade, and it is immediately evident in the interview that she had an outgoing personality. She was wearing an ASB shirt and was very engaged in the conversation, expressing her excitement about being involved with the study. Jamie wants to attend college to

study medicine and eventually become a gynecologist. Jamie lives at home with only her mother. As she responded to the question she became quiet. I asked if her father was in the picture, and she said that he had died when she was eight years old while living in Nigeria. She shared the story that one day they were walking home from church and her father complained of a headache. He collapsed in the street where people rushed to his side to help. He never regained consciousness and passed away shortly after the event. Despite this major tragedy and upheaval in her life, Jamie has been extremely successful in school. She attributes the caring relationship with her teacher as a major contributor to her success. Her advisory teacher has helped mentor her by providing support in the areas that she excels in and giving guidance in the areas that she can improve. She describes her extracurricular activities as a perfect balance to the rigor of earning a diploma while attending college and the ability to grow socially amongst her peers.

Lupita is a 12th grade student ranked 3rd in her senior class overall. She is highly motivated to attend college and pursue a medical degree in pediatrics. Currently, she qualifies for the free lunch program at her school and is designated an English language learner. Lupita has lived on the same street in an impoverished neighborhood her whole life. She shared that she experienced very little outside of her community and recognizes the negative impact it has on her gained cultural capital. When Lupita was in the 8th grade, her grandmother passed away. This moment in her life was very difficult for her to cope with as a middle school student. She praises the caring relationship she had with her 8th grade English teacher as the savior to her education at such a pivotal time in her life. Lupita describes Mrs. Jenkins as "the first teacher that actually had confidence in my abilities." During the time surrounding her grandmother's death, Mrs. Jenkins made the biggest impact. Lupita describes a particular experience by sharing,

I remember we were in class and somebody mentioned grandmothers and I asked her if I

could be excused. She went out and she had a talk with me and I was just telling her how

I was scared and everything. She made me feel that everything was going to be okay.

Lupita shared many other experiences with various teachers that impacted her life, making it

clear to her that a teacher's relationship with a student was critical to her resiliency development

and mindset.

Lupita is active in a variety of programs at school such as: Advancement via Individual

Determination (AVID), Upward Bound, Student Council, and Early College. In addition, she

volunteers her time to outside organizations in her community and attributes her resiliency skill

development to the strategies and experiences that these programs offer.

The research questions were designed to identify the factors most commonly found in at-

risk students and to establish the protective factors that best mitigate against the identified risk

factors, thus, leading at-risk students down a path toward academic success. Four primary themes

emerged within the data collection process. The four emerging themes were risk factors,

protective factors, unprotected factors, and growth mindsets. Within each emerging theme, a

series of codes surfaced and were tallied. The top ten most frequent codes within the protective

factors are found in Table 5.

Table 5

Top 10 Frequent Codes from Student Interviews

Protective Factors	Number of Responses
Teacher expectations	79
School involvement/ Being connected	67
Teacher/Coach mentor	64
Parental expectations	53
Fairness	41
Parental involvement	37
Listening to student needs	36
AVID strategies	28
Positive reinforcement or encouragement	26
Rigorous class structure	22

Table 6 illustrates the other component of correlations. The data in table 6 illustrate the

correlations that exist between various examples of resiliency or growth mindsets that emerged

during the student interviews.

Table 6

Top 10 Frequent Codes from Student Interviews

Growth Mindsets	Number of Responses
Self-motivated	87
Shows grit and determination	82
Sets goals	76
Seeks own solutions to problems	67
Finds ways to improve	52
Works hard to accomplish goals	44
Positive attitude	36
Takes on challenges	34
Does not accept failure	30
Never gives up	26

Themes from Interview Data

Creswell (2008) indicates that the most effective way to establish themes is to identify both major and minor components within each theme. There are three major themes that emerged from the various codes documented in the transcriptions of the students' responses. Each major and theme will be shown through the individual experiences of the participants in the study, the research that is available, and the two components of the theoretical framework; Bourdieu's Cultural Reproduction Theory and Dweck's Growth Mindset Theory.

Figure 2 is a visual representation of how the themes are connected to developing and supporting resiliency. The illustration shows the foundational problem, or the path we walk on, as being represented by the term "risk factors". As this study has shown, risk factors are

categorized in a variety of ways but all present certain dangers leading to school failure. The pillars represent the four critical themes identified in this study as effective contributors to resiliency and growth mindset development in at risk students. The pillars identified are components of both external and internal factors. Involvement, expectations, and reinforcement are considered external protective factors that are fostered by influential adults that the student encounters throughout their life, both parental and non-parental. Fortitude is the individual trait that the student exemplifies as they gain confidence in their conquering of the adverse conditions that they face. As they learn to prevail over their environment, they gain fortitude in their ability to become successful despite their negative circumstances. As the student determines their capacity to progress and set goals, the fortitude that they display develops into grit. The pillars become the necessary supporting facets of resiliency development; specifically, involvement, expectations, and reinforcement. Finally, the pitched roof represents the idea that resiliency can be developed and fostered when the proper supports are in place, thus, leading an at-risk child upward toward academic success.

Figure 2

Themes from Interview Data
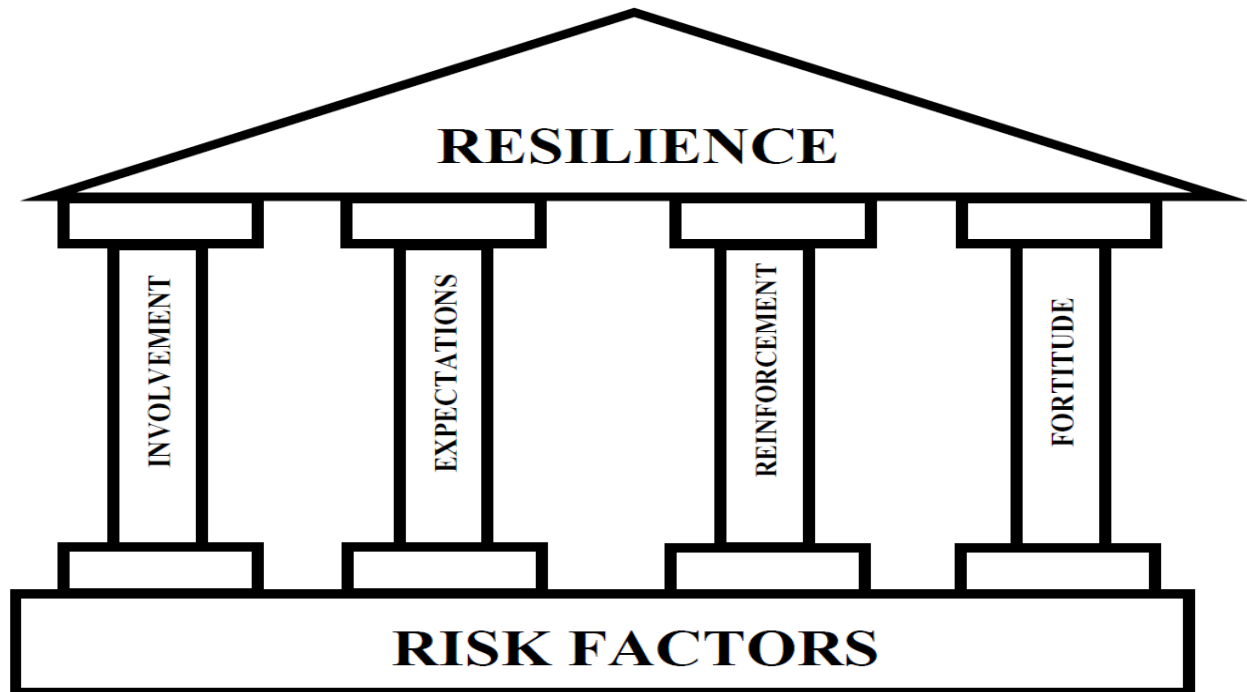
Research Question #2

Research has suggested that certain targeted educational programs can lead to academic achievement among students considered to be at risk of failure (Aidman & Malerba, 2015; Camacho & Fuligni, 2015; Cortes, 2015; Forneris, Camiré, & Williamson, 2015; Jurado, 2015; Perna, 2015; Royster, Gross, & Hochbein, 2015; Samek, Elkins, Keyes, Laconoe, & McGue, 2015; Welton & Williams, 2015). In addition to educational programs, studies have indicated that at-risk students who are involved in extracurricular activities at school show increased academic achievement levels over other students who are not involved in school activities (Camacho & Fuligni, 2015; Forneris et al., 2015; Samek et al., 2015). The second research question in this study is designed to prove these theories by asking:

What strategies and instructional programs most clearly foster resilience and growth mindsets in at-risk students?

The qualitative data suggests that when programs embed strategies that focus on the interpersonal skill development, at-risk children are more likely to develop resilience, grit, and a growth mindset. Programs such as AVID, Upward Bound, English Language Development, Student Advisory, and extracurricular programs all provide opportunities to focus on interpersonal skill development (Aidman & Malerba, 2015; Camacho & Fuligni, 2015; Cortes, 2015; Forneris et al., 2015; Jurado, 2015; Perna, 2015; Royster et al., 2015; Samek et al., 2015; Welton & Williams, 2015). Most educators acknowledge that developing skills that allow students to cope with stress, realize their aptitude, regulate their environment, and become self-assured in their abilities is critical to the development of a child. However, with the impact of standards-based instruction and high stakes testing, opportunities to dedicate to the development of these types of skills go by the wayside. Research has shown that student achievement gains are made when schools incorporate programs that can focus on interpersonal skill development within the regular instructional day (Aidman & Malerba, 2015; Camacho & Fuligni, 2015; Cortes, 2015; Forneris et al., 2015; Jurado, 2015; Perna, 2015; Royster et al., 2015; Samek et al., 2015; Welton & Williams, 2015). Furthermore, evidence suggests that, when these programs target at-risk students, the increase in gains for the targeted subgroups are substantial.

Karina is faced with an extreme amount of stress in her life. Although both parents are in the home and working, the economic situation is dire. The situation has caused Karina to seek employment to be able to help her parents pay the bills. Karina expressed that she is suffering from depression due to the stress that is caused by her family's economic status. Contributing to the stress and depression is the news she recently received that her father was diagnosed with a

serious illness that may become terminal. Both parents are undocumented citizens from Mexico, and neither have an education beyond high school, leaving Karina feeling as if life will not improve for her or her siblings. She is constantly stressed knowing that at any moment her parents could be deported to Mexico, leaving her on her own to care for her siblings.

Karina's success stems from the way that her parents and teachers motivate her. She has a great respect for her parents, acknowledging their work ethic and commitment to providing for the family. She attributes her success to the mindset that she can achieve anything if she just works hard for it. Karina credits her Advisory teacher for the interpersonal skills that she has developed in high school. The Advisory program at her high school is designed so that a teacher receives a cohort of 9th grade students and carries them in the program through their senior year. The interactions with her Advisory teacher have influenced the way she copes with stress, giving her self-assurance that her abilities are endless. When she struggled on a test and earned a poor mark, she went to her Advisory teacher. Her teacher responded, "Karina, a poor score doesn't mean you aren't capable, it simply means that you need to spend more time learning this particular concept if you want to achieve at a higher level." Karina compared the experience to that of another teacher that responded differently in a similar situation. The other teacher told her that maybe math is not her thing and she should pursue a path that is easier for her. Her surety of a teacher's relationship with students and the impact teachers have on a student's success became a clear message from Karina's interview. Furthermore, she attributes her interpersonal skill development to the time spent in her Advisory class where those skills are reinforced on a daily basis. The language that her mentor teacher chose to use with her undeniably motivates her to see that effort and success are linked together and that her abilities are not limited to her circumstances.

Pablo is another quiet and shy young man. He was dressed in tattered jeans and an unmarked t-shirt. He had a difficult time making eye contact, leaving me feeling that he came from humble circumstances with limited means. The interview with Pablo was very challenging in that I had to really wrestle responses out of him by asking a series of follow up questions to his short responses. Although Pablo receives free lunch and is an English language learner, he is enrolled in the rigorous early college program. Pablo has a 3.9 GPA and is currently ranked as having the 5th highest GPA in his senior class consisting of 380 students. In addition to his academic success in high school, Pablo has completed a full year of general education credits from the local community college that is housed as an annex at the high school campus.

Pablo comes from a stable family with parents that are still together. Neither of Pablo's parents finished high school and both are immigrants to the United States from Mexico. His brother is attending the University of California, Riverside. Pablo puts an extreme amount of value in the relationship with his brother and acknowledges that he is a mentor and support to him. The family has recently faced a difficult challenge that has limited their household income and has caused Pablo to work while attending high school and college to help pay the bills at home. The challenge came from an injury his father incurred while working as a butcher; his hand was badly cut in the meat slicer and, due to the lapse of time between the injury and surgery, had to be amputated. The amputation left his father without a job, and he has not since been able to secure employment. This has caused his mother to take on more hours at work and Pablo to start working to help support the family. The incident also caused Pablo to focus his post-secondary education on the medical field, and he now aspires to become a surgeon.

Pablo recognizes the support of his parents through their expectations and hopes that he is able to achieve more than they did. They push him to do well in school, but their involvement is

limited because of the language barrier that exists with his teachers and their discomfort in their understanding of the content. Pablo feels they are involved in his education, but in ways that are different from other students. Pablo likes to go the boxing gym to work out and relieve stress. His father was his coach before the accident and is very strict on making sure his homework is done before he goes to the gym. His brother is a huge support and contributor to his academic success through his mentorship and conversations about what it is like to be in college and what the expectations are to pass classes. This relationship has been very beneficial to Pablo's development because it has started the trend of attending college in his family and has shown him that it is possible.

Pablo shares three academic programs that he has been involved with as major contributors to his success as a first generation college student. The programs are AVID, Upward Bound, and Early College High School. Each of the programs has encouraged Pablo to develop a growth mindset and resiliency when facing challenges as a student. Pablo views the AVID program as vital to his organizational and studying skillset. The program taught him how to effectively organize his time and schedules to successfully overcome the rigor of simultaneously being a high school and college student. Upward Bound is a program designed to assist students who will be first generation college attendees to learn what is required for a successful college experience. The program provided trips to local colleges to meet with counselors, instructors, and financial aid personnel and enrolled students into summertime coursework at the local community college. Pablo shared with me the impact the program had on his ability to overcome challenges and realize that college was a viable possibility for him. He praised the counselor in the program as a mentor that put students first by showing him the possibilities that were available and giving him the confidence to achieve his potential. Pablo also credits the Early

College Program at the high school which prepared him to begin taking college courses as a junior. He expressed a deep appreciation for Mrs. Johnson, in particular, for her guidance, support, and encouragement in the program. It was clear to Pablo that Mrs. Johnson's high expectations and rigorous curriculum was intended to prepare students to be successful in both school and in their personal lives.

An interesting point that Pablo made during the interview was that when he was placed in English development programs he felt disconnected from the school setting. In 6th grade he had a desire to be part of the GATE (Gifted and Talented Education) program but was declined the opportunity because of his language designation. He felt that his English skills were satisfactory and that he should not have been excluded from the GATE program based on the arbitrary language assessment given to students to determine their English proficiency. Being a participant in the English Language Development program made him feel inadequate and segregated from other students, and his placement in the program negatively impacted his self-esteem.

Although it was difficult to get answers out of this shy, adolescent man, it was clear during the hour or so of conversation that this quiet young man sees himself as a person that can take on any challenge and overcome it. The experience with Pablo solidified the idea that adults matter in the lives of children. Furthermore, when effective strategies are embedded in effective programs, a palette for skill development is fostered. Pablo faced many challenges as a Latino male living in low socio-economic circumstances, and his ability to overcome those challenges stemmed primarily from his trust in mentors, a brother, academic programs, and encouragement from parents that want a better life for their children. Pablo grasps the support he gained in the various educational programs with both hands and faces his challenges head on with fortitude,

knowing that he can overcome the obstacles with the skills that he has learned from dedicated mentors in his life.

Jose is an athletic young man with a desire to become a Physical Therapist for athletes. He lives at home with his two younger brothers, a sister, and his mother. Jose described his mother as very caring, but mentioned that they seem to always disagree with each other. He had a close relationship with his father until he was convicted and sent to prison out of state. If his father survives the 35-year sentence, he will be deported to Mexico after his release. After his father was convicted for molesting his sister and her friends about five years ago, the money that the family needed to survive was diminished significantly. At first his older brother was helping out with the bills, but his mother kicked him out of the house after he became heavily involved with drugs and gangs. The situation had a very serious impact on Jose's life and left him feeling angry, betrayed, hopeless, and frightened. To add to the stress that Jose has encountered, last year his best friend and teammate was struck by a police cruiser and killed, causing Jose to spiral into depression.

Although there is noticeable decline in his transcript at both tragic junctions in Jose's life, he continues to excel academically. Not only is Jose's GPA in the top ten percent of his senior class, he has also earned 21 credits while simultaneously attending college. The two biggest contributing factors that Jose attributes to his success are his relationship with his football coach and being part of an athletic team. The strategies he learned were key to his growth and development as a successful student overcoming adversity. His coach used effective communication strategies through praise and positive reinforcement. As a member of a team, Jose acquired valuable skills from the collaboration, discipline, and individual effort strategies that were deliberately taught and practiced. Jose's commitment to success derives from the

discipline and lessons he learned from his coach while in football. He acknowledged his coach was a critical person in his life when he was dealing with these tragic events. Due to the growth mindset strategies that were instilled, he recognized that if he wanted to continue being part of the football team, his academics had to be put at the top of his priority list. Strategies that were taught on the field translated to the classroom, giving him a sense of motivation. He stated, "Once I realized that the results stemming from hard work as football player were consistent with the results I had from hard work in the classroom, I knew I could do anything."

Research Question #3

The quantitative data was collected through a survey that was designed on Qualtrics to give an indication of the relationship between various risk factors and strategies that promote student grit. The survey was given to high school students at both a comprehensive high school and an alternative online high school in a southern California school district. The school district has nearly 20,000 students and is considered a low socio-economic district with a National Free and Reduced Lunch Program percentage exceeding 80%. Of the 60 students who were targeted, 47 completed the survey in Qualtrics, and the results were analyzed using SPSS software and the Pearson Correlation model for identifying relationships and correlations with multiple variables. The results from the survey were analyzed to answer the third research question:

> What variables are most strongly correlated among risk factors and growth mindset attributes in at-risk students with high academic achievement?

Tanner (2012) has indicated that effective relationship identification between two interval scale variables that are normally distributed can be found by using Pearson's Correlation. All of the variables in this study were correlated with grit in order to determine if any of the variables resulted in a significant relationship with grit, resiliency, and growth mindsets. Grit as a variable

is established by a series of actions that are indicators of grit as identified in Duckworth's Grit

Scale. As such, grit is identified and found in multiple student responses, all of which are

established as grit variables. Salkind (2011) and Tanner (2012) both stated that correlations range

from -1 to 1, and the strength of the relationship between two variables is assessed based on the

distance from 1 or -1. Furthermore, Salkind (2011) designates a strength of correlation

relationship in the following increments:

- .8 - 1.0 very strong

- .6 - .8 strong

- .4 - .6 moderate

- .2 - .4 weak

- 0 - .2   no relationship

For this study, we will test $H_o = \rho = 0$. The null hypothesis states that there are no correlations

between grit and GPA, risk factors, protective factors, growth mindsets, and cultural

reproduction. Each of the correlations were calculated as two-tailed probabilities with a

significant value at p<.05.

Table 7 illustrates the results comparing the correlations between risk factor variables

using a two-tailed probability at both the p<.05 and p<.01 levels. Due to length restrictions in the

table, each variable was given an abbreviation for ease of placement. The abbreviations are as

follows:

GPA = Grade Point Average

P I = Parental Involvement

F L = Socioeconomic Status (Free Lunch)

Tragedy = Experienced hardship or tragedy

Goals = often setting goals but later choose to pursue a different one

Living = the students living conditions (foster home, temporary housing, shared living

   space, shelter)

ELL = English as a second language

Mother Ed = the amount of education the student's mother has earned in their life

P R = parent relationship (divorced, separated, or married)

Table 7

Correlation Matrix – Risk Factors

Variable (n=47)	GPA	P I	F L	Tragedy	Goals	Living	ELL	Mother Ed	P R
GPA	1	.321*	.394	-.107	.275	-.079	-.089	-.177	-.168
P I	.321*	1	-.031	.071	.011	-.147	.299	.399**	-.181
F L	.133	-.031	1	.121	.190	-.065	-.360*	-.308*	-.117
Tragedy	-.107	.071	.121	1	.176	-.235	.018	.310*	-.246
Goals	.275	.011	.190	.176	1	-.322*	-.201	-.002	-.179
Living	-.079	-.147	-.065	-.235	-.322*	1	-.207	-.186	.763**
ELL	-.089	.299	-.360*	.018	-.201	-.207	1	.445**	-.066
Mom Ed	-.177	.399**	-.306*	.310*	-.002	-.186	.445**	1	-.018
P R	-.168	-.181	-.117	-.246	-.179	.763**	-.066	-.018	1

Note. *Correlation is significant at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level (2-tailed).

   Table 8 represents all of the significant correlations for the data displayed in table 7. The

null hypothesis is rejected for all of the correlations listed in table 8 due to the multiple variables

resulting in significant correlations.

Table 8

Significant Correlations – Risk Factors

Variables	Correlation	Strength of Correlation
GPA – Parental Involvement	.321*	Weak
Parental Involvement – Mother's Ed	.399**	Weak
Free Lunch – English Second Language	-.360*	Weak
Free Lunch – Mother's Ed	-.308*	Weak
Tragedy – Mother's Ed	.310*	Weak
Goals – Living Conditions	-.322*	Weak
Living Conditions – Parent Status	.763**	Strong
English Second Language – Mother's Ed	.445**	Moderate

Note. *Correlation is significant at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level (2-tailed).

The data denoted in Table 9 represent the correlation between mindset and grit statements as defined in Angela Duckworth's Grit Scale. Each variable is represented by an abbreviated statement. The full statements are shown as the following:

- I have overcome setbacks to conquer an important challenge

- New ideas and projects sometimes distract me from previous ones

- Setbacks don't discourage me

- I have been obsessed with a certain idea or project for a short time but later lost interest

- I am a hard worker

- I often set a goal but later choose to pursue a different one

- I have difficulty maintaining my focus on projects that take more than few months to complete

- I finish whatever I begin

- I have achieved a goal that took years of work

Table 9 shows the results of the student survey by indicating the strongest correlations. Any weak correlations or no identified correlations were removed from the data in order to focus solely on the moderate to strong correlations.

Table 9

Correlation Matrix – Mindset and Grit

Variable (n=47)	Hard Worker	Achieve Goal Over Time	Lost Interest	Maintain Focus
Overcome Setbacks	.430**	.533**	.487**	.053
Easily Distracted	-.039	-.071	.415**	.476**
Not Discouraged	.425**	.233	-.067	-.011
Finish What I Start	.353*	.661**	.111	-.220
Set & Change Goals	.232	.006	.192	.509**

Note. *Correlation is significant at the 0.05 level (two-tailed). **Correlation is significant at the 0.01 level (two-tailed).

Table 10 displays the significant correlations found in Table 9 data. Although there were no significant correlations between risk factors and resiliency statements, there are in fact, multiple significant correlations in the attributes that lead to resiliency development. The correlations show that as students become proficient in one resiliency skill, they increase the likelihood of developing additional skills that foster resiliency.

Table 10

Significant Correlations – Mindset and Grit

Variables	Correlation	Strength of Correlation
Overcome Setbacks – Lost Interest in Ideas	.487**	Moderate
Overcome Setbacks – Hard Worker	.430**	Moderate
Overcome Setbacks – Achieve Goal Over Time	.533**	Moderate
Easily Distracted – Lost Interest in Ideas	.415**	Moderate
Easily Distracted – Maintain Focus	.476**	Moderate
Not Easily Discouraged – Hard Worker	.425**	Moderate
Set & Change Goals – Focus	.509**	Moderate
Finish What I Start – Achieve Goal Over Time	.661**	Strong

Note. *Correlation is significant at the 0.05 level (two-tailed). **Correlation is significant at the 0.01 level (two-tailed).

Conclusion

Chapter IV presented a synopsis of the findings from both the quantitative and qualitative data collection methods as it relates to the topic of at-risk students and strategies to help them. Pearson's Correlation found some positive, statistically significant relationships at the 0.05 level between a student's GPA and the level of parental involvement, as well as between a parent's level of education and tragic events the student has encountered in their life. Negative statistically significant relationships were found at the 0.05 level between a student's socioeconomic status and the level of parent education. Also, there was a negative correlation between a student's socioeconomic status and having English as a second language. The last negative relationship existed between the ability to accomplish goals and the student's living conditions. Pearson's Correlation's found statistically significant relationships at the 0.01 level

between the level of parent education and the degree of parental involvement. The level of parent education and English as a second language also resulted in a negative correlation. Finally, the parents' marital status and the student's living conditions resulted in a negative correlation at the .01 level.

Additional quantitative statistics demonstrate that there are significant correlations between various skills and mindsets attributed to grit or resiliency. Each of the correlations are listed in table 10 according to the identified level of .01 and .05.

Qualitative measures were taken due to the weak to moderate relationships that existed between the variables that showed a statistically significant relationship. The intent of the qualitative methods was to gather auxiliary evidence regarding strategies proven to be effective in developing resiliency in at-risk students. As stated previously, the themes that emerged from the qualitative data proved that students distinguish a host of protective factors that contribute to resiliency development. On the same token, student responses clearly indicate that there are in-school factors that can limit or deter an at-risk student from becoming successful in school.

Chapter V

Conclusion

Introduction

As education in America continues to evolve with new standards and high stakes testing, more and more children are considered at risk of failure. Educators witness students fail to grasp proficiency in the content, which leads to an alarming rate of students dropping out of school (Casillas et al., 2012; Dutro & Selland, 2012; Halpern-Manners, Warren, & Grodsky, 2015; Swanson, 2010). The drop out crisis in America has caused educators to pause and identify what leaves students at risk of failing. Although most of the factors that place a student at risk of failure are not new to educators and researchers alike, they are however, learning that the risk factors can become intensified when the warning signs are neglected (Casillas et al., 2012; Dutro & Selland, 2012; Halpern-Manners et al., 2015; Swanson, 2010).

The consequences for our nation losing over 7,000 students per day as dropouts has resulted in a series of problems that seriously hinder the growth and stability of our future (Anderson, 2014; Swanson, 2010). At a time when an increasingly complex global economy demands more from students, teachers, and institutions, more than 32 million Americans over age 18 have yet to complete high school (Anderson, 2014; Casillas et al., 2012; Dutro & Selland, 2012; Halpern-Manners et al., 2015; Swanson, 2010). The situation becomes even more threatening when considering Bourdieu's Cultural Reproduction Theory (1977).

Bourdieu claims that social class and disposition are generational. A student that comes from a low socio-economic background or gains a limited amount of cultural capital in a higher class is more likely to continue to reside in those same conditions in the future. Understanding the theory is critically related to educators as they wrestle with the uncontrollable circumstances

their students encounter. When institutions and educators fail to recognize the consequences of Bourdieu's theory, the risk factors associated within social classes and the lack of cultural capital gained compounds the problem from one generation to the next (Anderson & Hansen, 2012; Gaddis, 2013). Thus, the crisis we face in America with at-risk students failing not only grows in the present day, but it is forced down the road for future generations to add to it, causing the problem to multiply beyond control. Cultural capital is considered the cultural background, dispositions, proficiencies, and intelligence delivered from one generation to generation (Barrett & Martina, 2012; Bourdieu, 1977; Gaddis, 2013; Payne, 2005; Wagner & McLaughlin, 2015). Inherited cultural capital deals specifically with the hidden rules that exist among social classes, thus influencing certain tendencies that lead to the development of resilience, grit, and perseverance in a child, or the lack thereof (Payne, 2005).

Although some of the traits and experiences are not taught in schools, awareness to the hidden rules, cultural norms, and personal experiences of each child can certainly lead in the right direction to resiliency development in at-risk students (Payne, 2005).

Research associated with at-risk students is ongoing, but often the results are primarily focused on the risk factors and their consequences. This study seeks to identify effective strategies that develop resiliency in at-risk students so they may be able to overcome the risk factors they face and establish a growth mindset to gain continued success.

Students failing school as a result of risk factors they face necessitates the continued research on risk factors and their consequences. However, an equal need exists to identify strategies that will support at-risk students in developing resiliency and overcoming their adverse conditions. When determining what strategies are most effective, it is important to include the experiences, beliefs, and results from at-risk students who are in fact succeeding in school.

Protective factors that mitigate against the risk factors play a critical role in assisting at-risk students, but the research is silent on the perceptions and beliefs that students have in relation to the resiliency development in concert with their education. In fact, most research focuses on students who are failing as a result of their risk factors. This study focuses on students who are succeeding in school despite their adverse conditions and their perceptions as to how they developed resiliency, grit, and growth mindsets throughout their journey. The questions investigated in this study were:

1. What factors do successful at-risk students identify as key contributors to their resilience, grit, and growth mindset?

2. What strategies and instructional programs most clearly foster resilience and growth mindsets in at-risk students?

3. What variables are most strongly correlated among risk factors and growth mindset attributes in at-risk students with high academic achievement?

Chapter V interprets the results of this study, how they relate to Bourdieu's (1977) Cultural Reproduction Theory, to Dweck's (2006) Growth Mindset Theory, and establishes the implications for future research.

Summary of Results

This study investigated the factors that most contributed to resiliency and growth mindset development among at-risk students. Because there are multiple variables affecting a child's at-risk status and his or her statistical probability of failure, neither an independent qualitative nor quantitative research method was sufficient to identify what develops resiliency, grit, and growth mindsets in students identified as "at-risk." Creswell (2008) notes that "the use of both quantitative and qualitative methods, in combination, provides a better understanding of the

research problem and questions than either method by itself" (p.552). Outlined below are the underpinnings of this study: variables considered, interviews conducted, metrics of success considered, and themes discovered or utilized.

Variables

This analysis involved students enrolled at an urban high school with a high concentration of English Language Learners, Free and Reduced Lunch counts, and minority students. The school resides in a low socio-economic community with multiple gangs and high crime rates. Each student was part of a successful early college high school program that had been established within the comprehensive high school campus. Ex post facto, demographic, and student survey data were studied to define the strength of relationships between grit/resiliency and the following variables:

- Grade Point Average

- Parental Involvement

- Socioeconomic Status (Free Lunch)

- Tragedy or Hardship

- Goal Setting

- Living Conditions

- English as a second language

- Mother Education Level

- Parent Relationship

Interviews

A cycle of semi-structured interviews was conducted with a targeted group of students who have thrived academically despite multiple risk factors. The interviews were used to pinpoint the

themes students used to describe their resiliency, grit, and mindset development. In order to attract volunteers for the study, an electronic notice was sent through intra-district mail to administrators, guidance coordinators, and teachers within the early college high school program (Appendix D). Solicited responses from the targeted parties and a short survey were used to identify the study participants (Appendix N). Qualitative and quantitative data were collected and assessed concurrently throughout this study. The two data collection methods informed each other equally.

The semi-structured interviews were conducted individually, allowing researchers to gather data related to people's experiences by asking a series of specific questions (Creswell, 2008; Rossman, 2016). The qualitative segment of this study provided a sample of students who volunteered to participate in face-to-face interviews set in the main office of the students' school. Seven of the eight interviews were no less than one hour in length, and they were tape recorded and then transcribed. The interview transcripts were reviewed to determine the accuracy of student responses, and the transcripts were read multiple times in order to code for specific emerging themes. Each of the student interviews was analyzed separately and coded based on individual responses to the posed questions (Appendix M). Numerous identical and related codes surfaced from each individual student. Table 6 elucidates the high frequency codes that appeared from each student interview.

Quantitative Data

The primary source of qualitative data in this study is derived from a student survey conducted through Qualtrics™. Research question #3 asks:

What variables are most strongly correlated among risk factors and growth mindset attributes in at-risk students with high academic achievement?

The variables in this study are broken into two categories. Category one refers to the risk factors students face as variables. The variables associated with the category are family configuration, socioeconomic status (defined by free lunch status), level of parent education, English as a second language, experienced hardship or tragedy, and student grade point average (GPA). Category two refers to the student's self-perception of resilience and grit that they possess based on statements from the Duckworth's Grit Scale. The variables used in this study are a combination of statements that show both resilience as it correlates to grit. The variables are separated into the following statements:

- I have overcome setbacks to conquer an important challenge

- New ideas and projects sometimes distract me from previous ones

- My interests change from year to year

- Setbacks don't discourage me

- I have been obsessed with a certain idea or project for a short time but later lost interest

- I am a hard worker

- I often set a goal but later choose to pursue a different one

- I have difficulty maintaining my focus on projects that take more than few months to complete

- I finish whatever I begin

- I have achieved a goal that took years of work

- I become interested in new pursuits every few months

- I am diligent

Duckworth separates resilience from grit by determining that grit is the quality that enables a student to use hard work to stick with long-term goals and passions. Resilience, on the other

hand, is the overall ability to overcome challenges and respond to adversity (Perkins-Gough, 2013).

Category One: Risk Factors

An anonymous student survey (n=47) was used to identify correlations among risk factors in at-risk students who are successfully achieving academically. A student's mother's education resulted in significant correlations among other risk factor variables. Forty-seven percent of the students responded that their mother's education was less than a high school diploma (n=33). The mother's level of education resulted in multiple correlations, including weak, moderate, and strong. Table 8 explains the correlation matrix in its entirety while table 9 highlights significant correlations. The null hypothesis states that there is no correlation between a mother's education and other risk factor variables. However, the data show that there are significant correlations between the mother's level of education and parental involvement, socioeconomic status, child experienced hardship, and English as a second language.

Fifty-eight percent of the students surveyed responded that their primary language is something other than English (n=26). A mother's level of education and English as a second language had the strongest correlation at r=.445 or 45%. Although Salkind (2011) considers this relationship to be moderate, it was significant at p<.01 which results in a 99% confidence level.

Sixty-four percent of the students surveyed responded that they had experienced a serious tragedy or hardship in their life (n=29). A mother's level of education and experienced hardship resulted in a weak correlation at r=.310 or 31%. The correlation is weak but remains significant at p<.01 showing the relationship exists at a 99% confidence level.

Seventy-four percent of the students surveyed responded that their parents were somewhat or highly involved in their education (n=33). A mother's level of education and

parental involvement is slightly stronger at r=.399 or 40%. This correlation is very close to being a moderate correlation at the p<.05 level with a relationship confidence level of 95%.

Seventy percent of the students surveyed responded that they received free lunch at school (n=32). Lastly, a mother's level of education and socioeconomic status resulted in a negative correlation at r= -.308. The negative correlation determines that the less education the mother has, the more likely the student will come from poverty. Although the correlation is weak, the relationship exists with a 99% confidence level or p<.01.

Both Payne (2005) and Bourdieu (1977) suggest that social class is generational. In other words, a person's social class is repeated from generation to generation if certain cultural and educational capital is not gained. The results of this study support the literature that debates the notion that low education is associated with low socioeconomic status (Andersen & Hansen, 2012; Bourdieu, 1977; Dufur, Parcel, & Troutman, 2013; Payne, 2005). The majority of the participants in this study indicated that their parents acquired less than a high school education. As a result, each of the students were categorized as living in poverty based on their socioeconomic status, supporting the literature that suggests one correlates with the other. Furthermore, the level of parent education is associated with parental involvement and the student's primary language, indicating social class is, in fact, reproduced throughout generations (Pressman et al., 2015).

However, the participants of this study have overcome the limiting effects of their parents' education and are succeeding in school. As such, the students are demonstrating resilience in the face of adversity and beginning to mitigate against the socioeconomic cycle they are experiencing. Both Payne (2005) and Bourdieu (1977) indicate that a child comes to school with a certain quantity of social and cultural capital. The social and cultural environments lead

to the development of certain norms within the social class that are often repeated over generations. Nonetheless, a child can learn, develop, and function in higher social class norms when the skills are deliberately taught and fostered (Bourdieu, 1977; Payne, 2005). The participants of this study are demonstrating that through skill development and reinforcement, the cycle of a diminished social class can be improved. Jacob solidified this notion when describing his desire to succeed in school. His parents are both high school dropouts and living month-to-month on very little. He recognized the sacrifices that his parents were making so he could experience a better life stating, "They don't want me to make the same mistakes as them dropping out of high school. They want me to succeed in life so I don't struggle like them. This motivates me to succeed for them and for my future family."

There are two correlations that exist when comparing a student's living conditions. The question referring to parent status was intended to identify how many students suffered divorce or separation from their parents. The question regarding living conditions was intended to identify if a student experienced unstable living conditions.

Eighty percent of the students responded that they lived at home with two parents (n=36) while 73% responded that their parents were married (n=33). The correlation was strong at r=.763 or 76% and the relationship existed at the p<.05 level or with 95% confidence. However, the data is unreliable due to the fact that a child living with two parents is more than likely living with parents that are married as the data suggested and of course, would show a strong correlation. Therefore, this correlation was not considered quantitatively when referenced in this study.

A negative correlation emerged between a student's living conditions and sticking with a set goal. In other words, students who come from two-parent households are more likely to start

and not finish a set goal. Forty-three percent of the students surveyed responded that they set goals but change them later (n=19). The correlation was at r= -.322 or 32%. While this is a weak relationship, it was somewhat surprising to see that students coming from two-parent households were less likely to stick with a goal. The literature suggests that students coming from a two-parent household are more likely to experience success (Altschul, 2012; Dufur et al., 2013). That certainly may be the case, but the data in this research indicates that two-parent households are not an indicator of student resilience.

Busy schedules notwithstanding, parental involvement is a crucial component in developing resiliency in at-risk students (Bagby & Sulak, 2015; Sawhill, 2015). Often, in homes afflicted by poverty or other conditions that place students at risk, parental involvement is nearly nonexistent. This is the case because so many at-risk students come from families with single parents or a broken parental structure (Bagby & Sulak, 2015; Sawhill, 2015). For at-risk students, parental involvement can play a critical role in their academic success.

Eighty-seven percent of the students surveyed had a GPA of 3.0 or higher (n=39). A significant correlation existed between a student's GPA and parental involvement at r=.321 or 32%. Although this is considered to be a weak relationship (Salkind, 2011), it was significant at p<.01 proving at the 99% confidence level that the relationship existed. The weak relationship exists due to a combination of elements that exist in the environment of at-risk students. For example, the majority of the participants spoke Spanish in the home as their primary language. Many of the parents were Spanish only speakers which limited the parent-teacher or parent-school interactions. As a result, traditional parental involvement was limited. Another cause for the weak relationship is the fact that most of the parents had less than a high school education

which resulted in limited understanding of the curricula. These limitations are prevalent among low socioeconomic families and exist at higher rates in Hispanic households (Altschul, 2012).

Research has shown that the "helicopter parent" model is not always the most productive way to support a child's education (Fingerman et al., 2012; Lum, 2006). In fact, scholars describe the effectiveness of parental involvement occurs in an assortment of tactics used within the home (Ginsburg & Jablow, 2005; Kremer-Sadlik & Fatigante, 2015; Mueller & Dweck, 1998; Pressman et al., 2015; Watkins et al., 2015). The participants supported the claim that effective parental involvement exists beyond the traditional scope of parents attending meetings, interacting with teachers, and assisting with homework. Jacob's parents are separated, and he was assigned to live with his father due to his mother's drug use and jail sentence. The primary language in the home is Spanish and his father has less than a 4th grade education. They are living in poverty but they share a close bond. His father coached him in boxing before his hands were amputated due to a work related accident. Nevertheless, his father's involvement in his education remains constant. Although his father cannot communicate with his teachers nor assist with his homework, Jacob tells about the impact his father has on his educational success. He stated,

> My father makes it very clear to me. If I don't finish my homework, I don't get to go to the boxing gym. If I tell him that I don't have time, he tells me that I don't have time for homework, I don't have time for the gym. School always comes first.

Lupita's parents both have less than a 5th grade education but she describes her experience as, "My parents don't go to back-to-school nights. My mom will login into my grades and check on them. My mom is like A's and B's and that's it. Any C's and were going to have issues."

Karina expresses her frustrations with her parents' language barrier and lack of understanding with the content she is learning at school. She said,

> The language barrier that I have hasn't helped me at all because my parents don't know any of my homework. The support they give me is checking up on my grades, looking at colleges together, and making sure I get my homework done.

The research, the data, and the participants support the findings that, although the statistical relationship may be weak, parental involvement at some level, contributes to fostering resilience toward academic achievement.

The final correlation that exists among risk factors is the correlation between socioeconomic status and English as a second language. Bourdieu theorizes that social class is generational, and in order for one to advance in class, one must gain cultural capital. The research indicates that poverty is consistently associated with minorities that immigrate to the United States without assimilating to the middle class culture that is most widely represented in America. Seventy percent of the students surveyed responded they received free lunch at school (n=32) while 58% of the students surveyed responded their primary language is something other than English (n=26). The correlation between the two variables had a negative correlation at r= -.360 or 36%. The relationship further supports the research that suggests that poverty is associated to language and culture assimilation (Payne, 2005). While the correlation is weak, the relationship exists with a 99% confidence level. The literature suggests that these correlations exist because people living in poverty gain less social, emotional, cultural, and educational capital. Therefore, socioeconomic status can lead to many other risk factors that can further hinder the educational attainment of students (Gaddis, 2013; Lazzaro et al., 2014; Poudel et al., 2014). Other scholars contend that, although socioeconomic status plays a role in educational

attainment, poverty is not a sole contributor to student failure (Bagby & Sulak, 2015; Bellin & Kovaks, 2006; Payne, 2005). Other factors contribute to a child's responsiveness to resilience outside of poverty such as health (Bellin & Kovaks, 2006), parental involvement (Bagby & Sulak, 2015), and student mobility (Rumberger & Larson, 1998). Each of the participants in this study were identified as qualifying for free lunch at school. However, the resiliency that they developed and demonstrated in school supersedes the notion that poverty is a sole indicator of student failure. In fact, many stated that their living conditions, their parents' lack of education, and the challenges they faced, motivated them to be successful to improve their future outcomes. Pablo shared his feelings that disputes the research indicating that poverty equals student failure by saying,

> My parents don't have a high school education and they struggle. Our environment is tough but that teaches me that I have to go to college and I have to succeed. Do better for myself, something my parents weren't able to do. It's not always the environment because students can overcome anything they want to.

Although there is a correlation between socioeconomic status and other risk factors, that correlation does not define the ability for students to overcome adverse conditions through resilience, grit, and a growth mindset.

Category Two: Mindset and Grit

Dweck (2006) concludes mindsets are an important part of a person's personality and that they can, indeed, be changed. As educators learn more about mindsets, they begin to think and react in new ways that help students develop their own growth mindsets. In an interview, Duckworth stated,

"One thing we've found is that children who have more of a growth mindset tend to be

grittier. The correlation isn't perfect, but it suggests to me that one of the things that make

you gritty is have a growth mindset" (Perkins-Gough, 2013).

Simply stated, growth mindsets lead to grit and vice versa. Duckworth's Grit Scale was given to

students to determine correlations between resilience, grit, and growth mindsets in at-risk

students who are succeeding in school. Findings showed various weak correlations but they also

resulted in some key moderate and strong correlations that will help educators to focus on

developing the important traits in their students.

Overcoming challenges: Students who participated in the survey (n=47) showed that

correlations existed among various traits that support resilience, grit, and growth mindsets.

Seventy-seven percent of at-risk students who were succeeding in school responded that they

have overcome setbacks to conquer an important challenge (n=34). A significant correlation

existed between overcoming setbacks (n=34) and being a hard worker (n=41) at r=.430 or 43%.

The relationship is moderate at p<.05 or with a 95% confidence level. The data further support

the research that describes resilience as being able to overcome adversity and respond to failure

(Perkins-Gough, 2013). Duckworth's research focuses on grit being resilient in the face of failure

or adversity. Therefore, the data show that when adults teach at-risk students to overcome

adversity and to work hard at whatever task they engage in, resilience is developed. In

connection with Dweck's research, growth mindset development is essential to helping children

overcome adversity or failure (Dweck, 2006). Another critical component of student success

comes when students are able to achieve goals over time. The data in this study show a

correlation between overcoming setbacks and achieving goals over time (n=29) at r=.533 or

53%. The moderate relationship is significant at p<.05 with a 95% confidence level. Teaching

students coping strategies and ways to overcome adversity and failure establishes a foundation for developing a mindset capable of working hard and achieving goals that have been set. Each of the participants in this study has overcome serious challenges and are succeeding in school. Their experiences and resilience support the quantitative data in this study. For example, Pablo discussed the serious bouts of depression that he has dealt with over the years stemming from his parents' divorce, his physique, experiencing poverty, his father's illness, and having his mother in jail. For most young adults, these experiences would surely lead to academic failure (Anderson, 2014; Casillas et al., 2012). However, Pablo was determined to accomplish his academic goals and prove that he could be successful. He said,

> I would encourage myself during the dark times in life to do better. I want to make my parents proud and show them that I can be successful and handling whatever life throws at me, I know that I'll be able to overcome it.

Lupita described her mentality about achieving her goals when faced with adversity by saying,

> I tell myself that I need to get it together. I start to think about areas I might need to cut down my time so that I can focus more on my grades. I know it is my responsibility to reach my goals so I figure out what I'm doing wrong and I fix it.

> In other words, individual fortitude emerges as a necessary component to achieving

resiliency. As students encounter challenges in their lives, there are external protective factors that can be established in order to mitigate against risk of student failure. However, in order to best acquire resiliency, grit, and a growth mindset, one must develop and apply fortitude. Fortitude become the individual, internal factor that an at-risk student must acquire in order to increase the likelihood of overcoming adversity and becoming successful in school.

Easily distracted: Significant correlations emerged from the survey between becoming distracted (n=16) and losing interest in ideas (n=11) at r=.415 or 41%. Although moderate, the correlation remains significant at p<.05 or 95% confidence level. Another correlation related to distraction existed between becoming easily distracted and maintaining focus (n=17) at r=.476 or 47%. There is a moderate correlation (Salkind, 2011), and the confidence level is at p<.05 or 95%. At-risk students experience multiple distractions in their lives, many being out of their control. Jamie has experienced many situations that could be a distraction for her while in school. Her father died one day while walking home from church, leaving her alone with her mother. They moved from Nigeria and started American schooling which was quite the challenge for her. She responded in her interview the importance her teachers had on her success by creating a learning environment that encouraged student participation. The environment greatly enhanced her ability to eliminate the distractions and stay focused on her education. She described her experience as,

> Some teachers with their expectations can actually help you get through your problems. They make you feel like your education is not just a score but more about your growth and development. That really helped me get through the hard times.

The data further show that educators can help develop and foster resilience in at-risk students by eliminating other distractions that are in their control within the learning environment. Furthermore, using strategies that teach students how to remain focused on the task they are engaged in will help at-risk students cope with the external distractions (Ginsburg & Jablow, 2005). Many of these strategies are embedded or can be taught in structured programs such as student advisory, Advancement Via Individual Determination (AVID), Upward Bound, and other educational programs at school. The strategies involved in these programs teach

organization, goal-setting, time management, and other skills that assist students remain focused on the overall goal of succeeding academically.

Karina is constantly worried about her parents being deported back to Mexico. Both of her parents are undocumented immigrants working here in the United States. They both work in order to pay the bills and keep the family together. As such, they are required to drive and engage in other activities that put them at risk of being exposed as "illegal." This is a distraction that Karina wrestles with constantly while in school. However, she has credited educational programs like AVID and Upward Bound as critical to her ability to focus on her academics. She is desperate to achieve and be successful so that she can improve her family's situation. The programs have provided numerous opportunities for tutoring, as well as, taught valuable organizational, note-taking, and goal-setting strategies that have led to her success.

Coping leads to hard work. Ginsburg and Jablow (2005) describe the need to teach coping strategies to at-risk students essential to their ability to overcome discouragement. At-risk students face multiple failures in their lives which ultimately fosters discouragement. This study showed that there is significant correlation between not being easily discouraged (n=23) and hard worker (n=41) at r=.425 or 42%. The correlation is moderately significant but the relationship exists at p<.05 or a 95% confidence level. The data support the research indicating the importance of teaching at-risk children strategies that help them cope with their adverse conditions (Black et al., 2008; Ginsburg & Jablow, 2005; Ginsburg & Kinsman, 2014).

Teaching students to cope with their adverse conditions is critical to the social, emotional, and academic development (Ginsburg & Jablow, 2005). Students that build fortitude in their own lives as they overcome challenges, are able to recognize their incredible capacity to exceed expectations. Students that utilize the skills taught to them from external sources while

applying fortitude, develop grit, or passion toward long term goals. Coping strategies are an avenue that can be provided to students in educational settings, and they can urge at-risk students toward resiliency, grit, and growth mindset development. Their individual hard work, determination, perseverance, and desires, coupled with caring adults that establish high expectations while reinforcing skills, can cause extremely successful results.

Pablo describes Advisory as an excellent resource for learning how to deal with high school and prepare for college. He stated,

> My Advisory class is so informative. My Advisor is always giving us the extra push to be prepared for college. They do everything it takes to help us deal with the challenges and what we will need to do to be successful. They guide us through everything to make sure we are successful.

Pablo echoed the program's effectiveness by stating, "I learn things in Advisory that I don't learn anywhere else. My teacher helps us find scholarships and programs that will help us in our education." Ben also was an advocate for Advisory by simply saying, "That was one of the programs that elevated my mentality of just being successful at school."

Finish what you start. At-risk students experience a variety of challenges while attending school and create feelings of helplessness. Learned helplessness can impair a student's ability to finish what they start leaving them in danger of failing. The strongest correlation that surfaced from the student survey was the correlation between finishing what you start (n=35) and achieving a goal over time (n=29) at r=.661 or 61%. The correlation is strong (Salkind, 2011) and is significant at p<.05 or a 95% confidence level. This particular correlation becomes extremely relevant when developing resiliency, grit, and growth mindsets in at-risk students. As educators struggle with ensuring that all children are successful in school, they encounter

roadblocks with students who experience adversity (Williams & Bryan, 2013). Understanding

the correlation between teaching students to finish what they start and achieving goals over time

is a critical strategy supporting the intent of this study (Karimshah et al., 2013; Pashak et al.,

2014; Williams & Bryan, 2013). Teaching perseverance, persistence, and completion strategies

are certainly viable in today's classroom (Henderson, 2013; McClure, Yonezawa, & Jones, 2010;

Werner, 1996). The data prove that when schools implement programs or teach strategies that

support these types of skill development will experience a surge in academic achievement among

at-risk students as they conquer resilience. Although each of the participants in this study are

excellent examples of finishing what they start, Jose's attitude rang loud and clear. He and his

siblings live at home with their mother and she is the sole provider for the family. At times, the

struggle to survive seems unbearable for Jose as he witnesses the stress and anxiety of his

mother. His resilience and grit come from watching his mother overcome the challenges.

Through his emotions he shared,

> My mom has always found a way to get things done. When I started playing football
>
> again this year our family was struggling to have food to eat. I was thinking about
>
> quitting football and maybe find a job so I could help with money for my family. But, my
>
> mom didn't let me. She taught me that I need to follow through with my commitments to
>
> my coach and team and let me know we would be alright.

This example shows the grit and determination that is possible in all students regardless

of their environment or negative circumstances. Duckworth describes grit as the quality that

inspires individuals to stick with their long-term goals and passions, while working hard

throughout the process (Perkins-Gough, 2013). Each of the participants showed their grit by

defining their long-term goals and passions as successfully completing high school, and

preparing to attend four-year colleges. Despite their adverse conditions, each had learned the skills throughout their journey that eventually developed fortitude and grit. Grit was developed through application of skills, reinforcing the positive results, and the experiences gained by overcoming adversity. Granted, non-parent adults and parents alike contributed to the fostering of skills, but it was the incredible fortitude of the students, and self-motivation that anchored the development of grit.

Qualitative Data - Metrics for success

Student achievement has long been the barometer for educational success. No Child Left Behind (NCLB, 2002) established a strict accountability process for districts and schools that was directly connected to high stakes testing at both the state and federal levels. As a result, student test scores in core subjects and pass rates on federally mandated assessments in ELA and math, as well as graduation rates among high school seniors, were monitored meticulously in an effort to assess and increase student achievement. More recently, President Obama signed into effect a reauthorization of the Elementary and Secondary Education Act (ESEA, 2015), formerly known as the No Child Left Behind Act (2002), as a demonstration of the continued commitment to education in America. The sustained effort to raise student achievement in America has led to the restructuring of standards taught. These are known as the National Common Core Standards. With new standards comes a new, more flexible system for assessing student achievement; however, the message is clear: Education and student achievement remain an integral part of our country's identity.

This study supports the notion that no child should be left behind and that all students, despite their circumstances, have a right to a quality education. However, for some, the challenges faced become overwhelming and they are subject to becoming at risk of failing in

school. Research on vulnerable students continues to explore the factors associated with risk of failure, but this study is focused on what creates resiliency in at-risk students with the resolve to succeed in school.

Theme One: Involvement

Research questions one and two asked which protective factors, programs, and strategies are most attributed to resiliency skill development and growth mindsets. Participants clearly identify the importance of involvement in two distinct areas as critical to resiliency skill development, and growth mindsets. The two distinct areas identified are parental involvement and student involvement. Participants overwhelmingly attributed involvement as a contributing factor to their resiliency development, and when programs are implemented to effectively incorporate involvement, the likelihood of resiliency development significantly increases among at-risk students (Nitsch et al., 2015; Noddings, 2014; Oostdam & Hooge, 2013; Toldson & Lemmons, 2013).

Parental Involvement: Every bit counts. It may be the most used phrase in public education and the least controversial, but research clearly shows that parental involvement can positively impact a child's education (Altschul, 2012; Kremer-Sadlik & Fatigante, 2015; Noel Stark, & Redford, 2013; Pressman et al., 2015; Watkins, Anthon, Shaffer, & Smith, 2015). Ben stated in his interview that parental involvement is important because children want to please their parents and try to do even better than they did in school. Although he only lives with his mother, he attributes her involvement as an integral part of his academic success, stating, "She'll do a teacher-student conference or the back to school nights to know what I'm working with at school. She'll usually make time for it." While most schools promote parental involvement, one must understand that involvement may come in a variety of forms (Altschul, 2012; Kremer-

Sadlik & Fatigante, 2015; Noel Stark, & Redford, 2013; Pressman et al., 2015; Watkins et al., 2015).

Pablo explained that his parents do not do more than check in on his grades. His parents rarely call teachers or communicate with the school due to the language barriers that exist. Although, their involvement includes a minimal presence at school or with teachers, he attributes their checking in on his grades with him valuable. On the other hand, Lupita touted her parents' involvement in school as a constant push to succeed. She acknowledged that her parents have always attended back to school nights, parent-teacher conferences, and have been actively engaged in helping her with her school work. Nearly all of the participants responded that they have noticed that parental involvement has steadily declined as they approach graduation. Those with younger siblings expressed that their parents are focusing more on their siblings now and expecting them to finish their senior year strong without much of their support.

The biggest challenges linked to parental involvement for at-risk students are the parents' availability for intervention, the parents' ability to comprehend the curriculum, and a parents' comfort in working with educators (Altschul, 2012; Kremer-Sadlik & Fatigante, 2015; Noel Stark, & Redford, 2013; Pressman et al., 2015; Watkins et al., 2015). Seven of the eight participants stated that their parents' education consisted of less than a high school diploma. As such, they indicated that it was very rare that their parents sat down with them to help with homework because they were not familiar with the content. Pablo stated that if he could change something about his parents' involvement it would be to communicate more with his teachers. He feels the stress of trying to do everything himself, and he desires his parents to be more communicative with the school and his teachers without him having to ask them to do so.

Karina's father has less than a 6th grade education and her mother dropped out early in high school while living in Mexico. She expressed frustration that her parents would not sit down and discuss colleges or work with her on her homework. She was curt with her perception of their involvement by stating, "My parents can't help me so I have to do things on my own. I've told my mom before that she doesn't help me with my school. She doesn't know any better, but she just doesn't help me."

Ally was especially sensitive to the fact that her father is very removed from her education due to the family circumstances both of her parents work long hours, with her father working two jobs. She explained her parents are not able to attend back to school nights or conferences because they are always working. Her poor relationship with her father has been a heavy burden that she carries to school each day. Fighting through the tears, Ally shared, "My dad is never home and we're really distant from each other. When he comes home, we just pass by each other and there is no communication or anything. It's kind of hard, but I got used to it."

Despite the obstacles that each family faced, all of the participants recognized the importance of parental involvement as a vital function of their academic success. Each identified areas they considered to be effective in their academic success while acknowledging areas that could be improved to have a greater effect on their educational outcomes. Furthermore, the fact that each participant faced significant obstacles regarding parental involvement and still achieved at the top of their class, is a positive indicator of the students' resiliency, fortitude, and overall grit. Again, the individual component that existed among the participants to assist in their development was fortitude in sticking with their goals and aspirations.

Student Involvement: Find your Niche. The main purpose of student involvement is to strengthen student dedication to education, communities, and to democracy (Fletcher, 2012).

Student involvement in this study refers to the degree by which a student dedicates oneself to the overall educational experience through positive engagement. Thus, a highly engaged student allocates considerable effort to studying, spending time on campus, participating in extracurricular associations, and interacting frequently with teachers and other students. Student involvement has long been considered an effective strategy to helping at-risk students succeed in school (Davalos, Chavez, & Guardiola, 1999; Fletcher, 2012; Lipscomb, 2007). Furthermore, this study indicates student involvement is linked to building resiliency, grit, and growth mindsets among students at risk of failure, and that involvement increases the potential to develop fortitude. As at-students get involved in the total educational experience, they develop new peer relationships, establish an identity within the school, explore new challenges and interests, and test their interpersonal skills, all of which foster both resiliency and growth mindsets (Davalos et al., 1999; Fletcher, 2012; Gaddis, 2013).

Student involvement was a common thread among all of the participants in this study, each of which faced multiple risk factors. All eight participants were involved in a highly rigorous academic programs such as AVID (n=5), Upward Bound (n=3), Advanced Placement (n=8), and an early college program embedded into the comprehensive high school (n=8). In addition to the academic programs, each participant was involved in some form of extracurricular activity which included athletics (n=6), ASB (n=2), and Clubs (n=4). In addition to school involvement, some participants also were involved in community service groups and their church (n=3). All of the participants, for example, were part of the early college program. Each of the participants were selected in their freshmen year to be part of the program and had to demonstrate an ability to meet the rigor of a college setting. Once demonstrated, students enrolled in college classes that were held on the high school campus, thus earning college credits

while in high school. Each of the participants has earned no less than 15 college credits while enrolled in the program.

Karina credited Upward Bound as a major contributor to not only her overall academic success, but also to helping her develop resiliency in school. The Upward Bound director was Hispanic and came from a similar background as Karina's parents. He taught her that if she persevered through the challenges, she would be able to graduate high school and go to college. The program required her to wake up early on the weekends and take a bus downtown to the college campus in order to participate in the program. Her commitment to do so is an indicator of the skills that she was developing in the program. Lupita also attributes her resiliency to Upward Bound sharing that she learned valuable skills that helped her be more effective in her study habits, organization, and time management. As she implemented the learned strategies, she experienced success in the classroom which led to her believe that she was capable of succeeding at high levels.

Jose was adamant that his involvement in Advance Placement classes while being extremely involved in football was critical to his development as a successful student. When Jose started school he was unable to speak English. This impairment prevented him from succeeding in his elementary school years. He would become frustrated and feel as if he would not graduate high school and end up like his parents. As he advanced through the years, the language barrier started to fade, and he was able to comprehend more and more of the content. The more he understood, the more he pushed himself to earn higher grades. Upon entering high school, Jose had enrolled in the highly rigorous Advanced Placement and early college programs and joined the football team. He started to notice initially that the two conflicting demands were taking a toll on his academic achievement. To make matters worse, his senior year, his best friend and

football teammate was hit by a car while crossing the street and killed. The challenges and increased pressure that he faced would have caused most students to give up but Jose's mindset was different from most at-risk students. He realized that both programs were teaching him how to overcome adversity through effort and a focused determination to achieve a targeted goal. By his senior year, Jose had applied the skills he learned in both his academic and extracurricular programs, had passed the AP English exam, and was an All-League selection in football. The boy that started school not speaking English had now earned college English credits while being a successful athlete.

Participation in these rigorous academic programs and engaging extracurricular programs provided an avenue for these at-risk students to test the theory that they could not succeed in school because of the many risk factors they faced. As such, all of the participants were involved in three or more extracurricular and academic programs while attending high school. Despite their risk factors, rigorous class schedules, and busy involvement, each student is prepared to graduate in the top 10 percent of their class, as they approach high school graduation and each of the students have attributed these programs to their resiliency and growth mindset development.

Theme Two: Expectations

Research suggests that when teachers expect more from their students, they get more from their students (Hattie, 2006; Hattie, & Hamilton, 2006; Murphy, Weil, Hallinger, & Mitman, 1982; Rubie-Davies et al., 2006). High expectations for students can come from multiple resources such as parents, teachers, programmatic requirements, and school administrators. Nevertheless, research indicates that expectations, both high and low, have an effect on student learning (Hattie, 2006; Murphy et al., 1982; Rubie-Davies et al., 2006). Students who come to school with multiple adverse factors in their lives are more likely to fail

their classes. Therefore, high expectations for all students is a critical component of developing resiliency and growth mindsets in students categorized at risk of academic failure. This study hypothesized that at-risk students are cognizant of the expectations that are placed upon them, and that high expectations contribute to resiliency skills development. Furthermore, this study attempted to prove that at-risk students are capable of not only reaching the expectations that are placed upon them, but they are able to exceed them with support.

A key to resiliency development in relationship to high expectations may start in the home. Pablo's parents are separated, and he lives alone with his father. His father is an immigrant from Mexico, and only completed up to the 3rd grade in school. Despite his father's limited education, Pablo expressed that his father expects him to earn good grades and to get a good education. He shared that his father has been frank with him regarding his education and the message has been for him to go to college, and that he has to succeed. Pablo only gets to see his mother briefly on weekends, but because both parents expect him to go to college, he is determined to persevere through the challenges, attend medical school, and become a doctor.

Karina clearly described the high expectations placed upon her by her parents to be successful in school. Although neither of her parents finished middle school in Mexico, she stated, "My parents think that school makes the world go round, and that if you are educated you are successful automatically." She shared the high expectations that her parents have for her place a tremendous amount of pressure on her to succeed. At times the pressure feels unbearable causing her to slip into depression. Through her tears she explained that she really wants to attend a University out of state but that her parents are not able to afford it, nor do they qualify for financial assistance due to their undocumented status. However, her resiliency to reach the

high expectations has caused her to look at in-state Universities that specialize in teacher education.

All eight of the participants acknowledged that high expectations to succeed in school existed within the home. Although some homes only had one parent as the caretaker, all students confirmed that at least one parent was involved in their education and pushed them to be successful in school.

Like parents, teachers play a major role in the development of student resilience toward academic achievement. Hattie (2006) states, "the major message is simple—what teachers do matters" (p.22). Teachers are the most vital contributor to a child's education. The expectations teachers have of their students and the strategies they teach to support the expectations, has a high effect on student learning (Dweck, 2006; Hattie, 2006). In relationship to at-risk students, meeting high expectations increases the likelihood of developing resiliency, and it fosters a growth mindset (Duckworth, 2009; Dweck, 2006; Jamar & Pitts, 2005; Strayhorn, 2014). High expectations leading to student achievement are not only verbalized by the teacher, but are also the environment by which a student learns (Dweck, 2006; Jamar & Pitts, 2005; Strayhorn, 2014). High expectations and an effective learning environment are closely woven together when developing resiliency in at-risk students (Dweck, 2006; Jamar & Pitts, 2005; Strayhorn, 2014). The language of the teacher is such that a child recognizes that they have the ability to learn and achieve equally to their peers despite the different challenges that they face (Dweck, 2006; Hattie, 2006). The learning environment leading to resiliency development created by the teacher is one that invites inquiry, promotes experimentation (be right or wrong), and makes connections to deeply learned concepts (Hattie, 2006). Conversely, when a teacher inaccurately places different levels of expectations on children based on their circumstances, or establishes a

learning environment that discourages individual thinking, they limit and at times reverse, the

development of resiliency and causing a fixed mindset to exist in at-risk children (Duckworth,

2009; Dweck, 2006; Jamar & Pitts, 2005; Strayhorn, 2014).

This study supports the notion that high expectations and the learning environment

created by the teacher plays a vital role in developing resiliency and growth mindsets in at-risk

students. In his interview, Ben determined that when teachers create an environment and

expectation that students can only learn from the teacher and the book, students are disengaged

with the learning. He stated, "If that's what they expect, why can't we just get the book and be

left alone? The student would actually be more engaged in class if they had to do something with

their hands or work with others to solve problems." He goes on to share that he is more engaged

with teachers that are charismatic, positive, and understanding of their challenges. He attributes

his determination and resiliency to his football coach stating, "Coach helped me be determined.

He was a high authority figure that was transparent with all of us and taught us to overcome

adversity through effort and determination." Jamie describes the learning environment as crucial

in teaching students to be resilient. She concluded that students perform at higher levels when

students are able to ask questions without feeling intimidated. She is most inspired when teachers

that are happy to answer questions and show a passion for teaching by making student feel

comfortable in the learning process. In describing the strategy that most attributed to her

resiliency and mindset, Jamie said, "My AP Chem teacher understands as a teacher and a mom.

She just wants her kids to be successful. No matter what problem I have, either in school or at

home, she is there to help me."

In contrast, Jose implies that when a teacher has low energy, it rubs off on the students in

the classroom. He declared, "I've had some teachers that are just so bitter, you know, you can

tell they just don't want to be there. Some classes you just sit there; nobody talks or does anything. I can see where that is a class that nobody wants to go to." He concludes that students learn resiliency and how to succeed with challenges when teachers expect their students to do more, and they develop positive relationships with their students. Jamie concurred with a teacher's negative actions toward students. She believes that a teacher's actions clearly show how they feel about their students and their job. Jamie feels that in order for at-risk students to learn resiliency and believe that they can accomplish their goals, teachers must show that they genuinely care about their students, are well-prepared in their lesson planning, and promote student engagement in their classes.

This study validates the research that high expectations for student achievement and creating an environment to reach those expectations are a necessary component in developing resiliency, grit, and growth mindsets in at-risk students.

Theme Three: Reinforcement

Parents may find themselves asking what more they can do to support their child in school. The most common response is to help more with schoolwork by doing drills, practice, or other activities with their children in quiet, confined spaces. Teachers find themselves asking how they can reach the child and motivate them to be resilient to challenges they face in school (Henderson, 2013; Sadowski, 2013). In order for parents and teachers to foster growth mindsets in their children, they must focus primarily on the child's beliefs (Gunderson et al., 2013). Research indicates that children's beliefs about their own intelligence play an integral role in how they achieve in school (Dweck, 2006, 2009; Noddings, 2014; Toldson & Lemmons, 2013). Most young children tend to believe that they are not capable of grasping an idea or subject when faced with failure (Dweck, 2006). This fixed mindset causes even more challenges for an at-risk

student when coupled with other difficult situations in their life (Dweck, 2006; Ginsburg & Kinsman, 2014). They begin to believe that their intellectual abilities cease at certain levels of understanding (Dweck, 2006, 2010b; Ginsburg & Kinsman, 2014). Adversely, the idea of simply telling children how smart they are is not the answer to fostering resilience, or building growth mindsets. Instead, parents and teachers should focus on encouraging the child's individual process to learning (Dufur et al., 2013; Dweck, 2006, 2007, 2009). When a parent or teacher focuses on a child's effort or strategies they have applied to their individual learning, they instill an eagerness in the child to confront new challenges with an individual belief that ultimately leads to growth and enjoyment of learning (Dweck, 2006; Ginsburg & Kinsman, 2014; Gunderson et al., 2013; Sadowski, 2013). This data in this study support the correlation between growth mindset language and resiliency.

Jose comes from a broken home. His father is serving time in prison for molesting his sister and her friends, and he lives only with his mother. She works numerous jobs to care for him and his siblings. He is categorized as living in poverty due to his free lunch status and English is his second language. He describes the conversations he has had with his parents at an early age as a valuable link to his growth mindset. His parents had high expectations for him to be successful in everything that he did in his life. He shared that they would never accept failure as an end result but instead taught him that failures were simply an opportunity to improve oneself. He related an experience that he had with his mother early on in high school when he started to struggle in school. He told his mother that he thought school was not for him, and he wanted to join the military. Her response stuck with him the remaining years in school, stating that she told him that challenges were a part of becoming something more. If he learned to accept the challenges as opportunities to grow and develop then he would be able to attend a university

when he graduated. Now, he says, "My mom, she's not asking me if I want to go to a university, she's asking me which one I am going to. I am grateful for that lesson."

Lupita's experiences also validate the research on adult language and its effect on resiliency development. Her parents' education is limited to a 5th grade level. She lives at home with three of her siblings in impoverished conditions. Although English is her second language, she is currently ranked in the top three in her graduating class. She is very active in the early college program and serves as President of the club. Her resiliency, grit, and growth mindset has been heavily impacted by the reinforcement she has received from her teachers. She described the need for at-risk students to have teachers that believe in them and show confidence in their abilities. She recognizes that although she receives support at home from her parents, many at-risk students do not, and therefore, it is critical that teachers fill that void at school. She shared a specific story about the first time a teacher influenced her growth mindset. When she was in 8th grade her grandmother, uncle, and great-grandfather all passed away. The loss of her close family members threw her into a downward spiral causing her to struggle in school. She started to believe that her ability to achieve in school was not possible. One day her ELA teacher chose to read her essay to class as an exemplary model for the rest of the students to follow. Lupita continues by saying that after class her teacher pulled her aside to tell her she was an amazing writer. She shared, "She would always tell me that I was an amazing writer. She was the first teacher that I can remember that had confidence in my abilities." She credits this teacher's positive reinforcements to her ability to believe that she can overcome any challenge and be successful in life. She began to cry softly as she expressed her deep appreciation to this teacher, crediting the teacher for her academic success. As a Top 10 student, her parents will get to sit on the football field in the front row at graduation to be recognized. Her tears flowed more freely as

she expressed the pride that her parents feel toward her excellent accomplishments in school. It was a goal that she made upon entering high school four years ago and a dream that she will see realized for her parents.

Reinforcement leading to resiliency development does not only come from adult language and their belief that all children can succeed regardless of their adverse conditions. The positive reinforcement also comes in the form of targeted instructional programs with strategies to foster resiliency, grit, and growth mindsets in all children embedded into the programs. Programs such as AVID, Upward Bound, Advisory, and other educational programs establish a gateway for schools and districts to implement effective strategies that create, foster, and sustain resiliency skill development for all children. The major educational programs that reinforce resiliency development in at-risk students who emerged through this study were student advisory, AVID, and Upward Bound.

Each of the eight participants attended a student advisory class within their regular class schedule. Student advisory programs have long been considered as valuable programs to guide students down a path towards academic achievement (Johnson, 2009; Johnson, Eva, Johnson, & Walker, 2011; McClure, Yonezawa, & Jones, 2010; Phillippo & Stone, 2013). Although the evidence suggests that teacher supports are a lever to raise student achievement among at-risk students, little research exists identifying the characteristics teachers need to be successful in their student support program (Phillippo & Stone, 2013). The research that surfaces most in literature is focused primarily on the student-teacher relationship through the perceptions of the student (Crosnoe, Johnson, & Elder, 2004; Hughes & Kwok, 2007; Phillippo & Stone, 2013). Although this study introduces new research linked to effective teacher characteristics, the

research maintains the lens of the student and their perceptions of teacher effectiveness in these programs.

The Advisory program at the school focused on the theory that all students should be connected to at least one adult in a meaningful way while attending school. The program served academic, social, and emotional functions by incorporating various strategies focused on the whole child. When developing advisory programs, embedding resiliency strategies especially makes sense in urban school settings (Benson & Poliner, 2013). Most urban educators agree that many of the students they teach are struggling with the day to day educational process while trying to manage the effects of their negative circumstances (Benson & Poliner). Advisory programs, when carefully developed, can nurture a student's support systems, learned optimism, and self-management skills that will foster resiliency (Benson & Poliner, 2013). The overall intent is to provide access to student voice and to encourage teachers to guide students based on their academic, social, and emotional needs. As such, it is critical that adults involved in advisory programs acknowledge it is about relationships and not a time slot to be filled during the day. Jamie validated the success of the advisory program and attributes the relationship and structure as part of her resiliency skill development. Jamie came from Nigeria in the 6th grade as an elementary student. She has faced multiple challenges in her life, including the loss of her father as he collapsed and died in the streets of Nigeria. She lives alone with her mother and is struggling with a new male figure emerging in her life as her mother begins to date. She admits that the advisory program at school helps her cope with the challenges because of her teacher's compassion, understanding, and commitment to student success. She acknowledges the importance of the program and the intent to allow students to be removed from the rigors of a regular school day and focus solely on the areas in which a student struggles during an

uninterrupted period. The program gives students an opportunity to work with other students who share similar struggles, communicate one-on-one with their advisory teacher, and learn strategies that help them be successful in school. She suggests the impact of the program can be vital in developing resiliency skills and teaching students how to move from a fixed mindset to a growth mindset. She stated, "I can talk to my advisory teacher about anything. It helps me stay focused on my academic success, teaches me how to be successful in my classes, and gives me an opportunity to fix things when I am struggling in a class."

Student advisory programs focus more on the relationships, mentoring, and support to student learning. Other programs focus primarily on strategies that assist students in learning how to be resilient while focusing on academic success. Programs such as Advancement via Individual Determination (AVID) and Upward Bound satisfy the need to develop these strategies in at-risk students. Upward Bound is a federally supported program designed to produce skills and impetus necessary for success in education beyond high school midst at-risk students (Seftor, Mamun, & Schirm, 2009). The program focuses not only on preparing students to enroll in college, but also delivers strategies that guide students to be successful in their preparation, including to be resilient. The primary goal is to improve academic skills, develop effective study skills, explore career choices through interaction, and promote personal growth and responsibility.

Karina stated, "I am involved in Upward Bound and that has really, really helped me." She describes the program as having been an important contributor to her academic success. She attributes the program to being the primary source of learning strategies that make her successful in school. She attends the program downtown at the local college and is highly considerate of the program objectives and the impact they have on her self-confidence, grit, and belief that she can

accomplish all of her academic goals. Lupita shares the sentiment saying, "Upward Bound taught us how to take notes, apply for colleges, and study for important exams like the SAT."

The participants in this study have produced evidence that other educational programs, such as AVID, are vital to developing resiliency among at-risk students. AVID programs implore educators to prepare students to be successful in their k-12 education and beyond (Bernhardt, 2013; Black, Little, McCoach, Purcell, & Siegle, 2008; Ensor, 2009). The program focuses on research-based strategies targeted to teach students skills and behaviors for academic success while providing intensive supports with teacher-student relationships (Bernhardt, 2013; Black et al., 2008; Ensor, 2009). The title of the program alone indicates the value of resiliency development as the program develops a sense of hope for personal achievement gained through hard work and determination.

Ally, Ben, Jacob, Karina, and Lupita all expressed that the note-taking strategies, organizational skills, time management, and study skills that they learned in AVID was a definite contributor to their academic success. Ben stated, "AVID was a new environment because they actually expected a lot of us. I learned how to take notes in class and it really helped in all my classes." Jamie echoed the importance of learning the strategies that AVID teaches by saying, "It taught me to manage my time, take notes, and study for important concepts in my classes.' Karina concurred by stating, "AVID helped with overall strategies like note-taking and how to be organized." Finally, Jacob summed it up by saying, "AVID taught us what we need to succeed in school."

Theme Four: Fortitude

Fortitude is having courage in the face of adversity. Fortitude emerged as the final theme within this study, and it was a major contributor to each participant's academic achievement.

Fortitude is developed primarily through individual, familial, and social reinforcement of positive outcomes. The three previous themes of relationships, expectations, and reinforcement create the foundation for fortitude to be developed in an individual. Psychofortology or "the science of psychological strengths" is a concept that has begun to surface over the last decade (Wissing & Van Eeden, 1998). The psychological ability to resist stress and adversity has been linked to academic achievement in at-risk students (Rahim, 2007). The strength to resist such adversity comes from what researchers call fortitude. An at-risk student develops fortitude through positive appraisal from highly valued individuals they encounter throughout their lives, especially during times of despair. Fortitude is a relatively new concept in guiding at-risk students toward successful outcomes that they would likely not experience without the trait (Gibson, 2001). Fortitude is derived from the reinforcement of resilience, grit, and growth mindset skills, with an emphasis on recognizing the positive outcomes that result in effective implementation of the learned skills (Cowen & Work, 1998; Dyer & McGuinness, 1996; Garmenzy, 1993). The quantitative research in this study showed a strong correlation between finishing a task and accomplishing a set goal, and moderate correlations between overcoming setbacks and being a hard worker. In essence, fortitude becomes the internal factor required for resiliency, grit, and growth mindsets to be developed with students facing adverse conditions. Jose reinforced the need to apply fortitude in order to develop resiliency, grit, and a growth mindset. He stated,

> There are resources that can be put out there for at-risk kids, but ultimately it's up to you. If you want to get out of the environment you are in right now, and you want to move forward and be better, than you are gonna have to put in the time, the work, and the effort, if you want to be where you want to be.

Jose inched forward toward success as he learned valuable skills through relationships, high

expectations, and positive reinforcement. However, it was his fortitude or his courage to

confront his obstacles with a surety he would prevail that completed his journey toward

developing resiliency, grit, and a growth mindset. Each of the participants in this study

displayed an incredible amount of fortitude as they confronted their challenges.

Jamie recognized the external factors that helped her overcome the many challenges she

faced. Nonetheless, when asked what has led to her tremendous amount of will to succeed in

school despite such grueling challenges, she replied,

> For me, it's just telling myself I have to do this. I can't just give up cause of this
>
> challenge. I just have to push through it. I think it's just again, my mindset, is just telling
>
> myself I have to do it.

Likewise, Karina acknowledges some of the external pillars like the role models in her

life, her parents and their influence, and surrounding herself with good friends as positive

contributors to her success. Still, fortitude becomes a cornerstone to her resiliency, grit, and

growth mindset development. She explained,

> I think it is all in the mindset of the person. I feel like I have that motivation to just get
>
> out of where I live, and just become something because I want it. It's how bad you want
>
> it, and I think that is what makes the difference.

In summary, external factors are certainly major contributors to developing resiliency,

grit, and growth mindsets. Nevertheless, this study discloses fortitude as an internal factor

required in order to successfully develop the aforementioned attributes. Each of the participants

in this study were incredible examples of applying fortitude to every negative situation they

encountered, and as a result, each demonstrated resilience, grit, and growth mindsets in their quest for academic achievement.

Conclusions

The questions guiding this dissertation study were:

1. What factors do successful at-risk students identify as key contributors to their resilience, grit, and growth mindset?

2. What strategies and instructional programs most clearly foster resilience and growth mindsets in at-risk students?

3. What variables are most strongly correlated among risk factors and growth mindset attributes in at-risk students with high academic achievement?

Many students, despite their abysmal circumstances, are thriving due to the resilience-building power of educators and schools. Imagine the student from a broken, abusive home, living in poverty and struggling to master English as a first language. The research shows that the student will fail and drop out of school (Bowers, Sprott, & Taft, 2013; Wang & Fredricks, 2014). This study, however, identifies possible solutions to help children learn to overcome the challenges, believe in their abilities, and ultimately succeed academically. Werner (1996) and Henderson (2013) identify schools as a viable haven to establish conditions that promote resilience, grit, and growth mindsets among students vulnerable to failure. Schools provide the most influential relationships that many at-risk students come to know in their lives. Teachers, administrators, and staff become mentors and role models through the powerful relationships that they build with students (Theron & Engelbrecht, 2012; Thomsen, 2002; Walsh, 2012). When asked why some kids when faced with adversity succeed while others do not, one student, Karina eloquently stated, "It's all in the mindset and teachers as role models have a lot

to do with it. Not just because they are good examples, but because of the examples they share on how I should be."

A school's environment provides the foundations that are necessary for resilience to be developed (Benard, 2004; Theron & Engelbrecht, 2012; Werner, 2003). A school setting provides structure, boundaries, and openness to explore the many opportunities that are available to students (Birdsall, 2013). These elements of cultural capital are critical in a student's development, especially when they are nearly non-existent in their personal lives away from school. The school setting opens opportunities for educators to share a multitude of examples about overcoming adversity through literature, history, and the arts (Walsh, 2012). A student's exposure to and retention of the cultural, social, and emotional capital that the school provides can greatly enhance the development of resilience. Jose was direct in his perception about the role schools have in developing resilience and growth mindsets. He bluntly stated,

> School has taught me not to make excuses. Everybody goes through tough things in life. I've gone through a lot of stuff. My dad is in prison, my mom works two jobs, my best friend was killed last year, and I have to work on the weekends to help pay the bills. But, you don't see me failing my classes or just doing the basic minimum. No, I have learned that if you really want to become something you just have to do it, period.

Jose's concise evaluation of the resiliency skills and growth mindset that he has developed supports the notion that schools are a valuable training ground for at-risk students.

Finally, schools teach fundamental core values that all students need to learn in order for them to persevere through the challenges that they face and will face throughout their lives (Berard, 2004; Thomsen, 2002). The participants of this study attended a high school that instilled specific values in all of its students. The core values were plastered throughout the

campus and were the foundation of the school's culture. The core values that were engrained into the students' minds upon entering the school were perseverance, respect, integrity, and dedication to excellence. These core values were represented by the acronym PRIDE. Students were taught to take "pride" in all that they did in school and in their communities. The core values were reinforced through incentive programs, recognitions, and daily conversations with teachers, staff, and administrators. Although the conversations were not a prescribed component of the school's advisory program, the ideas were introduced, and reinforced regularly in the advisory setting. Students were taught to persevere through adversity, treat others with respect, to have integrity in and out of school, and to dedicate themselves to excellence in all that they do. Teaching and reinforcing the core values in the school setting created a culture of growth mindsets and resilience among students. Granted, academic failure still existed on campus, but their student achievement data greatly exceeded those schools of similar demographics and circumstances.

Although the external protective factors are critical to developing resiliency, grit, and growth mindsets in at-risk students, the anchor factor relies in the individual fortitude the student exerts within the process. Each of the students in this demonstrated an incredible amount of fortitude in their quest for educational success. The multiple challenges they encountered throughout child and adolescent years would cause many to crumble into academic failure. However, the fortitude that each student possessed nurtured the strategies, skills, and other protective factors that foster resiliency, grit, and growth mindsets. As such, in order for resiliency, grit, and growth mindsets to be developed in at-risk students, a balance between external protective factors, and the student's individual fortitude must be established. Schools are the ideal setting for these skills to be developed.

 In summary, schools are the best solution to developing resilience, and growth mindsets among at-risk students. Schools are the best solutions because of the structure and opportunities that they create for students coming to school with multiple adverse factors. The school environment is a resource for educators to implement strategies and programs to support involvement, declare expectations, and reinforce the skills needed to be successful. Bourdieu (1977) and other scholars consistently declare that students living with multiple risk factors simply do not receive the necessary support and skills to escape their conditions without schools intervening in the process. This research is summed up by Pablo, a participant in this study. Pablo lives with his father and they share living conditions with another family because his father cannot independently support the two of them. He describes the stress that he feels in school as "overwhelming." As an enrolled student, Pablo is categorized as Hispanic, an English language learner, and living in poverty. Nevertheless, this young man was an inspirational example as to why this study is important to educators across America. When asked why he defies the statistics that indicate he should be failing or dropping out of school, he concluded by saying,

> I'd like to introduce a new way that I feel would benefit Latino males or people in my situation. I know that anything is achievable whether you're poor or rich or the color of your skin. You just gotta kind of have that knowledge that with hard work you can succeed. Of course, the school you go to plays an important role. You gotta have a safe environment, a clean environment, and teachers that are doing their job correctly, which is not just giving you work, but having conversations with the students who motivate them. Ever since I was young, I was told that I would get to where I want to be as long as I keep going.

Pablo's response further solidifies the fact that students can develop resilience and growth mindsets if educators begin using effective strategies at an early age and continue to reinforce the skills, keep expectations high, and involve students and parents in the process throughout a student's academic career.

Recommendation for Further Research

There is vital need to continue the research on how to develop resiliency, grit, and growth mindsets in children facing serious adverse conditions both within and out of their control (Perkins-Gough, 2013; Yeager & Dweck, 2012). This research primarily focused on how students perceived resilience in their own lives and what they felt contributed to their skills and mindsets. However, because there are many stakeholders involved in a student's overall success in school, future studies from the lens of the teachers, and parents would prove to be a valued addition to the research of student resilience development.

Additional studies that would enhance this study would be to focus more on the deliberate practice of resiliency skills. The students in this study provided their thoughts and feelings about how they view their resiliency and how those skills came about in their everyday experiences. However, this study did not look at specific strategies that were deliberately practiced to enhance resilience skills in all students. Dweck and Duckworth both focus on the skills associated with grit and growth mindsets, but the research is vague regarding deliberate practice of the skills resulting in acquired resiliency (Perkins-Gough, 2013; Yeager & Dweck, 2012). However, this research concludes that effective strategies, and programs can be implemented in school systems which will foster the acquisition of the requisite skills that lead to resiliency, grit, and growth mindsets.

A teacher's perspective is highly valued in educational practice and program implementation. As such, the lack of perspective from teachers is also viewed as a limitation to this study. Teachers are the ones in the day-to-day trenches in education. They are the ones who assess individual learning, identify the critical areas of need for struggling students, and develop the plans to support the needs of all students in the classroom. Programs are regularly implemented in schools and the programs typically come from top-down leadership. Although administrators do their part in establishing research-based strategies and programs of instruction, the implementation impacts on teachers can often be overlooked. For example, advisory class was a common factor in each of the student's experience and each of them acknowledged the value of the program for a variety of reasons. However, it is a common gripe among teachers that student advisory programs do not yield the results the literature suggests (Iver, 1990; Johnson, 2009; Johnson et al., 2011; Ziegler & Mulhall, 1994). Furthermore, they contend that the time spent in programs such as this limits the time spent on instruction in the classroom. In talking with teachers, many feel that the research on student-teacher relationship is unreliable and has little impact in comparison to being exposed to more quality instruction. Therefore, a highly valuable addition to this study would be to include the perspectives from teachers on how to effectively embed resilience strategies and programs into their regular instructional day.

The final recommendation for future study would be to incorporate the parent perspective on the subject. This study failed to incorporate a parent perspective and only focused the student's perspective of their parental involvement in their education. A parent's perception of the supports that they seek from schools to assist them in developing resiliency, grit, growth mindsets in their children would be an excellent addition to this study. Each of the participants related that their parents had limited education which excluded many from being able to help

their child with schoolwork. However, each participant acknowledged that their parents contributed to their growth mindset and ability to succeed in school. A critical addition to this study could be the perspectives that parents have on how to support resiliency development in children despite their limited education or understanding of the curriculum.

Implications for Professional Practice

As educators wrestle with the charge to educate and prepare every child to be successful in a global society, they seek answers about those students who are faced with serious adverse conditions leaving them statistically at risk of failure. Students experiencing multiple risk factors in their lives lack the resiliency skills necessary to overcome the challenges they to be successful in school. While the national statistics for high school dropouts are high and deserve much concern, there are many students who are conquering the challenges that have caused many to dropout, and instead, are succeeding in their educational endeavors.

The study findings share with professionals in the educational community effective strategies that will foster resiliency in at-risk students. This article uses research and real life experiences of at-risk students in an urban, public high school to provide effective strategies for fostering resilience with students in danger of failing school. The strategies and programs found in this study will assist all stakeholders including parents, teachers, students, and administrators in addressing the need to support at-risk students.

The students in this study can provide insight on the strategies that prove to be the most effective in developing and fostering resiliency, grit, and growth mindsets in at-risk students. As these students enter high school in the 9th grade, it is critical that educators are aware of the risk factors involved so that they can effectively implement successful resilience strategies early on before failure sets in. Inevitably, at-risk students will continue to fail and drop out of school.

However, the research has clearly shown that a student's mindset and resilience have a direct influence on their overall academic success (Blackwell, Trzesniewski, & Dweck, 2007). As students, especially minorities, are laboring under the negative stereotypes and adverse conditions they face, educators can extend a saving hand by providing effective strategies and programs that lead to growth mindsets and resilience in all students (Aronson, Fried, & Good, 2002; Blackwell et al., 2007).

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Appendix A

Human Research Review Committee Approval

NORTHWEST
NAZARENE
UNIVERSITY

Trent Hansen <trenthansen@nnu.edu>

Protocol #242015 - Evaluation of Successful Practices that Lead to Resiliency in At-risk Students

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Joseph Bankard <jabankard@nnu.edu>   Fri, May 1, 2015 at 3:45 PM
To: Trent Hansen <trenthansen@nnu.edu>, HRRC <hrrc@nnu.edu>

Trent,

These changes look good. You have received Full Approval. You may begin your research.
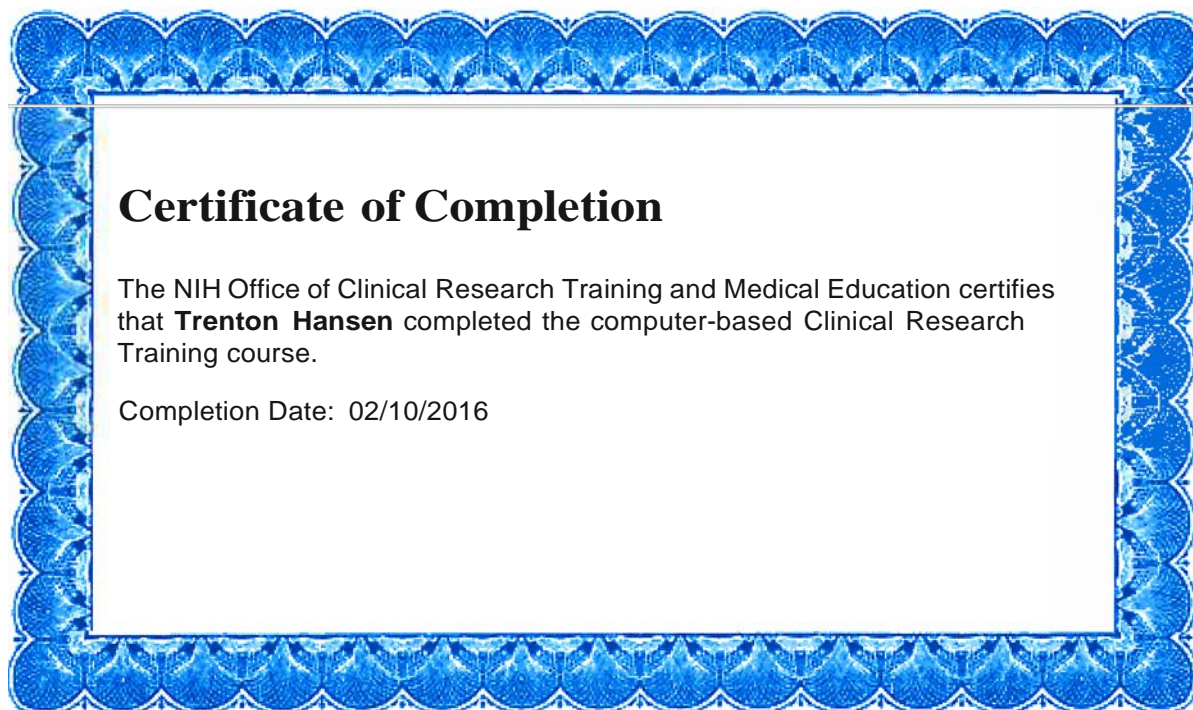
[Quoted text hidden]

--
Joseph Bankard, Ph.D

Associate Professor of Philosophy
Chair of Philosophy Department
Northwest Nazarene University
School of Theology and Christian Ministries

Appendix B

National Institute for Health Certification

Certificate of Completion

The NIH Office of Clinical Research Training and Medical Education certifies that **Trenton Hansen** completed the computer-based Clinical Research Training course.

Completion Date: 02/10/2016

od_crt@mail.cc.nih.gov via jpl-vmweb03.inetuhosted.net

Registration Summary:

02/10/2016
Trenton Hansen Ph.D
1977

33524 Carnation Ave
United States, Commonwealths and Te
MSC
Murrieta CA 92563
United States
Tel: (951)2467194 Fax: ()
E-mail: trentamber23@gmail.com

This e-mail is to verify that you successfully completed the NIH Clinical Research Training course.

You answered 21 out of a total of 25 questions for a final grade of 84.

If you are an NIH principal investigator, you have fulfilled the Training and Education Standard issued by the NIH for conducting clinical research within the intramural research program.

Please print this e-mail and retain for your records.

Appendix C

School District Research Approval

January 21, 2015

Northwest Nazarene University Attention: HRRC
Committee Helstrom Business Center 1^{51} Floor
623 S. University Blvd. Nampa, ID
83686

Re: Research Proposal Site Access for Trenton Hansen

Dear HRRC Members:

This letter is to inform the HRRC that Administration at the Jurupa Unified School District has reviewed the proposed dissertation research plan, including subjects, proposed data and collection procedures, and purpose of study. Mr. Hansen has permission to conduct his research with high school students in our district. The authorization dates for this research study are July 1, 2015 to April 30, 2016.

Sincerely,

Superintendent

Appendix D

Electronic Notice

Greetings Principals,

My name is Trenton Hansen and I am a Doctoral Student at Northwest Nazarene University, studying the impacts teachers, counselors and administrators can have on successful educational outcomes for at-risk students. You are receiving this notice because you have students enrolled in your school that demonstrate multiple risk factors that have been linked to academic failure but yet they are finishing in the top of their class.

I am looking for a sample of students that have two or more risk factors that are ranked in the top 10 in their class based on their GPA. Please provide me a list of your top ten 9th, 10th, 11th & 12th graders so that I can reach out to them about my study and to solicit their interest. The study has been reviewed by the Research Review Committee at Northwest Nazarene University and has been successfully approved. In addition, Superintendent ████ has approved the study within ████ Unified School District.

The benefits that may result from the research are: a better understanding on how to develop resiliency, grit and perseverance in students that face multiple adverse conditions in their lives. The procedures are as follows:

- The research project will take place over a period of two months. During that time, I will conduct interviews with multiple students in a safe, non-threatening setting at their regular school site.
- Data will be collected in the form of interviews, testing data and academic history for participants and their classmates.
- Participation will involve a combination of these data collection instruments and techniques.
- Student test score data from 2011-2015 may be used as a comparison.

I anticipate that there is minimal risk involved for your student's learning over the course of the study. Instructions for and during the interview will be given explicitly to each participant.

A student's participation in this project is completely voluntary. Any child may stop taking part at any time. The choice to participate or not will not impact the student's grades or status at school.

All information that is obtained during this research project will be kept strictly secure and will not become a part of your school's record. The results of this study may be used for a research paper and presentation. Pseudonyms or codes will be substituted for the names of children and the school. This helps protect confidentiality.

If you have any questions, please do not hesitate to contact me at trenthansen@nnu.edu or (951) 525-8715.

Sincerely,

Trenton Hansen
Doctoral Student – Northwest Nazarene University

Appendix E

Participant Consent - Interview

A. **Purpose and Background**

Trenton Hansen, M. S., a doctoral student in Educational Leadership at Northwest Nazarene University is conducting a research study related to student resiliency despite facing adverse conditions in their lives. With this study, we hope to improve the educational outcomes of children that face certain adverse conditions that are considered to lead to student failure within our public school systems. We believe that teachers, parents and administrators play a critical role in assisting at-risk students toward successful educational outcomes. We appreciate your involvement in helping us investigate how to better serve and meet the demands of at-risk students throughout our country in receiving a high quality education that leads to college and/or successful careers. You are being asked to participate in this study because you are a student that has experienced two or more at-risk characteristics but have proven to be successful academically despite your circumstances.

B. **Procedures**

If you agree to participate in the study, the following will occur:

1. You will be asked to sign an Informed Consent Form, volunteering to participate in the study.
2. You will meet with Trenton Hansen, primary researcher, at least once, for a face to face interview.
3. You will be asked to answer a series of interview questions about some of your life experiences and how they have affected your experiences in school, and the strategies that have helped you be successful.
4. You will be asked to reply to an email at the conclusion of the study asking you to confirm the data that was gathered during the research process.
5. These procedures will be completed at a location mutually agreed upon by the participant and the primary researcher and will take a total time of about 90 minutes.

C. **Risks/Discomforts**

1. Some of the interview questions may make you uncomfortable or upset, but you are free to decline to answer any questions you do not wish to answer or to stop participation at any time.
2. Confidentiality: Participation in research may involve a loss of privacy; however, your records will be handled as confidentially as possible. No individual identities will be used in any reports or publications that may result from this study. All data from notes, audio tapes or files will be encrypted and password protected known only to the primary researcher. In compliance with the Federalwide Assurance Code, data from this study will be kept for three years, after which all data from the study will be destroyed (45 CFR 46.117).

D. Benefits

There will be no direct benefit to you from participating in this study. However, the information you provide may help educators to better understand the roles of teachers and administrators in providing a learning environmental that leads to successful academic outcomes for at-risk students.

E. Questions

If you have questions or concerns about participation in the study, you should first talk with the researcher. Trenton Hansen can be contacted via email at <u>trenthansen@nnu.edu</u>, via telephone at (951) 525-8715. If for some reason you do not wish to do this, you may contact Heidi Curtis, Doctoral Committee Chair at Northwest Nazarene University, via email at ███████████, via telephone at ███████-8250, or by writing: 623 University Drive, Nampa, Idaho, 83686.

F. Consent - You will be given a copy of this form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline to be in this study, or to withdraw from it at any point. Your decision as to whether or not you participate in this study will have no influence on your present or future status in your school.

I give my consent to participate in this study:

_____   _____

Signature of Study Participant   **Date**

I give my consent for the interviews to be audio taped in this study:

_____   _____

Signature of Study Participant   **Date**

I give consent for quotes with pseudonyms to be used in the research study:

_____   _____

Signature of Study Participant   **Date**

Appendix F

Student Interview Questions

Background:

1. Before we get started let me tell you a little about why we are here today….
2. Tell me a little about who you are and some of the educational goals that you have.
3. What career path have you chosen or would like to pursue? Why?
4. How many people are in your family? Describe their educational backgrounds and success.
5. What are the educational beliefs in your home and family?
6. How many years have you attended public school?
7. How many schools or districts have you attended in the last 10 years (not including the natural progression to upper grades)? What caused the mobility?
8. What language is primarily spoken at home?
9. What is the highest level of education of your parents?
10. Describe the involvement your parents have on your education. What specific areas are they involved in? What areas are they less involved in? If you could have it your way, in what areas would you like more parental involvement and why?
11. Describe your living situation with your family
12. Do you feel the teachers treat students fairly?
13. Why do you feel that way?
14. What do teachers do to make you feel safe and that you have been treated fairly?
15. What are 3-5 things that teachers do to help motivate students?
16. Think of your top three teachers and describe the attributes that contributed most to your success in the classroom.
17. How important has the teacher/student relationship been in your overall success? Why?
18. Stress is a high indicator of student failure. Describe the three most stressful situations that you have dealt with outside of school while trying to focus on your education. What factors helped you overcome the stressful situations the most in the classroom.
19. Success in school has been linked to praise and recognition of accomplishment. Do you feel that it has contributed to your success? Why?
20. What are your goals and plans for the future?
21. What has led you to those goals?
22. What do you do when you struggle with a concept in a class or a class at school?
23. List 3 events in your life that was the most challenging to you while attending school and how did you overcome those challenges?
24. What strategies do you use in order to maintain focused in class or school when dealing with serious issues outside of school in your home life?

25. How did being an English Language Learner affect your early childhood education and what did you do to overcome that obstacle?

26. With the many issues that exist in a school with a high concentration of low socio-economic populations, what measures did you take in rising above the challenges and excelling in your education?

27. What programs and strategies helped you the most to remain focused on your education?

28. How has the culture of your school contributed to overall student success and specifically to your success as a student?

29. What extra-curricular activities are you a part of and how have they helped you to remain focused on your academics while being involved in other activities?

30. Do you feel that being involved in other activities contribute to the overall success of a student? Why?

31. How do you effectively organize your schedule to allow for time to study and take care of your other responsibilities in and out of school?

32. Do you consider effective organization and management of time a contributing factor to a student's success? Why?

33. Why do you think some students that face similar circumstances succeed while others do not?

34. How can grit and perseverance be taught to students so that they are better prepared for the challenges that they face?

Appendix G

Debrief Statement

Thank you for your participation in this study.

After we have an opportunity to analyze the data, we will email you the results and ask for feedback. Mainly, we want to ensure that we captured the essence of our discussion and accurately portray our discussion and your thoughts. This study will conclude by DATE.

Questions
In the meantime, if you have any questions or concerns, Trenton Hansen can be contacted via email at trenthansen@nnu.edu or via telephone at (951) 525-8715.

Thank you for your participation,

Trenton Hansen
Doctoral Student
Northwest Nazarene University
HRRC Application #

Appendix H

Parent Consent

DATE

Dear Parents or Guardian,

This year, I have the opportunity to conduct a research study with your child and his/her classmates as a part of my graduate program at Northwest Nazarene University. The study has been reviewed by the Research Review Committee at Northwest Nazarene University and has been successfully approved.

The benefits that may result from the research are: a better understanding on how to develop resiliency, grit and perseverance in students that face multiple adverse conditions in their lives.

The procedures are as follows:

- The research project will take place over a period of two months. During that time, I will conduct interviews with multiple students in a safe, non-threatening setting at their regular school site.
- Data will be collected in the form of interviews, a Likert Scale (The Grit Scale), testing data, academic history and ex post facto data for participants and their classmates.
- Participation will involve a combination of these data collection instruments and techniques.
- Student test score data from 2011-2015 may be used as a comparison.

I anticipate that there is minimal to no risk involved for your child's learning over the course of the study. Instructions for and during the interview and/or data survey will be given explicitly to each participant.

Your child's participation in this project is completely voluntary. In addition to your permission, your child will also be asked if he or she would like to take part in this project. Any child may stop taking part at any time. The choice to participate or not will not impact your child's grades or status at school.

All information that is obtained during this research project will be kept strictly secure and will not become a part of your child's school record. The results of this study may be used for future research, publications, and presentations in relationship to the topic. Pseudonyms or codes will be substituted for the names of children and the school. This helps protect confidentiality.

In the space at the bottom of this letter, please indicate whether you do or do not want your child to participate in this project. If you have any questions about this research project, please feel free to contact me either by mail, e-mail, or telephone. Please keep a copy of this form for your records.

The results of my research will be available after May 1, 2016. If you would like to have a copy of the results of my research or have any questions, please contact me at 951-525-8715 or my advisor, Dr. Heidi Curtis, at ███████3250.

Sincerely,

Trenton T. Hansen

Doctoral Candidate, Northwest Nazarene University

Parent Signature_____   Date_____

Please circle yes or no:

Yes – I consent to allow my student to participate in this valuable study No – I decline consent

Appendix I

Assent Form

Project Title: Evaluation of Successful Practices That Lead to Resiliency, Grit & Perseverance in At-Risk Students

Investigator: Trenton T. Hansen

      I am doing a research study about students that have shown resiliency, grit, and perseverance in their academic careers despite their adverse conditions. The purpose of this study is to research the educational programs, practices, policies, instructional methods and extra-curricular activities that cause students to succeed despite their adverse conditions or circumstances. This study will identify key indicators that lead to high achievement in schools and individuals that possess multiple at-risk characteristics.

      A research study is a way to learn more about people. If you decide that you want to be part of this study, you will be asked to answer a series of interview questions to provide insight on your path to success in school. The interviews will last no more than 2 hours and they will be conducted in an informal setting at your school site.

      There are some things about this study you should know. The interviews will last up to 2 hours and some of the questions may cause discomfort. You may choose to skip questions if you feel uncomfortable or uneasy about some of the content. You will be audio-taped and the investigator will take notes during the interview. If you choose not to be audio-taped than the investigator will transcribe the notes at a later date for review. At any time you may withdraw from the process without any repercussions to removing yourself from the study. All of the information will be confidential and all identities will be protected.

      When we are finished with this study we will write a report about what was learned. This report will not include your name or that you were in the study and is completely confidential. You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that's okay too. We have notified your parents and request that they sign the assent form too. I can be reached at trenthansen@nnu.edu or 951-525-8715 if you have any questions.

If you decide you want to be in this study, please sign your name.

I, _____, want to be in this research study.

_____   _____
Signature   Date

_____   _____
Parent or Guardian Signature   Date

Appendix J

Assent Form – Survey Only

Project Title: Evaluation of Successful Practices That Lead to Resiliency, Grit & Perseverance in At-Risk Students

Investigator: Trenton T. Hansen

I am doing a research study about students that have shown resiliency, grit, and perseverance in their academic careers despite their adverse conditions. The purpose of this study is to research the educational programs, practices, policies, instructional methods and extra-curricular activities that cause students to succeed despite their adverse conditions or circumstances. This study will identify key indicators that lead to high achievement in schools and individuals that possess multiple at-risk characteristics.

A research study is a way to learn more about people. If you decide that you want to be part of this study, you will be asked to answer a series of survey questions to provide insight on your path to success in school.

There are some things about this study you should know. The survey will last up to 30 minutes and some of the questions may cause discomfort. You may choose to skip questions if you feel uncomfortable or uneasy about some of the content. At any time you may withdraw from the process without any repercussions to removing yourself from the study. All of the information will be confidential and all identities will be protected.

When we are finished with this study we will write a report about what was learned from the study. This report will not include your name or that you were in the study and is completely confidential. The results of this study may be used for future research, publications, and presentations in relationship to the topic.

You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that's okay too. We have notified your parents and request that they sign the assent form too. I can be reached at trenthansen@nnu.edu or 951-525-8715 if you have any questions.

If you decide you want to be in this study, please sign your name.

I, _____, want to be in this research study.

_____ _____
Signature   Date

_____ _____
Parent or Guardian Signature   Date

Appendix K

The Grit Scale

Directions for taking the Grit Scale: Please respond to the following 12 items. Be honest – there are no right or wrong answers!

1.   I have overcome setbacks to conquer an important challenge.
☐   Very much like me
☐   Mostly like me
☐   Somewhat like me
☐   Not much like me
☐   Not like me at all

2.   New ideas and projects sometimes distract me from previous ones.*
☐   Very much like me
☐   Mostly like me
☐   Somewhat like me
☐   Not much like me
☐   Not like me at all

3.   My interests change from year to year.*
☐   Very much like me
☐   Mostly like me
☐   Somewhat like me
☐   Not much like me
☐   Not like me at all

4.   Setbacks don't discourage me.
☐   Very much like me
☐   Mostly like me
☐   Somewhat like me
☐   Not much like me
☐   Not like me at all

5.   I have been obsessed with a certain idea or project for a short time but later lost interest.*
☐   Very much like me
☐   Mostly like me
☐   Somewhat like me
☐   Not much like me
☐   Not like me at all

6.   I am a hard worker.
- ☐ Very much like me
- ☐ Mostly like me
- ☐ Somewhat like me
- ☐ Not much like me
- ☐ Not like me at all

7.   I often set a goal but later choose to pursue a different one.*
- ☐ Very much like me
- ☐ Mostly like me
- ☐ Somewhat like me
- ☐ Not much like me
- ☐ Not like me at all

8.   I have difficulty maintaining my focus on projects that take more than a few months to complete.*
- ☐ Very much like me
- ☐ Mostly like me
- ☐ Somewhat like me
- ☐ Not much like me
- ☐ Not like me at all

9.   I finish whatever I begin.
- ☐ Very much like me
- ☐ Mostly like me
- ☐ Somewhat like me
- ☐ Not much like me
- ☐ Not like me at all

10.   I have achieved a goal that took years of work.
- ☐ Very much like me
- ☐ Mostly like me
- ☐ Somewhat like me
- ☐ Not much like me
- ☐ Not like me at all

11.   I become interested in new pursuits every few months.*
- ☐ Very much like me
- ☐ Mostly like me
- ☐ Somewhat like me
- ☐ Not much like me
- ☐ Not like me at all

12.   I am diligent.
☐   Very much like me
☐   Mostly like me
☐   Somewhat like me
☐   Not much like me
☐   Not like me at all

Scoring:

1.   For questions 1, 4, 6, 9, 10 and 12 assign the following points: 5 = Very much like me
4 = Mostly like me
3 = Somewhat like me 2 = Not much like me 1 = Not like me at all

2.   For questions 2, 3, 5, 7, 8 and 11 assign the following points: 1 = Very much like me
2 = Mostly like me
3 = Somewhat like me 4 = Not much like me 5 = Not like me at all

Add up all the points and divide by 12. The maximum score on this scale is 5 (extremely gritty), and the lowest scale on this scale is 1 (not at all gritty).

Duckworth, A.L., Peterson, C., Matthews, M.D., & Kelly, D.R. (2007). Grit: Perseverance and passion for long-term goals. Journal of Personality and Social Psychology, 9, 1087-1101.

Appendix L

Questions Prior to Grit Scale

1. What is your mother's highest level of education?
    a. High School diploma
    b. Some college credits
    c. College degree
    d. Did not complete high school
2. What is your father's high level of education?
    a. High School diploma
    b. Some college credits
    c. College degree
    d. Did not complete high school
3. How involved are your parents in your education?
    a. Highly involved
    b. Somewhat involved
    c. Slightly involved
    d. Not at all
4. Choose the relationship of your parents.
    a. Married
    b. Divorced and living separately
    c. Separated
    d. Divorced and remarried
5. What best describes where you live?
    a. At home with two parents
    b. At home with one parent
    c. A relative's home
    d. A friend's home
    e. Forster home, group care or waiting placement
    f. Hotel, motel, or short term housing
    g. Other living arrangement
    h. Shelter, car, campground or other temporary housing
6. What language is spoken in your home?
    a. English
    b. Spanish
    c. Other
7. Have you ever lost an immediate family member or close relative?
    a. Yes
    b. No
8. Have you ever experienced a serious tragedy in your family?
    a. Yes
    b. No
9. Do you receive free lunch at school?
    a. Yes
    b. No

10. What is your Grade Point Average (GPA)?
    a. 4.0 or higher
    b. 3.0 – 3.9
    c. 2.0 – 2.9
    d. 2.0 or lower

Appendix M

Complete List of Codes from Interview Data

Protective	# of Responses	Unprotected	# of Responses	Growth Mindset	# of Responses
Teacher Expectations	79	Lack of support	68	Self-motivated	87
School involvement - Connection	67	Low expectations	61	Shows grit & determination	82
Teacher/Coach mentor	64	Loneliness	56	Sets goals	76
Parental Expectations	53	Unfair/Lack of understanding	48	Seeks own solutions to problems	67
Fairness	41	Teacher unavailable	37	Finds ways to improve	52
Parental Involvement	37	Students not valued	35	Works hard to accomplish goals	44
Listening to student needs	36	Lazy teachers	31	Positive attitude	36
AVID strategies	28	Family dysfunction	25	Takes on challenges	34
Positive reinforcement or encouragement	26	Meaningless homework	23	Does not accept failure	30
Rigorous class structure	22	Unable to relieve stress	18	Never gives up	26
Language acquisition strategies	17	Study time	14	Like to learn	16
Can talk with teacher	14	Living conditions	9	Have a better life	9
Teacher cares about their job	9	Easy classes	7	Be the best at what I do	3
Mutual respect	8	Parents can't help with homework	4		
School environment	6				
Home Schooling	1				

Appendix N

Student Questionnaire

1. Which of the following obstacles have you had to deal with in your life? Mark all that apply.

2. Please identify at which age(s) and grade(s) these have been an issue.

Obstacle(s):	Age(s):	Grade(s):
Single Parent Household		
Divorce		
Death (close family member/friend)		
Depression		
Drug and Alcohol Abuse (personally)		
Drug and Alcohol Abuse (family member)		
Physical Abuse		
Emotional Abuse		
Learning Disability		
Poverty		
Providing Child Care for Siblings		
Work to Help Support Family		
Learning English Fluently		
Cultural Biases		
Racism		
Bullying		
Parents with Low Level of Education		
Other:		

3. Are you willing to discuss these obstacles with Mr. Trenton Hansen for his research know that your name will not be used and the information is reported anonymously?

_____YES   _____NO

4. Please write your name in the space provided below if you marked "yes" to question #3.

Name_____DATE_____

Appendix O

Confidentiality Agreement

CONFIDENTIALITY AGREEMENT

Title of Research Project: Evaluation of Successful Practices That Lead to Resiliency, Grit and Growth Mindsets Among At-Risk Students

Local Principal Investigator:

As an assistant to the research team I understand that I may have access to confidential information about study sites and participants. By signing this statement, I am indicating my understanding of my responsibilities to maintain confidentiality and agree to the following:

- I understand that names and any other identifying information about study sites and participants are completely confidential.

- I agree not to divulge, publish, or otherwise make known to unauthorized persons or to the public any information obtained in the course of this research project that could identify the persons who participated in the study.

- I understand that all information about study sites or participants obtained or accessed by me in the course of my work is confidential. I agree not to divulge or otherwise make known to unauthorized persons any of this information, unless specifically authorized to do so by approved protocol or by the local principal investigator acting in response to applicable law or court order, or public health or clinical need.

- I understand that I am not to read information about study sites or participants, or any other confidential documents, nor ask questions of study participants for my own personal information but only to the extent and for the purpose of performing my assigned duties on this research project.

- I agree to notify the local principal investigator immediately should I become aware of an actual breach of confidentiality or a situation which could potentially result in a breach, whether this be on my part or on the part of another person.

Amber Hansen	_12/1/2015_	_Amber Hansen_
Signature	Date	Printed name
Trent Hansen	_12/1/2015_	TRENT HANSEN
Signature of local principal investigator	Date	Printed name