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PROTECTIVE FACTORS OF ACADEMIC RESILIENCY

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PROTECTIVE FACTORS OF ACADEMIC RESILIENCY

A Dissertation
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
in
Educational Leadership

by
Guadalupe Valdivia

June 2019

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ABSTRACT

Numerous studies had explored wide-ranging effects of childhood adversity. Yet, there is no known study that explores the impact of non-parental relationships (NPR) formed during the participation in out-of-school youth activities (OSYA), and future orientation (FO) on academic resiliency (AR) among people with adverse childhood experiences (ACEs). This study moved away from the deficit perspective and focused on the strengths of individuals rather than weaknesses. The study examined the impact of protective factors of OSYA, NPR, and FO using the Michael Ungar's (2011) *Socio-Ecological Model of Resiliency* to better understand their role on AR among university students with ACEs. A quantitative approach, quasi-experimental design explored the research questions using only a single subject group, one-time post-test paper/web-based questionnaire (Creswell & Creswell, 2014). The following four hypotheses were conducted: Student-Staff Relationships formed in Out of School Youth Activities (NPR-OSYA) will positively correlate with FO; NPR-OSYA will differ between the No ACEs and Yes ACEs groups; FO will differ between No ACEs and Yes ACEs groups; NPR-OSYP and FO will predict higher AR among the Yes ACEs group. Results illustrated the complexity of the role of protective factors on AR among university students with ACEs. In conclusion, understanding the narratives of NPR-OSYP can help educators and counselor implement strategies to improve interaction and foster resilience among students who are struggling academically.

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I would also like to thank my mom, for helping me find my inner strength and redefining the term family. Thank you for surrounding me around strong women of color, allowing me to be who I am, and filling my heart with pure sincere love. You have been the greatest blessing in my life. I am proud to call you mom. To my husband and best friend, thank you for all the unconditional love and for quietly cheering me throughout each small milestone. Thank you for believing in me and always supporting my dream and goals. I love you.

DEDICATION

I would like to dedicate this dissertation to my two beautiful children, Angelina and Benjamin, who have sacrifice quality time to allow me to complete my doctorate degree. I love you both and I hope that this journey your father and I took, provide a better life and future to all of us.

This dissertation is also dedicated to a dear beloved friend, Ernest Duarte (1983-2002). Your love and friendship still remains in my heart. Thank you for telling me that I deserve better and that God has a plan and purpose for me. For always making sure I went to school, encouraging me to apply to college, and telling me to follow my heart. I kept my promise in completing my doctorate degree and I know you are proud of me. Now I will continue your dream-legacy to save at-risk youth, while I live my life to the fullest and enjoy my beautiful family.

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CHAPTER ONE

INTRODUCTION

The goal of chapter one is to first discuss the introductory background information of the problem statement. Second, the purpose of the statement leads to the discussion of why it was important to change the perspective. The research framework, theoretical underpinning, research questions, assumptions, and limitations will follow to support the research methodology chosen. For the purpose of the present study definitions of the key terms were discussed. Lastly, personal justification for the research will be discussed.

Introductory Background Information

Jeff Duncan-Andrade said at the 2018 Deep Learning Conference “No master gardener blames the seed for not growing” (Schwartz, 2018). In fact, “We [professional educators] see them [students] for their damaged petals instead of their tenacity and will to reach the sun” (Schwartz, 2018). The deficit model ignores the long-term consequences of trauma or violence and inequalities, does not address how toxic stress and complex posttraumatic stress disorder interrupts students’ learning experiences. Many researchers have shown how childhood adverse experiences have impacted people’s health and learning, although we have seen research that mainly focuses on the negative outcomes of adverse childhood experiences. We have seen how this research has led a new wave of researchers to use this information to create positive transformative

research that can educate and train others who work in “our children’s learning shape” to address “radical healing” that will eventually lead to better learning outcomes (Schwartz, 2018). Duncan-Andrade said that “critical hope” could be a form of intervention that combines learning material and resources (Schwartz, 2018). For example, loving and safe learning environments and healthy relationships that demonstrate sincere love with actions and not words can bring hope to vulnerable students. This new shift of thinking in professional educators, helps them see the problem from a growth perspective such as that “they know they have to change the soil” to see learning occur (Schwartz, 2018). This new shift moves towards a more positive model that develops resiliency among students who experience adversity. By collectively working together, we can help students change the narrative of their stories, which can help them be more hopeful toward the future.

Statement of the Problem

Personal and social level risks are known to affect academic achievement during adolescence (Becker & Luthar, 2002; Eccles & Gootman, 2002; Eccles & Roeser, 2005; Evans, 2004; Pagani, Vitaro, Tremblay, McDuff, Japel, & Larose, 2008; Roeser, Eccles, & Sameroff, 2000). Some of these risks are at the personal level, including a history of educational failure and conduct problems, poor school motivation, and significant feelings of emotional distress. At a social level, possible risks are living in poverty, low levels of parental education, dysfunctional parenting, school environments classified by ability and race, and

school-isolated peers. Either of these risks brings inequalities that impact people's health and learning (Badger & Bui, 2018; Kataoka, Vona, Acuna, Jaycox, Escudero, Rojas, Ramirez, Langly, & Stein, 2018; Lander, 2018; Schwartz, 2018).

Researchers have continued to show that poor neighborhoods shape children's lives (Badger & Bui, 2018). The community characteristics of where children live have a significant influence on whether they would prosper as adults. In fact, poor children who grow up in poor neighborhoods are less likely to escape poverty in adulthood and over the course of their lives (Badger & Bui, 2018). These poor neighborhoods offer fewer job opportunities, have fewer community resources, have high poverty schools, and mostly low-income ethnic minorities live in these places (Badger & Bui, 2018). People who live in poor neighborhoods are more likely to be exposed to crime, trauma and violence, which lead to complex post-traumatic stress disorder (Badger & Bui, 2018). As cited in Cassidy (2016), one example of adversity that affects academic achievement is poverty (Kanevsky, Corke, & Frangkiser, 2008).

Many parents do their best to keep their children away from peers with bad influences but their long work hours do not allow them to properly supervise their children. In fact, many at-risk youth do not have a safe space where they can spend their time and continue to grow after school hours (in the out-of-school context). Out-of-school youth activities can provide a safe zone, explore their creativity and strengths, be exposed to enriching and learning experiences, a

place to obtain and exchange funds of knowledge and a place to form a healthy identity, developing a sense of involvement, reason for caring, and provide a meaning for life (Durlak & Weissberg, 2007; Mahoney, 2000; Werner & Smith, 1992). Not having a safe or supervised place for at-risk youth can lead to many negative outcomes such as having early sexual experiences, experimenting with alcohol and drugs, participating in criminal behavior, joining a gang, or dropping out-of-school (Becker & Luthar, 2002; Eccles & Gootman, 2002; Eccles & Roeser, 2005; Evans, 2004; Pagani, Vitaro, Tremblay, McDuff, Japel, & Larose, 2008; Roeser, Eccles, & Sameroff, 2000). Most importantly, many at-risk youth who also come from dysfunctional families or low performing schools use after-school programs and extracurricular activities to seek for healthy relationships that can help them through their development (Eccles, Barber, Stone, & Hunt, 2003; Edmond, Auslander, Elze, & Bowland, 2006; Khambati, Mahedy, Heron, & Emond, 2018). Participation in meaningful activities and having access to significant relationships are important, because they allow youth to have meaningful conversations that help youth “change the narrative” of their stories, nurture positive future orientations, and promote resiliency (Beal & Crockett, 2010; Bruster & Coccoma, 2013; Deutsch & Jones, 2008; Edmond, Auslander, Elze, & Bowland, 2006; Khambati, Mahedy, Heron, & Emond, 2018; Taussig, Culhane, & Hettleman, 2007).

In addition to community level risk factors, many of the children living in these places also experience adversity at home. Statistics show that the younger

the children are the more they are at risk to be a first time victim of at least one type of adverse or maltreatment experience (Sacks & Murphey, 2018). The U.S. Department of Health and Human Services, (2016) reported that 40.9% (n=28,056) of not school-age children (ages birth to four) had adverse childhood experiences (ACEs). This means that children are already entering the school system with previous childhood adversity. Children with ACEs often have problems in their educational journey and these problems can limit or hinder academic achievement. When people shared that they had been exposed to four or more adverse experiences, 51% of them had a learning and behavior problem (Burke, Hellman, Scott, Weems, & Carrion, 2011). Having experienced various types of adversity can result in many long-term negative outcomes in the learning domains of cognitive/intellectual, communication/language, physical, and social-emotional (Cook, Spinazzola, Ford, Lanktree, Blaustein, Cloitre, DeRosa, Hubbard, Kagan, Liautaud, & Mallah, 2005; Culp, Watkins, Lawrence, Letts, Kelly, & Rice, 1991; Romano, Babchishin, Marquis, & Fréchette, 2015). In fact, when students are deprived of mastering basic academic skills, more unfavorable outcomes arise, such as academic failure, dropping out-of-school, criminal activity, incarceration, out-of-wedlock pregnancies, unemployment, dependency on government financial assistance, homelessness, and poverty (Metzler, Merrick, Klevens, Ports, & Ford, 2017; Troutman & Dufur, 2007; Zolkoski & Bullock, 2012).

Adolescents' ability to seek for positive role models decreases when there are no community programs in their neighborhood. In fact, these same disadvantaged neighborhoods expose children to more ACEs due to uncontrollable factors. Children who have less access to safe out-of-school youth organizations and healthy non-parental relationships are less likely to think positively about their future education, career, and family. However, education is a powerful tool that can help children stop the cycle of poverty and abuse. Having an education can help them thrive within their communities and escape poverty, because they will be qualified for better paying jobs. In fact, having an education can help youth gain skills to reduce or eliminate ACEs for themselves, their children and community members. Educated community members can advocate for others and help transform their neighborhood. But before education is addressed as a empowering tool for social mobility, it is important that these children have access to resources and opportunities that foster academic resiliency. Addressing the lack of these protective factors within the neighborhood will work towards closing the achievement gap and addressing the trend of educational disparities in these poor neighborhoods (Breen & Jonsson, 2005).

Changing the Perspective

In the educational field, it is common to see deficit models that focus on students' weaknesses rather than their strengths. Past literature and research with poor and minority students primarily focused on deficit perspectives.

According to James Collins (1988), related deficiency theories suggest that poor people are poor due to their own deficiencies in moral and intellectual abilities. In other words, deficit perspectives make the assumption that a group of people lacks the ability to achieve because of their background or experiences. This study will move away from the deficit perspective and focus more on the strengths of individuals such as resiliency.

In the field of positive psychology, this means that theory and research should focus primarily on empowering people and communities to thrive (Seligman & Csikszentmihalyi, 2000). This growth and strength perspective, suggests that all people want to live full and meaningful lives, they want to cultivate character traits and virtues, and they want to improve and increase positive life experiences (Seligman & Csikszentmihalyi, 2000). For example, in this study character traits/virtues being explored were future orientation and academic resiliency. In addition, positive life experiences being explored were the formation of healthy and positive non-parental relationships, and participation in meaningful activities such as out-of-school youth activities. These serve as protective factors buffering the effect of ACES on negative academic outcomes among people who have experienced childhood adversities. Therefore, this study uses theory that focuses on individual strengths.

Purpose Statement

Numerous studies have explored the wide-ranging effects of childhood adversity. Yet, there is no known study that explores the impact of non-parental

relationships (NPR) formed during the participation in an out-of-school youth activities (OSYA) and the development of future orientation (FO), on academic resiliency (AR) among people with adverse childhood experiences (ACEs). In order to better understand the development of AR following ACEs, it was necessary to study the role of these protective factors. The purpose of the study was thus to examine the role of a non-parental relationship formed in a youth activity (NPR-OSYA) and the effect of the development of FO, on AR among people who had ACEs. The study examined the impact of protective factors of OSYA-NPR and FO using Michael Ungar's (2011) Socio-Ecological Model of Resiliency (SEM-R) to understand their role on AR among university students with ACEs.

Research Framework

It is important to note that the framework for the research study was carefully developed using John W. Creswell's (2014) suggestions. Therefore, the framework introduced in this quantitative study, interconnected a post-positivist worldview with the appropriate research design and methods. Figure 1.1 demonstrates a visualization of the research framework.

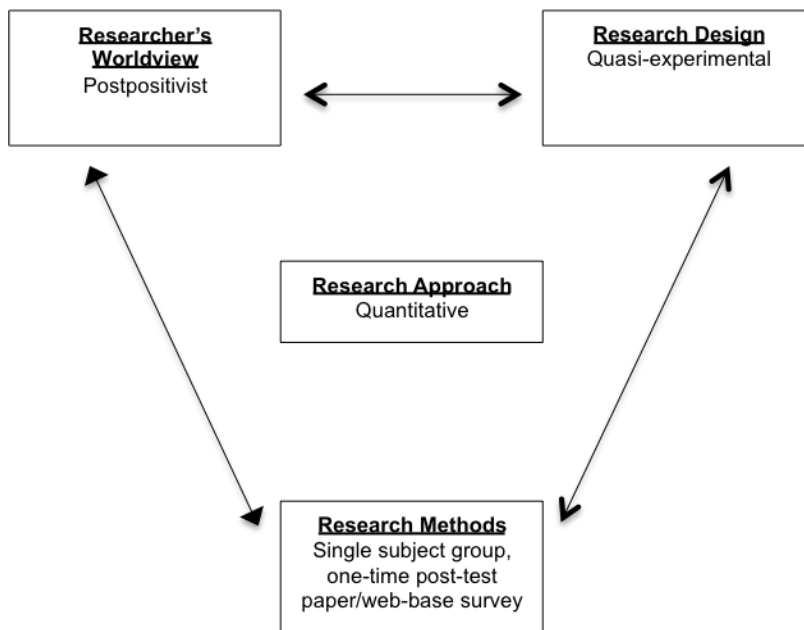


Figure 1.1. Visualization of the Research Framework

Worldview

The post-positivist worldview, also known as the scientific method, challenges the notion of absolute truth by holding a determinist philosophy, in which causes determines effects/outcomes (Creswell and Creswell, 2014). A study using post positivist worldview, “begins with a theory, collects data that either supports or refutes theory, and then makes necessary revisions and conducts additional tests” (Creswell & Creswell, 2014, p. 7).

Design and Method

A quantitative approach, and a quasi-experimental design explored the research questions using only a single subject group, one-time post-test paper/web-base survey (Creswell & Creswell, 2014; Krathwohl, 2009).

Theoretical Underpinning

Instead of just using one well-known, suitable or favorite theory, Norman Denzin (2017) supported a strategy that used different theoretical analyses on to the same data set (Risjord, Moloney, & Dunbar, 2001). Denzin described this process as allowing the data to speak for itself, because it approached data with multiple perspectives in mind (Denzin, 2017). Theoretical triangulation is used in this study because human behavior is extremely complex and looking at different perspectives can provide further explanation or interpretation of the complexity of the phenomenon (Hussein, 2015; Risjord, Moloney, & Dunbar, 2001). Multiple theories can help understand the organization of the phenomena, predict outcomes of new situations, and generate new research (Hussein, 2015; Price, Jhangiani, & Chiang, 2015). Theoretical triangulation can also check to see whether the findings give support to other existing theories. In this study multiple theories were kept in mind to help explain and interpret the complexity of the influence of protective factors on the development of academic resiliency. However, more weight will be placed on Michael Ungar's (2011) SEM-R because it facilitates a deeper understanding of the role of protective factors on the development of academic resiliency.

Socio-Ecological Model of Resilience

Michael Ungar's (2011) SEM-R was created by the combination of Bronfenbrenner's ecological model (1979) and Rutter's (1985; 1987) conception of resilience. Bronfenbrenner's (1979) multilevel system consisted of macro, exo,

meso, and micro systems surrounding the individual child. These systems operate at different levels and have a reciprocal interaction between the child and the elements identified in these multilevel systems (Bronfenbrenner, 1979). Similarly, Ungar's (2011) multilevel systems consist of community and family as the primary systems around the individual. The SEM-R, builds resiliency as a process developed from interactions between individuals and their environments (Bonanno, Romero, & Klein, 2015; Masten, 2011; Ungar, 2015, 2013ab). According to Ungar (2015) adversity can be experienced at one or more systemic levels and interactions between factors can occur at multiple ecological levels. When toxic stressors are extreme, environmental factors become more significant for a person's resiliency when compared to individual characteristics or cognitions (Ungar, 2014).

Figure 1.2 demonstrates a visual image of Michael Ungar's SEM-R. At the individual level there is an event, in this study it is the risk factor of Adverse Childhood Experiences (ACE) and the protective factor of Future Orientation (FO). At the community level there are the protective factors of participation in out-of-school youth activities (OSYA), Non-Parental Relationships (NPR), and Non-Parental Relationship formed in an Out-of-School Youth Activity (NPR-OSYA). In collective orientation, there is the outcome of Academic Resiliency (AR). Resiliency is developed as the levels of family, school and community collectively work together to influence the individual level. All levels work together to foster resilience.

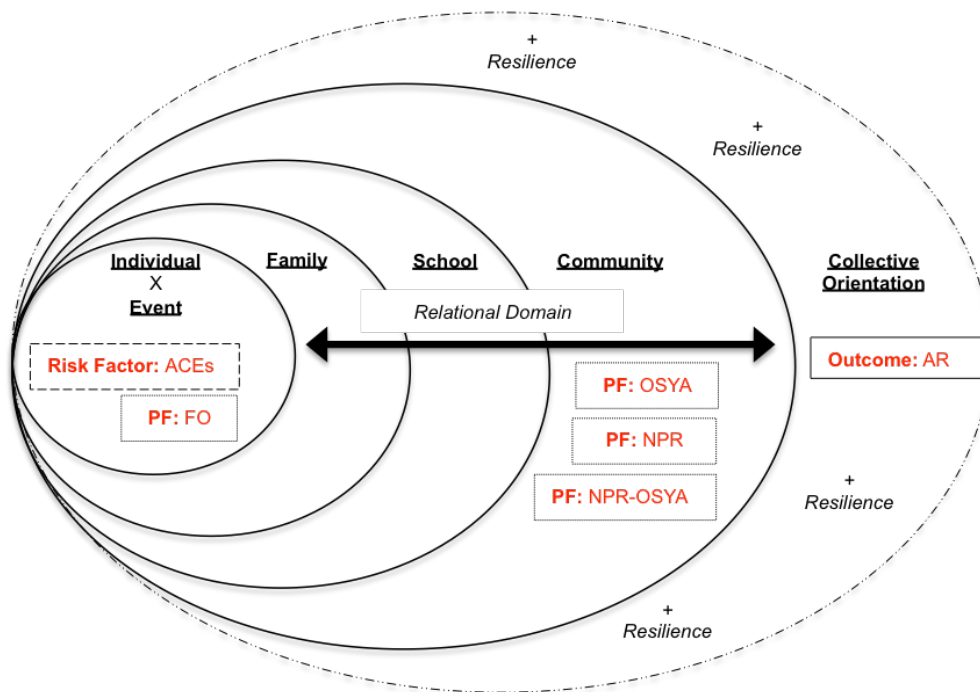


Figure 1.2. Michael Ungar's Socio-Ecological Model of Resilience

Hierarchy of Needs

Abraham Maslow's (1987) original hierarchy of needs pyramid had five levels. The original five levels consisted of the need for biological/physiological, safety, belonging and love, esteem, and self-actualization. In order for a person to be motivated to achieve growth needs, the lower levels had to be satisfied in an orderly manner with the ultimate goal of meeting the highest level (Maslow & Lewis, 1987). Over time, Maslow's hierarchy of needs has been expanded to include eight levels (Datta, 2014; Maslow & Lewis, 1987; McLeod, 2007; Noltemeyer, Bush, Patton, & Bergen, 2012; O'Neill, 2019). Amongst the deficiency needs includes physiological, safety, belonging and love, and esteem

needs. In the growth needs includes cognitive, aesthetic, self-actualization, and transcendence needs. This theory is important in helping understand human behaviors and experiences such as ACEs, OSYA, NPR, FO and AR. Maslow's hierarchy of needs will be lightly addressed in order to say why the protective factors are important needs that help individuals achieve academic resiliency.

Figure 1.3 demonstrates a visual image of Abraham Maslow's hierarchy of eight needs (Datta, 2014; Maslow & Lewis, 1987; McLeod, 2007; Noltemeyer, Bush, Patton, & Bergen, 2012; O'Neill, 2019). At the physiological and safety levels there is the risk factor of Adverse Childhood Experience (ACE). At the belonging and love level there are the protective factors of Non-Parental Relationships (NPR) and Non-Parental Relationships formed in an Out-of-School Youth Activity (NPR-OSYA). At the cognitive level, there is the protective factor of Future Orientation (FO). Lastly, at the self-actualization level there is the protective factors of participation in out-of-school youth activities (OSYA) and the outcome of Academic Resiliency (AR). The idea is that if lower levels of needs are not met then a person will to the best of their abilities fulfill that need. If lower level has not meet in the deficits needs then a person will have a harder time fulfilling the growth needs.

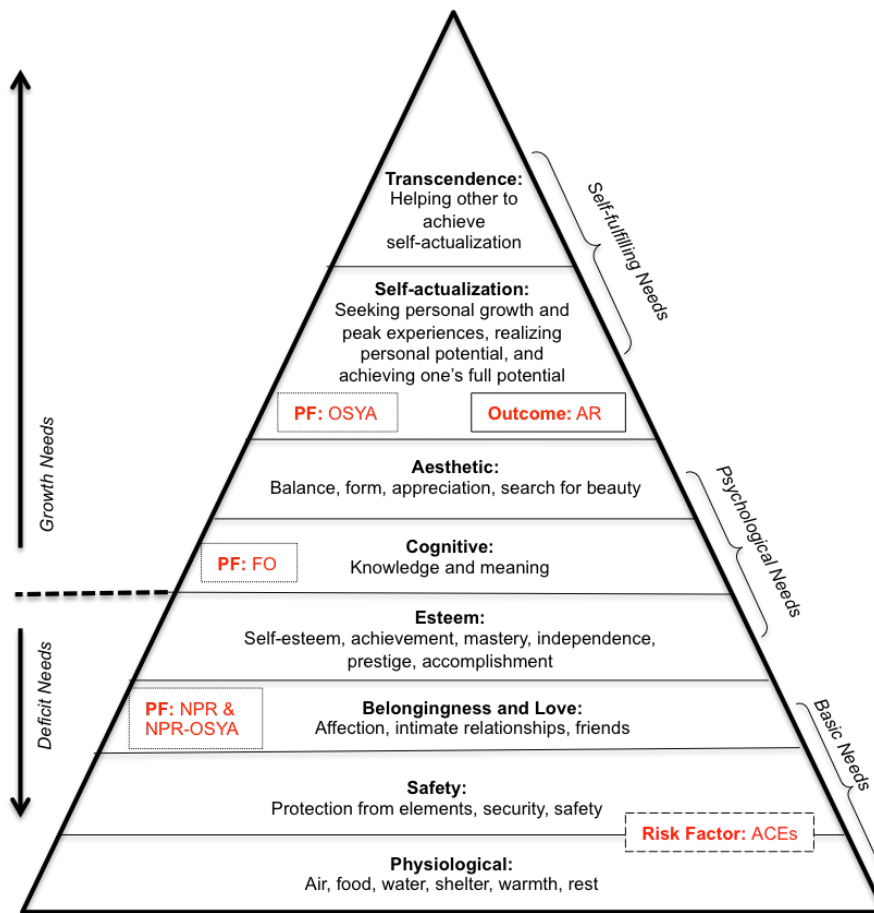


Figure 1.3. Abraham Maslow's Hierarchy of Needs

Several researchers have suggested that Abraham Maslow's needs should not be demonstrated in a pyramid but a venn diagram (Datta, 2014; McLeod, 2007; Noltemeyer, Bush, Patton, & Bergen, 2012; O'Neill, 2019). O'Neill (2019) explained that at some point levels will continue to overlap each other. For example, ACEs can occur while a person participates in OSYA or has developed a NPR. Also, O'Neill (2019) explained that needs are not required to be met in an orderly matter. A person might have to return to meet lower levels at some point. For example, a person developing FO can experience ACEs. Figure 1.4

demonstrates a visual image of Abraham Maslow's venn diagram of eight needs created by O'Neill (2019).

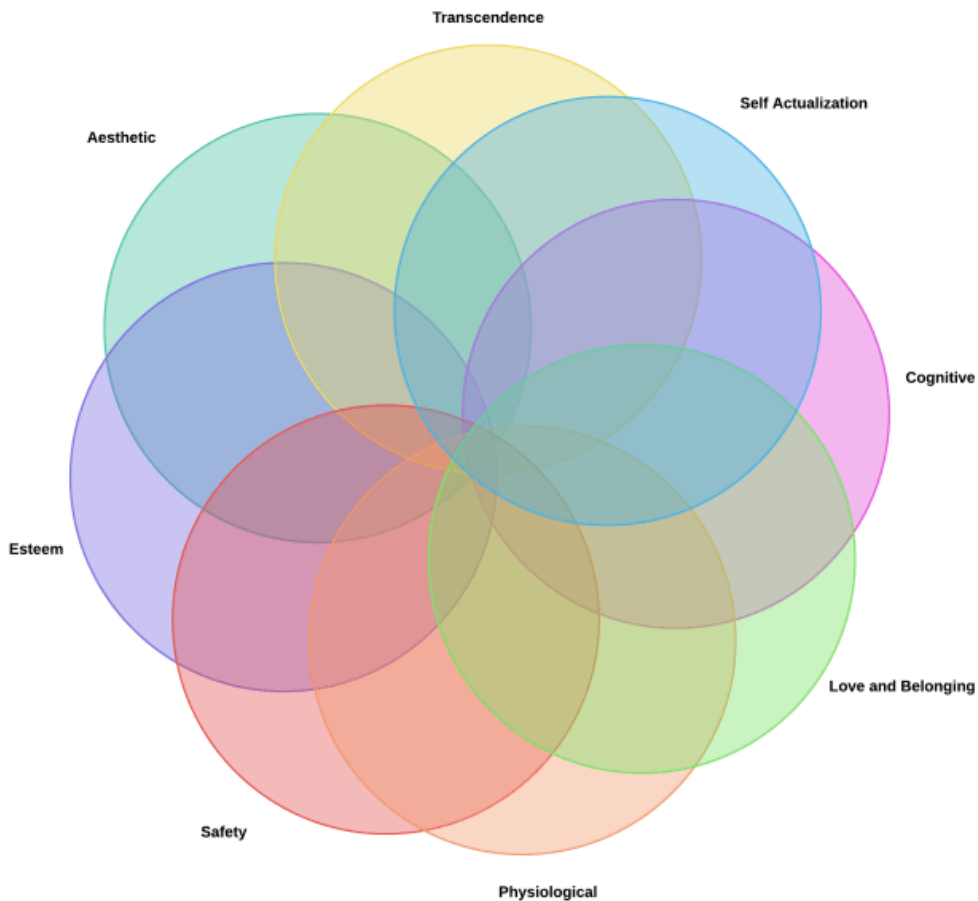


Figure 1.4. Abraham Maslow's Venn Diagram of Needs

Input-Environment-Outcome Model

The Input-Environment-Outcome (IEO) Model of Alexander Astin's (1985) emphasizes an evaluation of students' input and environment to fully impact the students' outcome (Astin & Antonio, 2012). The first element tries to understand students' experiences, characteristics, and qualities. The second element tries to

understand experiences and influences from students' environment. The last element, tries to understand students' outcomes such as characteristics, knowledge, attitudes, beliefs, and values.

This theory is important, because it has several assumptions that focus on the protective factor of out-of-school youth activities (OSYA). The first assumption is that students' participation in OSYA requires psychosocial and physical energy (Astin & Antonio, 2012). Another assumption is the amount of time participating in OSYA will vary between students. A third assumption is that participation in OSYA can either be based on the quality or quantity. A fourth assumption is that students' gains from OSYA are related to the quality and quantity of their participation in OSYA. The last assumption is that academic outcomes are related to OSYA. This can be applicable in the education field, and has shown that participation in meaningful activities relates to retention and academics (Kuh & Pike, 2005). Most importantly, this theory accounts for the student's demographic background, and any previous experiences.

Figure 1.5 demonstrates a visual image of Alexander Astin's (1985) Input-Environment-Outcome model (Astin & Antonio, 2012). In the input element, there is the risk factor of Adverse Childhood Experience (ACE). The environment element includes the protective factors of participation in out-of-school youth activities (OSYA), non-parental relationships (NPR), non-parental relationship formed in an out-of-school youth activity (NPR-OSYA), and future orientation (FO). The outcome element includes academic resiliency (AR). It is expected to

see relationships between the elements. The idea is that the impact of input, environment, and outcome will be greater than the impact of input and outcome (Astin & Antonio, 2012).

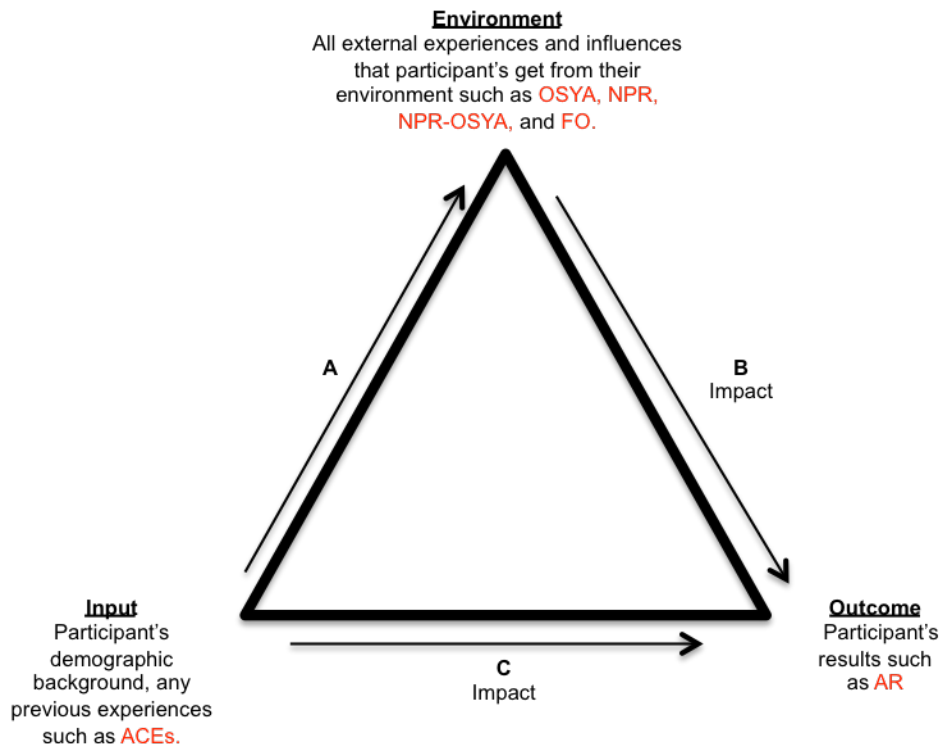


Figure 1.5. Alexander Astin's The Input-Environment-Outcome Model

Research Questions

The following research questions guided this study: Do the protective factors of having a non-parental relationship formed in an out-of-school youth activity and students future orientation have a relationship between them? Do outcomes of protective factors differ between the groups No ACE and Yes

ACEs? Do all protective factors have a greater cumulative effect on the relationship between Yes ACEs and academic resiliency?

Significance of the Study

It is significant is to understand why some students with ACEs have been academically successful and what can be done to help other at-risk students.

The study wants to understand how the protective factors of non-parental relationships (NPR), participation in youth activities (OSYA), and future orientation (FO) can serve as a buffer of negative academic outcomes among people who experience childhood adversity. Also, it hopes to better understand how caring relationships and leisure activities can benefit vulnerable students develop academic resiliency and continued positive thoughts about their future education, career and family domains. Understanding the problem from the perspective of the SEM-R brings “critical hope” in youth people and creates an alliance to cultivate healthier and stronger neighborhoods that have successful citizens (Badger & Bui, 2018; Kataoka, Vona, Acuna, Jaycox, Escudero, Rojas, Ramirez, Langly, & Stein, 2018; Lander, 2018; Schwartz, 2018).

Addressing this problem can help philanthropists, community leaders and members, politicians, school administrations and individual persons, and families find meaningful activities or interventions/preventions programs that are beneficial to children who comes from a disadvantaged background. The results of this study can help these individuals better distribute or allocate financial funding to populations who may be likely to show greater benefits from such out-

of-school youth activities/programs. Another goal is to express the importance of forming a school and community partnership, that jointly encourages policy-makers in implementation of a trauma-informed school system approach to better prepare people who work with children and youth. Training school personnel to be trauma-informed will allow them to be able to read the early signs of academic failure and adversity, which block students from learning in the classroom setting. The results of this research have the potential to transform communities to improve people's lives and outcomes.

Assumptions

A major assumption in this study was that people who participated in meaningful activities and had healthy relationships would be more likely to have better outcomes (Diversi & Mecham, 2005; Deutsch, Wiggins, Henneberger & Lawrence, 2012; Jones & Deutsch, 2011). The positive engagement in activities and having access to healthy staff-student relationships may play important roles in how future orientation might foster academic resiliency in at-risk students who participate in an out-of-school youth activities.

Limitations

This study design poses a few threats to internal validity. Self-selection of the participants could affect the dependent variables, as participants with higher academic resilience, may be more likely to participate in meaningful activities or seek positive non-parental relationships that nurture their future orientation. One

major limitation is that participants are going to answer to these questions from their own perspective. This includes participants who may forget or have trouble recalling important details from their previous experiences. One threat to external validity is that there may be an effect of setting, because the study is only being done in Southern California. However, the fact that data is being collected from various undergraduate and graduate programs in Southern California can control to some extent for many effects of setting.

Definitions of Key Terms

For the purpose of this study, the following common terms were defined as:

Academic Resiliency (AR): The academic resilience construct emerged as an “educational context specific” form and reflects an individual psychological resilience, which increases the likelihood of educational success, despite adversity brought by environmental conditions and experiences (Cassidy, 2016; Martin & Marsh, 2006; Wang, Haertel, & Walberg, 1994). While other students continued to perform poorly and fail, academically resilient students managed to turn around their educational misfortunes, by flourishing and thriving despite their adverse experiences.

Adverse Childhood Experience (ACE): Adverse Childhood Experiences (ACEs) are a wide-range of adversities that a person under the age of eighteen can experience. At a personal level, these experiences will include exposure to physical abuse, verbal abuse, sexual abuse, physical neglect, and emotional

neglect (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, & Marks, 1998). At a family level, it also includes adverse experiences that are witnessed, such as a substance use, domestic violence, incarceration, mental illness, and parent's divorce or death or abandonment (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, & Marks, 1998).

Future Orientation (FO): Future orientation is referred as the extent a person thinks about their future (academic, career and family/marriage orientations) sets goals, plans, explores options and makes commitments that guide the person's behavior and developmental course (Bandura, 2001; Beal, 2011; Hideg & Nováky, 2010; Nurmi, 1991; Seginer, 2008; Trommsdorff, 1986). Rachel Seginer's (2008) definition of future orientation is unique in the ways that she includes motivational, cognitive, and behavioral components in her model of FO. The behavioral motivational component of FO consists of the variables of value, expectancies, and internal control. The cognitive component of FO consisted of hopes and fears. Lastly, the behavior component of FO consisted of exploration and commitment.

Non-Parental Relationship (NPR): refers to healthy and positive relationships formed with a caring adult authority in the context of an out-of-school youth activity (NPR-OSYA). This relationship can be with a significant adult in their lives such as a teacher, mentor, spiritual leader, social worker, youth specialist, or out-of-school youth organization staff/personnel, rather than within their families" (Edmond, Auslander, Elze, & Bowland, 2006, p. 21). These

relationships can provide a social support system and the opportunities to have meaningful conversation that impact student's outcomes.

Outcome: the results of a previous interaction, event or experience in an individual (VandenBos, 2007).

Participation in an out-of-school youth activities (OSYA): refers to healthy and positive engagement or participation in an out-of-school youth activity. Student engagement or participation in OSYA can be a afterschool program or a extracurricular activity that is outside the traditional classroom context. These activities can provide a safe place where students can participate in meaningful activities that allow them to feel part of a community and feel a sense of belonging to something (Lander, 2018; Noltemeyer, Bush, Patton, & Bergen, 2012).

Protective Factor: this term refer to personal characteristics or traits and environmental factors of a group that decrease the statistical probabilities of experiencing negative outcomes (Masten, 1994). "Those [factors] that distinguished high-functioning children at risk from those who developed serious problems" (Luthar et al., 2000, p. 546).

Risk Factor: this is defined as "a behavior or constitutional (e.g. genetic), environmental, or other characteristic that is associated with an increased possibility or likelihood that a disease or disorder will subsequently develop in an individual" (VandenBos, 2007, p. 802). A risk factor does not prove to result in an

outcome of an interaction, event or experience, or disease (Rifkin & Bower, 2007),

Personal Justification for the Research

As a student I, the principal investigator, was involved in a wide range of extracurricular activities that are defined as high impact programs. As a high school student, I was actively engaged in Advancement Via Individual Determination (AVID), AVID Summer Bridge Programs, Boys & Girls Club of America, and the “Little Brother, Big Sister” mentoring program. As an undergraduate student, I engaged in programs that served at-risk students to retain and increase graduation rates such as Educational Opportunity Program (EOP), Student Assistance in Learning Program (SAIL), Ronald E. McNair Post-Baccalaureate Achievement Program, Hispanic Association of Colleges and Universities (HACU), and Health Scholar-Research Infrastructure in Minority Institutions (RIMI) programs. I additionally interned for First Five of San Bernardino, which led me to seek opportunities to volunteer for other non-profits that serve at-risk students such as Educate Tomorrow’s Parents, Court Appointed Special Advocates (CASA), Knott’s Family and Parenting Institution, Masada Homes, The Orangewood Jaycees, Orangewood Children’s Foundation, and Rosie’s Kids. I believe high impact practices are beneficial to oppressed groups. Therefore, I have been an advocate for out-of-school youth activities that increase learning experiences outside the classroom settings for over thirteen years. Most importantly, I tend to advocate for programs that serve low-income

minority at-risk students. As a member of a marginalized and underrepresented group in highly effective educational activities, I have seen at first hand the unlimited benefits that are gained from participating in meaningful activities and having access to a healthy non-parental relationships. As a former program coordinator for the McNair Scholar Program, I encouraged students to participate in high impact programs where they could cultivate personal characteristics and leadership skills that graduate programs desire in their prospective students. Most importantly, I encourage youth to use their time in meaningful activities with people who will help them reach their goals. I have seen that students who engage in high impact programs tend to be retained. These programs increase students' graduation rates, and increase chances of obtaining a graduate degree. My research topic was based on previous experiences from my direct participation in activities that motivated me to be an agent of change and inspired me to obtain a doctoral degree. I believe my previous experience will help strengthen my work by enabling me to be able to see the benefits from multiple perspectives. I will monitor my biases by not interpreting the data out of my belief or value systems or assumptions.

CHAPTER TWO

REVIEW OF THE LITERATURE

The purpose of the systematic literature review was to review existing scholarly evidence pertaining the research questions that will be addressed logically and as unambiguously as possible. The outline structure of the review detailed a narrative flow of each topic and subtopic, organizing these points so that they would build an argument towards an evidence-based conclusion (Labaree, 2013). Descriptive statistical data will be provided to understand the prevalence of adversity and negative outcomes that impact students' learning experiences. The presented topics are: 1) risk factor of adversity, 2) protective factors, 3) outcome, 4) relationships between protective factors, 5) outcome of protective factors based on the differences between individuals with or without adverse childhood experiences, and 6) the role of protective factors on the relationship between adverse childhood experiences and academic resiliency. Maslow's hierarchy of needs will be lightly addressed with regard to why the protective factors are important needs that help individuals achieve academic resiliency. The review will explore the protective factors using the socio-ecological model of resiliency (SEM-R) to better understand their role in academic resiliency among individuals who have experienced childhood adversity. Lastly, the review will end with a conclusion evaluating and respectfully

critiquing the reviewed literature to express the importance of the proposed study.

Risk Factors

If a direct cause and effect relationship cannot be proven between an effect variable and cause variable that is present, there can still be a statistical association between the two variables. The cause being linked with an effect is called a risk factor. In other words, a risk factor is a biological condition, substance, or behavior that has a relationship with the cause of an event but has not been proven to cause this event or disease (Rifkin & Bouwer, 2007). For example, negative educational outcomes (effect) can be shown to be related to a previous adversity (cause). Having a previous interaction, event, or experience in adversity does not necessarily cause negative educational outcomes. However, former research has found relationships among these variables. Identifying a risk factor is “valuable only to the extent that it can be used to predict an increased frequency or probability that a particular interaction event or experience will occur” (Rifkin & Bouwer, 2007, pg. 17). Adverse childhood experiences (ACEs) are known to be a significant risk factor of a wide range of negative outcomes.

Adverse Childhood Experiences

The following section will establish the definition of adverse childhood experiences (ACEs), which will be the risk factor for the study. It will follow by identifying negative outcomes related to ACEs.

Adverse Childhood Experiences (ACEs) are a wide-range of adversities that a person under the age of 18 can experience. At a personal level, these experiences will include exposure to physical abuse, verbal abuse, sexual abuse, physical neglect, and emotional neglect (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, & Marks, 1998). At a family level, it also includes adverse experiences being witnessed such as a substance use, domestic violence, incarceration, mental illness, and parental divorce, death or abandonment (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, & Marks, 1998).

Research with a deficit focus paints a very negative picture of what happens to these children. In such research, a traumatic experience has been claimed to: be overwhelming, to disable a person's fight or flight response, to threaten physical or psychological safety, and to lead to loss of control and inability to regulate emotion (Cook, Spinazzola, Ford, Lanktree, Blaustein, Cloitre, DeRosa, Hubbard, Kagan, Liataud, & Mallah, 2005). Exposure to complex trauma and toxic stress can affect brain development and developmental domains (Cook, Spinazzola, Ford, Lanktree, Blaustein, Cloitre, DeRosa, Hubbard, Kagan, Liataud, & Mallah, 2005). Outcomes following these traumatic experiences will vary based on type of abuse/trauma, frequency, duration, latency, and magnitude.

Occurrence of Childhood Adversity and Negative Outcomes

There has been scientific support to show the relationship between more ACEs and more negative outcomes in individuals. One study that explores the

link between childhood stressors and adult health is the Adverse Childhood Experiences study, which is a collaboration between the Center for Disease Control (CDC) and Kaiser Permanente (Burke, Hellman, Scott, Weems, & Carrion, 2011). The study began in 1994 and it included 17,337 adults enrolled in Kaiser in Southern California. The participants completed a survey that asked questions about their childhood experience. More specifically, they were asked questions about abuse and neglect, family dysfunction and their current behavior and health status. In addition, they were measured for exposure to multiple types of stressors. The study found that, the higher the ACE score was, the more people had risky health behaviors in childhood and adulthood. For example, some of these behaviors included pregnancies, suicide attempts, early initiation to smoking, sexual activity and use of illicit drugs. When participants shared that they had been exposed to four or more adverse experiences, 51% of them had a learning and behavior problem (Burke, Hellman, Scott, Weems, & Carrion, 2011). Many students experienced toxic stress or adversity at some point in their educational journey and frequently this trauma was unrecognized in school (Rossen & Cowan, 2013). It is clear that ACEs are risk factors that lead to a wide range of negative outcomes that impact individual adult life. For the purpose of this study, the no ACEs group will be participants who reported one or fewer types of abuse or trauma. The yes ACEs group will be participants who reported two or more types of abuse or trauma.

Educational Outcomes Following Adverse Childhood Experiences

The following section will identify the links between ACEs and negative outcomes within learning developmental domains. Furthermore, it will discuss how ACEs impact educational outcomes, which later lead to more unfavorable negative outcomes that follow in adulthood. Lastly, support of the link between ACEs and positive academic outcomes will be addressed.

Research has explored the impact of ACEs on school functioning problems among school-age students. In the developmental cognition domain, possible problems in school functioning were lower cognition, lower standardized test scores for math and reading, low grades for math and reading, overall low grade point average, learning disability/special education needs, and/or mental retardation (Romano, Babchishin, Marquis, & Fréchette, 2015). In the developmental social-emotional domain, possible problems in academic and social aspects were related to spending less time with friends outside of school hours, more pro-social behaviors and behavior problems, and/or more discipline referrals and suspensions (Romano, Babchishin, Marquis, & Fréchette, 2015). Mental health problems that interfered with academic learning experiences were hyperactivity/inattention, depression/anxiety, conduct disorders/physical aggression, indirect aggression and property vandalizing/destroying crimes (Romano, Babchishin, Marquis, & Fréchette, 2015). In the developmental communication/language domain, possible problems in academic and social aspects were communication disorders, critical interpersonal skills, and problems

with language development (Cook, Spinazzola, Ford, Lanktree, Blaustein, Cloitre, DeRosa, Hubbard, Kagan, Liautaud, & Mallah, 2005; Culp, Watkins, Lawrence, Letts, Kelly, & Rice, 1991). Other possible significant academic outcomes were frequent school transitions, lacking tutoring services outside of school, greater school absences and tardiness, and/or repeating grade levels (Romano, Babchishin, Marquis, & Fréchette, 2015).

Children with ACEs often have problems in their educational journey and these problems can limit or hinder academic achievement. In fact, when students are deprived of mastering basic academic skills, more unfavorable outcomes arise, such as academic failure, dropping out of school, criminal activity, incarceration, out-of-wedlock pregnancies, dependency on government financial assistance, and homelessness (Troutman & Dufur, 2007; Zolkoski & Bullock, 2012). However, if we move away from a deficit focus we can see that not every individual has negative or unpleasant outcomes following ACEs. Even though experience of adversity may lead to negative outcomes, there is hope that individuals can avoid or escape these negative outcomes. Indeed, resiliency is an important factor to take into account. For example, resilient early school age children from maltreating homes had positive outcomes, were high functioning and graduated from high school later in adolescence (Herrenkohl, Herrenkohl, & Egolf, 1994). Resilient children have a sense of purpose in society, believe in a bright future and have educational aspirations and goals (Benard, 1995). The evidence highlights that ACEs can negatively influence individuals' academic

performance and outcomes. Most importantly, resiliency focused research paints a more promising future for individuals who experience childhood adversity.

Prevalence of Childhood Adversity and Educational Outcomes

This section will provide statistics on the prevalence of the number of ACEs among school-age children, followed by statistics of negative educational outcomes in foster youth and school-age foster youth who have experienced some level of ACEs. Next, statistics of students who receive special education services and who express negative behavior outcomes within the school setting will be presented. Lastly, statistics on academic-related factors that lead to resiliency will be provided.

Vanessa Sacks' and David Murphey's (2018) research brief reported that one in ten children from birth to age seventeen have experienced three or more adverse experiences. Among children who live in the United States, 24% reported one, 11% two, and 10% three or more ACEs (Sacks & Murphey, 2018). Forty percent of children who live in California experience at least one ACE. More specifically, 25% reported one ACE, 8% two ACEs, and 7% three or more ACEs (Sacks & Murphey, 2018). These statistics show that the younger the children are, the more they are at risk to be a first time victim of at least one type of adverse or maltreatment experience. To further support this statistic, the 2016 child maltreatment statistics of the U.S. Department of Health and Human Services reported that in the state of California, 68,663 victims experienced at least one type of childhood maltreatment (neglect, physical, psychological, or

sexual). In that sample, 40.9% (n=28,056) were not school-age (ages birth to 4), 32.3% (n=22,188) were in elementary school (ages 5-10), 12.3% (n=8,440) were in middle school (ages 11-13), 14.4% (n=9,910) were in high school (ages 14-17), and .10% (n=69) were unborn, of unknown age, or ages 18-19 (U.S. Department of Health and Human Services, 2016). For this purpose, the following paragraph will use foster youth as examples of individuals who experience some level of ACEs. Negative educational outcomes associated with ACEs will be discussed.

According to the National Foster Youth Institute (2018), foster youth are more likely to change school in the middle of school year, be in special education classes, have fewer passing grades, and attend a low-performing school. In addition, 40% of foster youth have educational difficulties related to behavior problems or learning disabilities. High school drop out rates are three times higher in foster youth, of whom half will graduate high school and less than 3% are likely to graduate from a four-year college. The academic challenges that foster youth face are similar to students who experience adversity and maltreatment that have not been reported to Child Protective Services. These academic challenges translate to behavior problems and learning difficulties that disrupt students' learning experiences. In addition, other long-term outcomes are related to negative education attainment, unemployment and poverty (Metzler, Merrick, Klevens, Ports, & Ford, 2017).

As previously discussed, many foster youth have experienced some level of adversity. To see the biggest picture of the problem among schools, statistics of school age foster students are provided. There were a total of 55,348 foster students enrolled in 2016-2017 California schools, 47.3% (n=26,161) in elementary schools, 18.9% (n=10,450) in middle schools, and 33.9% (n=18,737) in high schools (California Department of Education, 2018). This means that children are already entering the school system with previous childhood adversity. Having experienced various types of adversity can result in many long-term negative outcomes in the learning domains of cognitive/intellectual, communication/language, physical, and social-emotional (Cook, Spinazzola, Ford, Lanktree, Blaustein, Cloitre, DeRosa, Hubbard, Kagan, Liautaud, & Mallah, 2005; Culp, Watkins, Lawrence, Letts, Kelly, & Rice, 1991; Romano, Babchishin, Marquis, & Fréchette, 2015). In addition, some learning disabilities have been associated with the severity of ACEs (Peck, Roeser, Zarrett, & Eccles, 2008; Romano, Babchishin, Marquis, & Fréchette, 2015).

Even though the following statistics do not report how many of those students experience ACEs, research has shown that many students with suspected learning disabilities have not been diagnosed due to parents neglecting or not acknowledging that their child is struggling in learning (Shifrer, 2013). In fact, major reason students do not seek special education services are to avoid the negative stigma associated with the label of having a learning disability (Shifrer, 2013). The California Department of Education (2018) reported

on individuals (years birth-22) who received special education services in 2017–2018 within the cognitive learning domain in the categories of intellectual disabilities (n=43,855), specific learning disability (n=297,468), autism (n=112,318), and traumatic brain injury (n=1,618). For the communication/language learning domain they provided services for speech or language impairment (n=161,485). The physical learning domain category included deaf-blindness (n=115), deafness (n=3,242), hard of hearing (n=10,633), visual impairment (n=3,487), orthopedic impairment (n=10,453), and other health impairment (n=97,426). In the social-emotional learning domain, services were provided for emotional disturbance (n=24,936). There were a total of 7,161 individuals who received services for multiple disabilities.

Furthermore there has been evidence that behavior problems can lead to learning difficulties by disrupting students' learning experiences (Romano, Babchishin, Marquis, & Fréchette, 2015). Based on the 2015-2016 California Department of Education statistics (2018), there were a total of 6,410,668 enrolled students in California schools, 2,182,978 truant students and 694,030 were labeled as chronic absentees. There were a total of 233,478 unduplicated counts of students suspended, of whom 46,358 were for violent injury incidents, 184,157 for no injury violent incidents, 12,951 for weapon possession, 41880 for illicit drugs, 78,242 for defiance only, and 18,257 for other reasons. There were a total of 5,657 counts of student expulsions, 1,234 for injury violent incidents, 1,584 for no injury violent incidents, 947 for weapons possession, 1,685 for illicit

drug related issues, 38 for defiance only, and 169 for other reasons. In 2016-2017 there was 6,405,496 enrolled students in the state of California. Out of 1,945,401 high school students enrolled, 47,249 dropped out (California Department of Education, 2018). The high dropout rate was in grade 7-12 with American Indian/Alaska Native (5.0%) and African American (4.5%) students dropping out at the highest percentage rate when compared to other ethnic groups. However, another angle on these outcomes is that there are still resilient students who continue to persist, regardless of their experiences of adversity. In 2016-2017 the State of California had 11,850 graduates, 200,911 (46.8 %) had UC/CSU required courses. Females were more likely to have all required courses for UC/CSU admissions 113,691 (52.7 %), when completed to males 87,220 (40.8 %).

In essence, the statistics support the ideas that ACEs continue to be a problem in students' academic lives. Today, educational professionals not only focus on academic growth, but they often take the additional roles of being counselors and supporters of the healing process for students who experience abuse or trauma. Secondary Trauma Stress (STS) for educators has become a new problem being addressed (Lander, 2018). Students' trauma affects our educational professionals and it is important for the community to provide further support to help these children with their healing process by fostering resiliency. Despite this, it is important to acknowledge that there are significant protective factors that influence students' academic resiliency.

Adverse Childhood Experiences and Academic Adversity

According to the American Civil Liberties Union (ACLU), there has been a national trend in which students “are being funneled out of the public schools and into the juvenile and criminal justice systems” (ACLU, 2019). The school-to-prison pipeline has pushed out more vulnerable students out of our public school than factors such as disagreement in curriculums being used, homeschooling, or significant illness. Many of these students who are being pushed out of our public schools, are identified as students of color (that is, Black, Hispanic or Latino, and American Indian), have a history of poverty, have learning disabilities (physical and developmental), history of abuse and/or neglect, and are or were in the foster care system (ACLU, 2019). Instead of continuing to isolate, punish, and push out students from the school system, we should find ways of how to dismantle and disassemble the school-to-prison pipeline. Most importantly, we need to understand why some of these survivors of childhood adversity still end up in the higher education system.

There have been few studies that have contributed to the understanding of resilience as a process and outcome (Breda, 2018). No known study has explored the link between previous ACEs and the increase of resilience among college students with ACEs. It is obvious that college students with ACEs have experienced the process of building resilience. It is possible that these same students have adopted the process to build resilience in other areas of their lives such as career and family domains. We know that there are several struggling

students at the university level that do not ask for help and are still dealing with emotional crises triggered by a past event. These stressors create other problems in their academic world. However, many colleges and universities have been proactive in creating resources to empower and equip vulnerable students to become resilient. For example the following universities have adopted programs to help students foster resilience (Thomas, 2017): 1) George Mason University, 2) Stanford, 3) Penn State, 4) Harvard, 5) Princeton, 6) University of Texas-Austin, and 7) Tulane. All of the resiliency-building programs have been successful in helping students perform better in school and prepare them for success. Yet, we do not know what protective factors have helped these college students escape other negative outcomes or the school-to-prison pipeline.

Protective Factors

This sub-section will define the term protective factors. Then the introduction of the protective factors of non-parental relationships, participation in out-of-school youth activities, and future orientation will be discussed. Although Maslow's hierarchy of needs theoretical framework will not be used for the proposed study, the research wanted to address why the protective factors were important needs that helped individuals achieve academic resilience. Then the each protective factor was placed in Ungar's (2011) SEM-R to understand how the level helps create a naturally-occurring process and lays the foundation of academic resilience. Lastly, research will be introduced about the importance of the protective factors placed on the process of academic resiliency from their

appropriate socio-ecological level. An important note to the reader: the subsection of future orientation will be the only protective factor that will have additional information on its growth patterns, because it is commonly noted in the literature as a key factor of academic resiliency.

Regardless of the risk of exposure, some factors have enabled at-risk students to become successful in academia. These empowering factors are known as protective factors, which are the characteristics and environmental factors that impact high-functioning at-risk students and prevent them from developing or expressing negative outcomes (Luthar, Cicchetti, & Becker, 2000, p. 546; Masten, 2011). The process of developing resilience requires at-risk people having better than expected outcomes, positive adaptation that is sustained despite the experience of toxic stress, and recovery from trauma, a person's resiliency status can change over time from resilience to non-resilience and vice versa (Afifi & MacMillan, 2011; Masten, 2011). To further explain this idea, at-risk students can become resilient individuals by using significant protective factors that help them do well in school, and have positive goals and plans for the future.

Participation in Out-of-School Youth Activities

Like non-parental relationships, the protective factors of participation in out-of-school youth activities can help youth meet their psychological need of belonging and feeling loved (Maslow & Lewis, 1987; Noltemeyer, Bush, Patton, & Bergen, 2012). Participating in meaningful activities can help youth develop a

sense of community within the out-of-school youth organization. Since, professional educators are already overwhelmed with other additional roles to help their students who experienced maltreatment or trauma, out-of-school youth activities can take some of those roles by engaging youth in meaningful activities that allows them to feel part of a community and feel a sense of belonging to something (Lander, 2018; Noltemeyer, Bush, Patton, & Bergen, 2012). Maltreated or traumatized students participating in out-of-school youth organization can have access to a safe place where they can learn how to use available resources that help them plan and prepare for the future.

In order to understand the influence of the participation in out-of-school youth activities on the process of academic resiliency, it was placed in the SEM-R to understand the influence of the community level (Ungar, 2011). For example, participation in an out-of-school youth activity can provide a safe zone, explore their creativity and strengths, be exposed to enriching and learning experiences, find a place to obtain and exchange funds of knowledge and a place to form a healthy identity, develop a sense of involvement, a reason for caring, and provide a meaning for life (Durlak & Weissberg, 2007; Mahoney, 2000; Werner & Smith, 1992). All these naturally occurring processes in out-of-school youth activities help further strengthen the foundation of resilience. As mentioned before, resilience acts as a process of participation in out-of-school youth activities, which in turn helps to create positive outcomes in academics.

To further understand the importance of participation in out-of-school youth activities on the process of academic resiliency, the following research will be reviewed, because it looked at the protective factors from the community level. Durlak & Weissberg (2007) evaluated the results from 73 after-school programs that promoted youths' personal and social skills. Overall, participants in after school programs varied significantly on several types of outcome measures. For example, participants gained peer relationships and social skills such as leadership, adaptability, and interpersonal relations (Durlak & Weissberg, 2007). Most importantly, academic-related outcomes consisted of greater achievement test scores, higher grades, better school attendance and school engagement, fewer behavior problems in school, and greater change from graduating high school. In fact, benefits of after-school programs are more significant for low-income youth who live in dangerous neighborhoods (Lansford, Malone, Stevens, Dodge, Bates, & Pettit, 2006). Participation in community-level youth activities can be a driving force in creating high-achieving students, which they persist through graduation.

Non-Parental Relationship Formed in Out-of-school Youth Activities

Children's unmet basic needs can have negative academic outcomes. To ensure academic competency of all students, lower order needs must be satisfied to motivate children's abilities for growth and maximize learning experiences (Maslow & Lewis, 1987; Noltemeyer, Bush, Patton, & Bergen, 2012). When children use all their energy in meeting basic needs such as

physiological (food, water, warmth and rest) and safety (security and safety) due to continued toxic stressors, there is a low possibility that they will use energy for psychological needs that help them connect to others (Noltemeyer, Bush, Patton, & Bergen, 2012). As mentioned previously, professional educators who work with maltreated or traumatized students usually get to hear student stories of hardship (Lander, 2018). These non-parental relationships can help students process their hardships and allow them to change the narrative of their stories. Also, these relationships can help maltreated or traumatized students meet their needs of belonging and being loved. Maslow explained how the need of belonging and being loved, gave children the sense of belonging to something, receiving and giving love, appreciation, forming intimate relationships and friendship (Maslow & Lewis, 1987; Noltemeyer, Bush, Patton, & Bergen, 2012). Forming non-parental relationships with maltreated or traumatized students, not only helps them with the healing process but, they can also help in encouraging them to obtain a solid education by taking advantage of the positive relationships available in their surroundings.

In order to understand the influence of the protective factor of non-parental relationships on the process of academic resiliency, it was placed in the SEM-R to understand the influence of the interpersonal-community level (Ungar, 2011). But before we talk about that influence, it is important to acknowledge that, in order to start developing non-parental relationships, youth must have communication skills (individual level). Having good communication skills is one

individual level trait associated with resilience in educational attainment (Lansford, Malone, Stevens, Dodge, Bates, & Pettit, 2006). Children with better social communication skills are successful in communicating effectively, find non-aggressive solutions to problems, develop relationships with others, relate to peers, have positive interactions with others, and form trusting relationships, thereby enhancing their supportive network (Lansford, Malone, Stevens, Dodge, Bates, & Pettit, 2006). Therefore, social communication skills are needed to help form non-parental relationships. To better understand non-parental relationships on the process of academic resiliency, it is necessary to understand how the interpersonal-community level helps create a naturally occurring process and lays the foundation of resilience. For example, positive non-parental relationships are usually caring, motivational, respectful, and supportive in development and learning, focus on strengths and interests, have high expectations, nurture critical thinking, and provide resources and opportunities to participate in meaningful activities (Benard, 1995). All these things offered opportunities to encourage and promote positive academic outcomes, which can lead to the process of academic resiliency.

To further understand the importance of non-parental relationships on the process of academic resiliency, the following research will be reviewed, because it looked at the protective factors from the interpersonal-community level. For example, Edmond, Auslander, Elze, and Bowland (2006) found that, adolescent girls in the foster care system found social supportive relationships with other

significant adults in their lives such as “teachers, mentors, spiritual leaders, or social workers, rather than within their families” (Edmond, Auslander, Elze, & Bowland, 2006, p. 21). The authors suggested that other significant adults in their interpersonal-community level provided more positive social support and social networks that supported resiliency. Moreover, Bruster and Coccoma (2013) explored the educational needs of youths aging out of foster care systems by introducing a mentorship program that was intended to impact youths’ educational outcomes, which would ultimately lead to self-sufficiency. These mentoring relationships stayed constant and acted as positive role models for the youth. The relationships connected youth with new people in their lives who had similar goals, which established a support system within the interpersonal-community level (Bruster & Coccoma, 2013). Youth obtained knowledge from these mentorship relationships such as information on vocational training and college (that is, majors, minors), college life and activities, and educational opportunities. The mentoring relationships had positive academic outcomes that influenced youth’s academic self-efficacy and high school graduation (Bruster & Coccoma, 2013).

Future Orientation

Before addressing the importance of future orientation as a need for achieving academic resiliency, the definition of future orientation will be established. The protective factor of future orientation is referred as the extent a person thinks about his or her future (academic, career and marriage

orientations), plans and sets goal before acting (Beal, 2011; Seginer, 2008).

Rachel Seginer's (2008) definition of future orientation is unique in the way that she includes motivational, cognitive, and behavioral components in her model of FO. The behavioral motivational component of FO consists of the variables of value, expectancies, and internal control. The cognitive component of FO consists of hopes and fears. Lastly, the behavior component of FO consists of exploration and commitment. All these variables play an important role in the growth of future orientation, which effects high challenge (resiliency). With the definition of future orientation being established, it is necessary to understand why future orientation is a key factor of resiliency.

Children who experience adversity are more likely to use all their energy in trying to satisfy deficit needs (for example, physiological, safety, and belonging and love) rather than growth needs (Maslow & Lewis, 1987; Noltemeyer, Bush, Patton, & Bergen, 2012). There are risk factors such as ACEs that can influence the way people see their abilities, which can negatively impact their FO. The process of FO can be explained by thinking of it as an aspect of self-actualization, which is a continually evolving thinking process to achieve and maintain one's full potential and well-being (Murphy, 1974). In order to meet Maslow's highest level of self-actualized need, individuals with ACEs must connect their past and future to fully live in the present, and continue to plan for the future to give meaning to their existence (Murphy, 1974; Noltemeyer, Bush, Patton, & Bergen, 2012). Academic achievement and FO are both needs that fall

within the growth category (Maslow & Lewis, 1987). Resilient people have hope and envision, build and believe in their future goals and plans. This coping mechanism helps resilient people have positive FOs and look forwards to the future. Without a doubt, professional educators are already shaping maltreated or traumatized students' FO, because it helps students be motivated to thrive toward academic achievement (Lander, 2018). To achieve their full potential and encourage them to be involved in meaningful activities and experiences where they can be creative and create (Lander, 2018; Maslow & Lewis, 1987; Noltemeyer, Bush, Patton, & Bergen, 2012). Having positive future orientation, can help children have hope for a better future, therefore they are more willing to believe that specific actions and behaviors will benefit them in the long-term.

In order to understand the influence of future orientation on the process of academic resiliency, it was placed in the SEM-R to understand the influence of the individual level (Ungar, 2011). FO can be influenced by life events (such as adverse experiences) and can also be influenced by other levels such as interpersonal and community. For example, Khambati, Mahedy, Heron and Emond (2018) identified individual, family and community level protective factors for good educational attainment and positive emotional health in adolescents who experienced maltreatment in early childhood. At the individual level, they found internal locus of control was the only buffer for emotionally and physically abused participants. Internal control is the belief that one has the power to overcome events in their lives and they have the power to influence new events

and outcomes (Khambati, Mahedy, Heron & Emond, 2018). Previous research has identified internal control to be an important factor of the development of FO (Seginer, 2008). However, internal locus of control only focuses on the individual without taking his or her context into account. However, since FO measures three key universal adult roles, which includes the family, career, and education domains, it is important to acknowledge other socio-ecological levels that influence the growth of FO (Seginer, 2008). It is important to acknowledge that one's culture can influence the development of FO growth. Culture-specific domains influence the use of free time for enjoyment, the development of connections to other significant people, and groups of people (Seginer, 2008). For example, future orientation can help people set goals and have intentions to achieve these goals. Most importantly, FO can help people have a positive outlook towards the future, which can protect youth from the risk of childhood adversity. All these naturally occurring processes in future orientation can help further strengthen the foundation of resilience. As mentioned before, resilience acts as a process of future orientation, which helps to create positive outcomes in academics.

As mentioned earlier, this subsection includes additional information to explain growth patterns in FO, which is commonly referred to in the literature as a key factor of academic resiliency. Beal and Crockett (2010) explored adolescents' future-oriented cognitions (FOCs; occupational aspirations, occupational expectation, and educational expectation) in participants who

participated in urban youth centers. They found that for more than one third of the adolescents, changes were seen in future-oriented cognitions over a one-year period. This suggests that future-oriented cognitions can change over time. Similarly, Oshri, Duprey, Kogan, Carlson, and Liu (2018) found that the development of FO changed over time and that it was not linear. Three types of growth patterns of FO were found when examining the mean level changes in FO over the three time points. The trajectory groups were named based on the group patterns. Participants that demonstrated consistency of high levels of FO across adolescence and into young adulthood, were in the high-persistent group. For example, high-persistent growth patterns of FO youth reported high FO at the beginning and had little change over time. Participants that demonstrated low levels of FO in early adolescence that increased over time, were placed in the group of low start/increasing. For example, low start/increasing growth patterns of FO youth reported low FO at the beginning and had increased over time. Participants who demonstrated high levels of FO in early adolescence that decreased over time were placed in the high start/decreasing group. For example, high start/decreasing growth patterns of FO youth reported high FO at the beginning and had decreased over time. In sum, only the high-persistent and low start/increasing FO growth patterns groups showed signs of resiliency. However, that did not mean that high start/decreasing people could change the direction of their growth pattern of FO. It just meant that at that moment, they

were not resilient. More optimistic FO may be facilitated through interactions with supportive peers, school environments, and community.

To further understand the importance of future orientation on the process of academic resiliency, the following research is reviewed from the individual perspective. As mentioned earlier, Oshri, Duprey, Kogan, Carlson, and Liu (2018) found growth patterns of FO and the relationship between multilevel risks and resources, which supported the resilient processes among maltreated youth. They found that high-persistent growth patterns of FO (individual level) had higher school engagement, less dissatisfaction with peer relationships, and were less likely to be exposed to dangerous community environments (Oshri, Duprey, Kogan, Carlson, & Liu, 2018). High-persistent people were more likely to have more resources (for example, social networks and social capital) and fewer risk factors over time, which suggested that supporting resilience processes were more probable in supportive contexts. Undoubtedly, low start/increasing people had similar trends as high-persistent people (Oshri, Duprey, Kogan, Carlson, & Liu, 2018). As low start/increasing youth experienced less risk (for example, less adverse experiences) and had access to more resources (for example, better peer relationships and more school engagement), the more they showed growth in FO, eventually “catching up” to those in the high-persistent group (Oshri, Duprey, Kogan, Carlson, & Liu, 2018). Also, Rachel Seniger’s (2008) study explored how adolescents’ FO was affected by threats and high challenge/resilience in the face of political violence. She found that resilient

individuals with positive FO experienced adult academic achievement. Results also showed that adolescents with high challenge/resilience had more positive FOs, specifically in academic developmental outcomes (higher education/career; math, native language, second language English). Similar to other studies, gender differences were seen in girls considering more the future, particularly to further their education, which led to higher resiliency (Oshri, Duprey, Kogan, Carlson, & Liu, 2018; Seniger, 2008). The results of all these studies suggested that the FO was an important protective factor in the process of academic resiliency. The growth pattern of FO could be influenced by many levels (family, school, interpersonal-community) and events, but only the individual level could have the strongest influence in the process of academic resilience. This supported the idea that the relationship between FO growth patterns and the process of academic resiliency could be influenced by relational domains (family, school, community), which in turn take a collective orientation role to foster the process of resiliency.

Outcome

An outcome is the result of a previous interaction, event or experience in an individual (VandenBos, 2007). In other words, an outcome is a consequence or result of something that turned out to be after something occurred. Outcomes can either be positive or negative. For example, let's look at the scenario of a student having to study for a test. If that student did not study, most likely the outcome would be that they would fail or get a low score in the test. On the other

hand, if they studied appropriately, then their outcomes would be positive such as passing the test and obtaining a high score. Outcomes can tell the background story of an action, process or activity/experience.

Academic Resiliency

The following subsection will first define academic resiliency. Also it will discuss three significant factors of academic resiliency, followed by how to foster academic resiliency. Then it will explore the relationship between adverse childhood experiences and academic resiliency. Lastly, research will be introduced about the importance of academic resiliency as an outcome of the risk factors in adverse childhood experiences, which will be placed on the process of academic resiliency from their appropriate socio-ecological level.

Researchers have adapted resiliency in academically positive outcomes to call it “academic resilience”, which is the unexpected educational attainments of adolescents, who are otherwise vulnerable to reduced school success, due to personal and social-level risks (Cassidy, 2016; Martin & Marsh, 2006; Peck, Roeser, Zarrett, & Eccles, 2008; Tudor & Spray, 2017; Wang, Haertel, & Walberg, 1994). Although there are many definitions of academic [also known as educational] resilience, they all have in common the experience of adversity and have a positive adaptation (Tudor & Spray, 2017). The academic resilience construct emerged as an educational context specific form and reflects an individual psychological resilience, which increases the likelihood of educational success, despite adversity brought by environmental conditions and experiences

(Cassidy, 2016; Martin & Marsh, 2006; Wang, Haertel, & Walberg, 1994). While other students continued to perform poorly and fail, academically resilient students managed to turn around their educational misfortunes, by flourishing and thriving despite their adverse experiences. For example, a high school dropout who later gained a high school diploma or general education diploma (GED) were characterized as academically resilient, in the sense that they had shown academic success by gaining a degree, despite the adverse conditions presented by dropping out-of-school.

To add more the understanding of the process of academic resiliency, Cassidy (2016) identified three significant factors in his academic resiliency study. The first factor of academic resiliency was perseverance, which included hard work and trying, not giving up, sticking to plans and goals, accepting and utilizing feedback, imaginative problem solving, and treating adversity as an opportunity to meet challenges and improve. The second factor reflected adaptive help-seeking, which included reflecting on strengths and weaknesses, altering approaches to study, seeking help, support and encouragement, monitoring effort and achievements, and administering rewards and punishments. The last factor was negative affect and emotional response, which included anxiety, catastrophizing, and avoiding negative emotional responses. Indeed, these three factors of academic resiliency are extremely important, because they allow at-risk students to learn specific behaviors and actions that cultivate greater goal orientation towards academic achievement and improve

internal/external protective factors (Cassidy, 2016). Having established, the understanding, the three significant factors that helped the process of academic resiliency, led professional educators to create opportunities for students to foster academic resiliency.

Several studies have recommended many ways to foster academic resilience (Cassidy, 2015; Eley & Stallman, 2014; Howe, Smajdor, & Stockl, 2012; McAllister & McKinnon, 2009; Tempski, Martins, & Paro, 2012; Thomas, & Revell, 2016). Professionals who work with school-age children can incorporate the following strategies to their classroom or programs by fostering academic resiliency among at risk students. Within the education context, resilience can be improved by providing access to protective factors such as providing workshops to improve resiliency or life skills. Secondly, providing access to caring and learning-centered education environments such as after-school programs or extracurricular activities. Third, have positive and high expectations such as encouraging them to see themselves as college students. Forth, provide a strong and supportive social community, such as mentoring programs that help them build a sense of belonging. Lastly, offer supportive peer relationships such as joining a sport or activity that encourages interaction with other peers. All these strategies can help students' foster academic resilience, which has been found to be a coping mechanism (Cassidy, 2016).

To further support the recommendations on how to foster academic resilience, studies suggest that individuals who have experienced adversity can

learn or acquire resilient qualities. For example, research has stressed the importance of teaching resiliency among college students related to well-being because it allows them to adapt to and bounce back from life's challenges (Cassidy, 2015; Eley & Stallman, 2014; Howe, Smajdor, & Stockl, 2012; McAllister & McKinnon, 2009; Tempiski, Martins, & Paro, 2012; Thomas, & Revell, 2016). The fact that resiliency can be taught increases the odds of improving life quality, well-being, and the functioning capacity of people who experienced childhood adversity.

Research has also addressed the importance of academic resiliency as an outcome of ACEs, which will be placed on the process of academic resiliency from the collective orientation. In this case collective orientation refers to how people perceive their goals, identity and values in terms of how they conform to their group or society at large. Overall, in the collective orientation everyone benefits, because no one is singled out. For example, the collective orientation here includes the levels of family, school, and community to help foster overall resiliency.

To support this idea, studies have identified and promoted protective factors which serve as buffers against the adverse effects caused by an at-risk or high stress event or situation and which eventually produce students who are academically successful (Alva, 1991; Arellano & Padilla, 1996; McMillan & Reed, 1994). This means that protective factors can be categorized into personal level factors and environmental level factors, which ultimately influence the

development of academic achievement. For example, common factors associated with resilience are self-efficacy, self-regulation, and a wide range of attributes (Cassidy, 2016). Other protective factors that have been suggested to further explore are engagement and participation in extracurricular activities, educational aspirations, academic self-concept, and supportive or caring adults (Tudor & Spray, 2017). What matters here, is that there is a mutual collaboration within all levels to foster academic resiliency as an outcome.

Resilience as a Process and Outcome Model

Resilience research has three common factors, which are adversity, a mediator, and outcome. In Figure 2.1, it gives a visual of Adrian Van Breda's Resilience as a Process and Outcome Model, where it contains three common factors in the resilience research (Breda, 2018). As explained before adversity is a risk factor that leads individuals to be more likely to have negative outcome. Michael Ungar's (2011) and Adrian Van Breda (2018) described the mediating process as resilience as a process. Also, they both described the better-than-expected outcomes as "resilience as an outcome". To help distinguish between process and outcome, Ungar (2004) recommended that different terms be used for them, and suggested that 'resilience' is best used as a process definition, and that 'resilient' be reserved for an outcome definition (Breda 2018, p 4).

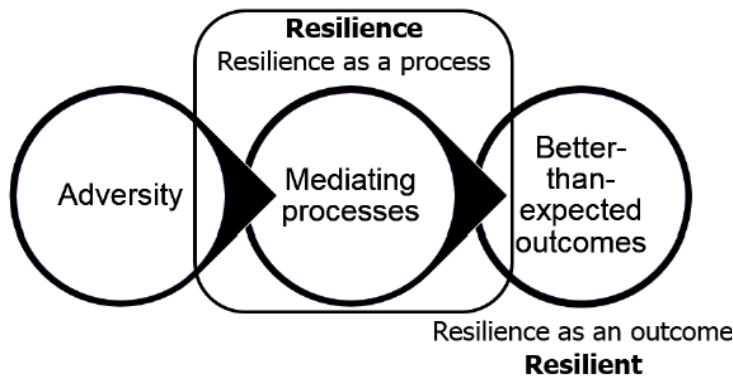


Figure 2.1. Adrian Van Breda's Resilience as a Process and Outcome Model

To further elaborate on the process to outcome phenomena of resiliency, Adrian Van Breda's Resilience as a Process and Outcome Model was adapted to fit the current study. In Figure 2.2, the adapted model of Resilience as a Process and Outcome shows in the adversity factor, the risk factor of Adverse Childhood Experience (ACE). In the mediator factor, it included the protective factors of participation in out-of-school youth activities (OSYA), Non-Parental Relationships (NPR), Non-Parental Relationship formed in an Out-of-School Youth Activity (NPR-OSYA), and Future Orientation (FO). In the outcome factor, it included Academic Resiliency (AR).

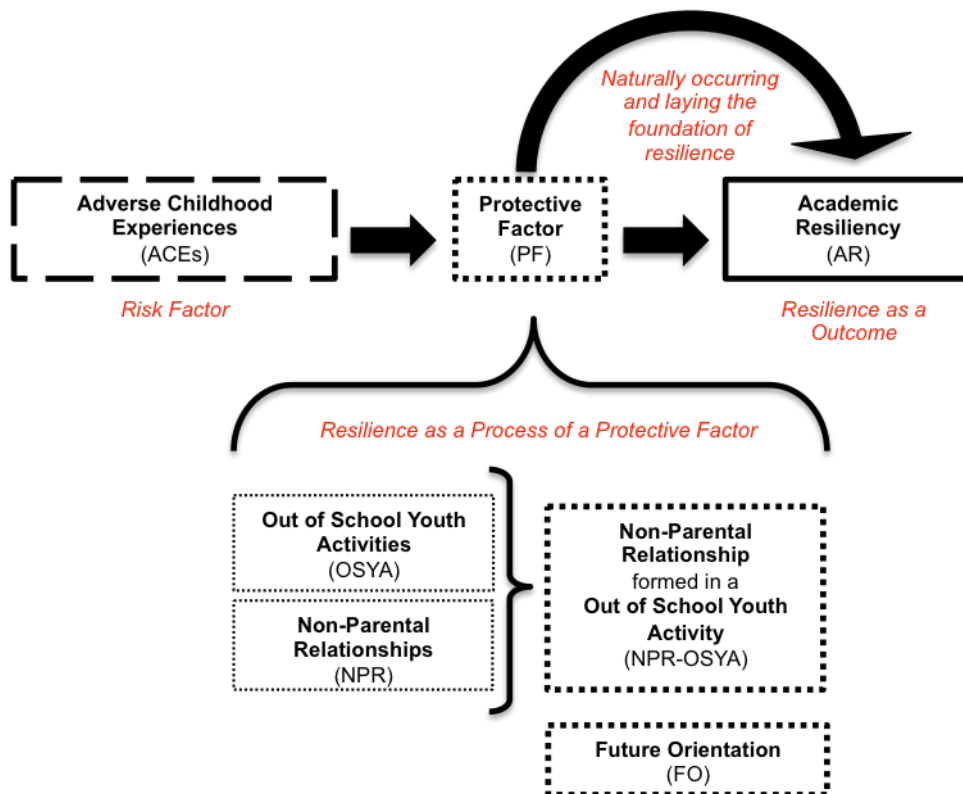


Figure 2.2. Adapted Model of Resilience as a Process and Outcome

Adversity and Outcome. Bonanno and Diminich (2013) have noted that it is important to recognize patterns of adversity, because they can have different resilience pathways. They explained that these resilience pathways are related to how frequently and prevalently adversity happens in individuals' communities. For example, low-income neighborhoods may have more prevalence of crime and violence, which influences the residency pathway of individuals who live in these neighborhoods. Although the present study will not be exploring patterns of adversity, they will be discussed to understand resiliency as a process and outcome.

Chronic adversity happens over a period of time and has unwelcome negative outcomes that impact on an individual's life (Bonanno & Diminich, 2013; Breda, 2018). The process of resilience in chronic adversity involves managing adversity as it continues to happen in an individual's life. The two subcategories of chronic adversity are distal and proximal onset (Bonanno & Diminich, 2013; Breda, 2018). Chronic adversity-distal onset has no clear starting point within the adverse experience of the individual. It may include other negative outcomes such as a history of continually experiencing poverty or abuse/trauma, which continues into an individual adult life. On the other hand, chronic adversity-proximal onset has a starting point in the experience of an individual and continues over a period of time. Also, it may include other adversities that impact many different areas of an individual's life, such as war or a natural disaster.

Acute adversity has a specific starting point that is short in duration and has less impact on the whole of life of an individual (Bonanno & Diminich, 2013; Breda, 2018). More specifically, the impact will be more within a generally well-functioning life context due to a significant event such as an accident or assault (Bonanno & Diminich, 2013; Breda, 2018). The process of resilience in acute adversity involves recovering from the adversity after it happened. Like chronic adversity-proximal onset, acute adversity allows individuals to have the "bounce back" resiliency effect; where as chronic adversity-distal onset does not. This is because chronic adversity-distal onset does not have previous adversity (before) or had not created a pattern of constantly coping with chronic and toxic stressor

(Cook, Spinazzola, Ford, Lanktree, Blaustein, Cloitre, DeRosa, Hubbard, Kagan, Liautaud, & Mallah, 2005; Breda, 2018). Having that pre-history of adversity allows students to be more likely to endure negative outcomes and be able to easily “bounce back” from the new adverse experience.

Resilience as Process of a Protective Factor. As suggested the term ‘resilience’ will be used as a process (Breda 2018, p 4). To further expand on the idea of resilience as a process, Figure 2.2 adopted the protective factors in the model as the mediating processes. The mediating processes of resilience were not guided to accommodate adversity, but to challenge the adversity through the protective factors. For example, an individual with ACEs can use the protective factors OSYA, NPR, NPR-OSYA, and/or FO as buffers of negative outcomes of adversity. In other words, resilience as a process of protective factors means that the protective factors help create the process of resilience (Banyard, Hamby, & Grych, 2017; Cicchetti, Rogosch, Lynch, & Holt, 1993; Egeland, Carlson, & Sroufe, 1993; Hsieh, Zimmerman, Bauermeister, Caldwell, Xue, Wang, & Hou, 2016).

Process to Outcome. Karen Kleiman (2016), a Licensed Clinical Social Worker, writes in a Psychology Today article about the “7 Steps Toward Resiliency.” These resiliency steps include: 1) accept the current state, 2) self care and relationships, 3) recognize own strengths, 4) set limits, 5) find one’s sense of humor, 6) forgive self and others, and 7) find meaning. Also, as cited in the American Academy of Pediatrics (2019), Ken Ginsburg, a pediatrician and

adolescent specialist introduced the 7 C's Model of Resilience, which include: competence, confidence, connection, character, contribution, coping, and control (Ginsburg & Jablow, 2014). Although Kleinman and Ginsburg, do not identify the stages of the resilience process, they do support the idea that resiliency is a process of stages or milestones. However, what these stages are and how the process happens is an area that needs further understanding.

Based on a wide range of professionals' who work in the area to foster resiliency, the resilience process has to be designed efficiently to create a strong foundation of resilience (Ginsburg & Jablow, 2014; Kleiman, 2016; Oppong, 2018; Ritholtz, 2016). But it does not necessarily mean that it will happen overnight. It also does not mean that individuals do not have the capacity to develop resilience in their lifetime. This process is continuously changing as individuals learn to challenge adversity. For example, some individuals will take longer to learn the process by trial and error, so they will probably have to do a lot more scaffolding to create an efficient process of resilience. The fact those individuals who are taking longer to create an efficient process of resilience, may just mean they are facing other barriers such as not having the cognitive ability or social skills to process the understanding of an unpleasant experience. Once an individual is familiar with the stages of resilience, it will be easier to apply what she or he previously learned to challenge other adverse experience in her or his life. It is also important to note that not every one will respond to adversity the same way, which means that one individual's resilience process will not work for

another person. More specifically the process has to occur naturally so it leads individuals to have ultimate and healthy results.

Figure 2.2, explains the transition of “resilience to resilient, “which will help explain the transition of the mediating processes to a “better than expected outcome.” The natural flow of the transition requires protective factors to not be forced upon individuals. Allowing the individual voluntarily to be fully engaged in the learning process of resilience by using protective factors creates a natural flow that leads to positive outcomes. This natural flow also helps lay a strong foundation of resilience. For example, a study that looked at outcomes of a leadership program that assigned mentors to youth did not find an effect in the relationships (Deutsch, Wiggins, Henneberger, & Lawrence, 2013). However, they found that youth participants in the leadership program still attended to the leadership program, because they formed significant relationships with another mentors (Deutsch, Wiggins, Henneberger, & Lawrence, 2013). This means that forcing non-parental relationships to serve as a protective factors will not be effective if they do not occur naturally. These protective factors have to occur naturally, so resiliency can act as the process of the protective factor.

The best way to summarize this section is by the following quote: “The key to becoming more process focused is to understand that good outcomes follow good processes. Without understanding the underlying process, good outcomes could just as likely be due to blind luck as to skill” (Ritholtz, 2016).

Resilience as a Outcome. As suggested the term of 'resilient' will be used as an outcome (Breda 2018, p 4). Specific protective factors in a process lead to either positive or negative outcomes. Research has been able to identify protective factors that can predict outcomes. However, when trying to understand a complex phenomenon, outcomes are not so predictable. To further expand on the idea of resilience as an outcome, Figure 2.2 adopted the positive outcome of academic resiliency. Resilience as an outcome means that the outcome was better-than- expected. Suggesting that there are protective factors in an individual's socio-ecological levels that interact or contribute in a positive way to their development of resiliency.

Protective Factors Shaping Resiliency from a Multilevel Systems

There are multiple levels of interactions that influence the shaping of resiliency (Masten, 2011). Researchers acknowledge that resilience might develop from factors external to the student. Some factors that are associated in the development of resilience are the attributes of the person, aspects of their families, and characteristics of their wider social environments (Masten, 2011; Werner & Smith, 2001). These protective factors can be divided into Ungar's multilevel systems. For example, individual-level protective factors are personal characteristics, traits, and resources, such as personality traits, intellect, self-efficacy, coping, and future orientation. Family-level protective factors include resources and supportive relationships, such as family coherence, stable caregiving, and parental relationships. Community level-protective factors include

peer relationships, nonfamily member relationships and nonfamily member social support. Similarly, Afifi and MacMillan (2011) and Zolkoski and Bullock, (2012) reviewed several studies that explored protective factors and were able to place them in the SEM-R. Environmental risk factors such as childhood adverse experiences can predict negative outcomes. Protective factors in the individual-level include future orientation, internal locus of control, and optimism about the future, academic skills, self-efficacy, and social skills that facilitate social connections. At the family-level, it includes primary support for children, parent-child attachment, warmth, family cohesion, care within a family, and close adult relationships. Protective factors in the community or social environment level include supportive peer relationships, non-family relationships, opportunities for success, participation in extracurricular activities, and academic achievement. In conclusion, this suggests that resilience can act as a protective factor, and resiliency can be an outcome that is influenced by protective factors within multiple levels.

Relationships Between Protective Factors

The following section will review literature related to the research question one. More specifically, hypothesis one: Non-parental relationships formed in an Out-of-School youth activity (NPR-OSYA) will positively relate with future orientation (FO). Therefore, this section will explore relationships among all the protective factors. Most, importantly academic outcomes will be reviews to

understand how the relationship between the protective factors fosters academic resiliency.

Non-Parental Relationship and Out-of-School Youth Activities

Resilient youth have attributes of social competence and communication skills, which help them establish positive relationships with adults and help them create a sense of worthiness and belonging with their family, school, and community (Benard, 1995; Lansford, Malone, Stevens, Dodge, Bates, & Pettit, 2006). Other research has found that youth who are involved in extracurricular activities gain social capital because they increase membership in important social networks (Eccles & Barber, 1999).

McGloin and Widom (2001) found that two-thirds of all sample groups reported being socially active in at least one activity daily or several times per week. Yet, all groups in the study did not differ significantly in the domain of social activity. The study did not, however, address these unique findings. For example, McGloin and Widom (2001) looked at interaction with family members, close friends, and neighbors but not non-parental adults in out-of-school youth organizations. It could be possible that the protective factor of participation in social activity would have a different outcome, based on who were the people involved in those activities.

Deutsch and Jones (2008) found that youth's interactions with adult authority were influenced by the macro systems, such as after-school programs. Youth-staff relationships were formed when youth perceived the relationships

emerging from respect. Most importantly, this was true for racial minority youth. By staff opening that window of communication, it allowed youth to have a greater sense of freedom, which in turn allowed them to talk about “the same struggles” they shared. Similarly the Young Women Leaders Program (YWLP) provided mentoring services to girls who were at-risk for making poor academic, socio-emotional or behavioral choices but who had leadership potential (Deutsch, Wiggins, Henneberger, & Lawrence, 2013). Even if the girls expressed less satisfaction with their one-on-one mentoring relationships, they still reported higher levels of social processes related to connectedness with peers and other mentors. Youth participation in the one-on-one mentoring reported fewer maladaptive behaviors, increased sense of belonging, and positive psychosocial and academic outcomes (Deutsch, Wiggins, Henneberger, & Lawrence, 2013). Overall, mentees in YWLP expressed high satisfaction with their mentoring experience. The quality of the trusting interactions and relationship building with non-parental adults may make it easy for youth to reach out for help and be more open for advice, feedback and recommendations from adults in authority.

Studies have found that at the community level, participation in extracurricular activities was one of the most important protective factors in facilitating resilience in educational attainments (Eccles, Barber, Stone, & Hunt, 2003; Khambati, Mahedy, Heron, & Emond, 2018). Extracurricular activities provide at-risk youth with the opportunities to set goals and connect to non-familiar adults (Eccles, Barber, Stone, & Hunt, 2003; Khambati, Mahedy, Heron,

& Emond, 2018). Children who have experienced adversity can greatly benefit from positive environments that promote resiliency with the assistance of a non-parental relationship. These interactions in positive environments can increase the feeling of acceptance and belonging, which helps at-risk children feel that others in their surrounding environment accept and appreciate them (Booker, 2007). In fact, resilient youth view hardships as learning experiences and make use of educational opportunities and resources (extracurricular activities) that help them pursue their education (Werner & Smith, 2001). Resilient youth are more likely to participate in extracurricular activities, where they can seek positive role models and build positive relationships with non-parental adults.

Non-Parental Relationship Formed in an Out-of-School Youth Activities and Future Orientation

Beal and Crockett's (2010) study found that adolescent FO cognition and adults' educational attainment was partially mediated by adolescents' extracurricular activities. This finding suggested that the adolescents' participation in extracurricular activities played an important role in the relationships between adolescent FO cognition and adult's educational attainment. In addition, they found that occupational aspirations, occupational expectations, and educational expectations predicted increases in academic activities (Beal & Crockett, 2010). Occupational aspirations predicted change in academic activities but not the reverse. This means that academic activities were not able to predict change in occupational aspirations, suggesting that activities do not highly influence change in people's occupational aspirations. Occupational

expectations and educational expectations predicted an increase of extracurricular activities. In addition, it was only able to predict bidirectional effects between both expectations and extracurricular activities. The results suggested that occupational and educational expectations were sensitive to feedback from adolescent experiences (for example, after school programs, extracurricular activities) but occupational aspirations were not. This means that out-of-school youth activities can change youths' negative FOs to positive FOs. For example, one study found that participation in youth programs that brought high school students into contact with their college level peers helped at-risk students to envision their academic and career future (Carter, 2012).

Research has found that these mentorship relationships have an important role in youth's growth of a FO. For example, youth had positive thoughts regarding postsecondary education and vocational training after participation in a mentorship program (Bruster & Coccoma, 2013). These relationships may be the key to help lay the foundation for resiliency among individuals who do not have access to warm and supportive parents or guardians or family members.

In another study on resilience, Edmond, Auslander, Elze, and Bowland (2006) explored education, FO, family support, and peer influence as protective factors among sexually-abused adolescents. Two groups were generated from participants' responses, currently symptomatic and resilient trajectories. The majority of the participants reported experiencing multiple forms of childhood

abuse aside from the sexual abuse. They found that adolescents with resilient trajectories had higher scores on the FO, which indicated that they were more optimistic about their future. Although these girls shared that they changed schools or school districts 4.9 times, which dramatically increased school instability, they still were on resilient trajectories, because they were sure of their educational plans for both high school and college. To further support this, they found these adolescents were less likely to plan to dropout-of-school without pursuing a GED, and they planned going to college.

Outcome of Protective Factors based on the Comparison of the Adverse Childhood Experiences Groups

The following section will address the research question two. More specifically, hypothesis two: Non-parental relationship formed in an Out-of-School youth activity (NPR-OSYA) will differ between the groups No ACEs and Yes ACEs. In addition, hypothesis three will be reviewed: Future orientation (FO) will differ between the No ACEs and Yes ACEs.

There is no known study that has explored the outcomes of NPR-OSYA and FO between the groups, No ACEs and Yes ACEs. In fact, no study has done any comparison in ACE history and explored the protective factors of non-parental relationship, participation in out of school youth activities, and FO as predictors for AR. In addition, there was no study that explored the mediation effect of the protective factors among the relationship of ACEs and AR. Therefore, further research is needed to explore the role of these protective

factors. This gap in the literature will be closed by the proposed study, with the goal of obtaining greater understanding of the role of these protective factors.

The Role of Protective Factors on the Relationship Between Adverse Childhood Experiences and Academic Resiliency

The following section will review literature related to the research question three. Specifically, hypothesis four: Non-parental relationship formed in an Out-of-School youth activity (NPR-OSYA) and future orientation (FO) will predict higher academic (AR) resiliency among the Yes ACEs group. Support will be provided to understanding protective factors that foster academic resiliency among ACEs. Due to limited research in the protective factors, this section will connect similar variables to the protective variables.

A new growth of literature has focused on enhancing the understanding of resiliency among people with a history of childhood adversity through the examination of protective factors that are linked to resilience (Afifi & MacMillan, 2011; Khambati, Mahedy, Heron, & Emond, 2018; Schultz, Tharp-Taylor, Haviland, & Jaycox, 2009; Walsh, Dawson, & Mattingly, 2010; Zolkoski & Bullock, 2012). Former research has found that resilient individuals have been associated with related factors of non-parental relationship, participation in out-of-school youth activities, and youth's future orientation (Benard, 1995; Khambati, Mahedy, Heron & Emond, 2018; Deutsch, Wiggins, Henneberger, & Lawrence, 2013; Lansford, Malone, Stevens, Dodge, Bates, & Pettit, 2006; Peck,

Roeser, Zarrett, & Eccles, 2008; Taussig, Culhane, & Hettleman, 2007; Seginer, 2008; Waters, 2017).

Limited research has looked at all the protective factors of non-parental relationships formed in out-of-school youth activities, and youth's FO that supports AR among people who experience ACEs. However, some links have been found in other factors related to the protective factors of interest. As mentioned previously, internal locus of control is an important factor of the development of FO (Seginer, 2008), and social and communication skills help establish positive relationships with adults (Benard, 1995; Lansford, Malone, Stevens, Dodge, Bates, & Pettit, 2006). A study found that internal locus of control, extracurricular activities, and communication and social skills were significant protective factors that could serve as buffers to prevent failure in academic achievement (Khambati, Mahedy, Heron & Emond, 2018). For instance, a study used a mentoring prevention program to promote adaptive skills that helped them navigate their environment in the domains of psychological (future orientation), social (social support), and behavioral (participation in extracurricular activities) to foster resilience (Taussig, Culhane, & Hettleman, 2007). They found that mentorship programs for foster youth created empowering relationships that encouraged attitudes that promoted positive FO. Also mentors formed a positive model for future relationships, and encouraged participation in extracurricular activities that promoted pro-social relationships and development.

Summary of Gaps and Limitation in the Literature Review

Although there is some research regarding the relationship between the protective factors, there is no existing research that studied the impact of out-of-school youth activities, non-parental relationships, and FO on AR among people who experienced childhood adversity. Despite the inconsistency of key terms used in the literature, there was some support that protective factors are related to academic outcomes. A review of the literature suggests that the current study is unique in that not many studies have explored the role of protective factors (non-parental relationships and participation in out-of-school youth activities, and FO) in childhood adversity and AR. Therefore, more research is necessary to understand the role of these protective factors among individuals who experience childhood adversity. Furthermore, no studies were found to explore protective factors' role as predictors for AR and mediators between the relationship of ACEs and AR. Most importantly, no study has been done using all the protective factors of interest among a sample of college students to explore AR among individuals who experience childhood adversity. Since, college students are already in college it shows that they have AR for graduating high school. Also, there is no known study that has explored the outcomes of NPR-OSYA and FO between the groups, No ACEs and Yes ACEs. Without a doubt, the proposed study will contribute greatly by providing information that will help close the gaps in the existing literature. There is no study that explores the protective factors of non-parental relationships, participation in out-of-school youth activities, and FO using

the SEM-R to better understand their role on AR among individuals who have experienced childhood adversity. In order to better understand how to promote resiliency following ACEs, it is necessary to study protective factors that may promote AR.

Conclusion

In order to better understand the development of academic resiliency (AR) following adverse childhood experiences (ACEs), it is necessary to study the role of protective factors. The proposed study will explore the role of protective factors of non-parental relationships formed in out-of-school youth activities (NPR-OSYA), and future orientation (FO) by using the SEM-R to better understand their relationship with AR among individuals with ACE.

Summary

There is no known study that examines the role of non-parental relationship formed in an out-of-school youth activity (NPR-OSYA) and future orientation (FO) as protective factors of negative academic outcomes among individuals who experienced ACEs. Therefore, the study investigated the influence of protective factors on the outcome of academic resiliency among individuals who had experienced childhood adversity. The SEM-R was used to interpret the results for the tested hypotheses with the goal to better understand their role on academic resiliency among individuals who had experienced childhood adversity.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

The goal of chapter three is to introduce the research design, variables of interest, research questions and hypotheses. Next the material and instruments will be described following sampling and data collection strategies used. The data analysis plan will discuss the steps taken prior to testing the hypotheses. Confidentiality of participants and the data was addressed followed by participants' risk and benefits to participating in the study. The chapter concludes with a discussion of how the researcher sought to minimize bias.

Research Design

A quantitative, quasi-experimental design explored the research questions using only a single subject group, and a one-time post-test paper/web-based survey (Creswell & Creswell, 2014; Krathwohl, 2009). The framework introduced in this quantitative study, interconnected postpositivist worldview with the appropriate research design and methods.

Variables of Interest

Table 3.1, shows the description of the variables that will be used in the study to explore the research questions.

Table 3.1. Descriptive of the Variables of Interest

Name of Variable	Description of Variable
Adverse Childhood Experience (ACE)	Risk Factor: Group 1= No ACEs (between 0 to 1 ACE), Group 2= Yes ACEs (2 or more ACEs)
Non-Parental Relationships (NPR)	Screeners survey item: No NPR= 0 NPR reported, Yes NPR= 1 or more NPR reported (the higher the NPR score the more NPRs)
Participation in Out-of-School Youth Activities (OSYA)	Screeners survey item: No OSYA= 0 OSYA reported, Yes OSYA= 1 or more OSYA reported (the higher the OSYA score the more OSYAs)
Non-Parental Relationship formed in an Out-of-School Youth Activity (NPR-OSYA)	Protective Factor: The higher the NPR-OSYA score the stronger the NPR
Future Orientation (FO)	Protective Factor: The higher the FOQ- Total global scale score the higher overall FO
Academic Resiliency (AR)	Outcome: The higher the ARS score the higher AR

Research Questions and Hypotheses

The following research questions were linked to the appropriate hypotheses that answered the research questions. Figure 3.1, represents one way to visualize the hypotheses.

Research Question 1

Do protective factors have a relationship between them?

Hypothesis I: Non-parental relationship formed in an Out-of-School youth activity will positively relate with future orientation.

Research Question 2

Do outcomes of protective factors differ between the groups No ACE and Yes ACEs?

Hypothesis II: Non-parental relationship formed in an Out-of-School youth activity will differ between the groups No ACEs and Yes ACEs.

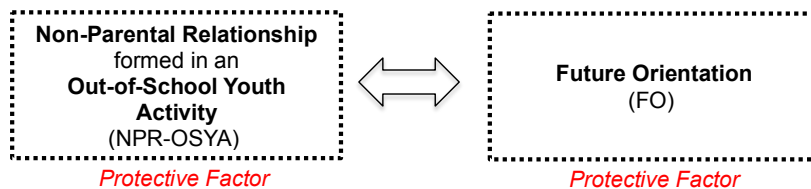
Hypothesis III: Future orientation will differ between the No ACEs and Yes ACEs.

Research Question 3

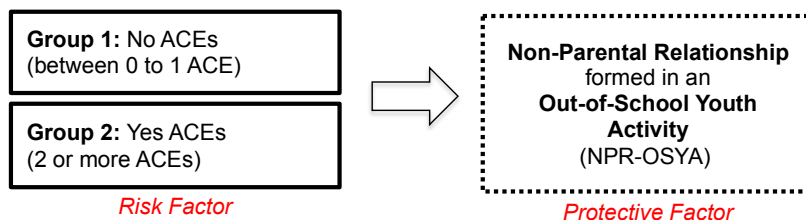
Do all protective factors have a greater cumulative effect on the relationship between Yes ACEs and academic resiliency?

Hypothesis IV: Non-parental relationship formed in an Out-of-School youth activity and future orientation will predict higher academic resiliency among the Yes ACEs group.

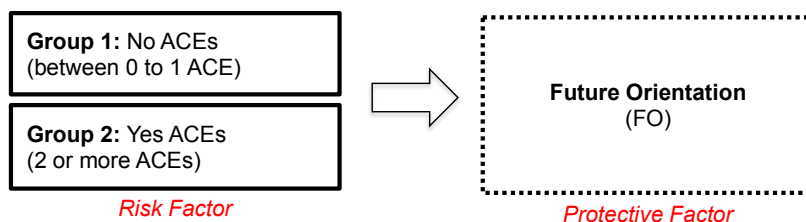
Hypothesis I



Hypothesis II



Hypothesis III



Hypothesis IV

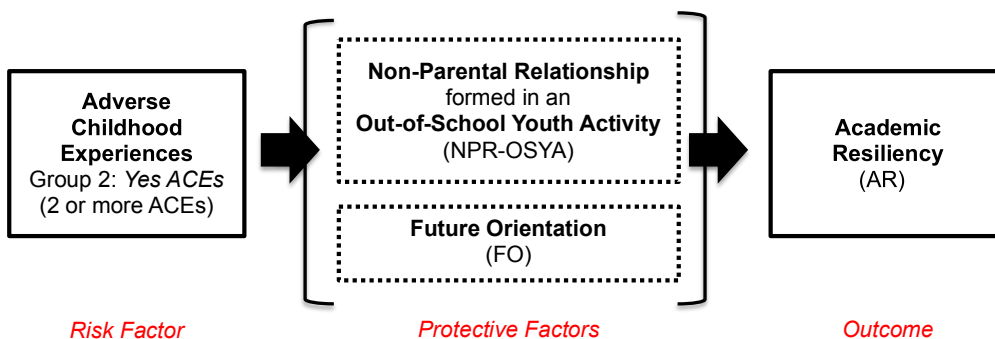


Figure 3.1. Visualization of the Hypotheses

Sampling Strategy

Sample Selection

This study used a purposive sample of college students that required participants with specific characteristics. Participants were college students from various undergraduate and graduate classes from a four-year public university. All participants had to be at least eighteen years of age and be enrolled in college. Other significant criteria to participate in the study include unique experiences before the age of eighteen years such as experiencing childhood adversity, and having formed a non-parental relationship during the participation in an outside-of-school youth activity. There were no other restrictions on who was allowed to participate.

Recruitment

College students were self-recruited by going into a web portal called SONA. The "Research Management and Scheduling Systems" (SONA) provides researchers a place to post their studies for which they need participants. A Psychology Department faculty member from the university was added into the Institutional Review Board (IRB) application in order to be able to recruit participants via SONA and to be able to offer extra credit lab units. Interested individuals independently signed up for a date and timeslot under the SONA systems. Once the individuals signed up to the study, SONA provided further information regarding the location they needed to go to complete the surveys.

The researchers asked participants for help to increase a snowball effect to obtain more participants who met the criteria to participate in the study.

Participants were told that, if they knew anyone who may be a good candidate that meet the participants' criteria for the study, to please direct them to SONA to sign up. They were asked to please not reveal full details about the study to anyone who may be a potential participant.

Research Setting

In the academic year of 2017-2018, the Southern California four-year public university from the California State University System consisted of 81% first-generation going to college students and 62% of the undergraduates were low-income (The California State University [CSU], n.d.). Retention rate of first-time freshmen within the first to second year was 85%, 14% graduated within four years and 54% graduated within six years. Descriptive of the four-year public university campuses are presented in Table 3.2 (The California State University [CSU], n.d.).

Table 3.2. Descriptive of the Four-Year Public University Campuses

Name of Descriptive	Campus	
	Main	Branch
Population		
City (N of people)	216,995	32,000
University (N of students)	20,461	1,400
Students Average Age (Years)		
Undergraduate	22	25
Post-baccalaureate/Graduate	32	36
Students Gender (%)		
Male	39%	33%
Female	61%	67%
Students Ethnicity (%)		
Hispanic/Latino	61%	65%
White	13%	16%
Black	5%	2%
Asian	5%	3%
Non-resident foreign	7%	
Unknown/Other	9%	14%
Student Classification (%)		
Undergraduate	90%	94%
Post-baccalaureate	2%	
Masters	8%	6%
Doctoral	<1%	

Participants were self-recruited via SONA to complete the surveys, which took place in a private laboratory in either campuses of the university. The lab space was set up to accommodate one to six participants to complete either the paper or web-based surveys. Qualtrics is a web-based tool used to help conduct survey research. Participants were able to complete the surveys online by using a laptop computer in the research lab. A group setting to collect data was chosen, because it would be less intimidating than having one individual participant and two researchers in the lab. One researcher was a male and the other a female. Having both genders available to ask questions helped

participants feel comfortable completing the surveys and freely asked questions regarding the survey items.

Data Collection Strategy

Researchers

Prior to the study, the researchers completed an on-line CITI Programs courses required by the university's Institutional Review Board (IRB) to address research ethics. Both researchers and the faculty sponsor had completed the following CITI Program courses: "Social and Behavioral Responsible Conduct of Research" and "Human Research: Social Behavioral Research Investigators and Key Personnel." In addition, both researchers received instruction in ethical considerations in conducting human research. Approval of the university IRB was given to collect data for the study (see Appendix A). The researchers followed the Code of Ethics and Standards set forth by the American Psychological Association (APA, 2009) and the American Educational Research Association (AERA, 2011).

Data Collection Procedures

The researchers had instructions to maintain consistency in data collection procedure (see Appendix B). SONA provided information to participants of the location where the study would be administered. As participants came into the lab space, the principal investigator entered in SONA their 3.5 extra credit/lab units. Once most participants had arrived to the lab space, the principal investigator read the following instruction:

This study is designed to measure a number of protective factors that may facilitate academic resiliency. We want to make sure that you understand two concepts. Participation in out-of-school youth activities refers to any experience outside of school hours. These experiences also include paid work and voluntary work. Your significant non-parental adult will be referred to as my staff. A significant non-parental adult can be a coach, teacher, youth specialist, staff, mentors, boss, or any adult with authority. When you are completing the survey that addresses these two concepts, think about your experiences with a significant non-parental adult from your participation in one activity or program. If the adult was your parent, choose another adult from another activity. In a moment, I will ask you to read the informed consent form, but I would like to highlight a few points. Some of the questions are very personal. Your answers will be anonymous. No one on the research team will share the nature of any specific person's answers. In addition, your participation is voluntary. You are free to stop participating at any time without penalty. I will now ask you to read the consent form, follow the instructions if you agree to participate and begin the surveys. At least one of us will be available if you have any questions.

Then participants were given either a paper survey packet or a computer to complete the web-base surveys in Qualtrics. The paper/web-based surveys consisted of an informed consent, demographic sheet, and several self-report

surveys. One research assistant remained near the door until 15 minutes had elapsed into the hour. The research assistant read the instruction to participants who arrived late outside the lab space and guided them to an available seat. While the participants completed the surveys in a setting that permits up to six participants to complete the study at any one time, the researchers stayed in the room to supervise participants and answer any questions regarding the survey items. For participants who completed the paper survey packet, a research team member immediately placed the completed packets into the “Vaultz Locking File Case Box.” It took approximately 35 minutes to complete the surveys.

As participants finished, the principal investigator took the participant into a “private space” outside the room and handed them a information statement. During the verbal debriefing process, all participants were asked if they would like to discuss their experiences and feelings about the study. In closing, all participants were given a resource packet with contact information of sexual assault, domestic violence, mental health and other support agencies that provide services to people who had experienced ACEs. In the case of an emergency, the principal investigator used previous experience dealing with stressed participants. In addition, a more experienced researcher who is a expert in narrative counseling provided additional feedback to ensure that participants would be safe to continue their day. Providing stressed participants with the opportunity to talk through their feelings and thoughts of the study helped them process their unexpected crises.

Materials and Instruments

The following materials and instruments were used to conduct the study. Permission to use the four instruments was granted by the author(s) or organization. The following documents were attached in the paper/web-base surveys packet: informed consent, demographics survey, Adverse Childhood Experience Questionnaire, Non-Parental Relationship formed in a Out-of-School Youth Activity Survey, Future Orientation Questionnaire, and Academic Resilience Scale. The information statement and resource sheet were given to participants after they completed the surveys.

Informed Consent

The informed consent statement was given to participants before completing the paper/web-based survey. It included information about the duration of the study, confidentiality and anonymity of their identity, and a reminder that they had the right to withdraw from participating. Participants were asked to read the informed consent, indicate agreement with a signature and date (see Appendix C).

Demographics Survey

The demographic survey collected ten descriptive questions such as age, gender, marital status, ethnicity, educational attainment/status, and income level (see Appendix D).

Adverse Childhood Experiences Questionnaire

The Adverse Childhood Experiences Questionnaire (ACEQ) is a self-report measure to assess adverse childhood experiences (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, & Marks, 1998). It is a measure intended to screen ten types of childhood adversity such as direct abuse (emotional, physical, sexual, emotional neglect, physical neglect) and indirect trauma related household members (domestic violence, mental illness, substance abuse, incarceration, parental separation/divorce). There were a total of ten survey items in the questionnaire. An example of an item starting with the statements “While you were growing up, that is, in your first 18 years of life (or) Prior to your 18th birthday” and followed with a questions such as “Did a parent or other adult in the household often or very often...Swear at you, insult you, put you down, or humiliate you? Or Act in a way that made you afraid that you might be physically hurt?” Each item is measured in a dichotomous type scale, indicating no “0= No ACE” or yes “1= occurrence of a type of ACE” questions. A score can range from 0 to 10 (no experience of adversity to several experiences to different types of ACEs). The higher the ACE scores, the higher the occurrence of different type of adverse experiences an individual has experience before the age of 18 years. The original questionnaire is a reliable and valid, with an adequate internal consistency of Cronbach’s alpha .88 (Murphy, Steele, Dube, Bate, Bonuck, Meissner, Goldman, & Steele, 2014).

A weakness of the questionnaire is that it does not measure toxic stress or is culture sensitive. For example, a study found that minorities perceive physical abuse and physical punishment differently, when compared to white individuals (Thombs, Bennett, Ziegelstein, Bernstein, Scher, & Forde, 2007). This means that when studies explore ACE, it needs to account for culture factors. Strength of this measure is that it can be used as a quick screener test to identify individual who had experienced some level of ACEs. Therefore, the ACE questionnaire was be used as a screener test to measure the occurrence of adverse experiences and identity groups “No ACE” and “Yes ACEs” (see Appendix D).

Non-Parent Relationship Formed in an Out-of-School Youth Activity Questionnaire

The Non-Parent Relationship formed in an Out-of-School Youth Activity (NPR-OSYA) survey originated from the Comprehensive Assessment of School Environments (CASE-1987; Lunenburg, 2011) and was modified by Caballero (2010). For the purpose of the study, the survey was further modified by changing terms such as teacher to “my staff” to refer significant relationships that were developed during the participation in out-of-school or other weekend activities and/or programs. In addition, eight items from the original culturally-relevant pedagogy construct were removed, because the study was not designed to measure the quality of the pedagogy taught in OSYA. Six survey items were added as screener items intended to assess the history and occurrence of meaningful activities (OSYA) and relationships (NPR). The NPR-OSYA is a self-

report measure to explore staff-student relationships, staff expectancy, and culturally relevant pedagogy on student academic achievement. The measure looked at the students' perception of their non-parental staff and how that perception of the staff had a role in the students' academic success or failure. The NPR-OSYA was modified to prompt responses from the participants that openly addressed the quality of the interpersonal and professional relationships between the staff and student. A total of 52 survey items consisted of the global NPR-OSYA modified measure.

Participants were asked to answer the survey items based on experiences prior to the age of 18 years. Participants were given definitions and examples of the following concepts. Participants referred to "Significant Non-Parental Adult" to "My Staff." A significant non-parental adult could be a coach, teacher, youth specialist, staff, mentors, boss, or any adult with authority. "Participation in out-of-school youth activities" referred to any experience outside of school hours. These experiences also included paid work and voluntary work. In addition, participants were asked to complete the survey items addressing these two concepts by thinking about their experiences with a significant non-parental adult from their participation in one activity or program. There were a total of three constructs, staff-student relationship (20 items), staff expectancy and disposition (20 items), and culturally-relevant pedagogy (12 items). Examples of some items are: "My staff made positive comments about my peers' abilities to learn" and "My staff created a place where everyone feels safe". Participants were asked to respond

to the questions using a four-point Likert scale (1 = strongly disagree to 4 = strongly agree). A global NPR-OSYA score was calculated by summing the responses, with a theoretical range of scores of 52-208. The higher global scores reflected more positive staff-student relationships/outcomes. Due to only changing terms teacher and classroom, it can be said that it is a reliable and valid questionnaire (Caballero, 2010). Cronbach's α of the global original questionnaire by Caballero (2010) was 0.81.

Overall, the questionnaire has several strengths, which account for staff-student relationship and staff expectancy, which are predictors of student academic achievement. In addition, the survey accounted for learning environments such the classroom or space where the meaningful activity took place. One weakness is that the questionnaire did not measure for the quality of the non-parental relationship formed in an Out-of-School youth activity. For those reasons, the instrument was used to measure the variable of interest (see Appendix D).

Future Orientation Questionnaire

For the purpose of the study, repetitive items were removed from the original questionnaire, new items were created, and terms were modified to be inclusive of all populations. The Future Orientation Questionnaire (FOQ) is a self-report measure for the extent a person thinks about their future, sets goals, plans, explores options and makes commitments that guide the person's behavior and developmental course (Seginer, 2009). There are a total of three

factors, each of which focused on a particular prospective domain such as higher education (35 items), work and career (35 items), and family and marriage (32 items). Each factor measures the three components of future orientation: behavior, motivation and cognition.

Participants were asked to complete the questions relating their thoughts about their future orientation in higher education, work and career, or family and marriage domain. In addition, participants were asked to respond in a way that corresponded exactly to their personal beliefs. Examples of items were “How often do you think about or plan your future, education, family and career?” and “How determined are you to fulfill your plans about future education, career, and marriage?” Participants were asked to respond to the questions using a five-point Likert scale (1 = low to 5 = high).

There were a total of 102 questions for the global scale. Questionnaire items represented a sample of relevant positively and negatively phrased responses. Scoring of negatively phrased items were reversed so that a high FOQ score indicated higher future orientation. A global FOQ score was calculated by summing the responses, with a theoretical range of 102-510. The higher FOQ global scores reflected higher future orientation. Cronbach’s α of 0.90 indicated high internal consistency reliability for the original global scale. Indicating that it was a reliable and valid questionnaire.

Strength of the questionnaire is that Seginer (2009) developed the questionnaire to be free from culture, which could identify the adolescents’ future

orientation from different cultures. In addition, future orientation could identify prospective domain of higher education, work and career, and family and marriage. Having FOQ scores for each domain allowed identifying of how students prioritized these domains. A weakness of the questionnaire was that it could not measure how NPR formed in OSYA directly influenced the development of students FO in each domain (see Appendix D).

Academic Resilience Scale

Academic Resilience Scale (ARS) measured the response of students' academic adversity in the academic or educational contexts (Cassidy, 2016). The ARS is a self-report, process-based measure of academic resilience (Cassidy, 2016). Academic resilience is measured based on student's specific adaptive cognitive-affect and behavior responses to academic adversity. There were a total of three factors which were: 1) perseverance, 2) reflecting and adaption self-seeking, and 3) negative effect and emotional response. Interpretation of factors suggests that factor one represents positive or adaptive responses to adversity, factor two represents long-term future aspirations, and factor three represents negative or non-adaptive responses to adversity. There were a total of thirty questions for the global scale. The only modifications in the original questionnaire were changing the term mark to grade and reversing the Likert scale. Participants were asked to imagine themselves as a student in the following vignette, who was experiencing academic adversity:

You have received your grade for a recent assignment and it is a “fail.” The grades for two other recent assignments were also poorer than you would want. You are aiming to get as good a degree as you can because you have clear career goals in mind and don't want to disappoint your family. The feedback from the tutor for the assignment is quite critical, including reference to “lack of understanding” and “poor writing and expression,” but it also includes ways that the work could be improved. Similar comments were made by the tutors who marked your other two assignments. (Cassidy, 2016, p. 4)

Once participants had been exposed to the adversity case vignette, participants were asked to respond to the question using a five-point Likert scale (1 = very unlikely to 5 = very likely). Scale items represented a sample of relevant positively and negatively phrased behavioral and cognitive-affective responses. Scoring of negatively phrased items were reversed so that a high ARS score indicated greater academic resilience. A global ARS score was calculated by summing the responses, with a theoretical range of 30-150. The higher global scores reflected greater academic resilience. Cronbach's α of 0.90 indicated high internal consistency reliability for the global scale. Indicating that it was a reliable and valid questionnaire.

As cited by Cassidy (2016), mixed results had been found between the relationship of resilience and age, gender and experience (Allan, McKenna, & Dominey, 2014; Khalaf, 2014; Martin & Marsh, 2006; Martin & Marsh, 2006). This

suggests that when using ARS, factors of age and gender had to be accounted for. A strength of ARS is that it can serve as intervention tools to identify student who need additional help when they face academic adversity. School personal can take preventative steps in helping students develop and foster academic resilience. The ARS is being used because Cassidys' (2016) instrument includes self-sufficiency, self-regulation with a range of qualities and personal characteristics. Also, it includes factors of perseverance, and reflecting and adaptive help-seeking, which were commonly associated with resilience (see Appendix D).

Information Statement

No written debriefing statement was needed because participants were not deceived in the study. However, due to having sensitive survey items, upon completion of the entire paper/web-based survey, participants were verbally debriefed and given a written information statement (see Appendix E).

Resource Sheet

The resource sheet contained information of local services available for sexual assault, domestic violence, mental health and other support agencies that provided services to people who experience ACEs (see Appendix F).

Validity and Reliability

Due to using existing survey instrument, the principal investigator and research assistant did an internal pretest to review all the survey items that had terms changed. Survey items were reviewed using Ruel, Wagner, and Gillespie's

(2015) suggestions. After carefully reviewing each survey item, the survey packet could be read clearly and new terminology did not change the interpretation of the survey questions. In addition, the principal investigator removed all the repetitive items to avoid fatigue in prospective participants. The entire set of instruments were chosen for the study, because they defined the variables of interest as we did in this study and because the instruments contained constructs or subscales that were important to explore. All original surveys had a moderate to strong reliability, which reassures that the items were measuring what they supposed to measure. Modified surveys had to undergo reliability and validity measures to ensure the modified surveys met the standard requirements of good surveys.

Data Analysis Plan

Preparing the Data

All the data was coded in a numerical formed in Excel. A key of the numerical codes for each survey item was used during the coding procedure of the demographic sheet and each instrument. Also, the two-buddy coding and entering data system was used to reduce errors and maintain consistency in the numerical codes. Then the raw data was transferred to Statistical Package for the Social Sciences (SPSS; Version 23.0 for Mac).

Missing data was recoded to no response. New variables were computed to identify the ACEs groups, status of NPR and OSYA. For example, participants who identified two or more of the ACEs were placed in the group of Yes ACEs.

Participants were not randomly assigned to an ACE group, because they assigned themselves to a group based on how they responded to specific survey items. In addition, new variables had been computed in SPSS from existing data from the survey items to calculate global scores and construct/subscale scores. Figure 3.2, presents the instructions to code the instruments that measured the variables of interest.

Coding Instructions for Instruments

Name of Instrument:			Survey Items:			Subscale:			
Constructs	Subscales	Number of Items	Ranging Scores	Total Items	Ranging Scores	Global Scale:	Total Items	Ranging Scores	
Academic Resilience Scale (ARS)	Perseverance	R1, 2, R3, 4, R5, 8, 9, 10, 11, 13, R15, 16, 17 & 30	14	14 - 70	32	35 - 160	30	30 - 150	
	Reflecting and adaption self-seeking	18, 20, 21, 22, 24, 25, 26, 27 & 29	9	9 - 45					
	Negative effect and emotional response	R6, R7, R12, R14, R19, 23 & R28	7	7 - 35					
Future Orientation Questionnaire (FOQ)									
Family and Marriage Domain (FOQ-FM)			9	9 - 45	35	35 - 175	102	102 - 510	
Beh	Commitment	2a, 2b, 2c & 3	3	3 - 15					
	Exploration	6a, 6b, 6c, 6d & 6e	5	5 - 25					
	Feelings about future	8a, 8b, R8c, 8d, R8e & 8f	8	8 - 40					
Cog	Value	R9a, 9b, R9c, 9d & R9e	5	5 - 25					
	External control	7d, 7e, 7f & 7g	4	4 - 20					
	Internal control	7a, 7b, 7c & 7h	4	4 - 20					
Mot	Expectance	2d & 5	2	2 - 10					
				15					15 - 75
				15					15 - 75
Work and Career Domain (FOQ-WC)			12	12 - 60					
Beh	Commitment	2a, 2b, 5a, 5b, 5c & 6	6	6 - 30					
	Exploration	3, 8a, 8b, 8c, 8d & 8e	5	5 - 25					
	Feelings about future	10a, 10b, R10c, 10d, R10e & 10f	8	8 - 40					
Cog	Value	R11a, 11b, R11c, 11d & R11e	5	5 - 25					
	External control	9d, 9e, 9f & 9g	4	4 - 20					
	Internal control	9a, 9b, 9c & 9h	4	4 - 20					
Mot	Expectance	2c & 7	2	2 - 10					
				15	15 - 75				
				15	15 - 75				
Higher Education Domain (FOQ-HE)			12	12 - 60					
Beh	Commitment	2a, 2b, 5a, 5b, 5c & 6	6	6 - 30					
	Exploration	3, 8a, 8b, 8c, 8d & 8e	5	5 - 25					
	Feelings about future	10a, 10b, R10c, 10d, R10e & 10f	8	8 - 40					
Cog	Value	R11a, 11b, R11c, 11d & R11e	5	5 - 25					
	External control	9d, 9e, 9f & 9g	4	4 - 20					
	Internal control	9a, 9b, 9c & 9h	4	4 - 20					
Mot	Expectance	2c & 7	2	2 - 10					
				15	15 - 75				
				15	15 - 75				
Non-Parental Relationship formed in a Out-of-School Youth Activity (NPR-OSYA)									
Culturally-relevant pedagogy			3, 6, 15, 18, 23, 34, 37, 40, 43, 46, 49 & 52	12	12 - 48	20 - 80	52	52 - 208	
Staff expectancy and dispositions			2, 5, 8, 10, 12, 14, 17, 20, 22, 25, 27, 29, 31, 33, 36, R39, 42, 45, 48 & 51	20	20 - 80	20 - 80	52	52 - 208	
Staff-student relationship			1, 4, 7, 9, 11, 13, 16, 19, 21, 24, 26, 28, 30, 32, 35, 38, 41, 44, 47 & 50	20	20 - 80	20 - 80	52	52 - 208	
Adverse Childhood Experiences (ACE)									
Indirect trauma			Incarceration	10	0 - 5	0 - 5	10	0 - 10	
Direct abuse			Mental illness	9	0 - 5	0 - 5	10	0 - 10	
Substance abuse			Domestic violence	7	0 - 5	0 - 5	10	0 - 10	
Parental separation or divorce			Physical neglect	5	0 - 5	0 - 5	10	0 - 10	
Physical neglect			Emotional neglect	4	0 - 5	0 - 5	10	0 - 10	
Emotional neglect			Sexual	3	0 - 5	0 - 5	10	0 - 10	
Sexual			Physical	2	0 - 5	0 - 5	10	0 - 10	
Physical			Emotional	1	0 - 5	0 - 5	10	0 - 10	
Emotional									

Note: R= Must reverse score for the survey item before summing score; Beh= Behavioral; Cog= Cognitive; Mot= Motivation.

Figure 3.2. Coding Instructions for Instruments

Data Screening

To ensure that the data was reliable and valid for testing, data screening in SPSS was conducted to clean and prepare the data for analysis. Screening data analyses were done using Tabachnick, Fidell, & Ullman (2007) suggestion from the book *Using Multivariate Statistics*. Data from participants who were missing significant values, had extreme outliers, and did not meet assumptions for normality were separated from the database or were not analyzed to test the hypotheses.

Statistical Analyses

Several statistical analyses were conducted using SPSS prior to testing the hypotheses.

Instrumentation Validity and Reliability Statistics. Modified surveys had to undergo reliability and validity measures to ensure the modified surveys met the standard requirements of good surveys. A Pearson Correlation was conducted to see the relationship between survey items within the instrument and to ensure that the constructs/subscales still existed after the instruments were modified. The item-total statistics were used to decide what survey items needed to be removed to improve validity and reliability of the modified instruments. A scale reliability analysis was conducted to provide the actual value for the Cronbach alpha of the modified surveys.

Descriptive Statistics. Measures of frequencies, central tendencies, dispersions or variations, and positions were conducted to describe the variables

being studies. Measures of relationships were conducted to describe the extent of the relationships between two variables. For example, the relationship between participants' ethnicity and future orientation was explored. Graphs and tables were used to summarize the results for data of both of the ACEs groups.

Inferential Statistics. The following statistical analyses were conducted for each hypothesis to answer the research questions. To study the relationships in hypothesis one, a Pearson Correlation was conducted. An Independent Sample T-test was conducted to study the comparison between the groups in hypotheses two and three. To study the predictor in hypothesis four, a Linear Multiple Regression was conducted.

Dissemination

As a doctoral student, one part of the requirements is to complete a dissertation project. The main objective of the dissertation project was to examine protective factors associated with academic resiliency among people who had experienced childhood adversity. The dissemination plan for the research findings is to first complete the dissertation, and then results will be submitted for publication in scholarly journals. Also a written product will be created to submit to a scientific journal. The second step is to do oral presentations at professional conferences. The goal is to spread the findings and ensure that people have access to the information and share it with other individuals, organizations or networks. Therefore, a data dictionary was created to be able to share the data with other professionals who wish to do action

research. Access to the data dictionary can be obtained by contacting directly the principle investigator. Professional educators and staff from youth organizations can benefit the most from this information. For example, professional educators who work with school-age children can incorporate strategies to their classroom or programs by fostering academic resiliency among at risk students. Lastly, the primary researcher hopes that schools and youth organizations move towards being more trauma-informed, to better provide intervention programs to school-age children.

Confidentiality

Participants were recruited via SONA to protect them from others knowing their identity or being classified as having experienced childhood adversity. No hard copy of SONA participation list was printed. For those participants who wished to receive lab credit for a class of their choice, researcher took a personal laptop to immediately enter the lab credits prior to participants starting the study. That was the only time participants were asked for their name to receive lab credits. The principal investigator's personal laptop had a safety-private lock screen and password. Participants who chose to terminate their participation during the time to complete the surveys still received lab credit for their participation as they had made an attempt.

The setting to complete the surveys was in a private lab to reduce the risk of others knowing the participation in the study. Participants were not asked to disclose their names at any time during or after the study. The informed consent

asked for a signature and date for agreeing to participate in the experiment. Data collection using Qualtrics was chosen to reduce paper usage and increase participants' confidentiality, while practicing in the web-based survey research (Ruel, Wagner, & Gillespie, 2015).

During the completion of the surveys, one researcher stayed in the room to supervise participants and the second researcher was available for participants to ask any questions regarding the survey items in a close and private proximity. Completed informed consent and paper survey packets were stored in a lock-box as soon as participants completed them. It also helped safely transport the collected data to the Principal Investigator's, home office, where they were kept in a locked filing cabinet. To guarantee further confidentiality, all data that could identify the identity of the participants was removed. For example, name of a non-parental role was changed to the name of their role/title. All the survey items were coded in a numerical form. Three years after the project has ended the principal investigator will destroy and dispose of the informed consents and printed survey packages by using the free shredding services at the university.

Risks and Benefits

Participants in the study could have experienced moderate risk, as defined by the IRB. Participation could have posed a threat for individuals who had not processed their experiences. Some participants could have experienced emotional or psychological distress. However, research suggests that

opportunities to explore and examine potentially traumatic experiences helped to minimize the possibility of negative outcomes and other psychological distress (O'Leary, Schueller, Wobbrock, & Pratt, 2018). Also, as previously mentioned, the principal investigator had been trained formally to do work with women in crisis and be sensitive to issues that could have arisen. One male researcher assistant was available to address sensitive issues that could have arisen with male participants. Male participants in crisis were referred to the university counseling and psychological services, which had both male and female counselors. Having both genders available during data collection to answer questions helped participants feel comfortable completing the web-based/paper surveys. Participants were handed information regarding local resources. Finally, when needed, therapist referrals were provided for participants to utilize the free university student counseling services.

The benefits of the study included a better understanding of the relationship between childhood adversity and protective factors that may buffer against the negative academic outcomes. Benefits to participants included the opportunity to explore and examine potentially traumatic experiences to minimize the possibility of negative outcomes and other psychological distress. Understanding these relationships enables professional educators to incorporate these protective factors into various programs designed to foster academic resiliency. Ultimately, it is hoped to increase research collaboration, permitting program development and evaluation studies in subsequent years.

Researcher Biases

My role as a researcher is to identify my background and address potential biases to remove myself from the study. My goal is to be objective while conducting the research. I grew up in a community where drugs, violence, gangs, and teenage parenthood were predominant, a place where little hope existed to experience academic success. This was especially the case growing up in a foster system. Yet, I used these same challenges as my inspiration to accomplish my personal, and academic goals. I vividly remember, spending many hours after school volunteering for my community or doing meaningful activities that strengthened my ethnic and academic identity. My foster mother exposed me to many positive role models and strong women who were leaders in their communities or were agents of change. It was not until my first year in college that I realized that being engaged in activities that were meaningful to me, had led me to gain valuable information from peers that helped me get into college. Another factor that buffered me towards negative academic outcomes, was having the self-initiative to seek for mentors and positive role models in my academic life. These people engaged me to think critically and reflect on what I wanted to do with my life after high school.

During my undergraduate and graduate college experience, I participated in a series of high impact practices. I believe that participating in meaningful activities and having at least one significant adult in your life can have several positive academic outcomes for underrepresented students who are low-income,

ethnic minority and first generation students. I have been blessed to have the opportunity to work with K-12 and higher education at-risk, vulnerable, and/or underrepresented students. Most of my jobs have allowed me the flexibility to create places where students discovered or explored their unique skills and talents, exposed them to positive experiences and role models that taught them positive personal characteristics, exposed them to be critical thinkers and agents of change, provided opportunities of personal growth, provided college knowledge, and a safe place where they could gain culture and social capital (Bourdieu, 2011; Coleman, 1988; Yosso, 2005).

As a former professional advisor, college recruiter, undergraduate research program coordinator, educator, and youth specialist who provided services to students, I often found myself working from a deficit model. I had attended numerous school and team meetings in which the deficits of students were highlighted with little to no discussion of their strengths and/or academic competencies. Quite often, when I asked team members these very questions regarding students' strengths, blank stares occur afterward or comments were made related to irrelevant factors such as breaking the dress code or frequent use of cell phone in the classroom. Despite having federal and state mandates to develop research-based intervention programs, problem-solving meetings have continued to focus primarily on students' low performance and inability that stop them from making academic progress. During team meetings we rarely highlighted the positives of academic performance on our students. As

professional advisors, advocates, and educators, we do not emphasize how “academic resilient” our students can be for simply just showing up to schools that continue to fail to meet their needs year after year. In fact, the responsibility not only falls in schools but on the community in which these students live. Therefore, I strongly encourage students to participate in community afterschool programs and extracurricular activities that expose them to protective factors that foster academic resiliency.

Summary

There is no known study that examines the role of non-parental relationship formed in a Out-of-School youth activity (NPR-OSYA) and future orientation (FO) as protective factors of negative academic outcomes among individuals who experienced ACEs. Therefore, the study investigated the influence of protective factors on the outcome of academic resiliency among individuals who had experienced childhood adversity. The socio-ecological model of resiliency (SEM-R) will be used to interpret the results for the tested hypotheses with the goal to better understand their role on academic resiliency among individuals who had experienced childhood adversity.

CHAPTER FOUR

RESULTS

The goal of chapter four is to analyze the quantitative data to address the three research questions. First data screening will be discussed. Then statistical analyses will be followed by instrumentation validity and reliability statistics. Descriptive data from the sample and variables of interest will be discussed. Inferential statistics will be followed by the results for each of the hypotheses. Lastly, a summary of the results will be discussed.

Data Screening

A total of 215 higher education students completed the web-based survey from Qualtrics. The responses were extracted from Qualtrics and uploaded to excel to clean the data. Participants who were missing a significant number of values, had extreme outliers, and did not meet assumptions for multivariate analysis were separated from the database or were not analyzed to test the hypotheses. Missing data was recoded to the value of -99. Once the data was screened the raw data from Excel was uploaded into SPSS.

There were three minor outliers in the variable FOQ total global score, but they were kept in the database because they were continuous scores that were within the range of scores for the instrument. Also, the outliers were not significantly disconnected from the rest of the FOQ total global scores. The program of SPSS identified three minor outlier using 1.5 interquartile range. A true outlier is any data point more than 3.5 interquartile range below the

lower quartile or above the upper quartile (Hoaglin & Iglewicz, 1987).

Demographics and each variable of interest were screened separately for the No ACEs ($n = 93$) and Yes ACEs ($n = 122$) groups.

Statistical Analyses

Statistical analyses were conducted using SPSS. In addition, Intellectus Statistics (2019), a online computer software was used to verify statistical analyses results.

Instrumentation Validity and Reliability Statistics

Reliability and validity measures ensured that the modified instruments met the standard requirements of good surveys. Figure 4.1, presents a table of the reliability and validity statistics for instruments. The new Cronbach alphas of the modified instruments are included.

Reliability and Validity Statistics for Instruments

Name of Instrument with Constructs and Subscales	Reliability Scale Statistics					
	Mean	Variance	Std. Deviation	Number of Items	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items
Adverse Childhood Experiences (ACE)	2.34	4.77	2.18	10	0.72	0.73
Direct abuse	1.08	1.77	1.33	5	0.67	0.68
Indirect trauma	1.26	1.64	1.28	5	0.61	0.61
Non-Parental Relationships formed in Out-of-School Youth Activities (NPR-OSYA)	168.48	366.54	19.15	52	0.96	0.97
Staff-student relationship	66.15	64.54	8.03	20	0.93	0.93
Staff expectancy and dispositions	64.43	47.94	6.92	20	0.87	0.90
Culturally-relevant pedagogy	37.89	23.57	4.86	12	0.87	0.88
Future Orientation Questionnaire (FOQ)	394.90	1991.98	44.63	102	0.95	0.95
Higher Education	138.90	238.52	15.44	35	0.87	0.89
Motivation	59.24	50.86	7.13	15	0.71	0.73
Cognitive	31.01	28.31	5.32	8	0.81	0.81
Behavioral	48.65	52.48	7.24	12	0.86	0.86
Work and Career	138.60	287.38	16.95	35	0.89	0.91
Motivation	59.43	57.91	7.61	15	0.75	0.77
Cognitive	32.17	32.11	5.67	8	0.86	0.86
Behavioral	47.00	65.25	8.08	12	0.88	0.88
Family and Marriage	117.40	445.93	21.12	32	0.92	0.93
Motivation	56.43	92.26	9.61	15	0.82	0.83
Cognitive	30.69	46.43	6.81	8	0.89	0.90
Behavioral	30.27	71.03	8.43	9	0.88	0.89
Academic Resilience Scale (ARS)	116.93	197.79	14.06	30	0.90	0.91
Perseverance	58.38	45.58	6.75	14	0.84	0.85
Reflecting and adaption self-seeking	36.33	26.52	5.15	9	0.81	0.83
Negative effect and emotional response	22.22	32.03	5.57	7	0.84	0.84

Note. N = 215.

Figure 4.1. Reliability and Validity Statistics for Instruments

Descriptive of Sample

There were a total of 215 participants who completed the questionnaires. The observations for age had an average of 23.91 ($SD = 7.11$, $SE_M = 0.49$, $Min = 18$, $Max = 60$). The most frequently observed category of gender was female ($n = 176$, 82%). The most frequently observed category of ethnicity was White ($n = 72$, 33%). Due to recruiting higher education students who were 18 years old age or older, the most frequently observed category of education level was some

college/technical school ($n = 99$, 46%). In addition, the current study had a large snowball effect within the local community college students. The most frequently observed category of employment was part-time ($n = 106$, 49%). The most frequently observed category of yearly income was less than \$9,999 ($n = 109$, 51%). The most frequently observed category of marital status was single ($n = 162$, 75%). The observations for family unit size had an average of 4.11 ($SD = 1.68$, $SE_M = 0.11$, $Min = 1$, $Max = 13$). The most frequently observed category of ethnic minority status was yes, being a person of color ($n = 143$, 67%). Table 4.1, shows that the most common demographics of the participants were low-income, ethnic minority women who were single.

From the adverse childhood experience total score, two categories were created for comparative purposes No ACEs (between 0 to 1 ACE) and Yes ACEs (2 or more ACEs). For the No ACEs group ($n = 93$) demographics, the observations for age had an average of 22.87 ($SD = 7.45$, $SE_M = 0.77$, $Min = 18$, $Max = 60$). The most frequently observed category of gender was female ($n = 67$, 72%). The most frequently observed category of ethnicity was White ($n = 34$, 37%). For the Yes ACEs group ($n = 122$) demographics, the observations for age had an average of 24.70 ($SD = 6.77$, $SE_M = 0.61$, $Min = 18$, $Max = 52$). The most frequently observed category of gender was female ($n = 109$, 89%). The most frequently observed category of ethnicity was Mexican/Chicano ($n = 40$, 33%).

Table 4.1. Frequency Table for Participants Demographics for the Total Sample and Adverse Childhood Experiences Groups

Variable	Total Sample		No ACEs Group		Yes ACEs Group	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Age <i>M(SD)</i>	23.9 (7.11)		22.87 (7.45)		24.70 (6.77)	
Family Unit Size <i>M(SD)</i>	4.11 (1.68)		4.44 (1.39)		3.85 (1.84)	
Gender						
Male	39	18.14	26	27.96	13	10.66
Female	176	81.86	67	72.04	109	89.34
Ethnicity						
Asian	11	5.12	5	5.37	6	4.91
Pacific Islander	2	0.93	-	-	2	1.64
Native American	2	0.93	-	-	2	1.64
White	72	33.49	34	36.56	38	31.15
Mexican/Chicano	62	28.84	22	23.66	40	32.79
Hispanic/Latino	37	17.21	21	22.58	16	13.11
Black	18	8.37	6	6.45	12	9.84
Other (single ethnicity)	1	0.46	1	1.08	-	-
Bi-racial/Multi-racial	10	4.65	4	4.3	6	4.92
Education Level						
High School/GED	56	26.05	33	35.46	23	18.85
Some College/Technical School	99	46.05	40	43.01	59	48.36
Associates Degree	42	19.53	12	12.9	30	24.59
Bachelors Degree	17	7.91	8	8.6	9	7.38
Masters Degree	1	0.46	-	-	1	0.82
Employment						
Not working	63	29.3	34	36.56	29	23.77
Part-time	106	49.3	45	48.39	61	50
Full-time	46	21.4	14	15.05	32	26.23
Yearly Income						
Less than \$9,999	109	50.7	57	61.29	52	42.62
\$10,000 to \$19,999	39	18.14	13	13.98	26	21.31
\$20,000 to \$29,999	30	13.95	9	9.68	21	17.21
\$30,000 to \$39,999	14	6.51	5	5.38	9	7.38
\$40,000 to \$49,999	6	2.79	3	3.23	3	2.46
\$50,000 to \$59,999	6	2.79	1	1.08	5	4.1
\$60,000 to \$69,999	2	0.93	1	1.08	1	0.82
\$80,000 to \$89,999	2	0.93	1	1.08	1	0.82
\$90,000 or more	4	1.86	1	1.08	3	2.46
Missing	3	1.4	2	2.15	1	0.82
Marital Status						
Single	162	75.34	80	86.01	82	67.21
In a relationship	3	1.4	2	2.15	1	0.83
Not married, living together	22	10.23	3	3.23	19	15.57
Married	23	10.7	7	7.53	16	13.11
Divorced/Separate	5	2.33	1	1.08	4	3.28

Note. *N* = 215; No ACEs *n* = 93; Yes ACEs *n* = 122

Table 4.2, presents a frequency table for the activities that the whole sample participated in. The most frequently observed category of Volunteer prior to the age of 18 years was Yes ($n = 117, 54\%$). The most frequently observed category of Work for pay/had a job prior to the age of 18 years was No ($n = 114, 53\%$). The most frequently observed category of out-of-school activities prior to the age of 18 years was Yes ($n = 119, 55\%$). Majority of the sample identified as a minority group and was at or below the federal income level. In addition, this table shows that most of the sample was working/moving closer to the career they wish to have. The most frequently observed category of significant non-parental relationship prior to the age of 18 was No ($n = 119, 55\%$). Based on the results from this table, it can be determined that low-income minority students are not forming NPR at the same rate as a non-low income, non-minority student. Finding from the descriptive also show that students are participating 55% of the time in OSYA, followed by volunteer experiences. These findings make sense due to the fact that most students seek experiences that will help them stand out in the college admission application.

Table 4.2. Frequency Table of Participants Activity and Non-Parent Relationship Status for the Total Sample and Adverse Childhood Experiences Groups

Variable	Total Sample		No ACEs Group		Yes ACEs Group	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Ethnic minority status						
No- European	72	33.49	34	36.56	38	31.15
Yes- Person of color	143	66.51	59	63.44	84	68.85
Federal income status for 2019						
Not Low-Income	33	15.34	10	10.75	23	18.85
Low-Income	21	9.77	4	4.3	17	13.93
Poverty	158	73.49	77	82.8	81	66.39
Missing	3	1.4	2	2.15	1	0.83
Working/moving closer to career wish to have						
No	36	16.74	20	21.51	16	13.11
Yes	179	83.26	73	78.49	106	86.89
Volunteer prior to the age of 18 years						
No	98	45.58	45	48.39	53	43.44
Yes	117	54.42	48	51.61	69	56.56
Work for pay/had a job prior to the age of 18 years						
No	114	53.02	57	61.29	57	46.72
Yes	101	46.98	36	38.71	65	53.28
Out-of-school activities prior to the age of 18 years						
No	96	44.65	38	40.86	58	47.54
Yes	119	55.35	55	59.14	64	52.46
Significant non-parental relationship prior to the age of 18						
No	119	55.35	27	29.03	68	55.74
Yes	65	30.23	51	54.84	38	31.15
Not Applicable	31	14.42	15	16.13	16	13.11

Note. *N* = 215; No ACEs *n* = 93; Yes ACEs *n* = 122

Table 4.3, demonstrates a frequency table for the type of activities participants engaged in prior to the age of 18 years by the status of a NPR. Participants who reported having a NPR were more likely to have participated in

OSYA or a volunteer experience. People were less likely to create a NPR was in paid work experiences.

Table 4.3. Frequency Table for Type of Activity by Non-Parent Relationship Status for the Adverse Childhood Experiences Groups

Type of Activity	No ACEs Group				Yes ACEs Group			
	No NPR		Yes NPR		No NPR		Yes NPR	
	<i>n</i>	%	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Volunteer								
No	21	41.18	9	33.33	28	41.18	9	23.68
Yes	30	58.82	18	66.67	40	58.82	29	76.32
Paid work								
No	25	49.02	17	62.96	22	32.35	19	50
Yes	26	50.98	10	37.04	46	67.65	19	50
Out-of-school activity								
No	20	39.22	3	11.11	34	50	8	21.05
Yes	31	60.78	24	88.89	34	50	30	78.95
Total	51		27		68		38	

Note. N = 215; No ACEs n = 93; Yes ACEs n = 122

Table 4.4 identifies the title or role of the significant non-parental adult identified for the Yes group in Out-Of-School activities prior to the age of 18 years. Participants reported that some of their significant adults hold more than one role within 2 different contexts. The participants who did not report a NPR-OSYA were placed in the not applicable category.

Table 4.4. Frequency Table of the Role of Non-Parent Relationship Formed in an Out-of-School Youth Activity for the Total Sample and Adverse Childhood Experiences

Role of the Significant Non-Parental Adult	Total Sample	No ACEs Group	Yes ACEs Group
	<i>N</i>	<i>N</i>	<i>N</i>
Choir Member	1	1	-
Co-worker	1	-	1
Co-worker/Work Supervisor	1	-	1
Coach-Speech	1	-	1
Coach-Sport	15	8	7
Coach-Sport/Program Supervisor	1	-	1
Coach-Sport/Teacher-Academic	5	2	3
Coach-Sport/Teacher-Band	1	1	-
Faith-based Leader	4	2	2
Faith-based Pastor	3	1	2
Mentor/Program Leader	1	1	-
Program Leader	3	2	1
Program Leader/Sister in law	1	-	1
Program Supervisor	2	1	1
Program Supervisor/Counselor-Academic	1	1	-
Program Supervisor/Mentor	1	-	1
Program Supervisor/Teacher-Academic	1	-	1
Teacher-Academic	5	2	3
Teacher-Academic/Program Leader	1	-	1
Teacher-Choir	2	-	2
Teacher-Community Service	1	-	1
Teacher-Dance	5	3	2
Teacher-Drama	1	-	1
Teacher-Piano	1	-	1
Work Supervisor	6	2	4
Total	65	27	38
Not Applicable	150	66	84

Note. N = 215; No ACEs n = 93; Yes ACEs n = 122. Response based on participants who completed the NPR-OSYA questionnaire.

Descriptive Analysis of Variables of Interest

A Pearson correlation analysis was conducted among the instruments: ACEs total global score, NPR-OSYA total global score, FOQ total global score, and ARS total global score. There were no significant correlations between ACEs and NPR-OSYA. Also there were no significant correlations between ACEs and FOQ.

A significant positive correlation was observed between ACE and ARS ($r = 0.15, p = .028$). The correlation coefficient between ACE and ARS was 0.15, indicating a small effect size. This correlation indicates that as ACE increases, ARS tends to increase. A significant positive correlation was observed between NPR-OSYA and FOQ ($r = 0.49, p < .001$). The correlation coefficient between NPR-OSYA and FOQ was 0.49, indicating a moderate effect size. This correlation indicates that as NPR-OSYA increases, FOQ tends to increase.

A significant positive correlation was observed between NPR-OSYA and ARS ($r = 0.47, p < .001$). The correlation coefficient between NPR-OSYA and ARS was 0.47, indicating a moderate effect size. This correlation indicates that as NPR-OSYA increases, ARS tends to increase.

A significant positive correlation was observed between FOQ and ARS ($r = 0.50, p < .001$). The correlation coefficient between FOQ and ARS was 0.50, indicating a large effect size. This correlation indicates that as FOQ increases, ARS tends to increase.

The observations for ACE total global score had an average of 2.34 ($SD = 2.18$, $SE_M = 0.15$, $Min = 0$, $Max = 9$) for all the 215 participants. The observations for direct abuse total score had an average of 1.08 ($SD = 1.28$, $SE_M = 0.09$, $Min = 0$, $Max = 5$). The observations for indirect trauma total score had an average of 1.26 ($SD = 1.28$, $SE_M = 0.09$, $Min = 0$, $Max = 5$). There were 122 people in the Yes ACEs group and 93 in the No ACEs group. Table 4.5 presents a summary statistics table of the instruments total scores for each ACE group. Descriptive findings show that there is no difference between NPR-OSYA among the ACEs group. Future orientation and AR mean scores are higher among the Yes ACEs group.

Table 4.5. Summary Statistics of Instruments Total Score for Each Adverse Childhood Experiences Group

Name of Instrument	No ACEs Group				Yes ACEs Group			
	<i>n</i>	<i>M</i>	<i>SD</i>	SEM	<i>n</i>	<i>M</i>	<i>SD</i>	SEM
Adverse Childhood Experiences Questionnaire	93	0.39	0.49	0.05	122	3.84	1.75	0.16
Non-Parental Relationships formed in Out-of-School Youth Activities Questionnaire	27	168.52	17.95	3.45	38	168.45	20.19	3.28
Future Orientation Questionnaire	93	387.75	48.05	4.98	122	400.34	41.22	3.73
Academic Resilience Scale	93	113.87	12.87	1.33	122	119.26	14.54	1.32

Note: N = 215; No ACEs $n = 93$; Yes ACEs $n = 122$; n = Sample number; M = Mean; SD = Standard Deviation; SEM = Standard Error of Mean

Inferential Statistics

Drawing from the quantitative data the results of each hypothesis are presented.

Hypothesis I

Hypothesis one was that a non-parental relationship formed in an out-of-school youth activity would positively relate with future orientation. A Pearson correlation analysis was conducted between NPR-OSYA total global score and FOQ total global score. Cohen's coefficient standard was used to evaluate the strength of the relationship between the protective factors. Coefficients between .10 and .29 represent a small effect size, coefficients between .30 and .49 represent a moderate effect size, and coefficients above .50 indicate a large effect size (Cohen, 1988). A Pearson correlation requires that the relationship between the pair of protective factors be linear (Conover & Iman, 1981). This assumption is not violated because there is not curvature among the points on the scatterplot between the pair of protective factors. Figure 4.2 presents the scatterplot of the correlation between NPR-OSYA and FOQ. A regression line has been added to assist the interpretation that NPR-OSYA ($M = 168.48$, $SD = 19.15$, $n = 65$) account for 24% of variance in FOQ ($M = 394.90$, $SD = 44.63$, $N = 215$).

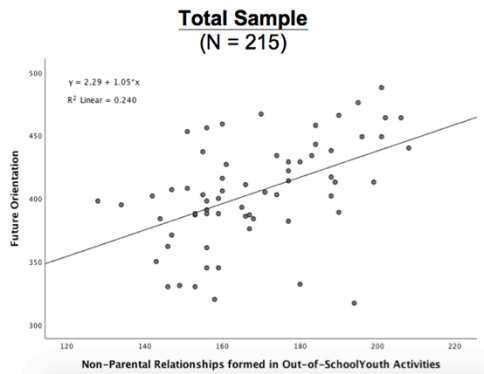


Figure 4.2. Scatterplots between Non-Parent Relationship Formed in an Out-of-School Youth Activity and Future Orientation Questionnaire for the Total Sample

A significant *positive* correlation was observed between NPR-OSYA total global score and FOQ total global score ($r = 0.49$, $p < .001$). The correlation coefficient between NPR-OSYA and FOQ was 0.49, indicating a moderate effect size. Yes ACEs group had larger effect size ($r = 0.52$, $p < .001$) than No ACEs group ($r = 0.49$, $p < .001$). Figure 4.3 shows the differences among the ACEs groups. These correlations indicate that as NPR-OSYA increases, FOQ tends to increase.

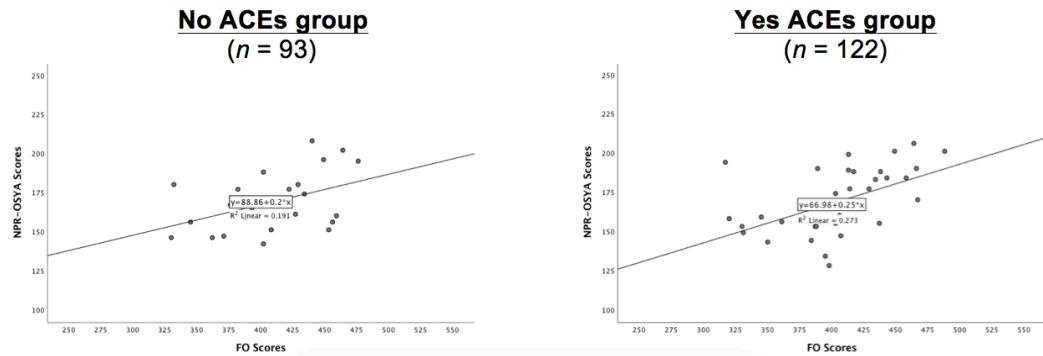


Figure 4.3. Scatterplots between Non-Parent Relationship Formed in an Out-of-School Youth Activity and Future Orientation Questionnaire for Each Adverse Childhood Experiences Group

Hypothesis II

Hypothesis two was that a non-parental relationship formed in an out-of-school youth activity would differ between the groups No ACEs and Yes ACEs. A two-tailed independent samples t-test was conducted to examine whether the mean of NPR-OSYA total global scores was significantly different between the groups No ACEs and Yes ACEs. The assumptions of normality and homogeneity of variance were assessed.

A Shapiro-Wilk test was conducted to determine whether the NPR-OSYA global total scores could have been produced by a normal distribution (Razali & Wah, 2011). The results of the Shapiro-Wilk test were not significant, $W = 0.97$, $p = .075$. These results suggest that the deviations from normality are explainable by random chance; thus normality can be assumed rather than forcing the distribution of NPR-OSYA.

Levene's test for equality of variance was used to assess whether the homogeneity of variance assumption was met (Levene, 1960). The homogeneity of variance assumption requires the variance of the dependent variable be approximately equal in each group. The result of Levene's test was not significant, $F(1, 63) = 1.12, p = .294$, indicating that the assumption of homogeneity of variance was met. This means that although each group was not equal in number of people, the distribution of the scores around the mean can be used within each group and be treated as equal.

The result of the two-tailed independent samples t-test was not significant, $t(63) = -0.01, p = .988$, indicating the null hypothesis cannot be rejected. This finding suggests the mean of NPR-OSYA was not significantly different between the groups No ACEs ($M = 168.52, SD = 17.95, n = 27$) and Yes ACEs ($M = 168.45, SD = 20.19, n = 38$). Therefore, no differences exist in NPR-OSYA among the ACEs groups. Figure 4.4, shows a bar graph of NPR-OSYA mean scores between both ACEs groups.

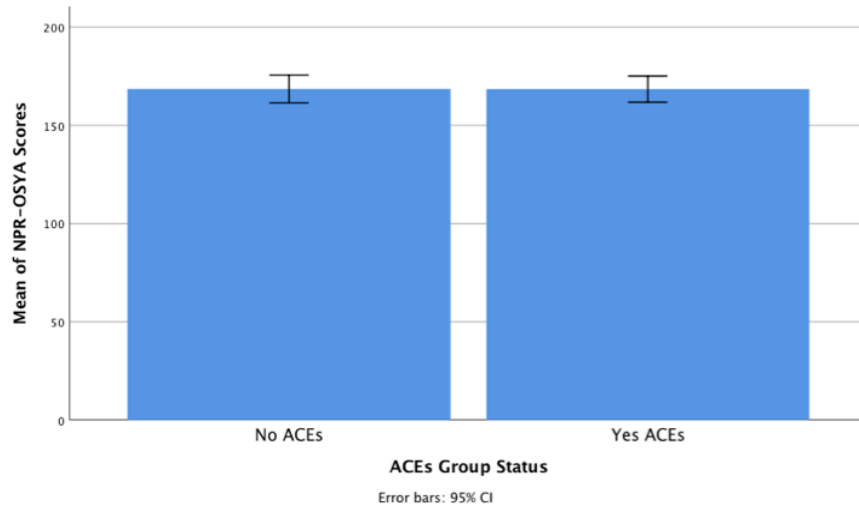


Figure 4.4. Bar Graph of the Non-Parent Relationship Formed in an Out-of-School Youth Activity Mean Scores for Each Adverse Childhood Experiences Group

Hypothesis III

Hypothesis three was that future orientation would differ between the No ACEs and Yes ACEs. An two-tailed independent samples t-test was conducted to examine whether the mean of FOQ total global score was significantly different between the groups No ACEs and Yes ACEs. Similar to hypothesis two, assumptions of normality and homogeneity of variance were assessed.

A Shapiro-Wilk test was conducted to determine whether FOQ total global score could have been produced by a normal distribution (Razali & Wah, 2011). The results of the Shapiro-Wilk test were significant, $W = 0.97$, $p < .001$. These results suggest that FOQ total global score is unlikely to have been produced by a normal distribution. However, the mean of FOQ will be approximately normally distributed as sample size increases according to the Central Limit Theorem

(CLT). Therefore, with a large sample size ($n > 50$), deviations from normality will have a small effect on the results (Stevens, 2009). Another way to test for the assumption of normality was utilized by plotting the quantiles of the model residuals against the quantiles of a Chi-square distribution (DeCarlo, 1997). Figure 4.5 presents a Q-Q scatterplot of FOQ total global score. Assumption of normality was met; the quantiles of the residuals were not strongly deviate from the theoretical quantiles. The result of Levene's test was not significant, $F(1, 213) = 1.41, p = .237$, indicating that the assumption of homogeneity of variance was met.

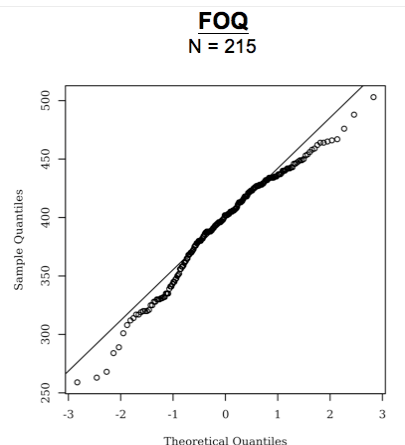


Figure 4.5. Scatterplot for Normality for Future Orientation Questionnaire

The result of the two-tailed independent samples t-test was significant, $t(213) = 2.07, p = .040$, indicating the null hypothesis can be rejected. This finding suggests the mean of FOQ was significantly different between the groups

No ACEs and Yes ACEs. The mean of FOQ in the Yes ACEs group ($M = 400.34$, $SD = 41.21$, $n = 122$) was significantly higher than the mean of FOQ in the No ACEs group ($M = 387.75$, $SD = 48.05$, $n = 93$). Figure 4.6, shows a bar graph to show differences of FOQ mean scores.

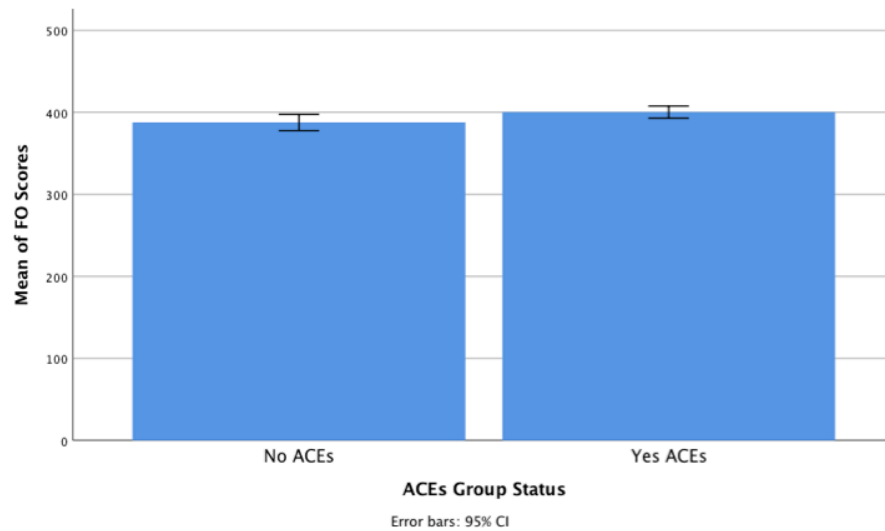


Figure 4.6. Bar Graph of the Future Orientation Questionnaire Mean Scores for Each Adverse Childhood Experiences Group

Hypothesis IV

Hypothesis four was that non-parental relationships formed in an out-of-school youth activity and future orientation would predict higher academic resiliency among the Yes ACEs group. Hypothesis four was that non-parental relationships formed in an out-of-school youth activity and future orientation would predict higher academic resiliency among the Yes ACEs group. Two separate linear regression analyses were conducted for each ACE group to

assess whether NPR-OSYA total global score and FOQ total global score significantly predicted the ARS total global score. The 'Enter' variable selection method was chosen for the linear regression model, which included the selected predictors of NPR-OSYA and FOQ. The assumptions of normality of residuals, homoscedasticity of residuals, absence of multicollinearity, and the lack of outliers were assessed.

Normality was evaluated using a Q-Q scatterplot (Bates, Mächler, Bolker, & Walker, 2014; DeCarlo, 1997; Field, 2013). The Q-Q scatterplots for normality is presented for each ACE group in Figure 4.7. The Q-Q scatterplot compares the distribution of the residuals with a normal distribution. In the Q-Q scatterplot, the solid line represents the theoretical quantiles of a normal distribution. Normality can be assumed if the points form a relatively straight line.

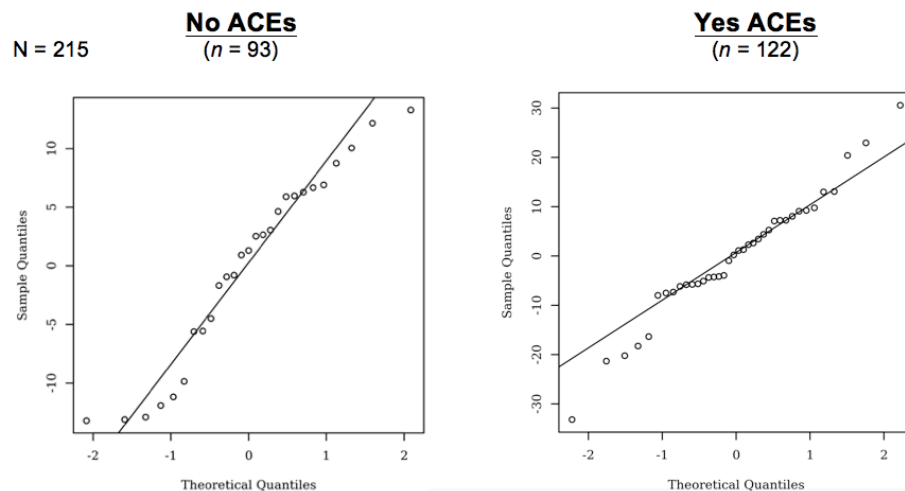


Figure 4.7. Scatterplot Testing Normality for Each Adverse Childhood Experiences Groups

Homoscedasticity was assessed by plotting the residuals against the predicted values (Bates, Mächler, Bolker, & Walker, 2014; Field, 2013; Osborne & Walters, 2002). Figure 4.8 presents a scatterplot of predicted values and model residuals for each ACE group. The assumption of homoscedasticity is met if the points look randomly distribute with a mean of zero and no apparent curve.

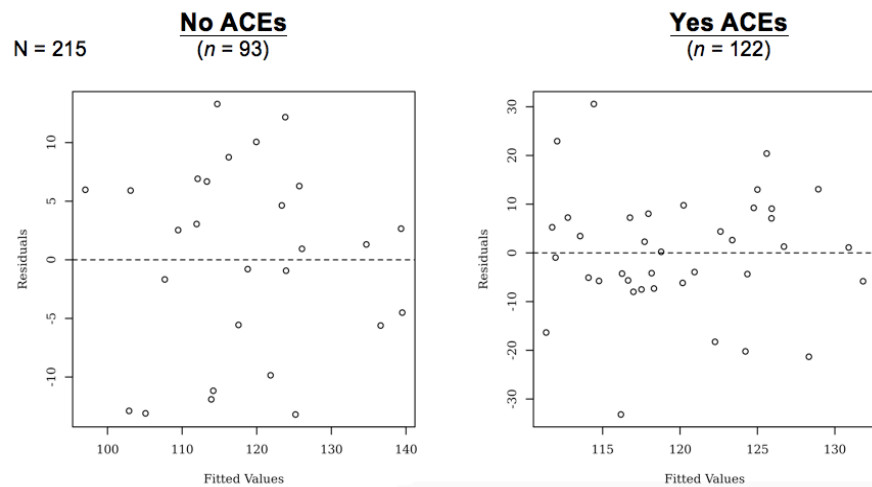


Figure 4.8. Residuals Scatterplot Testing Homoscedasticity for Each Adverse Childhood Experiences Group

Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between the predictors NPR-OSYA and FOQ. Table 4.6 presents the VIF for each predictor in the model for each ACE group. All predictors in the regression model have low VIFs. Low VIFs indicate decreased effects of multicollinearity in the model (Menard, 2009).

Table 4.6. Variance Inflation Factors for Non-Parent Relationship Formed in an Out-of-School Youth Activity and Future Orientation Questionnaire for Each Adverse Childhood Experiences Group

Variable	No ACEs VIF	Yes ACEs VIF
NPR-OSYA total global score	1.24	1.38
FOQ total global score	1.24	1.38

Note. VIF = Variance Inflation Factor

To identify influential outlier points, studentized residuals were calculated and the absolute values were plotted against the observation numbers (Field, 2013; Stevens, 2009). For the No ACEs group, an observation with a studentized residual greater than 3.43 in absolute value, the .999 quartile of a t distribution with 26 degrees of freedom, was considered to have significant influence on the results of the model. For the Yes ACEs group, an observation with a studentized residual greater than 3.33 in absolute value, the .999 quartile of a t distribution with 37 degrees of freedom, was considered to have significant influence on the results of the model. Figure 4.9 presents the studentized residuals plot of the observations for each ACE group.

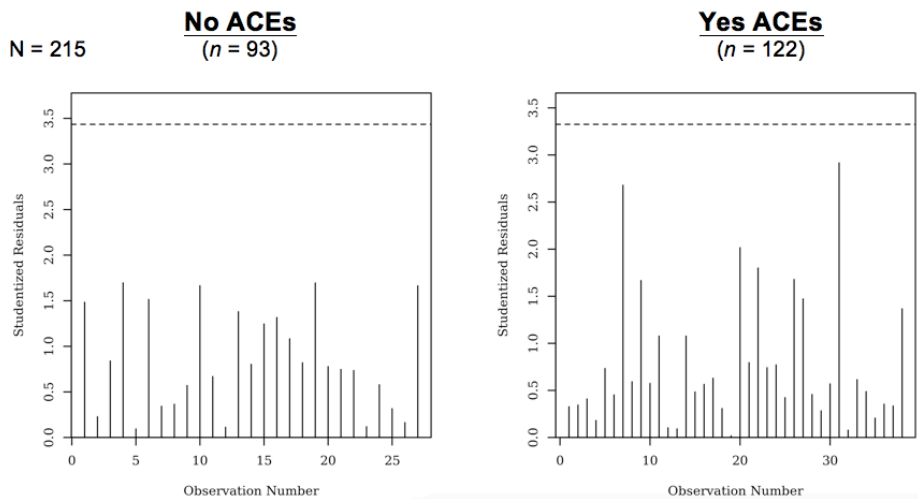


Figure 4.9. Studentized Residuals Plot for Outlier Detection for Each Adverse Childhood Experiences Group.

The results of the No ACEs group linear regression model for NPR-OSYA and FOQ predicting ARS were significant, $F(2,24) = 22.44, p < .001, R^2 = 0.65$, indicating that approximately 65% of the variance in ARS ($M = 113.87, SD = 12.87, n = 93$) is explainable by NPR-OSYA ($M = 168.52, SD = 17.95, n = 27$) and FOQ ($M = 387.75, SD = 48.05, n = 93$). The NPR-OSYA significantly predicted ARS, $B = 0.30, t(24) = 2.94, p = .007$. This indicates that on average, a one-unit increase of NPR-OSYA will increase the value of ARS score by 0.30 units. The FOQ significantly predicted ARS, $B = 0.19, t(24) = 4.13, p < .001$. This indicates that on average, a one-unit increase of FOQ will increase the value of ARS by 0.19 units.

The results of the Yes ACEs group linear regression model for NPR-OSYA and FOQ predicting ARS were significant, $F(2,35) = 3.67, p = .036, R^2 = 0.17$, indicating that approximately 17% of the variance in ARS ($M = 119.26, SD$

= 14.54, $n = 122$) is explainable by NPR-OSYA ($M = 168.45$, $SD = 20.19$, $n = 38$) and FOQ ($M = 400.34$, $SD = 41.21$, $n = 122$). The NPR-OSYA did not significantly predict ARS, $B = 0.17$, $t(35) = 1.39$, $p = .174$. Based on this sample, a one-unit increase in NPR-OSYA does not have a significant effect on ARS. The FOQ did not significantly predict ARS, $B = 0.07$, $t(35) = 1.26$, $p = .217$. Based on this sample, a one-unit increase in FOQ does not have a significant effect on ARS. Table 4.7, summarizes the results of the regression model for each ACE group. Figure 4.10, shows scatterplots between AR scores and unstandardized predicted values for each ACEs group.

Table 4.7. Results for Linear Regression with Non-Parent Relationship Formed in an Out-of-School Youth Activity and Future Orientation Questionnaire Predicting Academic Resilience Scale for Each Adverse Childhood Experiences Group

No ACEs group						
Variable	<i>B</i>	<i>SE</i>	95% CI	<i>B</i>	<i>T</i>	<i>p</i>
(Intercept)	-9.64	19.21	[-49.28, 30.00]	0.00	-0.50	0.62
NPR-OSYA total global score	0.30	0.10	[0.09, 0.51]	0.39	2.94	0.01
FOQ total global score	0.19	0.05	[0.09, 0.28]	0.55	4.13	< .001
Yes ACEs group						
Variable	<i>B</i>	<i>SE</i>	95% CI	<i>B</i>	<i>T</i>	<i>p</i>
(Intercept)	61.50	21.96	[16.92, 106.09]	0.00	2.80	0.01
NPR-OSYA total global score	0.17	0.12	[-0.08, 0.42]	0.25	1.39	0.17
FOQ total global score	0.07	0.06	[-0.05, 0.19]	0.23	1.26	0.22

Note. $N = 215$; No ACEs $n = 93$; Yes ACEs $n = 122$; Unstandardized Regression Equation for No ACEs is $ARS = -9.64 + 0.30 \cdot NPR\text{-}OSYA + 0.19 \cdot FOQ$; Unstandardized Regression Equation for Yes ACEs is $ARS = 61.50 + 0.17 \cdot NPR\text{-}OSYA + 0.07 \cdot FOQ$.

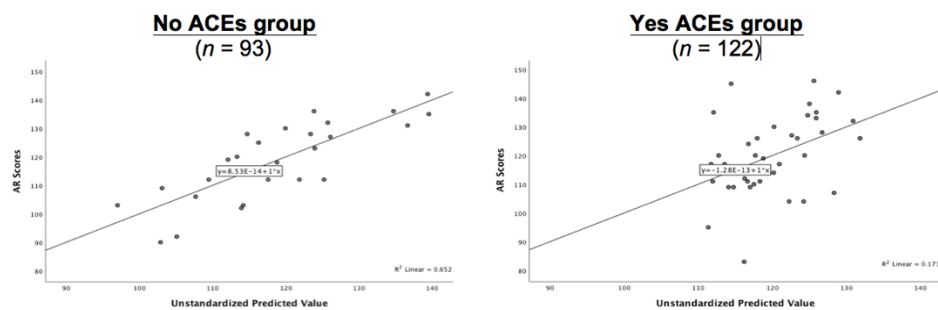


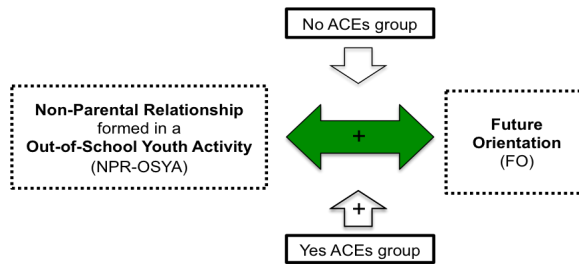
Figure 4.10. Scatterplots between Academic Resilience Scores and Unstandardized Predicted Values for Each Adverse Childhood Experiences Group

Summary

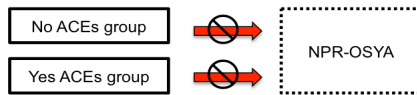
The purpose of the study was to investigate the influence of protective factors on the outcome of academic resiliency among individuals who had experienced childhood adversity. This chapter presented the statistical results. Descriptive statistics of the sample and variables of interest were used to provide background information to discuss the finding in the next chapter. Validity and reliability statistics showed that all instruments met the standard requirements of good surveys. Hypothesis one was non-parental relationship formed in an out-of-school youth activity would positively relate with future orientation. The findings indicated a significant positive relationship between NPR-OSYA total global score and FOQ total global score. Hypothesis two was non-parental relationship formed in an out-of-school youth activity would differ between the groups No ACEs and Yes ACEs. The mean of NPR-OSYA was not significantly different between the ACEs groups No ACEs. Hypothesis three was future orientation

would differ between the No ACEs and Yes ACEs. The findings indicated that the mean of FOQ was significantly different between the ACEs groups. Hypothesis four was non-parental relationship formed in an out-of-school youth activity and future orientation would predict higher academic resiliency among the Yes ACEs group. Although hypothesis four results were significant for NPR-OSYA and FOQ predicting ARS, results illustrated the complexity of the role of protective factors on AR among university students with ACEs. The next chapter will discuss the findings in connection to the theoretical framework of Michael Ungar's (2011) socio-ecological model of resiliency (SEM-R). Figure 4.11, presents a visualization of the results of each of the hypotheses. The visual aid supplements words with pictures to help the reader understand and remember the findings of each hypotheses.

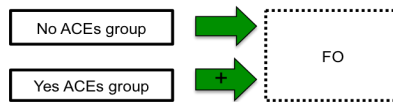
Hypothesis I



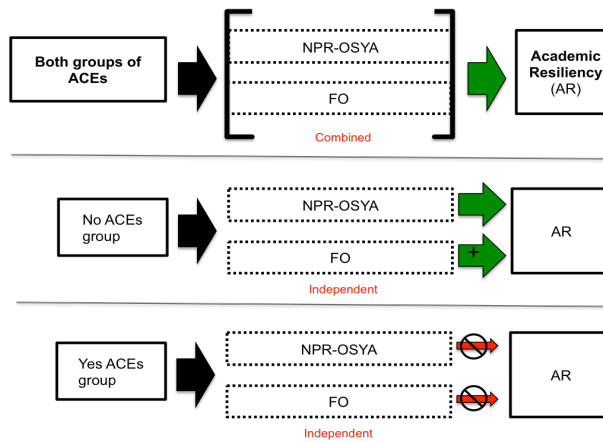
Hypothesis II



Hypothesis III



Hypothesis IV



Note. N = 215; No ACEs n = 93; Yes ACEs n = 122.

Figure 4.11. Visualization of the Results for Each Hypothesis

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

The main goal of chapter five is to review the findings and connect them with the literature. The purpose and methodology of the study will be reviewed following theory to practice. Recommendations for professionals will be given along with the next steps for educational reform. Then the limitations will be discussed with suggestions for future research. The chapter ends with a conclusion of the overall study.

Overview

A quantitative, quasi-experimental design explored the research questions using only a single subject group, and a one-time post-test paper/web-based survey (Creswell & Creswell, 2014; Krathwohl, 2009). The framework introduced in this quantitative study, interconnected a postpositivist worldview with the appropriate research design and methods. There is no known study that examines the role of non-parental relationship formed in an Out-of-School youth activity (NPR-OSYA) and future orientation (FO) as protective factors of negative academic outcomes among individuals who experienced ACEs. Therefore, the study investigated the influence of protective factors on the outcome of academic resiliency among individuals who had experienced childhood adversity. The SEM-R will be used to interpret the results for the tested hypotheses with the goal of better understanding their role in academic resiliency among individuals who have experienced childhood adversity (Ungar, 2011).

Discussion of Findings

Each of the following subsections will explain the results from each hypothesis and it will be interpreted by using the SEM-R. All hypotheses will be tied back to existing literature that contradicts or supports the findings. Lastly, I will discuss what was learned from that hypothesis and how it contributes to the field.

Hypothesis I

Hypothesis one was that a non-parental relationship formed in an out-of-school youth activity would positively relate with future orientation. There was a significant moderate-positive relationship between non-parental relationship formed in out-of-school youth activities (NPR-OSYA) and future orientation (FO). The Yes ACEs groups had a stronger relationship between NPR-OSYA and FO than the No ACEs group. As students reported having a more positive NPR, the more positive future orientation the student reported. This was especially true for the Yes ACEs group. Other studies have found similar finding in the power of caring relationship for maltreated children (Bethell, Gombojav, Solloway, & Wissow, 2016; Perry, 2001; Taussig & Culhane, 2010). Environmental influences such having a positive experience with a significant adult within meaningful activities can positively influence students' future orientation. We know that forming relationships are basic needs that provide love and a sense of belonging to people (Cassidy & Shaver, 2018; Cozolino, 2014; Murphy, Steele, Dube, Bate, Bonuck, Meissner, Goldman, & Steele, 2014). We know that relationships are

part of the social environment and that it can influence a persons thought process (Breda, 2018). The data in this study suggests that these relationships can be also influential in fostering future orientation in individuals.

Hypothesis II

Hypothesis two was that a non-parental relationship formed in an out-of-school youth activity would differ between the groups No ACEs and Yes ACEs. There were no significant differences between the No ACEs and Yes ACEs groups in non-parental relationships formed in an out-of-school youth activities (NPR-OSYA). In other words, previous experiences of ACE did not change students' reporting non-parental relationships formed in out-of-school youth activities. Previous adverse events do not seem to impact students forming overall relationships with significant non-parental adults. The human species are known to be social creatures and to form relationships for many reasons and purposes (Cassidy & Shaver, 2018; Cozolino, 2014; Perry, 2001). Regardless of having a history of childhood adversity, therefore, we know that significant relationships matter in students' lives.

It is possible that there was no difference in NPR-OSYA because the role/title of the NPR or the context of the place where this relationship was formed were not accounted for. For example, OSYA included volunteer work, paid work, and participation in out-of-school or other weekend activities and/or programs. Many of the NPR-OSYA for this study had more than one role/title such as being a coach-sport and a teacher-academic. This means non-parental

adults are being overworked or that students' trauma affects them. It is known that educational professionals who work with at-risk students are more likely to develop secondary trauma stress (Lander, 2018).

Another possible reason there was no differences in NPR-OSYA among the ACEs groups could be due to not controlling the context of what was being discussed in those relationships. For example, participants reported some of this information in answer to an open-ended question. A participant shared that their co-worker/work supervisor, "graduated with her associate's degree from college, which encouraged [her]. Also, seeing [her as a manager] and how hard [she] worked for such little pay in a restaurant, motivated [her] to not wanting to stay in the restaurant/hospitality industry" (Yes ACEs, Male, 26 years old). A participant reported that their NPR "role was a coach, but more of a role model to do better in academics, athletics, and to excel" (No ACEs, Male, 21 years old). Two participants shared the context of the conversations between their NPR-OSYA. In the case of an NPR with the title faith-based pastor, a participant shared, "He would tell me to be good, stay out from trouble" (No ACEs, Male, 29 years old). In the case of a program leader/sister-in-law, someone reported that their NPR would tell them to "do well in school" (Yes ACEs, Female, 21 years old). These quotations show that the role/title of the NPR and the context where the conversations took place may have had different influences. Researcher has noted that relationships are part of the social environment (Breda, 2018). For example, in the construct of the person-in-environment (PIE) approach the focus

is on the interactions between people and their social environments. The resilience process may depend on how the person and the social environment behave with each other. For example, to develop positive NPR, individuals are required to have some level of communication and social skills to interact with their environment. This means that students and NPR being in the same place are not sufficient to have a positive interaction with them. The type and quality of that interaction will determine the resiliency process.

Another reason that there were no differences in NPR-OSYA among the ACEs groups could be due to the measure NPR-OSYA being a self-report that explored staff-student relationships, staff expectancy, and culturally relevant pedagogy from the students' perception of their non-parental staff and how that perception of the staff had a role in the students' academic success or failure. Therefore, differentiation in the outcome of NPR-OSYA within the ACEs groups did not exist. For example, youth may say that staff are trying to build that NPR, because it is their job requirement to interact with the youth rather than believing that the NPR actually cares and loves them. Another example may be that, when staff express high expectations, the student may say that they say that to all the other youth. Therefore, it is important to see the perspective of the adults with whom they have created these relationships.

Hypothesis III

Hypothesis three was that future orientation would differ between the No ACEs and Yes ACEs. There were significant differences between the ACEs

groups, in future orientation (FO). The mean FO score in the Yes ACEs group, was significantly higher than in the No ACEs group. People in the Yes ACEs group had more positive thoughts about their future higher education, career and work, and family and marriage. This means that people in the Yes ACEs group thought more positively about their future, set goals, planned, explored options and made commitments that guided their personal behavior and developmental course.

A possible explanation why the Yes ACEs group had a more positive FO, could be due to them thinking about their FO more often, because of their previous adverse experiences. For example, resilient people who experience adversity are more likely to change the narrative of their story, because they want to live a full life without using the adverse experience as a barrier. This positive coping mechanism could be why people in the ACEs group had a more positive FO (Himelein & McElrath, 1996; Werner, 2004).

Another reason why the Yes ACEs group had a more positive FO may be due to the fact that all the participants were current college students who were living out the student role at the moment of doing the survey. This means that FO questions in the higher education domain could have raised those scores in the overall survey. Therefore, looking at a Yes ACEs non-college sample can further help understand whether these results are applicable to non-college students too.

Another possible reason why there were differences in FO between the ACEs groups can be because individuals could have categorized and/or prioritized the FO domains in different orders. For example, a college student may prioritize the domains in the order 1) future higher education, 2) career and work, and the 3) family and marriage. But let us say the college student has young children, then the order of the FO domains may be prioritized as 1) future higher education, 2) family and marriage, and then 3) career and work. Therefore, the order of prioritizing FO domains could be a reason for the differences among the ACEs groups. The FOQ would be able to explore the prioritizing of the domains. Future studies using the current data from this study would be able to further explore prioritizing of FO domains among the ACEs groups.

Another possible reason for differences in the ACEs groups could be due to the No ACEs group not independently thinking about their FO. For example, let us think about helicopter parents being forceful in influencing their children's FO. It is common to see parents pressuring their children to choose a major/career that the children do not want. During the debriefing process of the current study, a female participant shared with the principal investigator that she does not think about her future family and marriage because her parent and brothers are "too strict" with her, to the point that she is not allowed to date. She explained that she thinks about her education and career all the time, because she does not want to disappoint her family. She also shared that when she

started college, she realized she was too sheltered by her family. This is a good example of how parents being too active in their child's FO thinking process, behaviors, and motivations can hinder their children from independently thinking about their own wishes of their future orientation.

Hypothesis IV

Hypothesis four was that non-parental relationships formed in an out-of-school youth activity and future orientation would predict higher academic resiliency among the Yes ACEs group. Non-parental relationships formed in an out-of-school youth activity (NPR-OSYA) and future orientation (FO) significantly predicted academic resiliency (AR) for both ACEs groups. However, there was a large difference between the ACEs groups' strength of the prediction for AR. The No ACEs group's prediction of AR was stronger more than the Yes ACEs group. In the No ACEs group, the NPR-OSYA significantly predicted AR, meaning that the more a student reported a positive NPR-OSYA, the more it increased the students AR. Also, the FO significantly predicted AR, meaning that the more a student reported a positive FO, the more it increased the students' AR. In the Yes ACEs group, the NPR-OSYA did not significantly predict AR, meaning that NPR-OSYA does not have an effect on AR. Also, the FO did not significantly predict AR, meaning that FO does not have an effect on AR.

When looking at NPR-OSYA and FO together, they were good predictors of academic resiliency for both ACEs groups. However, differences existed when looking at how the protective factors independently predicted AR. Both NPR-

OSYA and FO independently were good predictors of AR among the No ACEs group. Future orientation was the strongest predictor of AR among the No ACEs group. Both NPR-OSYA and FO independently were not predictors of AR among the Yes ACEs group. This suggests that both jointly significant relationships formed in meaningful activities and future orientation are protective factors that predict academic resiliency for people with no adverse childhood experiences.

It is possible that NPR-OSYA and FO is better independent predictor for academic buoyancy. One researcher has noted a difference between the terms academic buoyancy and academic resiliency. Martin (2013) defined academic buoyancy as the “ability to overcome setbacks, challenges, and difficulties that are part of everyday academic life,” where as academic resiliency was defined as the “ability to overcome acute and/or chronic adversity that is seen as a major threat to a student’s educational development.” It is possible that people with ACEs, process resilience as “academic buoyancy” because they probably already face academic adversity on a daily basis. Therefore, measuring academic adversity should be looked at with a measure that looks at the term academic buoyancy for a sample with previous history of ACEs.

It makes sense that jointly NPR-OSYA and FO can be predictors of AR. The more protective factors work together in laying the foundation of resilience, the higher the possibility that these protective factors act as resilience as a process and resilience becomes an outcome. We know that protective factors help create the foundation of resiliency, but it does not necessarily mean that

people in the Yes ACEs group have successfully applied that to the academic context (Oshri, Duprey, Kogan, Carlson, & Liu, 2018; Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). As cited in Breda (2018):

Bonanno and Diminich (2013) coined the term 'emergent resilience' to describe the response to chronic adversity, which may show much longer periods of uneven outcomes and a gradual improvement over time, and 'minimal-impact resilience' as the acute adversity resilience pathway, characterized by a mild decline in functioning in response to the adversity and a rapid recovery (Breda, 2018, p.5).

It is possible that NPR-OSYA and FO were not predictors of AR independently because NPR-OSYA focus more on helping students in the healing process and building up resiliency capacity. Therefore, NPR-OSYA cannot invest enough time in fostering FO in the domains of education and career development.

Theory to Practice

Overall, the SEM-R was able to look at the role of protective factors in the process and outcome of academic resiliency. This model made a difference in interpreting the findings, because it did not explain the results from a deficit perspective. The SEM-R focuses on asking where do I find the resilience within me rather than saying, I am not resilient. This study found that at the social-ecological community level, a NPR-OSYA could influence a person's future orientations process through the relational domain. We know that future

orientation is developed at the individual level but can be influenced by other levels (Khambati, Mahedy, Heron & Emond, 2018; Seginer, 2008; Ungar, 2011). We also learned in this study that childhood adverse events do not hinder people from developing positive future orientations. It is the individual who has the final say of how they want to think about their future. From the socio-ecological perspective, we know that within the relational domain NPR-OSYA can influence an individual FO. Moreover, having a collective orientation at each of the levels helps create academic resiliency among individuals. Ungar explained that resilience as an outcome process is the result of a combination of personal and environmental protective factors (Ungar, 2011). This supports the results in the present study because NPR-OSYA and FO jointly were able to predict AR between both ACEs groups (Ungar, 2011)

Recommendations from Experts and Professional Leaders

The two biggest counties in Southern California have taken several steps to be proactive in starting a continuous conversation of “How do we improve students’ outcome that are experiencing adversity?” For example, at the symposium of “Race relations and social justice; Dismantling systems of racism and exclusion for a better IE,” several community members, experts and leaders developed strategic plans on April 2019 to address several issues that impacted student life in the Inland Empire. Each working group addressed students’ adverse experiences that interfered with their academic performance, health, and well-being. In the working group of the “Educational System” under the

leadership of the chair, Lori Caruthers-Collins, several people came together to pull in knowledge and create a plan to work towards dismantling the school-to-prison pipeline by reducing out-of-class time, suspensions or expulsions. Jointly, the working group created recommendations and next steps for professional leaders to work towards community healing and creating momentum towards positive change in local educational reform. Now that we know that resiliency can be fostered from multiple socio-ecological levels, the recommendation by the working group has been adapted so they can be applicable to any organization that works with youth.

1) Advice to caring adults who can serve as positive role models: Before any adult decides to create a relationship with a youth, they must check their privilege and biases that can interfere with building a caring and respectful relationship. Adults must know that this relationship needs to be consistent and will have better outcomes if it becomes a long-term relationship. If adults know that they are struggling to create a positive connection with the youth, then they should connect them to another adult or a local resource where they can build a relationship with another healthy adult. Regardless of the role of the non-parental adult, they must be able to put the student first and see youth as a solution not a problem. Building a significant relationship with a student starts with knowing the student's story and trying to understand the root of the problem behaviors that are causing them to act up.

2) *Provide capacity and training for adults who work with youth:* Self-care trainings for professionals who work with at-risk youth are important to reduce burn-out effects and to reduce turn-over rates. Incorporating trauma-informed strategies into the classroom and facilities that work with youth can be beneficial for people who work with youth. Professionals should be taught how to use screening tools such as ACE, with the goal being to help them learn about the background of youth (Bethell, Newacheck, Hawes, & Halfon, 2014). This will help them better provide services and meet youth where they are in their healing process. Professionals should provide culturally relevant practices and training in cultural diversity. They should also provide trainings in communication strategies and counseling to help adults build relationships with youth, which can help youth foster FO and AR. These trainings need to incorporate social emotional learning strategies such as 3D circles and move away from social media. They should also create alternative discipline strategies for students with behavior problems to prevent entry into the criminal justice system. They need to create strategies to involve parents, family, and community members to collaborate in forming significant NPR and safe spaces that promote FO and AR among youth.

3) *Provide access and opportunities for youth to build significant long-term non-parent relationship with a caring and healthy adult:* School administrators should provide teachers or school personnel with resources to share with students such as local programs and services that they can participate in after school hours or on weekends. This will allow school personnel to not feel

overwhelmed or guilty for not being able to serve as a significant relationship to all youth.

4) *Support student success by building capacity and resiliency:* Schools should offer educational programs to youth where they can learn how to foster resiliency and form positive NPR and FO. For example, *Educate Tomorrow's Parents* (ETP) is an educational program that gets youth to think about their future orientation. Most of the program's curriculum focuses in the family and marriage domain but it also ties in the domains of education and work/career. Family is part of a youth's future orientation. It creates a context to make better decisions now in all aspects of their life such as education and health choices (Fergus & Zimmerman, 2005). It also provides an increase of motivation to get an education to achieve a lifestyle they wish to have and give to their future family and partner.

By providing adolescents with family health information, ETP seeks to improve knowledge, attitudes, and behaviors. Teens are then able to make informed and healthy choices prior to creating a family, and thereby have greater capacities as adults to care for [and provide for] their future children (Rubenstein, 2018, p. 205)

In addition, the EPT curriculum helps youth to identify caring adults that help support their goals, navigate around obstacles, and encourage them to engage in meaningful activities. Also, ETP's logical model helps reduce or prevent future ACEs in future generations. More funding should be allocated to

educational programs or organizations that focus on building capacity and resiliency among all youth.

Limitations

A limitation of the present study was that the sample was college-going. Their rates of academic resiliency may be higher than those in the general population who are not all college-going. This is because their ability to be enrolled in higher education may make them resilient despite prior childhood adversity. Even though data was collected from community college level students who were enrolled in the cross-enrollment program at the four-year university, there was no variable to distinguish between students from the community college level and four-year university level. Having access to that information could have helped determine whether there was any difference in the level of academic resiliency among community college and four-year college students.

Another limitation was that no data was collected to determine previous academic adversity in students' K-12 learning experience. Therefore, there is no history of previous academic adverse factors that could have been controlled for, such as a learning disability, chronic truancy, high frequency of transferring schools, and suspensions or expulsions. Not knowing previous academic adversity could lead to unknown third variable problems that could influence the relationship between ACEs and academic resiliency.

A third limitation was that all the participants reside in Southern California, and the results may not be generalizable to students who live in other areas,

especially outside the United States. Generalization of the results cannot be applied, because we do not yet understand how protective factors may play a role in the development of academic resiliency within different cultures.

Future Research

Building on the limitations of the present study, future studies should consider including a non-college going comparison group, include a screening measure that looks at previous academic adversity in students' K-12 learning experience, They should create a variable to distinguish students from the community college level and four-year university level, and expand the study beyond the boundaries of Southern California, United States.

Prospective future studies should further document the relationship across various cultures or ethnic groups between the relationship of ACEs and AR. In addition, the protective factors of NPR-OSYA and FO should be explored to see if there are differences among cultures/ethnic groups. Understanding how one's culture and ethnic identity might influence resiliency can help professionals adapt intervention and prevention programs to be more culture-sensitive (Ungar, 2006). It is suggested that the surveys be translated to other languages.

In addition, researchers should consider adding more knowledge and understanding of the stages of resilience among different groups of people with different levels of ACEs. Having more knowledge on stages of resiliency can help understand how people with chronic adversity respond to the process and outcome of resiliency. This can explain why some individuals take longer periods

to recover and create a strong resilient pathway (Bonanno & Diminich, 2013; Breda, 2018). Having more understanding on the stages of resiliency can help professionals know when it is a significant time to intervene in students' lives, before ACEs start to negatively impact the students' academic performance (Cole, O'Brien, Gadd, Ristuccia, Wallace, & Gregory, 2005).

Future studies should consider including a qualitative research method to further explain the content in the conversations between students and NPR-OSYA. Interviewing students about what conversations they have had with their NPR-OSYA can help us understand what circumstances form the setting to create a significant relationship between a non-parent adult and an at-risk student. More so, knowing what topics are being discussed can help professionals relate to at-risk students and help them change the narrative of their past experiences, while laying a strong foundation of resiliency. Qualitative data can be beneficial in helping professionals fully understand and assess how the content in the conversations can help students participate in meaningful activities, future orientation, and foster academic resiliency.

Conclusion

Overall, this study added understanding to the role of non-parental relationships formed in an out-of-school youth activity (NPR-OSYA) and future orientation (FO) as protective factors of negative academic outcomes among individuals who experienced ACEs. We have learned from this study that protective factors NPR-OSYA and FO have a positive relationship, which is

stronger within the people who have experienced childhood adversity. Also, we learned that NPR-OSYA is extremely important for all people. We learned that people with childhood adverse experiences tend to have a more positive future orientation than people with minimal or no adverse childhood experiences.

Lastly, we learned that NPR-OSYA and FO combined are predictors of AR for all people. However, NPR-OSYA and FO stop being predictors for AR, when looked at independently among people who have experienced childhood adversity. We also learned that within people who have not experienced adversity, a strong predictor of AR is future orientation.

APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL



April 11, 2019

CSUSB INSTITUTIONAL REVIEW BOARD

Full Board Review

IRB-FY2019-145

Status: Approved

Ms. Guadalupe Valdivia and Prof. John Winslade
Department of Educational Leadership & Technology
Doctoral Studies Program
California State University, San Bernardino
6600 University Parkway
San Bernardino, California 92407

Dear Ms. Valdivia and Prof. Winslade:

Your application to use human subjects, titled "The Development of Academic Resiliency among Survivors of Adverse Childhood Experiences" has been reviewed and approved by the Institutional Review Board (IRB). The informed consent document submitted with your IRB application is the official version for use in your study and cannot be changed without prior IRB approval. A change in your informed consent (no matter how minor the change) requires resubmission of your protocol as amended through the Caluse IRB system protocol change form.

Your application is approved for one year from [APPROVAL_DATE] through April 9, 2020.

Please note the Caluse IRB system will notify you when your protocol is due for renewal. Ensure you file your protocol renewal and continuing review form through the Caluse IRB system to keep your protocol current and active unless you have completed your study.

Your responsibilities as the researcher/investigator reporting to the IRB Committee include the following 4 requirements as mandated by the Code of Federal Regulations 45 CFR 46 listed below. Please note that the protocol change form and renewal form are located on the IRB website under the forms menu. Failure to notify the IRB of the above may result in disciplinary action. You are required to keep copies of the informed consent forms and data for at least three years.

You are required to notify the IRB of the following by submitting the appropriate form (modification, unanticipated/adverse event, renewal, study closure) through the online Caluse IRB Submission System.

1. If you need to make any changes/modifications to your protocol submit a modification form as the IRB must review all changes before implementing in your study to ensure the degree of risk has not changed.

2. If *any* unanticipated adverse events are experienced *by* subjects during *your* research *study* or project.
3. If *your* *study* has not been completed submit a renewal to the IRB.
4. If *you* are no longer conducting the *study* or project submit a *study* closure.

Please ensure *your* CITI Human Subjects Training is kept up-to-date and current throughout the *study*.

The CSUSB IRB has not evaluated *your* proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval notice does not replace *any* departmental or additional approvals which *may* be required. If *you* have *any* questions regarding the IRB decision, please contact Michael Gillespie, the IRB Compliance Officer. Mr. Michael Gillespie can be reached *by* phone at (909) 637-7688, *by* fax at (909) 637-7028, or *by* email at mgillesp@csusb.edu. Please include *your* application approval identification number (listed at the top) in all correspondence.

Best of luck with *your* research.

Sincerely,

Donna Garcia

Donna Garcia, Ph.D., IRB Chair
CSUSB Institutional Review Board

DG/MG

APPENDIX B
DATA COLLECTION PROCEDURE

Data Collection Procedure
Protective Factors of Academic Resiliency Study

1. Set up room for 1-6 number of subjects
 - Prepare paper survey packets (OR) Email subjects the link to the Qualtrics anonymous web-based survey.
2. Prepare researchers laptop, with SONA page open. Maintain lock screen for other participants not to see the name of the participants. As participants come in, ask them for their information to grant them with extra credit/lab units. Remember to keep voices at a reasonable and professional level.
3. The principal investigator will read the instructions in the lab space. Once most people are there, give the following verbal instructions

“This study is designed to measure a number of protective factors including potentially traumatic experiences in childhood as well as factors that may facilitate academic resiliency.

We want to make sure that you understand 2 concepts:

- **“Participation in Out-of-School-Youth-Activities” includes any experience outside of school hours. These experiences also include paid work and voluntary work.**
- **“Your significant non-parental adult” will be referred to as “My staff.” A significant non-parental adult can be a coach, teacher, youth specialist, staff, mentors, boss, or any adult with authority. If the adult was your parent, choose another adult from another activity.**

When you are completing the survey that addresses these 2 concepts, think about your experiences with a significant non-parental adult from your participation in one activity or program.

In a moment, I will ask you to read the Informed Consent Form, but I would like to highlight a few points. Some of the questions are very personal. Your answers will be anonymous. No one on the research team, will share the nature of any specific person’s answers. In addition, your participation is voluntary. You are free to stop participating at any time without penalty. I will now ask you to read the consent form, follow the instructions if you agree to participate and begin the packet. At least one of us will be available if you have any questions.”

4. One research assistant should remain near the door until all individuals have shown up or until 15 minutes have elapsed into the hour. The research assistant will read the instructions to participants coming in late outside the lab space.
5. As participants finish, they will immediately place the informed consent and paper completed packets into the “Vaultz Locking File Case Box.” (OR) log-out from the computer.
6. Take them to a “private space” outside the room, hand them a information form and resource sheet. Let them read the sheet, and then ask them whether they would like to discuss their experience.

APPENDIX C
INFORMED CONSENT

Informed Consent

The study in which you are being asked to participate is designed to investigate adverse experiences in childhood as well as protective factors that may facilitate academic resiliency in higher education students. This study is being conducted by Guadalupe Valdivia, and Mauricio Guido under the supervision of Dr. John Winslade, Professor of Educational Leadership at the California State University, San Bernardino (CSUSB). The CSUSB Institutional Review Board has approved this study.

- **PURPOSE:** Although there is some research regarding the relationship between the protective factors, there is no existing research that explores the impact of out of school youth activities, non-parental relationships, and future orientation on academic resiliency among people who experienced childhood adversity. In order to better understand how to promote resiliency following Adverse Childhood Experiences (ACEs), it is necessary to study protective factors that may promote academic resiliency. The purpose of the study is to add information and understanding in the relationship and role of protective factors against negative academic outcomes among individuals who experience childhood adversity.
- **DESCRIPTION:** A quantitative approach, quasi-experimental design will explore the research questions using only a single subject group, one-time post-test paper/web-based questionnaire. The principal investigator will read the instruction before completing the surveys. Participants will complete the questionnaire in a setting that permits multiple participants to complete the surveys. One researcher will be a male and the other a female. Having both genders available will help participants feel comfortable completing the questionnaire and freely asking questions regarding the survey items.
- **PARTICIPATION:** Your participation is completely voluntary and you do not have to answer any questions you do not wish to answer. You may skip or not answer any questions and can freely withdraw from participation at any time. At your instructor's discretion, you may receive 3.5 lab units of extra credit through the department's SONA system.
- **CONFIDENTIALITY:** If you wish to receive lab credit for a class of your choice, the researcher will take a personal laptop to immediately enter the lab credits after you complete the debriefing process. This will be the only time participants will be asked for their name to receive lab credits. The principal investigator's personal laptop has a safety-private lock screen and password. All data that can identify you will be removed. All the survey items will be coded in a numerical form. Three years after the project has ended the principal investigator will destroy and dispose of the informed consents and paper questionnaire packet by using the free shredding services at the university.
- **DURATION:** It will take approximately 35 minutes to complete the questionnaire. When you are done, you will receive an information statement and a packet of resources that you might find to be helpful if you or someone you care about has experienced some of the issues explored.

- **RISKS:** Participation in this study may pose a threat of re-traumatization for individuals that have not processed their experiences. Some participants may experience emotional or psychological distress.
- **BENEFITS:** Benefits to you include the opportunity to explore and examine potentially traumatic experiences to minimize the possibility of negative outcomes and other psychological distress.
- **CONTACT:** If you have questions concerning this study or research subjects' rights, contact Dr. John Winslade, Professor of Educational Leadership at (909) 537-7312 or email jwinslad@csusb.edu.
- **RESULTS:** Presentation of the results will be reported in-group format only. The dissemination plan for the research findings is to complete the dissertation then it will be published in scholarly journals. Upon completion of this study (June, 2019), you can obtain a report of the group results by contacting the CSUSB Office of Doctoral Studies, College of Education Building, Room 335.

I understand that I must be 18 years of age or older to participate in your study, have read and understand the consent document and agree to participate in your study.

Signature

Date

APPENDIX D
SURVEYS PACKET

The DEMOGRAPHIC SURVEY will collect 10 descriptive questions such as age, gender, marital status, ethnicity, educational attainment/status, and income level.

1. What is your age?	_____ Years old
2. What is your gender? (Choose one)	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other: _____
3. What is your Ethnicity? (Choose one)	<input type="checkbox"/> Asian <input type="checkbox"/> Mexican/Chicano <input type="checkbox"/> Pacific Islander <input type="checkbox"/> Hispanic/Latino (non-Mexican) <input type="checkbox"/> Native American <input type="checkbox"/> Black (non-Hispanic, including African American) <input type="checkbox"/> White (non-Hispanic/Latino) <input type="checkbox"/> Other (please specify) _____
4. What is your highest level of education completed? (Choose one)	<input type="checkbox"/> High School/GED <input type="checkbox"/> Masters Degree <input type="checkbox"/> Some College/Technical School <input type="checkbox"/> Doctorate Degree (MD, JD, PhD, EDD) <input type="checkbox"/> Associates Degree <input type="checkbox"/> Other Post Graduate Degree <input type="checkbox"/> Bachelors Degree (Please specify) _____
5. What is your employment status? (Choose one)	<input type="checkbox"/> Not working <input type="checkbox"/> Full-time <input type="checkbox"/> Part-time <input type="checkbox"/> Other (Please specify) _____
6. What is your yearly income? (Choose one)	<input type="checkbox"/> Less than \$9,999 <input type="checkbox"/> \$50,000 to \$59,999 <input type="checkbox"/> \$10,000 to \$19,999 <input type="checkbox"/> \$60,000 to \$69,999 <input type="checkbox"/> \$20,000 to \$29,999 <input type="checkbox"/> \$70,000 to \$79,999 <input type="checkbox"/> \$30,000 to \$39,999 <input type="checkbox"/> \$80,000 to \$89,999 <input type="checkbox"/> \$40,000 to \$49,999 <input type="checkbox"/> \$90,000 or more
7. Are you working in/or-moving closer to the career you wish to have? (Choose one)	<input type="checkbox"/> No <input type="checkbox"/> Yes
8. What is your marital status? (Choose one)	<input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Not married, but living together with a partner <input type="checkbox"/> Divorced/Separate <input type="checkbox"/> Never Married <input type="checkbox"/> Widowed <input type="checkbox"/> Other _____
9. What is the size of your family unit? _____	Number of people who live at your home
10. How many children do you have? _____	Number of biological/non-biological children

ADVERSE CHILDHOOD EXPERIENCE QUESTIONNAIRE is a screener test intended to assess occurrence of childhood adversity. Please complete the following 10 questions by referring to the statements below.

While you were growing up, that is, in your first 18 years of life... (or) Prior to your 18th birthday...

1. Did a parent or other adult in the household often...Swear at you, insult you, put you down, or humiliate you? (or) Act in a way that made you afraid that you might be physically hurt?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
2. Did a parent or other adult in the household often...Push, grab, slap, or throw something at you? (or) Ever hit you so hard that you had marks or were injured?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
3. Did an adult or person at least 5 years older than you ever...Touch or fondle you or have you touch their body in a sexual way? (or) Try to or actually have oral, anal, or vaginal sex with you?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
4. Did you often feel that...No one in your family loved you or thought you were important or special? (or) Your family didn't look out for each other, feel close to each other, or support each other?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
5. Did you often feel that...You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? (or) Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
6. Were your parents ever separated or divorced?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
7. Was your mother or stepmother...Often pushed, grabbed, slapped, or had something thrown at her? (or) Sometimes or often kicked, bitten, hit with a fist, or hit with something hard? (or) Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
9. Was a household member depressed or mentally ill or did a household member attempt suicide?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
10. Did a household member go to prison?	No <input type="checkbox"/>	Yes <input type="checkbox"/>

HISTORY OF NON-PARENT RELATIONSHIPS FORMED IN OUT OF SCHOOL YOUTH ACTIVITIES is a screener test intended to assess occurrence of meaningful activities and relationships. Please complete the following 6 questions by referring to the 2 concepts below.

-“Participation in Out of School Youth Activities” includes any experience outside of school hours. These experiences also include paid work and voluntary work.

-“Your Significant Non-Parental Adult” will be referred to as “My Staff.” A significant non-parental adult can be a coach, teacher, youth specialist, staff, mentors, boss, or any adult with authority.

1. Did you do <i>volunteer work</i> outside of school prior to the age of 18 years?	
<input type="checkbox"/> No	<input type="checkbox"/> Yes (Number of hours per week _____)
2. Did you work for pay/have a job prior to the age of 18 years?	
<input type="checkbox"/> No	<input type="checkbox"/> Yes (Number of hours per week _____)
3. Did you participate in <i>Out-Of-School or weekend activities and/or programs</i> prior to the age of 18 years?	
<input type="checkbox"/> No	<input type="checkbox"/> Yes (Number of hours per week _____)
If you checked “Yes” to question 3 then continue with question 4.	
If you checked “No” to question 3 then continue with question 6.	
4. Check all that apply:	
<input type="checkbox"/> Athletics. What sports? _____	<input type="checkbox"/> Intervention/Prevention (Drug/Alcohol, Gang/Violence, Family health)
<input type="checkbox"/> Before/After school care	<input type="checkbox"/> Local 4-H. Other leadership program _____
<input type="checkbox"/> Boys and Girls Clubs	<input type="checkbox"/> Marching Band
<input type="checkbox"/> Cheerleading	<input type="checkbox"/> Mentoring (Career-readiness; Big Brother Big Sister)
<input type="checkbox"/> Chess Club	<input type="checkbox"/> National Honor Society
<input type="checkbox"/> Choir or Band	<input type="checkbox"/> Parks and recreation events/programs
<input type="checkbox"/> Church/Faith-based Youth Group	<input type="checkbox"/> STEM (Science, Technology, Engineering, and Math)
<input type="checkbox"/> Class Officer	<input type="checkbox"/> Student Council
<input type="checkbox"/> Dance Team	<input type="checkbox"/> Summer Camp
<input type="checkbox"/> Debate Team	<input type="checkbox"/> Tutoring (Homework help)
<input type="checkbox"/> Drama Club	<input type="checkbox"/> YMCA/YWCA
<input type="checkbox"/> Education (Environmental, Life Skills, Health/Nutrition, Pre-parenting)	<input type="checkbox"/> Other _____
5. In which activity did you spend more time? _____	
If you checked “Yes” to questions 1, 2, or 3 then continue with question 6.	
If you checked “No” to question 1, 2, or 3 then continue at Page 6.	
6. During your participation in volunteer work, paid work, or Out-Of-School or weekend activities and/or programs, <i>Did you get close to a person of a “non-parental role” that influenced your education and/or career thoughts?</i>	
<input type="checkbox"/> No	<input type="checkbox"/> Yes Who was this person? What was their title or role? _____
If you checked “Yes” to questions 6 then continue at Page 4.	
If you checked “No” to questions 1, 2, or 3 then continue at Page 6.	

NON-PARENT RELATIONSHIPS FORMED IN OUT OF SCHOOL YOUTH ACTIVITIES is a survey that looks at the effects of the staff-student relationship, staff expectancy, and culturally relevant pedagogy on student academic achievement. The following survey items should be answered based on experiences prior to the age of 18 years. Please complete the following 32 questions by referring to the 2 concepts below.

-“Participation in Out of School Youth Activities” includes any experience outside of school hours. These experiences also include paid work and voluntary work.

-“Your Significant Non-Parental Adult” will be referred to as “My Staff.” A significant non-parental adult can be a coach, teacher, youth specialist, staff, mentors, boss, or any adult with authority.

When you are completing the survey that addresses these 2 concepts, think about your experiences with a significant non-parental adult from your participation in one activity or program. If the adult was your parent, choose another adult from another activity.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. My staff provided support for all my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My staff had a positive attitude on a daily basis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. My staff presented the information in a way that was easy to understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. My staff cared about my academic and social well-being	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. My staff was sensitive to all my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. My staff viewed me as an important part of the learning space and learning activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My staff motivated me to give my best effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I admired my staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. My staff created a place where everyone feels safe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. My staff promoted honesty, respect, trust, and the need to be safe in the learning space environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. My staff guided my peers in a positive direction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. My staff encouraged us to give feedback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. My staff acknowledged my peers' effort through recognition and praise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. My staff called upon my peers in the decision-making process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. My staff used examples of my peers' background experiences, beliefs, and knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. My staff provided high and clear expectations for academic performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. My staff lets my peers take risks in the learning spaces and learning activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. My staff took time to get to know the background experiences of my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. My staff took the time to assist individual peers that needed extra help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. My staff motivated my peers through inspiring conversations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. My staff consistently engaged my peers in meaningful learning activities that are connected to real-world experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. My staff had a well-managed environment that provided my peers with a safe learning space/classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
23. My staff believed that everyone's culture was an important part of the learning space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I had a positive view of my staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. My staff focused on stopping unwanted behavior for the majority of the period in our learning space and learning activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I am able to take risks in the learning space/classroom without feeling embarrassed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. My staff viewed my peers as valuable members of the decision-making process in how the learning space/classroom was organized and run	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. I enjoy going to my staff's learning space/classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I viewed my staff as a good person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. I was able to ask for assistance without fear of rejection or embarrassment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. My staff's expectations were high, clear, and fair for all my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. I felt that my staff was a coach, mentor, or partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. My staff used various strategies to promote unity, order, satisfaction, and less conflict in the learning space environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. My staff connected emotionally with my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. I got a good first impression of my staff on the first day of participating in my activity and/or program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. My staff expected me to succeed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. I trusted my staff's decision-making ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. My staff separated my peers' needs based on academic performances and behavior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. My staff had low expectations for my success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. My staff was caring of my needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. My staff was committed to my emotional well-being as a participant in his/her learning space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. I knew what my staff's academic and behavioral expectations were	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. My staff was patient with my peers when directing them to learn appropriate behaviors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. My staff maintained an orderly learning space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. My staff had a good attitude	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. My staff made positive comments about my peers' abilities to learn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. My staff's learning space was structured with routines and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. My staff encouraged good behavior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. My staff rarely disciplined my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. My staff established positive rapport with the my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. My staff conducted him/herself professionally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. My staff projected a favorable impression to all my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FUTURE ORIENTATION QUESTIONNAIRE-HIGHER EDUCATION DOMAIN measures the extent a person thinks about their future academics, sets goals, plans, explores options and makes commitments that guide the person's behavior and developmental course. Please complete the following 35 questions relating your thoughts about your future higher education. Respond in a way that exactly corresponds to your personal beliefs.

1. How often do you think about or plan your future higher education?						
Never <input type="checkbox"/>	Rarely <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Often <input type="checkbox"/>	Daily <input type="checkbox"/>		
2. Please complete the following 3 questions by referring to the question below.						
"How well does each of the following sentences describe you?"						
		Definitely Not	Probably Not	Neutral	Probably Yes	Definitely Yes
a. Looking into several higher education options, I am now focusing on one.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I have made up my mind concerning my higher educational options.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Considering making my higher education choice happen, I am optimistic/	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How often do you try to get this information about different higher education options?						
Never <input type="checkbox"/>	Rarely <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Often <input type="checkbox"/>	Daily <input type="checkbox"/>		
4. How often do you find yourself thinking about your higher education options?						
Never <input type="checkbox"/>	Rarely <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Often <input type="checkbox"/>	Daily <input type="checkbox"/>		
5. Please complete the following 3 questions by referring to the question below.						
"How well does each of the following sentences describe you?"						
		Definitely Not	Probably Not	Neutral	Probably Yes	Definitely Yes
a. I am making serious preparations to enter a specific major	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I have clear plans concerning my specific major	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I think I know which major I will choose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. How determined are you to fulfill your plans about your future higher education?						
Definitely Not <input type="checkbox"/>	Probably Not <input type="checkbox"/>	Maybe Yes Maybe No <input type="checkbox"/>	Probably Yes <input type="checkbox"/>	Definitely Yes <input type="checkbox"/>		
7. How likely do you think it is that your higher education plans will happen?						
Definitely will not happen <input type="checkbox"/>	It is likely it will not happen <input type="checkbox"/>	Maybe Yes Maybe No <input type="checkbox"/>	It is likely it Will happen <input type="checkbox"/>	Completely sure will happen <input type="checkbox"/>		
8. Please complete the following 5 questions by referring to the question below.						
"Which of the following things have you been doing to get you closer to realizing your higher education plan?"						
		Not at all	Vary little	Somewhat	A bit	A lot
a. Talking to people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Collecting information from different sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Checking whether this specific major fits me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Consulting with other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Imagining myself in one major or another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Please complete the following 8 questions by referring to the question below.

"How much will each of the following factors affect the realization of your plans for higher education?"

	Not at all	Vary little	Somewhat	A bit	A lot
a. Personal ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Personal effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Self esteem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Social pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Economic conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Luck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Drive to succeed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Please refer to each of the 6 paired words by referring to the question below and select the space to which most accurately describes your feelings.

"What feelings are aroused when you think about your higher education and your future?"

	(1)	(2)	(3)	(4)	(5)	
a. Worry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Confidence
b. Negative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Positive
c. Good mood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bad Mood
d. Despair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hope
e. Courage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fear
f. Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Success

11. Please refer to each of the 5 paired words by referring to the question below and select the space to which most accurately describes your evaluation.

"How do you evaluate your future higher education?"

	(1)	(2)	(3)	(4)	(5)	
a. Important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unimportant
b. Useless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Useful
c. Worth my effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not worth my effort
d. Marginal to my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Central to my life
e. Enriching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Of no value

FUTURE ORIENTATION QUESTIONNAIRE- WORK AND CAREER DOMAIN measures the extent a person thinks about their future career, sets goals, plans, explores options and makes commitments that guide the person's behavior and developmental course. Please complete the following 35 questions relating your thoughts about your future career. Respond in a way that exactly corresponds to your personal beliefs.

1. How often do you think about or plan your future career?						
Never <input type="checkbox"/>	Rarely <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Often <input type="checkbox"/>	Daily <input type="checkbox"/>		
2. Please complete the following 3 questions by referring to the question below. "How well does each of the following sentences describe you?"						
		Definitely Not	Probably Not	Neutral	Probably Yes	Definitely Yes
a. After looking into several career options I am now focusing on one		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I have made up my mind concerning my career		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. When I think about making my career plans, I am optimistic		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How often do you try to seek information about different careers?						
Never <input type="checkbox"/>	Rarely <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Often <input type="checkbox"/>	Daily <input type="checkbox"/>		
4. How often do you find yourself thinking about your career?						
Never <input type="checkbox"/>	Rarely <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Often <input type="checkbox"/>	Daily <input type="checkbox"/>		
5. Please complete the following 3 questions by referring to the question below. "How well does each of the following sentences describe you?"						
		Definitely Not	Probably Not	Neutral	Probably Yes	Definitely Yes
a. I am making serious preparations to enter a specific career		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I have clear plans concerning my career		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I think I know which career I will choose		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. How determined are you to fulfill your plans about your future career?						
Definitely Not <input type="checkbox"/>	Probably Not <input type="checkbox"/>	Maybe Yes Maybe No <input type="checkbox"/>	Probably Yes <input type="checkbox"/>	Definitely Yes <input type="checkbox"/>		
7. How likely do you think it is that your career plans will happen?						
Definitely Not <input type="checkbox"/>	Probably Not <input type="checkbox"/>	Maybe Yes Maybe No <input type="checkbox"/>	Probably Yes <input type="checkbox"/>	Definitely Yes <input type="checkbox"/>		
8. Please complete the following 5 questions by referring to the question below. "Which of the following things have you been doing to get you closer to realizing your future career plan?"						
		Not at all	Very little	Somewhat	A bit	A lot
a. Talking to people		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Collecting information from different sources		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Checking whether this career fits me		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Consulting with other people		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Imagining myself in one career or another		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Please complete the following 8 questions by referring to the question below.

"How much will each of the following *factors* affect the realization of your plans for future career?"

	Not at all	Very little	Somewhat	A bit	A lot
a. Personal ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Personal effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Self esteem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Social pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Economic conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Luck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Drive to succeed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Please refer to each of the 6 paired words by referring to the question below and select the space to which most accurately describes your feelings.

"What feelings are aroused when you think about your future career?"

	(1)	(2)	(3)	(4)	(5)	
a. Worry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Confidence
b. Negative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Positive
c. Good mood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bad Mood
d. Despair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hope
e. Courage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fear
f. Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Success

11. Please refer to each of the 5 paired words by referring to the question below and select the space to which most accurately describes your evaluation.

"How do you evaluate your future career?"

	(1)	(2)	(3)	(4)	(5)	
a. Important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unimportant
b. Useless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Useful
c. Worth my effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not worth my effort
d. Marginal to my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Central to my life
e. Enriching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Of no value

FUTURE ORIENTATION QUESTIONNAIRE- FAMILY AND MARRIAGE DOMAIN measures the extent a person thinks about their future family, sets goals, plans, explores options and makes commitments that guide the person's behavior and developmental course. Please complete the following 32 questions relating your thoughts about your future family. Respond in a way that exactly corresponds to your personal beliefs.

1. How often do you think about or plan your future marriage/partnership and family?						
Never <input type="checkbox"/>	Rarely <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Often <input type="checkbox"/>	Daily <input type="checkbox"/>		
2. Please complete the following 4 questions by referring to the question below.						
"How well does each of the following sentences describe you?"						
		Definitely Not	Probably Not	Neutral	Probably Yes	Definitely Yes
a. I think I know who will be my partner		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I have definite plans to get married, find a partner, and have a family		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I have a clear picture about my marriage/partnership and family life		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I am optimistic about making a marriage/partnership and family plans		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How determined are you to fulfill your plans about your future marriage/partnership and family life?						
Definitely Not <input type="checkbox"/>	Probably Not <input type="checkbox"/>	Maybe Yes Maybe No <input type="checkbox"/>	Probably Yes <input type="checkbox"/>	Definitely Yes <input type="checkbox"/>		
4. How often do you find yourself thinking about your marriage/partnership and family life?						
Never <input type="checkbox"/>	Rarely <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Often <input type="checkbox"/>	Daily <input type="checkbox"/>		
5. How likely do you think it is that your marriage/partnership and family plans will happen?						
Definitely will not happen <input type="checkbox"/>	It is likely it will not happen <input type="checkbox"/>	Maybe Yes Maybe No <input type="checkbox"/>	It is likely it Will happen <input type="checkbox"/>	Completely sure will happen <input type="checkbox"/>		
6. Please complete the following 5 questions by referring to the question below.						
"Which of the following things have you been doing to get you closer to realizing your marriage/partnership and family plans?"						
		Not at all	Vary little	Somewhat	A bit	A lot
a. Talking to people		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Collecting information from different sources		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Checking whether getting married/partner fits me		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Consulting with other people		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Imagining myself getting married/partner and having a family		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Please complete the following 8 questions by referring to the question below.

"How much will each of the following factors affect the *realization* of your plans: future marriage/partnership and family?"

	Not at all	Very little	Somewhat	A bit	A lot
a. Personal ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Personal effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Self esteem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Social pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Economic conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Luck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Drive to succeed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Please refer to each of the 6 paired words by referring to the question below and select the space to which most accurately describes your feelings.

"What feelings *are aroused* when you think about your future marriage and family?"

	(1)	(2)	(3)	(4)	(5)	
a. Worry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Confidence
b. Negative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Positive
c. Good mood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bad Mood
d. Despair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hope
e. Courage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fear
f. Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Success

9. Please refer to each of the 5 paired words by referring to the question below and select the space to which most accurately describes your evaluation.

"How do you *evaluate* your future marriage/partnership and family?"

	(1)	(2)	(3)	(4)	(5)	
a. Important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unimportant
b. Useless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Useful
c. Worth my effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not worth my effort
d. Marginal to my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Central to my life
e. Enriching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Of no value

ACADEMIC RESILIENCE SCALE measures the response of students' academic adversity in the academic or educational contexts. Please complete the following 30 questions by using the vignette.

Imagine yourselves as a student in the vignette, who is experiencing academic adversity....

You have received your grade for a recent assignment and it is a "fail." The grades for two other recent assignments were also poorer than you would want. You are aiming to get as good as a degree as you can because you have clear career goals in mind and don't want to disappoint your family. The feedback from the tutor for the assignment is quite critical, including reference to "lack of understanding" and "poor writing and expression," but it also includes ways that the work could be improved. Similar comments were made by the tutors who marked your other two assignments.

	Very Unlikely	Unlikely	Neutral	Likely	Very Likely
1. I would not accept the tutors' feedback.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I would use the feedback to improve my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I would just give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I would use the situation to motivate myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I would change my career plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I would probably get annoyed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I would begin to think my chances of success at university were poor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I would see the situation as a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I would do my best to stop thinking negative thoughts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I would see the situation as temporary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I would work harder.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I would probably get depressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I would try to think of new solutions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I would be very disappointed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I would blame the tutor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I would keep trying.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I would not change my long-term goals and ambitions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I would use my past successes to help motivate myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I would begin to think my chances of getting the job I want were poor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I would start to monitor and evaluate my achievements and effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I would seek help from my tutors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I would give myself encouragement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I would stop myself from panicking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I would try different ways to study.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I would set my own goals for achievement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I would seek encouragement from my family and friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I would try to think more about my strengths and weaknesses to help me work better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. I would feel like everything was ruined and was going wrong.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I would start to self-impose rewards and punishments depending on my performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. I would look forward to showing that I can improve my grades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THANK YOU for PARTICIPATING in this STUDY

APPENDIX E
INFORMATION STATEMENT

Information Statement

Thank you for your participation in the study of Childhood Adversity and Academic Resiliency. The study you have just completed was designed to investigate the relationship between the protective factors: non-parental relationships, participation in out of school youth activities, and future orientation. In addition, it investigated what role do protective factors play in individuals that had experienced abuse or trauma in childhood. Specifically, we are interested in examining the role that each protective factor plays in the relationship between adverse childhood experiences and academic resiliency. Most research concerning childhood adversity has focused on the negative impact of those experiences. Therefore, the purpose of this study was to help identify protective factors that help foster academic resiliency among people who experience childhood adversity.

Your participation was important in helping us highlight the future direction for additional training for “trauma informed” schools/youth organization staff and volunteers to enhance their service efforts for disadvantaged and vulnerable students. The findings in this study should help researchers to encourage more community-based research in this field. We hope that the findings shed light on the importance of creating opportunities for students to participate in youth organizations, facilitate healthy non-parental relationships, and encourage a positive future orientation in disadvantaged and vulnerable students. In addition, it is hoped that the information gathered from this study can help develop community and educationally based intervention programs for people who have experienced childhood adversity.

Final results will be completed by June 2019. All results will be grouped together; therefore, individual results will not be available. Your participation, including your name and answers will remain absolutely confidential. The dissemination plan for the research findings is to complete the dissertation then it will be published in scholarly journals. Upon completion of this study, you can obtain a report of the group results by contacting the CSUSB Office of Doctoral Studies, College of Education Building, Room 335.

If you have any additional questions concerning this study or your participation in this research, please feel free to call the principal investigator, Guadalupe Valdivia at (909) 567-4013 or email 000072006@coyote.csusb.edu.

If you have questions concerning the research subjects' rights, contact Dr. John Winslade, Professor of Educational Leadership at (909) 537-7312 or email jwinslad@csusb.edu.

If you know someone who can be a good fit with the objective of the study, please share with them where they can sign up for the study. Please do not reveal full details about this study to anyone who may be a potential participant, as we will be collecting data over the next few months. *Thank you for your participation.*

APPENDIX F
RESOURCE SHEET

Resources for Riverside and San Bernardino Counties

RAINN

635B Pennsylvania Ave., S.E.

Washington, DC 20003

Phone: (202) 544-1034

Hotline: 1-800-656-HOPE

(hotline will direct survivor to nearest rape crisis center)

Riverside County Rape Crisis Centers:

**Center Against Sexual Assault of
Southwest Riverside Co.**
640 N. San Jacinto St. #E
Hemet, CA 92543
(951) 652-8300

Coachella Valley Sexual Assault Services
74333 Highway 111, Suite 103
Palm Desert, CA 92260
(760) 568-9071
(800) 656-4673

Riverside Area Rape Crisis Center
1845 Chicago Ave. #A
Riverside, CA 92507
(951) 686-7275

Riverside County Domestic Violence Resources:

Alternatives to Domestic Violence
1005 N. State St.
Hemet, CA 92543
(951) 425-8900

Lutheran Social Services (Genesis Shelter)
3772 Taft Street
Riverside, CA 92503
(951) 689-7847

Shelter From the Storm
73550 Alessandro Drive, #103
Palm Desert, CA 92260
(760) 674-0400

San Bernardino County Rape Crisis Centers:

**San Bernardino Sexual Assault Services,
Inc.**
444 N. Arrowhead Avenue, Suite 101
San Bernardino, CA 92401-1221
(909) 885-8884

Redlands Office
30 Cajon Street
Redlands, CA 92373
(909) 335-8777

Victorville Office
15437 Anacapa Road, Suite 8
Victorville, CA 92392
(760) 952-0041

San Bernardino County Domestic Violence Shelters:

Better Way

14114 Hesperia Road
Victorville, CA 92392
(760) 955-8723
(760) 955-8010

Haylee House

703 E Main Street
Barstow, CA 92311
(760) 256-3441

Morongo Basin Unity Home

7237 Joshua Ln
Yucca, CA 92284
(760) 366-9663
1-866-367-6638

Doves

41943 Big Bear Blvd
Big Bear Lake, CA 92315
(909) 866-1546
(909) 866-5723

High Desert Domestic Violence

16857 C Street
Victorville, CA 92392
(760) 843-0701

Option House

813 N D. St
San Bernardino, CA 92401
(909) 381-3471
(909) 383-1602

Other Off-Campus Services

Helpline

(Suicide, Crisis Counseling &
Information and Referrals)
(990) 686-4357

Child Protective Services

(800) 442-4918

Youth Service Center

(909) 683-5193

On-Campus Services

- Campus Advocate 909.537.5040; <https://www.csusb.edu/survivor-advocacy-services/resources>
- Counseling and Psychological Services 24-Hour Hotline 909.537.5040; <https://www.csusb.edu/caps>; for life threatening situations, call 9-1-1
- Student Health Center 909.537.5241; <https://www.csusb.edu/student-health-center>
- Women's Resource Center 909.537.7203; <https://www.csusb.edu/smsu/resources/womens-resource-center>
- Queer and Transgender Resource Center 909.537.5963; <https://www.csusb.edu/smsu/resources/queer-and-transgender-resource-center>
- University Ombuds Services 909.537.5635; <https://www.csusb.edu/ombuds>

REFERENCES

- Afifi, T. O., & Macmillan, H. L. (2011). Resilience following child maltreatment: A review of protective factors. *The Canadian Journal of Psychiatry, 56*(5), 266-272. doi:10.1177/070674371105600505
- Allan, J. F., Mckenna, J., & Dominey, S. (2014). Degrees of resilience: Profiling psychological resilience and prospective academic achievement in university inductees. *British Journal of Guidance & Counselling, 42*(1), 9-25. doi:10.1080/03069885.2013.793784
- Alva, S. A. (1991). Academic invulnerability among Mexican-American students: The importance of protective resources and appraisals. *Hispanic Journal of Behavioral Sciences, 13*(1), 18-34. doi:10.1177/07399863910131002
- American Civil Liberties Union. (2019). School-to-prison pipeline. Retrieved from: <https://www.aclu.org/issues/juvenile-justice/school-prison-pipeline>
- American Educational Research Association. (2011). *Code of ethics. Educational Researcher, 40* (3), 145-156. Retrieved from: https://c.ymcdn.com/sites/www.weraonline.org/resource/resmgr/a_general/aera.pdf
- American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct. 47*, 1597-1611. Retrieved from: <https://www.apa.org/ethics/code/ethics-code-2017.pdf>

- Arellano, A. R., & Padilla, A. M. (1996). Academic invulnerability among a select group of Latino university students. *Hispanic Journal of Behavioral Sciences, 18*(4), 485-507. doi:10.1177/07399863960184004
- Astin, A. W., & Antonio, A. L. (2012). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. Lanham, MD: Rowman et Littlefield.
- Badger, E., & Bui, Q. (2018, October 01). Detailed maps show how neighborhoods shape children for life. *The New York Times*. Retrieved from: <https://www.nytimes.com/2018/10/01/upshot/maps-neighborhoods-shape-child-poverty.html>
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*(1), 1-26. doi:10.1146/annurev.psych.52.1.1
- Banyard, V., Hamby, S., & Grych, J. (2017). Health effects of adverse childhood events: Identifying promising protective factors at the intersection of mental and physical well-being. *Child Abuse & Neglect, 65*, 88-98. doi:10.1016/j.chiabu.2017.01.011
- Bates, D., Mächler, M., Bolker, B., & Walker, S. (2014). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software, 67*(1), 1-51. doi:10.18637/jss.v067.i01
- Beal, S. J. (2011). *The development of future orientation: Underpinnings and related constructs* (Published doctoral dissertation). University of Nebraska-Lincoln.

doi:<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1032&context=psychdiss>

Beal, S. J., & Crockett, L. J. (2010). Adolescents' occupational and educational aspirations and expectations: Links to high school activities and adult educational attainment. *Developmental Psychology*, *46*(1), 258-265.

doi:10.1037/a0017416

Becker, B. E., & Luthar, S. S. (2002). Social-emotional factors affecting achievement outcomes among disadvantaged students: Closing the achievement gap. *Educational Psychologist*, *37*(4), 197-214.

doi:10.1207/s15326985ep3704_1

Benard, B. (1995). *Fostering resilience in children*. *ERIC/EECE Digest*. EDO-PS-99. Retrieved from: <https://files.eric.ed.gov/fulltext/ED386327.pdf>

Bethell, C. D., Newacheck, P., Hawes, E., & Halfon, N. (2014). Adverse childhood experiences: Assessing the impact on health and school engagement and the mitigating role of resilience. *Health Affairs*, *33*(12), 2106-2115. doi:10.1377/hlthaff.2014.0914

Bethell, C., Gombojav, N., Solloway, M., & Wissow, L. (2016). Adverse childhood experiences, resilience and mindfulness-based approaches. *Child and Adolescent Psychiatric Clinics of North America*, *25*(2), 139-156.

doi:10.1016/j.chc.2015.12.001

Bonanno, G. A., & Diminich, E. D. (2013). Annual research review: Positive adjustment to adversity - trajectories of minimal-impact resilience and

- emergent resilience. *Journal of Child Psychology and Psychiatry*, 54(4), 378-401. doi:10.1111/jcpp.12021
- Bonanno, G. A., Romero, S. A., & Klein, S. I. (2015). The temporal elements of psychological resilience: An integrative framework for the study of individuals, families, and communities. *Psychological Inquiry*, 26(2), 139-169. doi:10.1080/1047840x.2015.992677
- Booker, K. C. (2007). Likeness, comfort, and tolerance: Examining African American adolescents' sense of school belonging. *The Urban Review*, 39(3), 301-317. doi:10.1007/s11256-007-0053-y
- Bourdieu, P. (2011). The forms of capital (1986). In *Cultural theory: An anthology* (pp. 81-93). Malden: Wiley-Blackwell.
- Breen, R., & Jonsson, J. O. (2005). Inequality of opportunity in comparative perspective: Recent research on educational attainment and social mobility. *Annual Review of Sociology*, 31(1), 223-243. doi:10.1146/annurev.soc.31.041304.122232
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge - Mass. & London: Harvard University Press.
- Bruster, B. E., & Coccoma, P. (2013). Mentoring for educational success: Advancing foster care youth incorporating the core competencies. *Journal of Human Behavior in the Social Environment*, 23(3), 388-399. doi:10.1080/10911359.2013.764218

- Burke, N. J., Hellman, J. L., Scott, B. G., Weems, C. F., & Carrion, V. G. (2011). The impact of adverse childhood experiences on an urban pediatric population. *Child Abuse & Neglect*, 35(6), 408-413.
doi:10.1016/j.chiabu.2011.02.006
- Caballero, J. A. (2010). *The effects of the teacher-student relationship, teacher expectancy, and culturally-relevant pedagogy on student academic achievement* (Published doctoral dissertation). University of Redlands.
doi:<https://pqdtopen.proquest.com/doc/897551383.html?FMT=AI>
- California Department of Education. (2018). Data and statistics. DataQuest
Retrieved from: <https://dq.cde.ca.gov/dataquest/>
- California State University. (n.d.). Facts and stats 2017/2018. Retrieved from:
<https://www2.calstate.edu/>
- Carter, H. M. (2012). Institutionalization of caring in an era of accountability: Creating a supportive environment for at-risk students retention in high school and access to college. *The New Educator*, 8(2), 177-193.
doi:10.1080/1547688x.2012.670568
- Caruthers-Collins, L. (2019, April). Educational systems: school to prison pipeline. Symposium conducted at the meeting on Race Relations and Social Justice “Dismantling systems of racism and exclusion for a better IE”, San Bernardino, CA.
- Cassidy, J., & Shaver, P. R. (2018). *Handbook of attachment: Theory, research, and clinical applications*. New York: The Guilford Press.

Cassidy, S. (2015). Resilience building in students: The role of academic self-efficacy. *Frontiers in Psychology, 6*(1781), 1-14.

doi:10.3389/fpsyg.2015.01781

Cassidy, S. (2016). The academic resilience scale (ARS-30): A new multidimensional construct measure. *Frontiers in Psychology, 7*(1787), 1-

11. doi:10.3389/fpsyg.2016.01787

Cicchetti, D., Rogosch, F. A., Lynch, M., & Holt, K. D. (1993). Resilience in maltreated children: Processes leading to adaptive outcome. *Development and Psychopathology, 5*(04), 629-647. doi:10.1017/s0954579400006209

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. London: Lawrence Erlbaum.

doi:<http://www.utstat.toronto.edu/~brunner/oldclass/378f16/readings/CohenPower.pdf>

Cole, S. F., O'Brien, J. G., Gadd, M. G., Ristuccia, J., Wallace, D. L., & Gregory, M. (2005). *Helping traumatized children learn: Supportive school environments for children traumatized by family violence*. Boston:

Massachusetts Advocates for Children. Retrieved from:

<https://traumasensitiveschools.org/wp-content/uploads/2013/06/Helping-Traumatized-Children-Learn.pdf>

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, 95-120. doi:10.1086/228943

- Collins, J. (1988). Language and class in minority education. *Anthropology & Education Quarterly*, 19(4), 299-326. doi:10.1525/aeq.1988.19.4.05x0914d
- Conover, W. J., & Iman, R. L. (1981). Rank transformations as a bridge between parametric and nonparametric statistics. *The American Statistician*, 35(3), 124-129. doi:10.1080/00031305.1981.10479327
- Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., . . . Kolk, B. V. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, 35(5), 390-398. doi:10.3928/00485713-20050501-05
- Cozolino, L. J. (2014). *The neuroscience of human relationships: Attachment and the developing social brain*. New York: W.W. Norton & Company.
- Creswell, J. W., & Creswell, J. D. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications.
- Culp, R. E., Watkins, R. V., Lawrence, H., Letts, D., Kelly, D. J., & Rice, M. L. (1991). Maltreated children's language and speech development: Abused, neglected, and abused and neglected. *First Language*, 11(33), 377-389. doi:10.1177/014272379101103305
- Datta, Y. (2014). Maslow's hierarchy of basic needs: An ecological view. *Oxford Journal: An International Journal of Business & Economics*, 8(1), 53-67. Retrieved from: <http://www.ojbe.org/oj/index.php/journals/article/view/54/47>

- Decarlo, L. T. (1997). On the meaning and use of kurtosis. *Psychological Methods*, 2(3), 292-307. doi:10.1037//1082-989x.2.3.292
- Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods*. New York, NY: Routledge.
- Deutsch, N. L., & Jones, J. N. (2008). "Show me an ounce of respect": Respect and authority in adult-youth relationships in after-school programs. *Journal of Adolescent Research*, 23(6), 667-688. doi:10.1177/0743558408322250
- Deutsch, N. L., Wiggins, A. Y., Henneberger, A. K., & Lawrence, E. C. (2013). Combining mentoring with structured group activities: A potential after-school context for fostering relationships between girls and mentors. *The Journal of Early Adolescence*, 33(1), 44-76. doi:10.1177/0272431612458037
- Diversi, M., & Mecham, C. (2005). Latino (a) students and Caucasian mentors in a rural after-school program: Towards empowering adult-youth relationships. *Journal of Community Psychology*, 33(1), 31-40. doi:10.1002/jcop.20034
- Durlak, J. A., & Weissberg, R. P. (2007). The impact of after-school programs that promote personal and social skills. Chicafo, IL: Collaborative for academic, social, and emotional learning (NJ1). Retrieved from: <https://casel.org/wp-content/uploads/2016/08/PDF-1-the-impact-of-after-school-programs-that-promote-personal-and-social-skills-executive-summary.pdf>

- Eccles, J. S., & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters?. *Journal of adolescent research*, 14(1), 10-43. doi:10.1177/0743558499141003
- Eccles, J. S., & Gootman, J. A. (2002). Features of positive developmental settings. In J. S. Eccles & J. A. Gootman (Eds.), *Community programs to promote youth development* (pp. 86 –118). Washington, DC: National Academies Press. doi:10.17226/10022
- Eccles, J. S., & Roeser, R. W. (2005). School and community influences on human development. In M. H. Bornstein & M. E. Lamb (Eds.), *Developmental science: An advanced textbook* (pp. 513-555). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of social issues*, 59(4), 865-889. doi:10.1046/j.0022-4537.2003.00095.x
- Edmond, T., Auslander, W., Elze, D., & Bowland, S. (2006). Signs of resilience in sexually abused adolescent girls in the foster care system. *Journal of child sexual abuse*, 15(1), 1-28. doi:10.1300/J070v15n01_01
- Egeland, B., Carlson, E., & Sroufe, L. A. (1993). Resilience as process. *Development and psychopathology*, 5(4), 517-528. doi:10.1017/S0954579400006131
- Eley, D. S., & Stallman, H. (2014). Where does medical education stand in nurturing the 3Rs in medical students: Responsibility, resilience and

resolve?. *Medical teacher*, 36(10), 835-837.

doi:10.3109/0142159X.2014.917159

Evans, G. W. (2004). The environment of childhood poverty. *American psychologist*, 59(2), 77-92. doi:10.1037/0003-066X.59.2.77

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M.,
Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and
household dysfunction to many of the leading causes of death in adults:
The adverse childhood experiences (ACE) study. *American Journal of
Preventive Medicine*, 14(4), 245-258. doi:10.1016/S0749-3797(98)00017-
8

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for
understanding healthy development in the face of risk. *Annu. Rev. Public
Health*, 26, 399-419.

doi:full/10.1146/annurev.publhealth.26.021304.144357

Field, A. (2013). *Discovering statistics using SPSS* (4th ed.). Thousand Oaks,
CA: Sage.

Ginsburg, K. R., & Jablow, M. M. (2014). *Building resilience in children and
teens*. Elk Grove Village, IL: American Academy of Pediatrics.

Herrenkohl, E. C., Herrenkohl, R. C., & Egolf, B. (1994). Resilient early school-
age children from maltreating homes: Outcomes in late adolescence.
American Journal of Orthopsychiatry, 64(2), 301-309.

doi:10.1037/h0079517

- Hideg, É., & Nováky, E. (2010). Changing attitudes to the future in Hungary. *Futures*, 42(3), 230-236. doi:10.1016/j.futures.2009.11.008
- Himelein, M. J., & McElrath, J. A. V. (1996). Resilient child sexual abuse survivors: Cognitive coping and illusion. *Child abuse & neglect*, 20(8), 747-758. doi:10.1016/0145-2134(96)00062-2
- Hoaglin, D. C., & Iglewicz, B. (1987). Fine-tuning some resistant rules for outlier labeling. *Journal of the American Statistical Association*, 82(400), 1147-1149. doi:10.1080/01621459.1987.10478551
- Howe, A., Smajdor, A., & Stöckl, A. (2012). Towards an understanding of resilience and its relevance to medical training. *Medical education*, 46(4), 349-356. doi:10.1111/j.1365-2923.2011.04188.x
- Hussein, A. (2015). The use of triangulation in social sciences research: Can qualitative and quantitative methods be combined?. *Journal of comparative social work*, 4(1), 1-12. Retrieved from: https://www.researchgate.net/profile/Ashatu_Hussein/publication/260041595_The_use_of_Triangulation_in_Social_Sciences_Research_Can_qualitative_and_quantitative_methods_be_combined/links/551a7c270cf26cbb81a2df1e/The-use-of-Triangulation-in-Social-Sciences-Research-Can-qualitative-and-quantitative-methods-be-combined.pdf
- Intellectus Statistics (2019). [Online computer software]. Retrieved from: <https://analyze.intellectusstatistics.com/>

- Iwaniec, D., Larkin, E., & Higgins, S. (2006). Research review: Risk and resilience in cases of emotional abuse. *Child & Family Social Work*, 11(1), 73-82. doi:10.1111/j.1365-2206.2006.00398.x
- Jones, J. N., & Deutsch, N. L. (2011). Relational strategies in after-school settings: How staff–youth relationships support positive development. *Youth & Society*, 43(4), 1381-1406. doi:10.1177/0044118X10386077
- Kanevsky, L., Corke, M., & Frangkiser, L. (2008). The academic resilience and psychosocial characteristics of inner-city English learners in a museum-based school program. *Education and Urban Society*, 40(4), 452-475. doi:10.1177/0013124507304693
- Kataoka, S. H., Vona, P., Acuna, A., Jaycox, L., Escudero, P., Rojas, C., Ramirez, E., Langley, A., & Stein, B. (2018). Applying a trauma informed school systems approach: examples from school community-academic partnerships. *Ethnicity & disease*, 28(Supp), 417-426. doi:10.18865/ed.28.S2.417
- Khalaf, M. A. (2014). Validity and reliability of the academic resilience scale in Egyptian context. *US China Educ. Rev. B* 4, 202–210. Retrieved from: <http://www.davidpublisher.org/Public/uploads/Contribute/551219868b17e.pdf>
- Khambati, N., Mahedy, L., Heron, J., & Emond, A. (2018). Educational and emotional health outcomes in adolescence following maltreatment in early

childhood: a population-based study of protective factors. *Child abuse & neglect*, 81, 343-353. doi:10.1016/j.chiabu.2018.05.008

Kleiman, K. (2016). 7 steps toward resiliency: Managing anxiety in motherhood. *Psychology Today*. Retrieved from:
<https://www.psychologytoday.com/us/blog/isnt-what-i-expected/201605/7-steps-toward-resiliency>

Krathwohl, D. R. (2009). *Methods of educational and social science research: The logic of methods*. Long Grove, IL: Waveland Press.

Pike, G. R., & Kuh, G. D. (2005). A typology of student engagement for American colleges and universities. *Research in higher education*, 46(2), 185-209. doi:10.1007/s 11162-004-1599-0

Labaree, R. (2013). *Organizing your social sciences research paper*. Purpose of guide. *USC Libraries*. Retrieved from:
<https://libguides.usc.edu/writingguide/purpose>

Lander, J. (2018, October 7). Secondary traumatic stress for educators: Understanding and mitigating the effects. *Mindshift. KQED News*, 52281, 1-6. Retrieved from: <https://www.kqed.org/mindshift/52281/secondary-traumatic-stress-for-educators-understanding-and-mitigating-the-effects>

Lansford, J. E., Malone, P. S., Stevens, K. I., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2006). Developmental trajectories of externalizing and internalizing behaviors: Factors underlying resilience in physically abused children.

Development and psychopathology, 18(1), 35-55.

doi:10.1017/S0954579406060032

Levene, H. (1960). Robust tests for equality of variances. In Olkin, I.

(Eds). *Contributions to probability and statistics: essays in honor of Harold Hotelling* (pp. 278-292). Stanford University Press. Palo Alto, CA.

Retrieved from: <https://searchworks.stanford.edu/view/733748>

Lunenburg, F. C. (2011). Comprehensive assessment of school environments (CASE): An underused framework for measuring school climate.

In *National forum of educational administration and supervision journal*, 29(4), 1-8. Retrieved from:

<http://www.nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg,%20Fred%20C%20%20Comprehensive%20Assessment%20of%20School%20Environments%20NFEAS%20V29%20N4,%202011.pdf>

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

Mahoney, J. L. (2000). School extracurricular activity participation as a moderator in the development of antisocial patterns. *Child development*, 71(2), 502-516. doi:10.1111/1467-8624.00160

Martin, A. J. (2013). Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity. *School Psychology International*, 34(5), 488-500. doi:10.1177/0143034312472759

- Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools, 43*(3), 267-281. doi:10.1002/pits.20149
- Maslow, A., & Lewis, K. J. (1987). Maslow's hierarchy of needs. *Salenger Incorporated, 14*, 987. Retrieved from:
<http://www.researchhistory.org/2012/06/16/maslows-hierarchy-of-needs/>
- Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 3-25). Hillsdale, NJ, US: Lawrence Erlbaum Associates. Retrieved from: <https://psycnet.apa.org/record/1994-97364-001>
- Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology, 23*(2), 493-506. doi:10.1017/S0954579411000198.
- McAllister, M., & McKinnon, J. (2009). The importance of teaching and learning resilience in the health disciplines: a critical review of the literature. *Nurse education today, 29*(4), 371-379. doi:10.1016/j.nedt.2008.10.011
- McGloin, J. M., & Widom, C. S. (2001). Resilience among abused and neglected children grown up. *Development and Psychopathology, 13*(4), 1021-1038. doi:10.1017/S095457940100414X

- McLeod, S. (2007). Maslow's hierarchy of needs. *Simply Psychology*, 1.
Retrieved from: <http://www.simplypsychology.org/maslow.html>
- McMillan, J. H., & Reed, D. F. (1994). At-risk students and resiliency: Factors contributing to academic success. *The Clearing House*, 67(3), 137-140.
doi:10.1080/00098655.1994.9956043
- Menard, S. (2009). *Logistic regression: From introductory to advanced concepts and applications*. Thousand Oaks, CA: Sage Publications.
- Metzler, M., Merrick, M. T., Klevens, J., Ports, K. A., & Ford, D. C. (2017). Adverse childhood experiences and life opportunities: shifting the narrative. *Children and youth services review*, 72, 141-149.
doi:10.1016/j.chilyouth.2016.10.021
- Murphy, A., Steele, M., Dube, S. R., Bate, J., Bonuck, K., Meissner, P., Goldman, H., & Steele, H. (2014). Adverse childhood experiences (ACEs) questionnaire and adult attachment interview (AAI): Implications for parent child relationships. *Child Abuse & Neglect*, 38(2), 224-233.
doi:10.1016/j.chiabu.2013.09.004
- Murphy, T. J. (1974). *Future time perspective and planning abilities in process and reactive schizophrenics*(Published doctoral dissertation). Loyola University Chicago. Retrieved from:
https://ecommons.luc.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=2405&context=luc_diss

- National Foster Youth Institute (2018). *Education: Foster youth face a special set of challenges outside the classroom that have a serious impact on their academic performance*. Retrieved from:
<https://www.nfyi.org/issues/education/>
- Noltemeyer, A., Bush, K., Patton, J., & Bergen, D. (2012). The relationship among deficiency needs and growth needs: An empirical investigation of Maslow's theory. *Children and Youth Services Review*, 34(9), 1862-1867. doi:10.1016/j.chilyouth.2012.05.021
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental review*, 11(1), 1-59. doi:10.1016/0273-2297(91)90002-6
- O'Leary, K., Schueller, S. M., Wobbrock, J. O., & Pratt, W. (2018). "Suddenly, we got to become therapists for each other": Designing peer support chats for mental health. In *CHI 2018 - Extended abstracts of the 2018 conference on human factors in computing systems: Engage with CHI proceedings*; 2018-April). Association for Computing Machinery. doi:10.1145/3173574.3173905
- O'Neill, J. (2019, January 4). Maslow's hierarchy of needs (MHoN) and the biopsychosocial model in psychology. *Arion's Home*. Retrieved from: https://www.arionshome.com/2019/01/04/mhon-bps/#Not_Really_a_Pyramid_or_Hierarchy

- Oppong, T. (2018, May 23). Process > outcome.(How to overcome the outcome bias). *Personal Growth*, A Medium Corporation. Retrieved from: <https://medium.com/personal-growth/process-outcome-how-to-overcome-the-outcome-bias-acc521a30484>
- Osborne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2), 1-9. Retrieved from: <https://pareonline.net/getvn.asp?v=8&n=2>
- Oshri, A., Duprey, E. B., Kogan, S. M., Carlson, M. W., & Liu, S. (2018). Growth patterns of future orientation among maltreated youth: A prospective examination of the emergence of resilience. *Developmental psychology*, 54(8), 1456-1471. doi:10.1037/dev0000528
- Pagani, L. S., Vitaro, F., Tremblay, R. E., McDuff, P., Japel, C., & Larose, S. (2008). When predictions fail: The case of unexpected pathways toward high school dropout. *Journal of social issues*, 64(1), 175-194. doi:10.1111/j.1540-4560.2008.00554.x
- Peck, S., Roeser, R., Zarrett, N., & Eccles, J. (2008). Exploring the roles of extracurricular activity quantity and quality in the educational resilience of vulnerable adolescents: Variable and pattern centered approaches. *Journal of Social Issues*, 64(1), 135-156. doi:10.1111/j.1540-4560.2008.00552.x

- Perry, B. D. (2001). Bonding and attachment in maltreated children. *The Child Trauma Center*, 3, 1-17. Retrieved from: https://childtrauma.org/wp-content/uploads/2013/11/Bonding_13.pdf
- Price, P. C., Jhangiani, R., & Chiang, I. C. A. (2015). *Research methods in psychology*. Victoria: BCcampus, BC Open Textbook Project. Retrieved from: <http://solr.bccampus.ca:8001/bcc/file/b58ffd04-ca71-4365-95e1-916f2105bd55/1/OTB027-03-research-methods-in-psychology-2nd-canadian-edition.pdf>
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, 2(1), 21-33. Retrieved from: <https://www.nrc.gov/docs/ML1714/ML17143A100.pdf>
- Rifkin, E., & Bower, E. (2007). *The illusion of certainty: Health benefits and risks*. New York: Springer.
- Risjord, M., Moloney, M., & Dunbar, S. (2001). Methodological triangulation in nursing research. *Philosophy of the Social Sciences*, 31(1), 40-59. doi:10.1177/004839310103100103
- Ritholtz, B. (2016, January 23). You're obsessed with outcomes. Here's why attention to process pays off. The Washington Post. Retrieved from: <https://www.washingtonpost.com/business/get-there/youre-obsessed-with-outcomes-heres-why-attention-to-process-pays-off/2016/01/22/f03828a4->

bebe-11e5-bcda-

62a36b394160_story.html?noredirect=on&utm_term=.cf617e264a1f

Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (2000). School as a context of early adolescents' academic and social-emotional development: A summary of research findings. *The elementary school journal*, *100*(5), 443-471. doi:10.1086/499650

Romano, E., Babchishin, L., Marquis, R., & Fréchette, S. (2015). Childhood maltreatment and educational outcomes. *Trauma, Violence, & Abuse*, *16*(4), 418-437. doi:10.1177/1524838014537908

Rossen, E., & Cowan, K. (2013). The role of schools in supporting traumatized students. *Principal's Research Review*, *8*(6), 1-8. Retrieved from: http://cqrengage.com/naspweb/file/YEfwxfQ75YH/prr_nov13_trauma_sensitive_schools.pdf

Rubenstein, R. S. (2018). My life-plan for parenting: Discussion guide, *educate tomorrow's parents*. Raleigh, NC. Retrieved from: <https://www.teacherspayteachers.com/Product/My-Life-Plan-for-Parenting-Discussion-Guide-4102723>

Ruel, E. E., Wagner, W. E., & Gillespie, B. J. (2015). *The practice of survey research: Theory and applications*. Thousand Oaks, CA: Sage Publications.

- Rutter, M. (1985). Resilience in the face of adversity. Protective factors and resistance to psychiatric disorder. *The British Journal of Psychiatry*, 147(6), 598-611. doi:10.1192/bjp.147.6.598
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American journal of orthopsychiatry*, 57(3), 316-331. doi:10.1111/j.1939-0025.1987.tb03541.x
- Sacks, V. & Murphey, D. (2018, February). The prevalence of adverse childhood experiences, nationally, by state, and by race/ethnicity. *Research Brief*. 1-20. Retrieved from: https://www.childtrends.org/wp-content/uploads/2018/02/ACESBriefUpdatedFinal_ChildTrends_February2018.pdf
- Schultz, D., Tharp-Taylor, S., Haviland, A., & Jaycox, L. (2009). The relationship between protective factors and outcomes for children investigated for maltreatment. *Child Abuse & Neglect*, 33(10), 684-698. doi:10.1016/j.chiabu.2009.04.004
- Schwartz, K. (2018, July 17). Why critical hope may be the resource kids need most from their teachers. *Mindshift. KQED News*, 51206, 1-9. Retrieved from: <https://www.kqed.org/mindshift/51206/why-critical-hope-may-be-the-resource-kids-need-most-from-their-teachers>
- Seginer, R. (2008). Future orientation in times of threat and challenge: How resilient adolescents construct their future. *International Journal of Behavioral Development*, 32(4), 272-282. doi:10.1177/0165025408090970

- Seginer, R. (2009). *Future orientation: Developmental and ecological perspectives*. Boston, MA: Springer Science & Business Media
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5-14. Retrieved from: <http://www.bdp-gus.de/gus/Positive-Psychologie-Aufruf-2000.pdf>
- Shifrer, D. (2013). Stigma of a label: Educational expectations for high school students labeled with learning disabilities. *Journal of Health and Social Behavior*, *54*(4), 462-480. doi:10.1177/0022146513503346
- Stevens, J. (2009). *Applied multivariate statistics for the social sciences*(5th ed.). Mahwah, NJ: Routledge Academic.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics*. Boston, MA: Pearson Education.
- Taussig, H. N., & Culhane, S. E. (2010). Impact of a mentoring and skills group program on mental health outcomes for maltreated children in foster care. *Archives of Pediatrics & Adolescent Medicine*, *164*(8), 739-746. doi:10.1001/archpediatrics.2010.124
- Taussig, H. N., Culhane, S. E., & Hettleman, D. (2007). Fostering healthy futures: An innovative preventive intervention for preadolescent youth in out-of-home care. *Child welfare*, *86*(5), 113-131. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2613856/pdf/nihms83737.pdf>

- Tempksi, P., Martins, M. A., & Paro, H. B. (2012). Teaching and learning resilience: A new agenda in? medical education. *Medical Education*,*46*(4), 345-346. doi:10.1111/j.1365-2923.2011.04207.x
- Thomas, P. (2017, December 27). 7 ways that universities can foster resilience in students. Presence. Retrieved from: <http://www.presence.io/blog/7-ways-that-universities-can-foster-resilience-in-students/>
- Thomas, L. J., & Revell, S. H. (2016). Resilience in nursing students: An integrative review. *Nurse Education Today*,*36*, 457-462. doi:10.1016/j.nedt.2015.10.016
- Thombs, B., Bennett, W., Ziegelstein, R., Bernstein, D., Scher, C., & Forde, D. R. (2007). Cultural sensitivity in screening adults for a history of childhood abuse: Evidence from a community sample. *Journal of General Internal Medicine*,*22*(3), 368-373. doi:10.1007/s11606-006-0026-y
- Trommsdorff, G. (1986). Future time orientation and its relevance for development as action. In Silbereisen, R. K., & Eyferth, K. (Eds). *Development as action in context* (pp. 121-136). Berlin, Heidelberg: Springer. Retrieved from: https://kops.uni-konstanz.de/bitstream/handle/123456789/11213/Future_time_orientation_and_its_relevance_for_development_as_action.pdf?sequence=1&isAllowed=y
- Troutman, K. P., & Dufur, M. J. (2007). From High School Jocks to College Grads. *Youth & Society*,*38*(4), 443-462. doi:10.1177/0044118x06290651

- Tudor, K. E., & Spray, C. M. (2017). Approaches to measuring academic resilience: A systematic review. *International Journal of Research Studies in Education*, 7(4). doi:10.5861/ijrse.2017.1880
- U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2018). *Child maltreatment 2016*. Retrieved from: <https://www.acf.hhs.gov/sites/default/files/cb/cm2016.pdf>
- Ungar, M. (2006). Resilience across cultures. *British Journal of Social Work*, 38(2), 218-235. doi:10.1093/bjsw/bcl343
- Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry*, 81(1), 1-17. doi:10.1111/j.1939-0025.2010.01067.x
- Ungar, M. (2013a). Resilience after maltreatment: The importance of social services as facilitators of positive adaptation. *Child Abuse & Neglect*, 37(2-3), 110-115. doi:10.1016/j.chiabu.2012.08.004
- Ungar, M. (2013b). The impact of youth-adult relationships on resilience. *International Journal of Child, Youth and Family Studies*, 4(3), 328-336. doi:10.18357/ijcyfs43201312431
- Ungar, M. (2014). Practitioner review: Diagnosing childhood resilience - a systemic approach to the diagnosis of adaptation in adverse social and physical ecologies. *Journal of Child Psychology and Psychiatry*, 56(1), 4-17. doi:10.1111/jcpp.12306

- Ungar, M. (2015). Social ecological complexity and resilience processes. *Behavioral and Brain Sciences*, 38, 1-79.
doi:10.1017/s0140525x14001721
- Breda, A. V. (2018). A critical review of resilience theory and its relevance for social work. *Social Work*, 54(1), 1-18. doi:10.15270/54-1-611
- Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, 18(5), 389-399.
doi:10.1002/jts.20047
- VandenBos, G. R. (2007). *APA dictionary of psychology*. Washington, DC: American Psychological Association.
- Walsh, W. A., Dawson, J., & Mattingly, M. J. (2010). How are we measuring resilience following childhood maltreatment? Is the research adequate and consistent? What is the impact on research, practice, and policy? *Trauma, Violence, & Abuse*, 11(1), 27-41. doi:10.1177/1524838009358892
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1994). Educational resilience in inner cities. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 45-72). Hillsdale, NJ, US: Lawrence Erlbaum Associates.
- Waters, L. (2017). *Expressions of hope and future orientation among court-involved African American young adults with histories of adverse*

childhood experiences: A grounded theory approach (Published doctoral dissertation). Wheaton College.

Werner, E. E. (2004). Journeys from childhood to midlife: risk, resilience, and recovery. *Pediatrics*, *114*(2), 492-492. doi:10.1542/peds.114.2.492

Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press.

Werner, E. E., & Smith, R. S. (2001). *Journeys from childhood to midlife: Risk, resilience, and recovery*. Ithaca, NY: Cornell University Press.

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, *8*(1), 69-91. doi:10.1080/1361332052000341006

Zolkoski, S. M., & Bullock, L. M. (2012). Resilience in children and youth: A review. *Children and Youth Services Review*, *34*(12), 2295-2303. doi:10.1016/j.childyouth.2012.08.009