

## ABSTRACT

LACKEY, STEPHANIE DAWN. The Impacts of Adverse Childhood Experiences on Community College Student Persistence. (under the direction of Dr. Carrol Warren).

The objective of this qualitative single-case study was to deepen the understanding of how adverse childhood experiences and trauma affect community college students' ability to persist successfully from one semester to another by gaining insights into their lived experiences. This study examined the following research question: *How do community college students who report exposure to early childhood adverse experiences describe the influences that allowed them to persist in college from one semester to the next?*

Participants were recruited from a student success program that served first-generation, low-income, or students with a diagnosed disability. An adapted Adverse Childhood Experiences and Traumatic Events Questionnaire, with scores of three or higher, was used as a qualifier for participation in the study. Eight participants were selected to be part of the study, with their scores from the adapted questionnaire ranging from three to ten. Research indicates that individuals who experience four or more categories of childhood trauma have an increased risk for future physical and mental health risks; however, scores of three still indicate negative health risks. This study relied upon questionnaire responses that resulted in scores of three or higher.

The foundation of this study's conceptual framework was shaped by two theories: Tinto's Theory of Institutional Departure and Bronfenbrenner's Bioecological Human Development Theory. An analysis of interview data revealed findings of how participants navigated both the historical and temporal elements of their experiences while adapting to college life's academic and social aspects. They voiced barriers of academic challenges, mental health needs, and financial burdens. Outside influences such as family and friends had both positive and negative

effects. The overall theme that emerged from the findings was the need for increased opportunities to foster a sense of belonging within the campus community. Throughout the participants' shared college experiences, they demonstrated resilience and relied on personal motivation to persevere toward their goal of graduating.

*Key Terms: adverse childhood experiences, trauma, community college, persistence, student success, and sense of belonging.*

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The Impacts of Adverse Childhood Experiences on Community College Student Persistence

by  
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## DEDICATION

To all the magnificent butterflies that have emerged as resilient survivors, gloriously transformed.



## **BIOGRAPHY**

Stephanie Dawn Lackey was born in Martinsville, Virginia, to loving parents Wayne and Louise Lackey. From the tender age of seven, Stephanie's heart was set on a singular ambition: to become a teacher. Her innate desire to foster a nurturing environment where children could learn and thrive fueled this early calling.

As a product of the community college system, Stephanie emerged as a passionate advocate for its core values of accessibility and equity in education. She firmly believes that community colleges are vital hubs for economic mobility and workforce development, providing tailored pathways to success.

With an extensive tenure spanning over 29 years in education, Stephanie currently serves as the Department Chair of Teacher Education at Forsyth Technical Community College in Winston-Salem, North Carolina. She has assumed numerous leadership roles throughout her career, spearheading initiatives such as Guided Pathways and program redesign efforts.

Stephanie's dedication to the community college system extends far beyond her institutional duties. Actively engaged in North Carolina community college work, she serves as the co-lead of NCACCESS, an organization committed to supporting early childhood faculty across the state.

In 2018, Stephanie embarked on a groundbreaking collaboration with the North Carolina Community College System, Duke University, and the Center for Child and Family Health. As a content developer for trauma-informed practice course modules, she sought to address the profound impact of trauma in early childhood and secondary trauma on caregivers.

Driven by her passion and informed by professional and personal experiences, Stephanie's doctoral research explores the complex interplay between childhood trauma and

community college student persistence. During her doctoral studies at NCSU, she distinguished herself as a North Carolina State University Graduate Ambassador and was honored as a Dream Fellow in the Belk Center for Community College Leadership Fellows Program.

Beyond her professional endeavors, Stephanie finds fulfillment in her role as a mother to two grown children, Braedan and Tristan. She currently calls Mount Airy, North Carolina, her home, where she continues to inspire and shape the future of education.

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## CHAPTER 1: INTRODUCTION

*“The truth about childhood is stored up in our bodies and lives in the depths of our souls. Our intellect can be deceived, our feelings can be numbed and manipulated, our perceptions shamed and confused, our bodies tricked with medication, but our soul never forgets. And because we are one, one whole soul in one body, someday our body will present its bill.”*

– Alice Miller, *Breaking Down the Walls of Silence*

### **Introduction to the Study**

The first years of life determine the foundation for all the years that follow. The most rapid period of human development happens from birth to age eight. This sensitive time of development is so fundamental that end-of-third-grade learning outcomes can predict academic achievement and success (Bia et al., 2020; Dodge et al., 2017; North Carolina Early Childhood Foundation, 2019; Meloy et al., 2019). Unfortunately for many, childhood can be fraught with traumatic experiences such as neglect and abuse, personal traumas, poverty, and systemic oppression (Thomas et al., 2021). In an interview, children's author Michael Morpurgo stated, "Childhood cannot be measured or graded. The outcomes we observe when young people grow up are based on the self-confidence and self-worth that is built through the early years" (Corner, 2015, p.1). Childhood traumas can impact and impede the growth of individuals into adulthood. This study seeks to identify what influences community college students who have experienced traumatic early childhood experiences as they persist in college from one semester to the next.

This chapter establishes the significance of adverse childhood experiences and traumatic events, their long-term effects on mental health and cognitive functions, and their impact on adulthood, especially college success. One overarching research question is offered, supported

by the theoretical and conceptual frameworks that undergird this research study. Finally, chapter one provides definitions of key terms utilized throughout the research.

Exposure to childhood abuse and household dysfunction during childhood has proven to impact the health, well-being, educational attainment, and workforce opportunities of adults who have lived in adverse childhood environments (Center on the Developing Child, n.d.; Centers for Disease Control and Prevention, 2020; Felitti et al., 1998; Hinojosa et al., 2019). The term Adverse Childhood Experiences (ACEs) was coined by Drs. Vincent Felitti and Robert Anda and colleagues during their intensive study on the impacts of childhood abuse and dysfunctional households on individuals' health once in later years (Felitti et al., 1998). Their groundbreaking 1995 study determined that adverse childhood experiences during the first 18 years of life led to several health consequences in adulthood (Felitti et al., 1998). Felitti et al. (1998) developed an ACE survey that measured ten types of traumas centering around personal experiences and events related to family members. Each type of trauma exposure counted as "one," with higher counts indicating exposure to multiple traumatic events (Felitti et al., 1998). The study defined adverse childhood experiences as "exposure to psychological, physical, or sexual abuse; violence against mother; or living with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned" (Felitti et al., 1998, p. 245). Exposure to these types of traumatic events can increase risks of sexual promiscuousness, sexually transmitted diseases, drug and alcohol abuse, teen pregnancy, a varied range of chronic diseases, criminal activity, and mental health disorders (Anda et al., 2006; Centers for Disease Control and Prevention, 2019; Felitti et al., 1998; Karatekin, 2018).

Over the last ten years, the ACE Study has received much attention. The original epidemiological survey has often been misapplied as a screen and score. The screen and score

approach provides an inadequate measure since its original intent was never to diagnose trauma (Anda et al., 2020; NCTSN, 2021). The scoring approach excludes other common traumas and adversities and does not consider the “frequency, severity, duration, or developmental timing of the exposure to such events” (NCTSN, 2021, p. 1). The original authors addressed concerns about the misapplication of the survey, reiterating that the ACE score is a valuable tool to describe the impact of adverse childhood stressors and to be used as a framework for understanding how prevention can reduce future health concerns (Anda et al., 2020). There are many variations of ACE questionnaires available across mental health organizations. For this study, two ACE and one Traumatic event questionnaire were adapted to create one questionnaire (Appendix A) that included additional adversities and traumatic events that young children may be exposed to beyond the original ACEs Questionnaire (Burke et al., 2015; Felitti et al., 1998; Hooper et al., 2011). Since this study focuses on the persistence of community college students who have experienced childhood adversities, the designed Adverse Childhood Experiences and Traumatic Events Questionnaire is a self-reporting of events only. It does not include the traumatic exposure's frequency, severity, or age. While childhood adversities and traumatic experiences are terms used for addressing trauma young children may be exposed to, the two terms overlap but are not interchangeable (NCTSN, 2021). Adversity refers to hardships and requires an adaptation of the child's psychosocial and cognitive development to their environment. Some adversities, such as the imprisonment of a family member, may be a hardship but not traumatic. Serious adversity, like sexual abuse, may also be traumatic. A “traumatic event is a frightening, dangerous, or violent event experienced or witnessed that is threatening to life or body integrity” (NCTSN, 2021, p. 2). Since this study does not utilize the questionnaire to screen participants for treatment planning but as a qualifier for participating in

the research study, the terms adverse childhood experiences and childhood trauma may be used interchangeably when referring to traumatic experiences that occur in childhood.

Adverse childhood experiences and early trauma can cause toxic stress if they remain prevalent over a prolonged period. Toxic stress increases the cortisol level in the brain, which can be increasingly impactful during sensitive periods of development (Anda et al., 2006; Shonkoff et al., 2012; National Scientific Council (NSC), 2014). The hippocampus controls how the brain responds to increased cortisol from elevated stress. High cortisol levels can inhibit how new neurons are formed in the hippocampus, thus limiting brain development and neuron connectivity (Shonkoff et al., 2012; NSC, 2014). Some neurons weaken, impairing memory (Anda et al., 2006; Dawe et al., 2020). This altered brain structure response to toxic stress in early childhood produces a strong correlation between ACEs and challenges in contextual learning, linguistic, cognitive, and social-emotional skills development, "all of which are inextricably intertwined in the wiring of the developing brain" (Shonkoff et al., 2012, p. 236). According to Shonkoff et al. (2012), adverse childhood experiences impact physiological and biological disruptions in the brain as it develops during childhood. The outcomes of the impact of trauma-induced brain development disruptions can persist into adulthood, impacting mental and physical health. While learning to deal with adversity is part of healthy development, long-term exposure to highly toxic situations can cause lifelong repercussions in a child's physical, cognitive, and psychological development (Center on the Developing Child, n.d.).

Adverse childhood experiences and toxic stress can impact school success and place young adults at a higher risk for drop-out (Porche et al., 2011). Substance Abuse and Mental Health Services Administration (SAMHSA) conducted a study on the impact of trauma (2023). They found that two-thirds of children reported at least one adverse childhood experience by age



16 (2022). In 2019, the national high school drop-out rate among students between 15-24 years of age was over five percent (Hanson, 2021). Eight percent of the 16–19-year range were neither enrolled in school nor employed (Hanson, 2021). In 2020, 24.1% of first-time freshmen dropped out of college (Hanson, 2022). Students from low socioeconomic families are 79% more likely to drop out of school than students from high socioeconomic backgrounds (Hanson, 2022).

Drop-out rates are significantly higher for those students who have experienced childhood trauma such as physical and sexual abuse, witnessed domestic violence, or experienced a natural disaster compared to those who have not experienced the same specific traumas (Porche et al., 2011). High ACE scores are related to less school connectedness (Song & Qian., 2020). Trauma exposure reduces the likelihood of participation in extracurricular activities such as sports and clubs. There is a reduced ability to self-regulate behaviors and lower grades (Song et al., 2022). This lack of engagement (Rumberger & Rotermund, 2012; Tahara et al., 2021) and poverty (Thomas et al., 2021) correlates with students dropping out of college (Hanson, 2022).

Early traumatic experiences are highly connected to mental health struggles in college students. Karatekin (2018) found that in undergraduate students who reported early adverse experiences, mental health worsened over a semester. In a subsequent follow-up study, those who scored two or more on the ACEs were twice as likely to meet the criteria for depression or an anxiety disorder and to express suicidal thoughts not reported in the first interview (Karatekin, 2018). Study results indicate alarmingly elevated anxiety, depression, and suicidality levels in college students with early adversity (Karatekin, 2018). Karatekin's study examined the impact of ACEs on mental health from one semester to the next among undergraduate students enrolled in a large public university. While literature exists on the population of undergraduate students at

a four-year institution who experience challenges with maintaining enrollment because of early childhood trauma, little research has focused on first-year students who experience enrollment challenges due to trauma and seek education at community colleges.

### **Significance**

Adverse childhood experiences can impact college success. Depression, anxiety, drug use, time management, lack of academic skills, and family relationships can affect an individual's educational journey. Felitti et al. (1998) report that depression and anxiety are highly related to substance abuse, which can cause multiple problems in college success. The use of alcohol or the need for students to provide care for families with substance abuse leads to increased academic barriers. College students with a history of childhood trauma also demonstrate higher anxiety, depression, and thoughts of suicide (Karatekin, 2018). College students identified time management, lack of study skills, academic readiness, and the usefulness of the required courses as barriers to school success (Hinojosa et al., 2019). These are basic college readiness skills obtained during the formative educational years. Research shows that adverse childhood experiences are related to health and family-related issues (Felitti et al., 1998; Hinojosa et al., 2019), leading to more significant academic barriers (Hinojosa et al., 2019).

College students are facing increased barriers associated with personal mental health challenges. Severe depression, intentional self-harm, devised suicide plans, and suicide attempts among college students doubled between 2012 and 2018 (Duffy et al., 2019; Healthy Minds Network, 2020; Joseph, 2019). College students face many barriers, such as work, finances, transportation, food insecurities, childcare, and family life (Baugus, 2020; Waters-Bailey et al., 2019).

Students bear these daily stressors as they try to balance family and work responsibilities around attending class and completing homework, leading to moderate to severe psychological stress (American College Health Association, 2022). The American College Health Association (2022) surveyed undergraduate students to assess college students' overall health. Finances, family, anxiety, and depression were identified as negatively impacting academic success. Thirty-six percent of the college students surveyed experienced food insecurities; only 30% reported receiving mental health services in the past year (American College Health Association, 2022) and experienced higher levels of anxiety and depression (American College Health Association, 2022; Porter & Umbach, 2019).

Community college students have more psychological concerns than those enrolled in a university due to less access to mental health resources (Katz & Davidson, 2014). The alarming amount of stressors college students carry can be heightened for those with a history of adverse experiences. The nature of the problem becomes imminent for community colleges as administrators seek to provide resources and accommodate learning opportunities for first-year students who enter with a history of childhood trauma.

Community colleges will admit and enroll students with a background of traumatic experiences. The influence of childhood traumatic experiences can impact how students interact with others, handle stress, and succeed in their coursework and educational goals. The resources provided by community colleges to support students with mental health concerns will determine the success and persistence of students. Much research has been conducted on the impacts of adverse childhood experiences on adult health, including alcoholism, anxiety, and depression; however, little has been conducted on how these negative experiences impact community college students' persistence.

## **Statement of the Problem**

If community colleges do not recognize that students are entering their doors with a background of mental health challenges associated with childhood trauma, then the persistence rates of this vulnerable population of students will be impacted. While some community colleges have made efforts to address students' current state of mental health, little understanding of students who enroll with a background of childhood trauma and its impact on student success is known (Brogden & Gregory, 2019). Global and societal events, like COVID-19, and its effect on mental health have highlighted the impact of trauma on an individual's day-to-day functions. The ability to function as individuals, especially college students, is exacerbated by childhood trauma. Without gaining an understanding from the student's perspective of the barriers and needed support structures, persistence rates for community college students with adverse childhood experiences will continue to decrease (Hanson, 2022), perpetuating the poverty cycle (Thomas et al., 2021), unemployment, health concerns, and increased risk of incarceration or criminal activity (Felitti et al., 1998).

## **Purpose of the Study**

This qualitative case study aims to better understand the impact of adverse childhood experiences and trauma on community college students' ability to successfully persist from semester to semester by learning more about their experiences. Trauma exposure during the early years may create barriers such as academic deficiencies (Anda et al., 2006; McEwen, 2005), poor emotional regulation (Shonkoff et al., 2012; Song et al., 2022), anxiety and depression (Anda et al., 2006; Felitti et al., 1998; Karatekin, 2018) and poverty (Thomas et al., 2021). This case study, conducted in the northwest urban area of North Carolina, examines student perspectives on how trauma impacts their ability to stay in school at one community college.

## **Theoretical Framework**

Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Theory of Institutional Departure are two theoretical frameworks undergirding this research.

Individuals are directly influenced by those they interact with the most. Urie characterizes the environment's and ecology's importance in shaping human development (Bronfenbrenner, 2005). An interrelationship exists between the individual, their changing environment, and their larger social contexts (Bronfenbrenner, 2005). This interrelationship is especially apparent for those who have experienced adverse childhood experiences (Cruz et al., 2022).

According to the ecological systems theory, an individual's environment consists of five subsystems, or environments, nested within each other. These subsystems interact synergistically among each other and with the individual (Bronfenbrenner, 1977; Zhu et al., 2020). The microsystem refers to the individual's immediate environment and the settings the individual participates in, such as family, friends, home, school, and the workplace. The mesosystem is the interconnections among these settings, creating a system of microsystems. (Bronfenbrenner, 1977). The exosystem is an extension of the mesosystem, including informal and formal social structures that impact the settings in which the individual participates, such as the neighborhood, media, government, and legal, medical, and mental health services. These social structures can influence what happens in the individual's environments. A macrosystem "encompasses the micro-, meso- and exosystem and entails the overarching societal values and cultural norms that form one's broader social environment" (Zhu et al., 2020, p. 160).

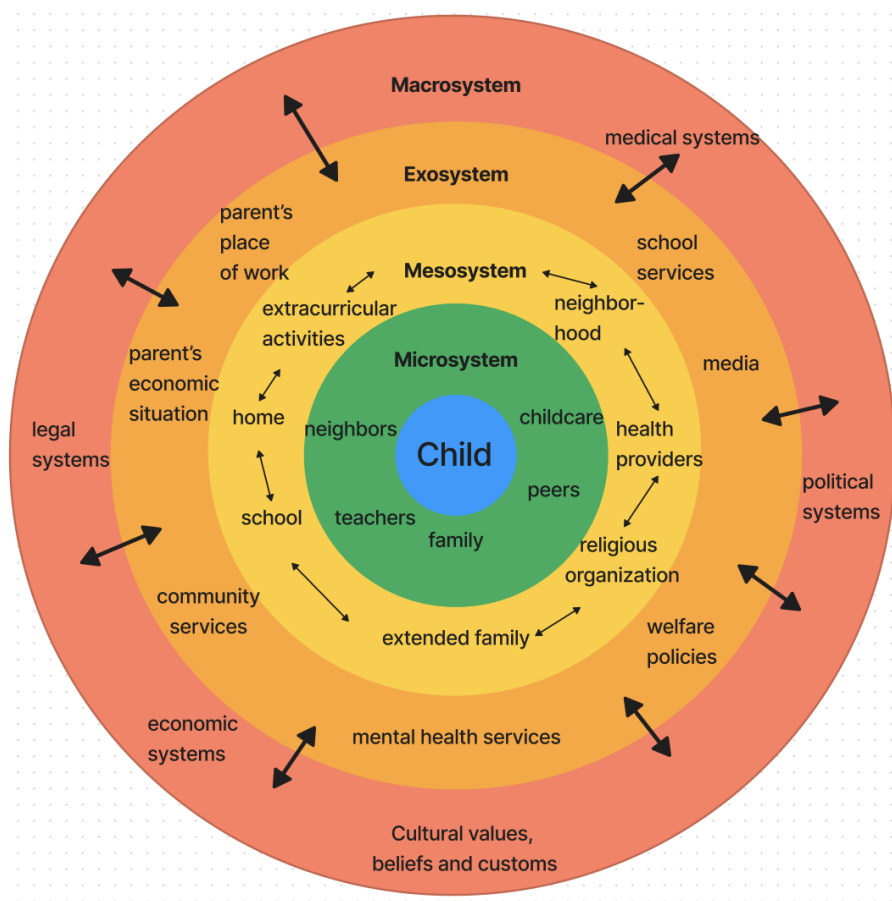
All subsystems may impact a young child that has experienced adverse experiences. A child living in an abusive home (microsystem) may experience toxic stress, which is detrimental

to their social, emotional, and cognitive development. Relationships between the home and community (mesosystem) may be strained due to attempts to conceal the abuse or trauma. The school and home interactions will be guarded or nonexistent. The child may not be allowed to participate in extracurricular activities as an aspect of control and fear of abuse being discovered. Social service intervention (exosystem) may or may not produce a positive outcome for the child. It may take years to substantiate the abuse, for parent rehabilitation, or for the child to be removed from the home. The legal and political system (macrosystem) determines how child abuse is defined and its implications for the families involved. Each layer influences the individual in the center, with the closest having the most impact on their development. The child, at the center of the subsystems, is vulnerable to their interrelationships (Bronfenbrenner, 1977).

Figure 1 visually represents an adapted version of Urie Bronfenbrenner's Ecological model (Bronfenbrenner, 1977). This model demonstrates the interrelated factors that impact a child's development.

**Figure 1.1**

*Adapted Factors from Bronfenbrenner's Ecological Model*



*Note:* Bronfenbrenner's Ecological Systems Model illustrates how the interactions among the systems impact the child's development.

Adapted from Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *The American Psychologist*, 32(7), 513-531. <https://doi.org/10.1037/0003-066X.32.7.513>

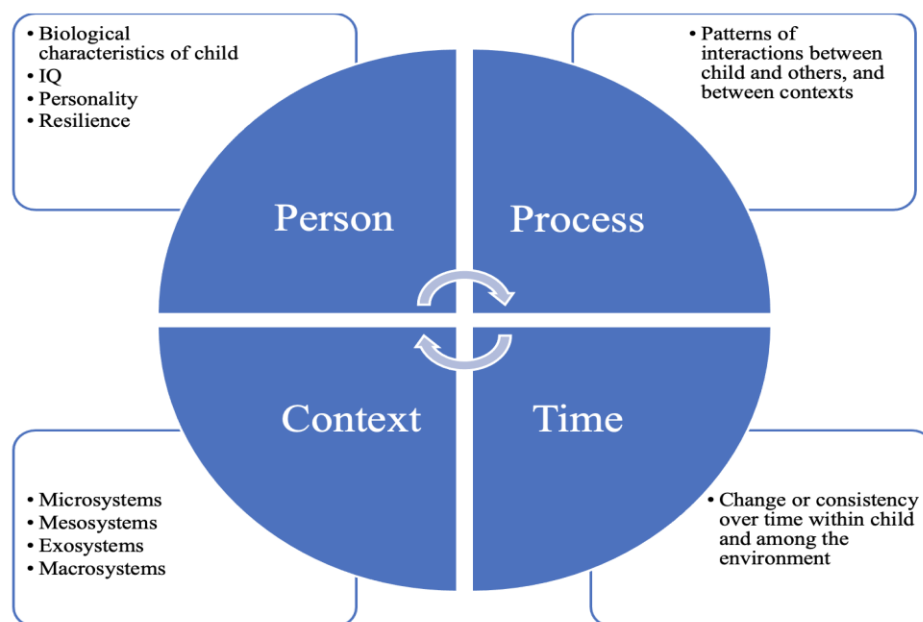
Bronfenbrenner's Ecological Systems Theory evolved through the years of his research. In the 1990s, he expanded his theory to include the Process-Person-Context-Time model (PPCT) to focus on the proximal processes of family relationships. His Bioecological Theory of Human Development emphasizes the four factors of process, person, context, and time (Bronfenbrenner, 1979, 2005). Bronfenbrenner viewed proximal processes as "the most powerful predictor of human development" (Eriksson et al., 2018, p. 420), defining them as the reciprocal interactions between an individual and other persons, objects, or symbols in the immediate environment, such as doing homework or hanging out with friends (Bronfenbrenner & Morris, 1998; Mercon-Vargas et al., 2020). Over time, he expanded the proximal process to consider the characteristics of the developing person, context, developmental outcome, and time (Bronfenbrenner & Morris, 1998; Mercon-Vargas et al., 2020).

In the PPCT model, Bronfenbrenner determined that person and context (from micro to macro) strongly influenced proximal processes (Bronfenbrenner & Morris, 1998). Consequently, proximal processes can produce positive and negative outcomes. According to Bronfenbrenner and Morris (1998), dysfunctional outcomes are expected in children growing up in disadvantaged or disorganized homes. In children growing up in advantaged and stable homes, outcomes are more indicative of developmental competence; therefore, according to this model, parental abuse or neglect can result in developmentally maladaptive outcomes (Mercon-Vargas et al., 2020). Figure 1.2 provides an adapted visual summary of the elements in the Process-Person-Context-Time Model (Bronfenbrenner, 2005; Tudge et al., 2009).



**Figure 1.2**

*Adapted Bronfenbrenner's Process-Person-Context-Time Model*



*Note:* This is an adapted version of Bronfenbrenner's Person-Process-Context-Time Model, which depicts the interrelationships between the person, patterns of interaction among environments, adaptations over time, and contextual interactions within the systems.

Adapted from Bronfenbrenner, U. (Ed.). (2005). *Making human beings human: Bioecological perspectives on human development*. Sage Publications.

Adapted from Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological systems theory of human development. *Journal of Family Theory & Review*, 1(4), 198–210. <https://doi.org/10.1111/j.1756-2589.2009.00026.x>

Student attrition has been a concern for community colleges for years (Causey et al., 2022; National Student Clearinghouse Research Center (NSCRS), 2022; Park & Choi, 2009;

Provasnik et al., 2009). The idea of how to retain students is at the forefront of community colleges (Thomas & McClellan, 2022). According to the NSCRS (2022), from 2020 to 21, 41% of community college first-year students did not return to college the following year. Tinto's Theory of Institutional Departure highlights how personal backgrounds impact goal creation, college integration, and positive or negative outcomes with persistence and completion (Tinto, 1993; Tinto, 2012).

Tinto theorized that students must progress through three stages in institutional persistence to persist to degree completion: separation, transition, and incorporation (Tinto, 1988). As students enter higher education, they must separate themselves from their families, peers, and past habits to transition successfully into college life. If students do not experience encouragement from their families and peers, separation and transition will be more complex and may negatively impact the persistence needed to remain in school. Students who grew up with educated parents tend to adjust to the college experience more readily. According to Tinto (1988), "One would therefore expect persons of minority backgrounds or from very poor families, older adults, and persons from small rural communities to be more likely to experience such problems than other students" (p. 445). Since the 1980s, higher education institutions have experienced challenges retaining students, especially underrepresented minorities (Mendelson et al., 2021).

Though most students transition easily into the social and academic facets of college life, many struggle with letting go of outside influences, which, without assistance, can lead to early departure (Tinto, 1988). Acclimation into college depends on developing positive social interactions with peers and faculty. Failure to make positive relationships may lead to early departure (Tinto, 1982, 1988). Not all can make these connections alone and may require

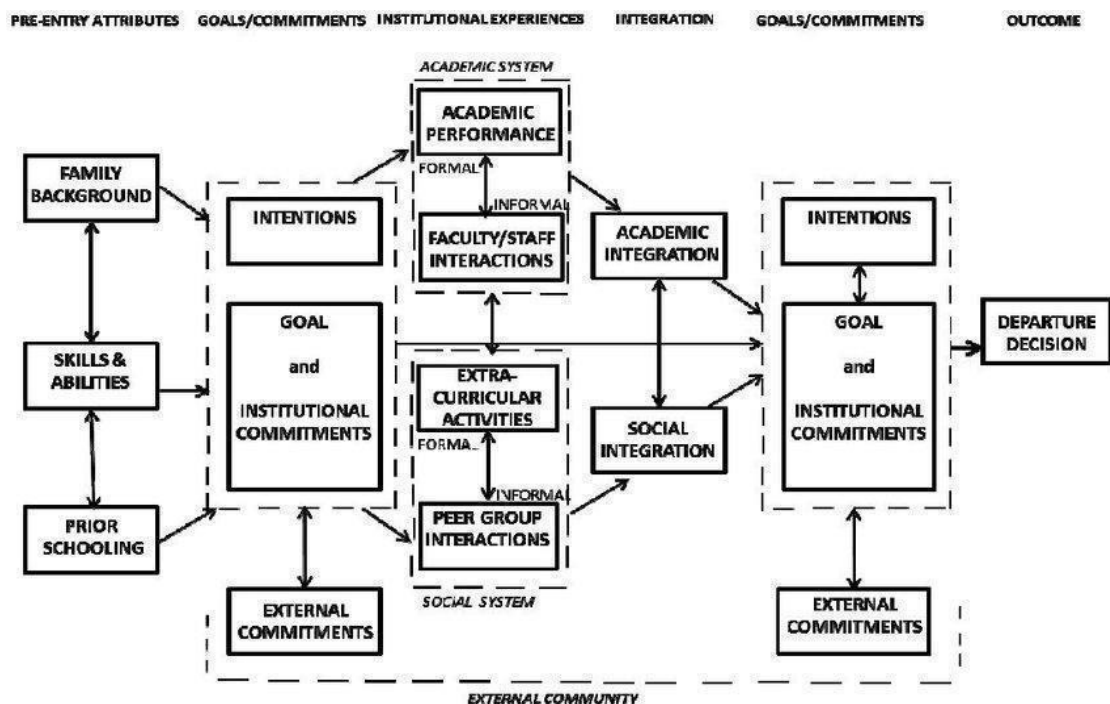
assistance. Community colleges must actively address ways to make the first-year experience inclusive and welcoming, especially for those with a trauma background.

Higher education institutions must evaluate programs to determine actions needed to assist students in becoming acclimated and persisting to completion. A particular focus on the early months of students' education careers is imperative rather than later when problems have emerged (Tinto, 1988). Front-loading resources at the beginning may reduce early withdrawal. Orientation programs and social opportunities should continue beyond the first few weeks but through the first semester as students adjust to the stressors of college life (Tinto, 1988).

Frequent contact with faculty outside the classroom and mentorship provides a greater sense of belonging. Characteristics of students straight out of high school are different from transfer and nontraditional students. Programs designed to meet their unique needs are equally important, if not more so, in assisting in persistence (Tinto, 1988). Institutions must work toward providing students with a meaningful learning environment to connect to the institutions by developing a sense of belonging within the student body (Freeman et al., 2007; Demetriou et al., 2017; El Zaatari & Maalouf, 2022).

Tinto's Theory of Institutional Departure "cannot do or explain everything" (Tinto, 1982, p. 688). It does not explain the financial hardships that tuition and living expenses may have on students or the differing elements leading to transfer decisions or permanent departure from school. In addition, the model does not explain the differences in experiences among students of different genders, races, and socioeconomic backgrounds (Tinto, 1988). Figure 1.3 is a representation of Tinto's Model of Institutional Departure. The figure illustrates the interconnectedness of a student's goals and commitments, institutional experiences, how well they integrate into the college culture, and the decision to stay enrolled or leave college.

Figure 1.3

*Tinto's Model of Institutional Departure*

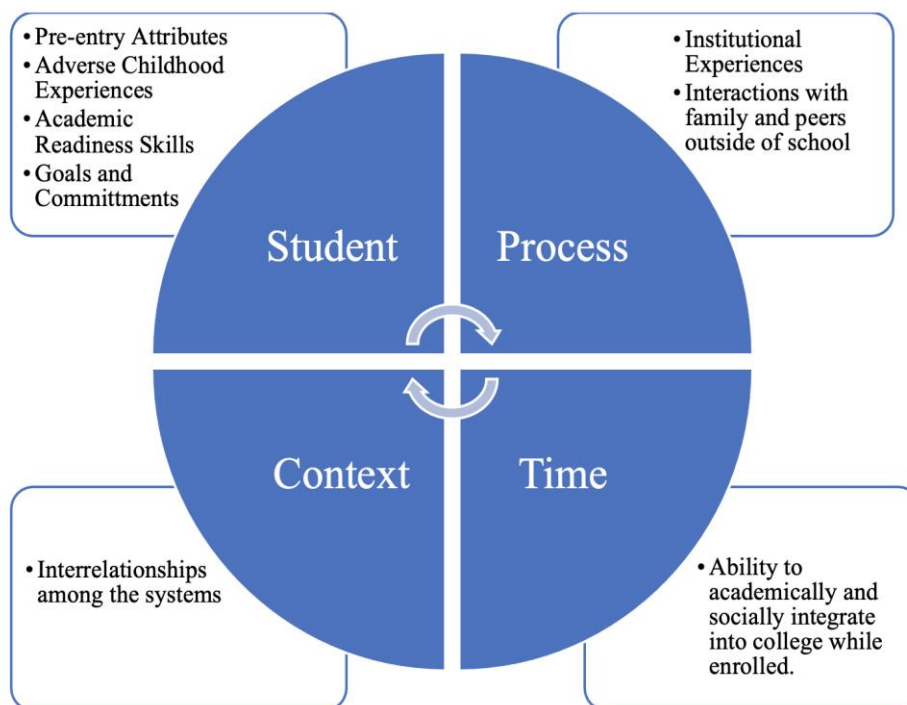
Note: Tinto, V. (1993). *Leaving college: Rethinking the cause and cures of student attrition* (2nd ed.). The University of Chicago Press. Reprinted with permission. (Appendix A)

This study integrates Bronfenbrenner's Bioecological Human Development Theory and Tinto's Theory of Institutional Departure, guiding the research question and methodology development. Through a case study, the researcher will glean personal insights from community college participants who have disclosed exposure to childhood adversities and trauma and how they persist in college.

## **Conceptual Framework**

Application of Bronfenbrenner's Bioecological Human Development Theory and Tinto's Theory of Institutional Departure to this study relates to how trauma from childhood impacts student success and retention in their current academic environment. College students who have experienced trauma in their childhood carry the weight of that exposure as they navigate the onboarding process to college, acclimate to college life, and develop school/life balance.

This conceptual framework, provided in Figure 1.4, overlays Bronfenbrenner's Bioecological Theory of Human Development with Tinto's Theory of Institutional Departure. The student section in the model considers the student's pre-entry attributes, academic readiness, goals and commitment, and exposure to adverse childhood experiences. The process section includes interactions between students, their families and peers, and their school. The context section encompasses both the students and the school's ecological systems. Time in this model, represented in the bottom right quarter, includes the events and ability to acclimate while enrolled in college.

**Figure 1.4***Conceptual Framework*

*Note:* This is a developed conceptual framework of Bronfenbrenner’s Person-Process-Time-Context Model and Tinto’s Institutional Departure Model integrating aspects of both models: the attributes a student brings to the college experience, the experiences and support they may receive in college, the ability over time to integrate within the interrelationships of the systems academically and socially.

Each student possesses individual characteristics such as gender, age, personality, temperament, intelligence, and resiliency traits (Eriksson et al., 2018; Rosa & Tudge, 2013). Individual characteristics influence how students handle stressful or challenging situations. Students exposed to childhood trauma can experience academic barriers due to trauma-induced

brain development disruptions (Shonkoff et al., 2012) and less school connectedness (Song & Qian, 2020). Enrolling in college can be more challenging for those with adverse experiences than students without trauma exposure. College students with ACEs have higher levels of anxiety and depression (Karatekin, 2018) and struggle with academic readiness, study skills, and time management (Hinojosa et al., 2019). Once a student has an educational goal and decides to enroll, what the college does to create a sense of belonging will play a critical role in persistence (Tinto, 1988; Freeman et al., 2007; Demetriou et al., 2017; El Zaatari & Maalouf, 2022).

### ***Process and Time***

Process and time, as used in this framework, relate to the students' interactions on campus and among their peers. Relationships and trust developed through personalized advising (Yenney, 2020) and faculty engagement (Freeman et al., 2007) contribute to student academic success. Opportunities to engage students in athletic programs and clubs (Martinez & Munsch, 2019) and resiliency classes (Chandler et al., 2020) increase a sense of belonging. Students who feel a sense of belonging in college tend to stay engaged and persist from one semester to the next (Freeman et al., 2007; Yenney, 2020).

The activities students participate in and commit their time to while in college are paramount to their success. Integrating academic and social aspects of college plays a crucial role in supporting a student's intentions, goals, and desires to persist with balancing school and life. If these areas are met positively, the student will remain in school. Negative attainment of academic and social integration can lead to students dropping out. Students who have experienced trauma demonstrate a greater need for support in obtaining academic success and a sense of belonging (Tinto, 1988).

### ***Context and Student***

Context is the interaction between all the systems-micro-, meso-, exo-, and macrosystems (Bronfenbrenner, 1977, 1995, 2005). The context of family and peer relationships and support of enrolling in college (microsystem), how the college engages the student through onboarding, career counseling, advising and academic supports (mesosystem), the balance of work and family life (exosystem), and the availability of financial resources and mental health services (macrosystem), all play a role in a student's success and decision to stay in school. The effects of context and person are interactive, not additive (Mercon-Vargas, 2020).

Bronfenbrenner's Process-Person-Context-Time Model and Tinto's Theory of Institutional Departure provide a conceptual framework that considers the ecological systems' interrelationship with the student's decision to persist from semester to semester.

### **Research Question**

One overarching research question guides this case study:

How do community college students who report exposure to early childhood adverse experiences describe the influences that allowed them to persist in college from one semester to the next?

### **Definition of Terms/Key Terms**

<b><i>ACEs</i></b>	Adverse Childhood Experiences (Felitti et al., 1998).
<b><i>Acute trauma</i></b>	A single traumatic event that lasts for a short time (Foundation Trust, 2023a).
<b><i>Chronic trauma</i></b>	Occurs when multiple traumatic events occur, usually over a long period (Foundation Trust, 2023b).



- Complex trauma*** Experiencing multiple traumatic events from a young age, usually caused by adults who were supposed to care for and protect the child (Foundation Trust, 2023c).
- Neglect*** The failure of a caregiver to provide for a child's basic needs. It is considered trauma, especially for an infant or young child entirely dependent on adults. Neglect can also increase the likelihood of exposure to other types of traumatic events (NSPCC, n.d.).
- Historical trauma*** Personal or historical event(s) or prolonged experience(s) that continues to impact several generations, such as slavery, removal from homelands or relocation, forced placement in boarding schools, massacres, genocides, or ethnocides (Foundation Trust, 2023d).
- Systemic trauma*** The mistreatment of people within a specific group supported and enforced by society and its institutions. It is not usually an acute event but is often ongoing. This mistreatment is generally based on personal identity or belonging to an oppressed group and includes discrimination, micro-aggressions, gender-based discrimination, and health disparities (Foundation Trust, 2023e).
- Toxic Stress*** Toxic stress results in prolonged activation of the stress response, with a failure of the body to recover fully. It differs from a normal stress response in lacking caregiver support, reassurance, or emotional attachments (Foundation Trust, 2023f).

- Nontraditional*** Students who delayed college after high school, attend school part-time, have children, are single parents, work full-time while enrolled, are financially independent, did not earn a traditional high school diploma, or serve in the military (National Center for Education Statistics, n.d.).
- Persistence*** Percentage of fall credential-seeking students who graduated or are still enrolled at the college during the subsequent spring semester (Gardner, 2022).
- Retention*** The percentage of fall credential-seeking students who graduate or are still enrolled at the college during the following fall semester (Gardner, 2022).
- Underserved population*** Students of low socioeconomic status, first-generation college goers, or students of color (Rendon, 2006).

### **Chapter Summary**

William Faulkner (1951), an American writer, wrote, "The past is never dead. It's not even past" (pg. 73). Individuals with adverse childhood experiences cannot wholly put lived trauma in the past. Traumatic experiences are molded into the body, causing psychological and biological disruptions that persist into adulthood (Shonkoff et al., 2012). Toxic stress that occurs when children are under persistent stress alters brain structure, creating a deficiency in contextual learning and cognitive and social-emotional development (Shonkoff et al., 2012). Young adults are at risk of having the inability to establish positive peer relationships (Song & Qian, 2020) and develop risky behaviors such as drinking and promiscuousness (Anda et al., 2006; Centers for Disease Control and Prevention, 2019; Felitti et al., 1998; Karatekin, 2018), and struggle with academics (Hinojosa et al., 2019; Song & Qian, 2020). These potential deficiencies may impact school success and place young adults at a higher risk for drop-out (Porche et al., 2011). Adults

who have ACEs may struggle with maintaining employment, managing finances, and pursuing education, which can exacerbate poverty (Centers for Disease Control and Prevention, 2021).

The effects of trauma may impact students' abilities to persist in their coursework. This study will focus on the impact of adverse childhood experiences on community college student persistence from one semester to the next. Personal student perspectives may inform community college practices as leaders seek to assess the measures taken to provide supportive assistance to students with mental health concerns. The findings from this study could identify the resources and programs needed by students who have experienced trauma to support their academic persistence.

This chapter provided an overview of trauma and its long-term effects on personal development in adulthood through an introduction and an explanation of the significance and purpose of the study through theoretical and conceptual frameworks. The research question that guides this qualitative study, the theoretical and conceptual framework contributions, and the purpose of this study were also shared. Chapter two will provide a literature review of the long-term impacts of childhood trauma on adult development and the barriers that community college students, especially those who have experienced adverse childhood experiences, must overcome to be successful.

## CHAPTER 2: LITERATURE REVIEW

### Overview

Exposure to early childhood trauma and adversity increases vulnerability to other life stressors (McElroy & Hevey, 2014) and can impact college success (Anda et al., 2006; Hinojosa et al., 2019; Porter, 2010). Individuals exposed to adverse childhood experiences before the age of 18 are more susceptible to depression and anxiety (Anda et al., 2006; Felitti et al., 1998; Giovanelli et al., 2016; Karatekin, 2018). College students, especially males (Grigsby et al., 2020), are more apt to abuse alcohol and illicit drugs to cope with the emotional dysfunction from adverse exposure (Felitti et al., 1998; Forster et al., 2018; Merrick et al., 2017). Pervasive depression, anxiety, and substance abuse distract community college students from their academics, which can impact college success, leading to dropping out (Porter, 2010).

Community college students are increasingly non-traditional students who work full-time and have family responsibilities (Bergman & Olson, 2019). Many are first-generation students of color, and students of low socioeconomic backgrounds tend to be underrepresented on many college campuses (Pendakur & Furr, 2016; Williams et al., 2022). Balancing work, school, and family responsibilities brings its own stressors. For students who have experienced early childhood adversities, levels of anxiety can be exasperated, leading to significant academic barriers (Hindojosa et al., 2019).

Mental health challenges such as high anxiety and depression can enhance the desire to disengage from academic and social activities. Academic success and college persistence are impacted when students lack engagement on campus (Rumberger & Rotermund, 2012; Tahara et al., 2021; Tinto, 1988, 1993). Students need opportunities to acclimate to college social and

academic expectations (Tinto, 1988) to develop a sense of belonging (Carballo, 2022; Tinto, 1988).

Our nation is in a mental health crisis. No age is excluded. Young children, teens, young adults, and adults are all vulnerable to mental health challenges. College students report that depression, anxiety, and financial and family responsibilities are negatively impacting their college academic success and ability to persist (American College Health Association, 2022). The 2023 NC Child Health Report Card reported a drastic increase in mental health concerns for North Carolina children, indicating a significant increase in depression and suicide attempts among ages 12-17. Students with adverse childhood experiences are more apt to suffer from severe psychosocial and cognitive impediments (Anda et al., 2006; Felitti et al., 1998; Giovanelli et al., 2016; Karatekin, 2018).

Community colleges must be ready to provide mental health services for students, especially for those who have exposure to adverse childhood experiences and traumatic events. Without support, the persistent rates of this vulnerable population will be jeopardized. This study will examine how students who have adverse childhood experiences and trauma exposure persist in college from one semester to the next. Listening to these students' voices and their strategies, barriers, and needs to persist is critical.

The relationship between ACEs, resilience, well-being, and depression is intermingled (Kelifa et al., 2021; Wright et al., 2009). This chapter reviews the theoretical perspectives of Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Theory of Institutional Departure, resiliency, and Adverse Childhood Experiences to illustrate their interrelationship on the impact of community college persistence.

## **Bronfenbrenner's Bioecological Theory of Human Development**

Urie Bronfenbrenner was a developmental psychologist most famous for his ecological systems theory, highlighting the importance of the environment on an individual's development. His ecological theory is a "complex system of relationships affected by multiple levels of the surrounding environment, from immediate settings of family and school to broad cultural values, laws, and customs" (Mcleod, 2023, p.1). In his original study, Bronfenbrenner (1977) speculated that four interactive subsystems impact an individual's development: micro-, meso-, exo-, and macrosystems. These systems are perceived like nesting dolls. Each system nestles into the other, interacting with each other and the individual (Bronfenbrenner, 1977). Visually, one could also consider a bulls-eye formation with the developing person in the center and the four subsystems surrounding the individual in a stacked circular fashion. This visual depicts the importance of the developing person as the center focal point with the influence's subsystems in the outer circles.

The microsystem is the interactive relationship between the developing individual and those in their immediate setting, such as home, school, and church. The elements of a setting are defined as "place, time, physical features, activity, participant, and role" (Bronfenbrenner, 1977, p. 514). The microsystem is the most influential system since it is the most intimate to the individual.

The mesosystem is the interrelationships between a developing person's leading settings, such as home, school, and peers. It is a "system of microsystems" (Bronfenbrenner, 1977, p. 515).

The third subsystem is the exosystem. The exosystem is viewed as an extension of the mesosystem. It embraces the social structures and major institutions of society that influence the immediate settings in which the developing person resides both formally and informally. Public

agencies, mass media, work at large, and social media all have the power to influence the developing individual (Bronfenbrenner, 1977). A child living in poverty is developmentally impacted if the Department of Social Services decreases the number of children that can receive childcare vouchers, eliminating an opportunity for the child to attend a high-quality childcare center during the critical years of development.

The macrosystem differs from the other subsystems in that it does not focus on the contexts affecting the individual but on the influences of existing culture and subculture (Bronfenbrenner, 1977). The overarching political, economic, legal, and social systems directly or indirectly influence the interrelationships of the other systems. The priority children and their caregivers are given in the constructs of the existing political, economic, legal, and social platforms determine how they are treated and interacted with in their different settings (Bronfenbrenner, 1977). Melvin L. Kohn, John Hopkins sociologist and former Bronfenbrenner student at Cornell, speculated that Bronfenbrenner's work informed the study of social and behavioral science to “realize that interpersonal relationships, even [at] the smallest level of the parent-child relationship, did not exist in a social vacuum but were embedded in the larger social structures of community, society, economics, and politics” (Woo, 2005).

In the 1990s, Bronfenbrenner expanded his ecological theory to consider the biological paradigm in which he introduced the process-person-context concept. He extended the ecological theory model to include the chronosystem (Bronfenbrenner, 1999, 2005). The chronosystem recognizes that development is a dynamic process influenced by the timing and sequencing of events. It adds a temporal dimension to Bronfenbrenner's ecological framework, emphasizing that individuals are not only shaped by their immediate contexts but also by the historical and temporal aspects of their experiences (Bronfenbrenner, 1999, 2005).

Bronfenbrenner's Bioecological Theory of Human Development are applicable when considering the impacts of ACEs on the development of an individual over time. He states that "the individual's own developmental life course is seen as embedded in and powerfully shaped by conditions and events occurring during the historical period through which the person lives" (Bronfenbrenner, 1995, p. 641). The original Adverse Childhood Experiences (ACE) Study focused on household dysfunction, such as abuse, violence against the mother, drug use in the home, parental imprisonment, and its impact on adult health (Felitti et al., 1998). The study revealed a significant increase in ACEs exposure and adult risk factors (Felitti et al., 1998). Many studies have substantiated these findings. Individuals exposed to adverse childhood experiences are at greater risk for suicidal ideation (Aytur et al., 2020; Thompson et al., 2012; Wiens et al., 2020), depression (Campbell et al., 2016; Elmore et al., 2020) and drug use (Dube et al., 2003; Dube et al., 2006; Aytur et al., 2020).

Although Bronfenbrenner's Bioecological Theory of Human Development is conceptualized around the field of child development, researchers across other domains utilize the approach extensively to examine human behavior and one's interaction with the world around them (Renn & Arnold, 2003; Moran et al., 2016; Onwuegbuzie et al., 2013; Yasui et al., 2017). Bronfenbrenner believed that the interactions between the individual and the outside world always affected one another (Bronfenbrenner, 1977, 1986). His systems theory applies to the interactivity and interconnectedness of all people across the systems they encounter (Renn & Arnold, 2003; Moran et al., 2016). Bronfenbrenner's Bioecological Theory of Human Development is the central guiding framework for this research study. Tinto's Theory of Institutional Departure has been integrated with Bronfenbrenner's framework to deepen the theoretical foundation.



## **Tinto's Theory of Institutional Departure**

For years, student retention has been a concern for secondary education (Aljohani, 2016). Adults who enroll in community college face many barriers. Financial crises, family and job responsibilities, transportation, and food and housing insecurities impact how they can engage in academics (American College Health Association, 2022; Waters-Bailey et al., 2019).

Vincent Tinto theorized that experiences in the first year of college set the foundation for whether students will persist or leave school (Tinto, 1993). Expanding upon Van Gennep's rites of passage (1960), Tinto speculated that a student's persistence or departure was determined by how successful they were in navigating the stages of separation, transition, and incorporation in their first year of college (Aljohani, 2016; Tinto, 1993). Initially, students must separate themselves from their past social circle, including family, which may have different values and norms related to their new academic trajectory. As students move forward and disassociate from them, they enter the transition stage and can acclimate to the college environment (Aljohani, 2016; Tinto, 1993; Van Gennep, 1960). A certain level of autonomy (Van Gennep, 1960) and different adapting strategies are required to move from one stage to the next (Crede et al., 2012; Parker et al., 2004; Tinto, 1993).

In Tinto's Institutional Departure Model, students bring unique pre-entry attributes into the college experience. Family background, past educational experiences, and academic readiness can support or hinder college entry. These attributes shape individual goals, intentions, and external commitments and will impact the mindset and ability to persist (Tinto, 1993). Adverse childhood experiences are a pre-entry attribute that can negatively impact academic success (Anda et al., 2006; Karatekin, 2018; McEwen, 2005; Shonkoff et al., 2012) and persistence (Cheung et al., 2021; Hartley, 2011; Mullen, 2021).

A student's external commitments, such as family and job responsibilities, can also affect their decision to stay or depart. Upon enrollment, community college students encounter new expectations that differ from their previous roles and responsibilities. Students face new academic, personal, and social expectations, which require them to form different methods and strategies to acclimate to college life. The intense need to adapt and assimilate into college life can be very stressful and affect a person's health and ability to cope (Tinto, 1993; Parker et al., 2004, & Credé et al., 2012). Mental illness, such as depression, can arise if individuals are forced to transition alone (Van Genneep, 1960).

Tinto states that colleges consist of academic and social systems (1993). While most students can adjust socially and intellectually to college life, many find it more difficult (Tinto, 1988). "Without assistance, many withdraw from college very early in the academic year" (Tinto, 1988, p. 444). Students must integrate into both systems to persist. Persistence in college can be supported by the institution's academic or social system (Tinto, 1988). "The longitudinal process of student institutional departure can be seen as being marked by the difficulties individuals experience in making either or both the social and intellectual adjustment to the formal and informal academic and social life of the new communities of the college" (Tinto, 1988, p. 448).

High ACE scores are related to less school connectedness (Song & Qian, 2020). A student's sense of belonging in college is a strong determinant as to whether they decide to persist in school (Carballo, 2022). Tinto (1993) highlighted the potential lack of fit between students' goals and needs and the expectations of post-secondary education. Successful college acclimation relies on adjusting to the academic and social environment. Failure to develop interpersonal relationships can lead to negative outcomes such as depression, anxiety, suicide,

and attrition (Hoyle & Crawford, 1994; Salzer, 2012; Tinto, 1993). Student persistence is influenced by their pre-entry attributes and how colleges help them acclimate into the academic and social environment through positive faculty interactions (Dwyer, 2017; Jackson et al., 2023; Van Gennep, 1960; Tinto, 1993, 2017a) and connectedness to campus (Freeman et al., 2007; Hotchkins et al., 2021; Lewis et al., 2017; Museus & Chang, 2021; Van Gennep, 1960; Tinto, 1993). The ability to acclimate will impact their decisions to stay or depart (Tinto, 1993).

### **Resiliency**

Individuals face many stressors in daily life. Most stress is healthy, but prolonged stress under adverse circumstances can cause long-term emotional distress and biological dysfunction (Anda et al., 2006; Felitti et al., 1998; Felitti et al., 2009; McEwen, 2005; Shonkoff et al., 2021). The ability to withstand, adapt, and recover from adversity, trauma, threats, and toxic stress is considered resilience (American Psychological Association, 2014). Resilience has been defined as "the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development" (Masten, 2014a, p. 6) such as exposure to early childhood trauma (Bethell et al., 2016; Bethell et al., 2017; Bethell et al., 2019; Liu et al., 2020; Poole et al., 2017; Wang et al., 2021). Adaptive systems interact with one another to shape development. Developing a solid resilience to adversity depends on these systems' adaptations and interactions. "As a result, the resilience of a person is always changing, and the capacity for adaptation of an individual will be distributed across interacting systems" (Masten, 2014a, p. 9).

Resiliency factors are significantly influenced by past and present experiences (Garg et al., 2015). Individuals exposed to adverse childhood experiences have a lower rate of resilience and protective factors (Bethell et al., 2016). One could consider early childhood trauma as a

breakdown of safety, security, and nurturing in a child's environment and relationships, which can diminish their ability to manage chronic stress and develop resilience (Bethell et al., 2016).

The ability of individuals to adapt to adversity depends on their connections to people, relationships, and external systems (Masten, 2018). Children develop in ecological systems embedded in families, communities, societies, and cultures (Bronfenbrenner, 1977, 1995, 2005; Southwick et al., 2014). Interventions developed to build resiliency will impact other systems' functioning. According to Southwick et al. (2014), intervening at higher levels may be more effective, such as developing community awareness and programs on resiliency factors and providing resources for schools and families rather than resilience programs directed mainly at the individual.

Resilience does not happen in isolation. An individual's resilience is highly dependent on multiple layers of society (Southwick et al., 2014). The ability of a developing child to appropriately respond to adversity depends on the ability to self-regulate and the ability of families, schools, communities, health care systems, and other ecological systems (Masten, 2019). It may be seen "as a process to harness resources to sustain well-being" (Southwick et al., 2014, p. 4).

Temperament, or personality, is often associated with resilience; however, differences in personalities and cognitive abilities can impact a person's adaptive capabilities (Masten, 2018). Experiences, such as trauma, can also shape personalities. Individual differences in personality or temperament can be developmentally influenced by the situation and experiences (Masten, 2014b). Therefore, resilience can be viewed as a multi-layer process involving individual and environmental factors and their interactions.

Resiliency interventions may help individuals learn to develop the ability to adapt to challenging or adverse situations, such as mindfulness (Bethell et al., 2016), reframing mental health challenges (Singh et al., 2014), and self-care (Heath et al., 2020). However, the developmental timing of interventions is critical (Toth & Cicchetti, 2013; Masten, 2011, 2014b). There are windows of plasticity in the transitional years, such as early childhood, early adolescence, and adulthood (Nesbitt, 2022; Masten, 2011, 2014a). In the early childhood years, resiliency can be restored through protective caregiving. In adolescence and adulthood, relationships are still critical in developing resilience. Teens focus more on peer and mentor relationships, whereas adults are parenthood and work-based (Masten, 2014b). Interventions during these times will have a more significant impact.

Resilience is an essential psychological resource that helps individuals successfully adapt to trauma, adversity, and stress. The ACE score (Felitti et al., 1998) does not consider the positive experiences a child may acquire during childhood that will help develop resiliency, protecting them from the negative effects of childhood adversities (Starecheski, 2015). Having supportive relationships such as a loving grandparent, a trusted confidante, an encouraging teacher, or a trusted friend may mitigate the long-term effects of early trauma (Starecheski, 2015). College students, especially those exposed to adverse childhood experiences, need opportunities to develop protective factors such as "supportive relationships, problem-solving and self-regulation skills, self-efficacy and optimism, and beliefs that life has meaning" (Masten, 2019, p. 101). To understand resiliency is to understand community college students.

### **Community College Overview**

In the early twentieth century, American community colleges responded to societal demands for labor market skill development, social equality, and higher education attainment

(Cohen et al., 2014). The terms junior college and community college have been used to describe two-year institutions. Junior colleges were the first colleges housed in high schools (Beach & Grubb, 2011; Cohen et al., 2014). The first junior college was established in Chicago, Illinois, in 1901 by William Rainey Harper, president of the University of Chicago, and J. Stanley Brown, principal of Joliet High School (Beach & Grubb, 2011; Cohen et al., 2014; Thoreson, 2017). William Rainey Harper's vision was to "take higher education outside city centers and into outlying communities throughout the country" (Thoreson, 2017, p. 12). His vision came to fruition when he began awarding an associate degree at the end of a two-year program, beginning the term "junior college" (Beach & Grubb, 2011; Thoreson, 2017).

America's community colleges proliferated. By the 1970s, junior colleges gradually took on the name of community colleges. Service areas increased as community colleges offered early college high schools and baccalaureate degrees. By 2010, 18 states approved community colleges offering baccalaureate degrees. Today, 96% of community colleges are within a 20-mile radius of in-state residents (Cohen et al., 2014). Since their origination, community colleges have continued to meet the needs of society and the labor market. Today's curricular functions focus on academic transfer, occupational, continuing, developmental education, and community service (Cohen et al., 2014). According to Cohen et al., "All education is general education. All education is potentially career-enhancing. All education is for the sake of the broader community" (p. 30); thus, all functions are intertwined. Community colleges' mission is to reduce barriers for students to obtain higher education and skills for job development.

Today, the mission has not changed. Community colleges' mission is to reduce student barriers by providing high-quality and accessible education for skill development to enter the workforce (Cohen et al., 2014; Emsi Burningglass, 2021; Wyner, 2014), creating a catalyst for

economic growth (Christophersen, 2020). In North Carolina, for example, every dollar a student invests in their education is \$4.50 higher in future earnings over a lifetime, with an annual rate of return of 22.3% (Emsi Burningglass, 2021). The community also benefits from increased earnings of \$1.90 in taxpayer dollars per student dollar spent (Emsi Burningglass, 2021). Community colleges today focus on providing degree or credential completion opportunities and outcomes centered around measurable learning, student equitability, and increased labor market (Wyner, 2014).

### ***Why Students Choose Community Colleges***

Community colleges are a viable option for those interested in obtaining workforce skills and educational credentials. Students attend community colleges to achieve social mobility, a sense of pride, and an opportunity to reconstruct themselves with a greater sense of purpose and accomplishment (VanOra, 2019). Many community college students are first-generation, the first in their families to attend college (Toutkoushian et al., 2018, 2021). They seek well-paying jobs their families may not have attained (Perez & McDonough, 2008).

### **Student Demographics**

#### ***Non-traditional/Underserved Populations***

Adult learners, age 25 or older, represent 40% of higher education's student population (Nichols & Barger, 2021; NCES, 2021a). Seventy-five percent of this group are non-traditional students. Non-traditional students typically have children, work full-time, attend school part-time, are financially independent, or serve in the military (Bergman & Olson, 2019). First-generation, low-income, and students of color tend to be underrepresented on college campuses (Pendakur & Furr, 2016; Williams et al., 2022). This study proposes a sample population of students enrolled at a community college who are considered non-traditional, underrepresented,

of low-income, first-generation, or have a documented disability. According to Bronfenbrenner's Bioecological Theory of Human Development, these identifying characteristics will impact student development (Bronfenbrenner, 1977, 1986) and apply to the interactivity and interconnectedness of those across the systems they encounter (Renn & Arnold, 2003; Moran et al., 2016).

First-generation students are disadvantaged while navigating the higher education system (Stephens et al., 2014). They have difficulty adjusting to college, with only 27% of first-generation students graduating in four years (Carballo, 2022). Ellis et al. (2009) studied first-generation college students. They recommended that colleges offer financial support, academic and peer mentoring, and community activities to develop a sense of belonging on campus.

Certain racial groups and students from low-income families are often marginalized among our colleges and universities in the United States. In 2021, only 14% of the two-year college population were black, 26% Hispanic, 6% Asian, and 9% of American Indian/Alaska Native (NCES, 2021b). McFarland et al. (2017) found that students from high socioeconomic backgrounds were 20% more likely to enroll in college right out of high school than those from low-middle-income families. Additionally, those from higher socioeconomic families were five times more likely to earn a college degree than those of lower income. Family influences can either support or hinder college entry (Tinto, 1993). Familial knowledge and understanding of college culture and benefits will impact the mindset and ability to persist (Tieken, 2020; Whiteside, 2021).

### ***Student Barriers***

Dr. Matt Bergman presented national research on adult learners to a North Carolina presidential leader convening. He shared that adult learners experience many barriers that can



impact academic success, such as family and work responsibilities, negative academic experiences, and fear of not fitting into the college culture (McClellan, 2023). They possess financial limitations, time, apprehension about the value of a degree, and challenges navigating the higher education system (Strada Education Network, 2019). Other nonacademic barriers include food and housing insecurities, transportation, childcare, and mental health care (Waters-Bailey et al., 2019).

The most significant cause of adult learners dropping out of college is family responsibilities and financial burdens (Florida Virtual Campus, 2019; Karon et al., 2020; Strada Education Network, 2019). Non-traditional students are enrolling in post-secondary education at higher rates than in previous decades (Cruse et al., 2019). This group includes student parents who account for over one in five (22 %) of all undergraduates in higher education, with almost half enrolling in 2-year institutions (Cruse et al., 2019). Student parents tend to enroll at community colleges rather than four-year institutions (Cruse et al., 2019). Childcare is a sizeable nonacademic barrier for parents (Baugus, 2020; Cruse et al., 2018; Dayne et al., 2023; Waters-Bailey et al., 2019; Wladis et al., 2018), especially in rural areas with childcare deserts (Dukes, 2022; Malik et al., 2018; NC Early Childhood Foundation, 2022). With two out of five student parents being single mothers, mothers disproportionately carry the burden of finding childcare (Dayne et al., 2023; Cruse et al., 2018; Cruse et al., 2019). Students with unmet needs will not persist (McClellan, 2023; Tinto, 1982, 1993).

### ***Financial Barriers***

The financial burden of college tuition and textbooks exacerbates inequalities for students from traditionally underserved and underrepresented populations (Spica & Biddix, 2021). Those who cannot afford the required materials choose to delay purchasing their course

materials, take fewer classes, drop courses, and earn poor grades (Florida Virtual Campus, 2019; Martin et al., 2017; Spica & Biddix, 2021). Adult learners, students of color, and those of lower income status are also most likely to owe outstanding balances that lead to stranded credits (Karon et al., 2020). Debt owed to colleges for past services leads students to drop out of college and prevents them from returning to complete their degrees (Florida Virtual Campus, 2019; Karon et al., 2020).

Student barriers, such as familial understanding, low economic resources, and work and family responsibilities (Karon et al., 2020; McClellan, 2023; Waters-Bailey et al., 2019), impact students' ability to persist in college (Tinto, 1982; 1993).

### ***Persistence & Completion***

In recent years, student retention and persistence have become focus areas for college leaders. In 2020-21, 41% of community college first-year students did not return to college the following year (NSCRC, 2022). As of July 2020, nationally, 39 million students were identified as having some college credit but no completion of a degree or credential, with the majority last attending community college (Causey et al., 2022). Community colleges provided the most chosen pathway for those who chose to re-enroll. Underserved populations earned an associate or certificate as compared to Asian and white populations who reached higher credentials (NSCRC, 2022).

Persistence for students, continuing enrollment from one semester to the next, is impacted by nonacademic and academic barriers. Students who experience nonacademic barriers (Florida Virtual Campus, 2019; Karon et al., 2020; Strada Education Network, 2019), lack academic readiness (Ouellette-Schramm, 2022; Perez et al., 2022), lack a sense of belonging on campus (Cadenas et al., 2022; Strayhorn, 2020) and experience mental health concerns (Cadenas et al.,

2022; Freibott et al., 2022; Mullen, 2021), are more apt to drop out of college. As this case study evolves, it will be essential to capture the experiences of the students that persist from one semester to the next despite their barriers.

This research study will investigate how students exposed to childhood adversities persist in college.

## **Adverse Childhood Experiences and Trauma**

### ***ACEs/Trauma and Student Success***

Early onset depression is a common effect of traumatic experiences (Giovanelli et al., 2016). Research relates that exposure to childhood trauma and adversities predicts later depressive symptoms for decades to come (Blum et al., 2019; Chapman et al., 2003). Depression and anxiety can negatively impact community college students' academic success (Crouch et al., 2019; Hinojosa et al., 2019; Houtepen et al., 2020; Karatekin, 2018).

Karatekin (2018) noted that college students with ACEs reported that over a semester period, their mental health regressed. Students who reported two or more ACEs doubled the likelihood of being diagnosed with depression, anxiety, and suicidal ideation. Karatekin's results indicate that students with early childhood adversity possess high levels of anxiety, depression, and suicidality.

Severe depression can lead to suicide, especially among college students. Intentional self-harm and devised suicide plans and attempts doubled between 2012 and 2018 (Duffy et al., 2019; Healthy Minds Network & American College Health Association, 2020; Joseph, 2019; Merrick et al., 2017). From 1998 to 2018, suicide rose from the 8th largest (Dube et al., 2001) to the 2nd leading cause of death among 10-24-year-olds (Lensch et al., 2020). The cumulative effects of ACEs may cause an increase in alcohol and drug abuse (Merrick et al., 2017). Forster

et al. (2018) study reported that 50-75% of college students with ACE exposure were abusing alcohol and illicit drugs as a coping mechanism.

Hinojosa et al. (2019) conducted a study at a university in the Southeast to determine if ACEs created an academic barrier for students. The results showed that students who experienced adverse childhood experiences revealed a deterioration of overall health and family distress which did affect academics. In this study, college students identified academic readiness, a lack of study skills, and time management as barriers to school success (Hinojosa et al., 2019). Sadly, these are basic college readiness skills typically obtained during the formative primary, middle, and high school years.

Sleep deprivation for college students is also associated with adverse childhood exposure and academic success. Poor sleeping patterns can increase the risk of depression, poor academic success, and not adapting to college expectations (Gress-Smith et al., 2013). Adaptation to the academic and social schemas of college creates a sense of belonging, which plays a significant role in persistence (Carballo, 2022; Tinto, 1988). Lack of engagement (Rumberger & Rotermund, 2012; Tahara et al., 2021) correlates with students dropping out of college (Hanson, 2022).

Adverse childhood experiences and trauma are not all equal. Response to exposure depends on the individual, circumstances, type, and context (NCTSN, 2021). Sexual and physical abuse, in particular, is shown to significantly decrease educational attainment, which is explained by the social, family, and individual context (Boden et al., 2007; Duncan, 2000). Gender also impacts how individuals respond. Women with ACE exposure have higher negative mental outcomes, such as anxiety and depression, while males with high ACE exposure develop higher substance abuse (Grigsby et al., 2020). Emotional abuse and neglect are highly associated

with later anxiety and depression, including negative schemas of self-worth (Wright et al. 2009). Children who have been exposed to trauma may generalize the trauma to the self, creating negative schemas of “I am not worthy” or “I am not enough” (Ascienzo et al., 2022), which can persist into adulthood (Wright et al., 2009).

### ***ACE Study***

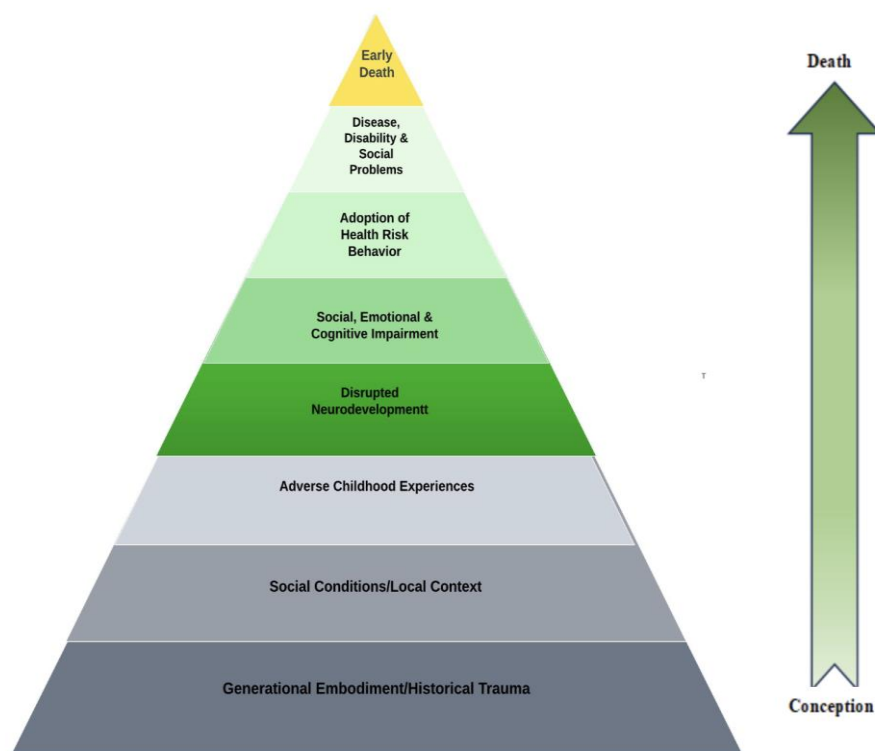
The original ACE study was conducted in partnership with the Center for Disease Control and Kaiser between 1995-1997 to examine how early childhood abuse and household dysfunction impact the health of individuals later in life. Dr. Felitti et al. (1998) coined Adverse Childhood Experiences (ACEs), categorized by abuse, neglect, and household dysfunction that occur in a child's life before age 18. Each category was broken into subcategories. The study used three categories of childhood abuse: psychological, physical, and sexual abuse. Exposure to household dysfunction was broken into four categories: substance abuse, mental illness, violence toward a mother figure, and incarceration (Felitti et al., 1998).

Study participants were given a questionnaire to self-report adverse experiences in each category. Childhood exposure was calculated from 0 to 7, with 7 being the highest level of exposure (Felitti et al., 1998). The results of the study were alarming. More than half of the respondents (52%) experienced exposure to at least one category of adverse childhood experience, with the highest exposure being substance abuse (Felitti et al., 1998). Outcomes suggested a strong correlation between exposure to adverse childhood experiences and adult health risk factors such as heart, lung, and liver disease, cancer, and bone fractures. Figure 2.1 illustrates the influences of adverse childhood experiences on the lifespan. The researcher recreated the model to demonstrate how adverse childhood experiences contribute to

neurodevelopmental disruptions and impairments in social, emotional, and cognitive functioning, ultimately influencing the academic readiness of community college students.

### Figure 2.1

*The ACE Model of Potential Influences Throughout a Lifespan*



*Note:* The ACE Pyramid depicts how adverse childhood experiences influence health and well-being throughout life. The disrupted neurodevelopment and social, emotional, and cognitive impairment influence community college students' academic readiness (Ouellette-Schramm, 2022; Perez et al., 2022) and persistence (Arria et al., 2013; Bruffaerts et al., 2018; Cadenas et al., 2022; Hanson, 2022; Revranche et al., 2023).

Adapted from Centers for Disease Control and Prevention (2021, April 6). *Violence prevention:*

*The ACE pyramid.* <https://www.cdc.gov/violenceprevention/aces/about.html>

While the ACE Study illuminated the long-term impacts of early childhood trauma, it was not representative of all races, cultures, socioeconomic statuses, or educational attainment. Out of the 8,506 persons in the study, over 79% of the participants were white, with 43% having a college degree. Only six percent did not graduate high school (Felitti et al., 1998). However, the study sparked research on the impacts of ACEs on development and educational and economic outcomes.

The ACE survey began to be utilized in multiple settings to diagnose mental health treatment. However, even leading authors of the original ACE study cautioned users to refrain from using self-reported survey scores as a basis for diagnosis and treatment (Anda et al., 2020, p. 294). The ACE score resulting from the survey has been described as “...neither a diagnostic tool nor predictive at the individual level. Thus, great care should be used when obtaining ACE scores for children and adults as a part of a community-wide screening, service, or treatment” (Anda et al., 2020, p. 294).

The ACE survey is very narrow in the areas of adversity and does not include all areas of trauma that individuals may encounter in their childhood (National Child Traumatic Stress Network (NCTSN, 2021). While a complete understanding of adverse childhood experiences and what that may uniquely look like in each individual is not clear, research has determined that the original list of what Felitti et al. (1998) included in the ACE Study is not inclusive (Finkelhor et al., 2013; NCTSN, 2021). Including a broader sense of what is considered adverse or traumatic will provide more insight into needed resources to support those who have exposure. Finkelhor et al. (2013) suggest adding indicators to reflect bullying, community violence, poverty, and poor academic success. The National Child Traumatic Stress Network (2021) currently includes 22 different categories of adverse and traumatic events in their data collection, recognizing

"community violence, school shootings, disasters, racial trauma, and bereavement (e.g., parental/sibling drug overdose, suicide, or other death)" as important (p. 2). Figure 2.2 introduces 22 categories of adverse and traumatic events determined by NCTSN. The distinct types of traumas linked to Adverse Childhood Experiences (ACEs) are emphasized in bold text, delineating the disparities between the original ACEs study (Felitti, 1998), and the National Child Traumatic Stress Network's (NCTSN) expanded exploration of traumatic events that may occur in life (2021).

## Figure 2.2

*Child Adversities and Trauma Types Collected in National Child Traumatic Stress Network*

<b>Child Adversities &amp; Trauma Types Collected in NCTSN (with ACEs highlighted, Felitti)</b>	
1. <b>Sexual Abuse</b>	13. Separation from Family Member
2. <b>Physical Abuse</b>	<b>Parent Incarceration</b>
3. <b>Emotional Abuse/ Psychological Maltreatment</b>	14. Death of Loved One
4. <b>Neglect</b>	15. Illness/Medical Trauma
5. <b>Domestic Violence</b>	16. Serious Injury or Accident
6. <b>Impaired Caregiver Substance Abuse Parental Mental Illness</b>	17. Natural Disaster
7. <b>Parent Divorce or Separation</b>	18. Kidnapping
8. Sexual Assault/Rape	19. Forced Displacement
9. Physical Assault	20. Extreme Interpersonal Violence
10. War/Terrorism/Political Violence	21. Bullying
11. Community Violence	22. Other Trauma (Including Sex Trafficking)
12. School Violence	

*Note:* Adapted from National Child Traumatic Stress Network. (2021). *Beyond the ACE score: Perspectives from the NCTSN on child trauma and adversity screening and impact.*

<https://www.nctsn.org/sites/default/files/resources/special-resource/beyond-the-ace-score-perspectives-from-the-nctsn-on-child-trauma-and-adversity-screening-and-impact.pdf>



Not all adversities and trauma are equal in their effects. Researchers have cautioned not to view the 4+ ACEs cutoff score (Felitti et al., 1998) as the only high-risk consideration (Briggs et al., 2021; NCTSN, 2021). Certain combinations of ACEs may produce a cumulative effect that increases high risk. "Certain pairs of traumatic events and adversity interact together "synergistically"—meaning that their combined effect is more powerful than simply the sum of their individual effects—for some of the most significant major adult mental illnesses" (NCTSN, 2021, p. 3). For example, an ACE paired with sexual abuse for women is synergistically greater than a larger total sum of three ACEs, while men have a more significant effect when an ACE is paired with economic hardship (Briggs et al., 2021; Putnam et al., 2013). Depending on the individual, the synergistic interactions of the trauma or adversity, and the context of occurrence, different childhood traumas and adversities will produce unequal levels of impact on adult health outcomes (NCTSN, 2021; Putnam et al., 2020).

### ***Impacts of ACEs***

Adverse childhood experiences and trauma leave a deep imprint on the body, impacting the overall well-being of adults (Hughes et al., 2017; Kelifa et al., 2021; Khrapatina & Berman, 2017; Mosley-Johnson et al., 2019). Researchers have determined that childhood adversities become “biologically embedded,” altering the body's physiology (Berens et al., 2017) and causing the inability to cope with stress (Shonkoff et al., 2009).

Stress is a normal part of life. When individuals experience stress, the body responds by triggering stress hormones, which may cause an increased heart rate, rise of blood pressure, and muscle tension. The biological response will subside as the stressful event diminishes (Harvard Health Publishing, 2020). However, when individuals are exposed to long-term adversity, the stress levels can become toxic and have negative impacts on the body. Toxic stress is

characterized as “severe, prolonged, or repetitive adversity with a lack of the necessary nurturance or support of a caregiver to prevent an abnormal stress response” (Franke, 2014, p. 391), which can impact brain development, causing changes in attention span, cognitive responses, and learning abilities (Anda et al., 2006; Felitti et al., 1998; Felitti, 2009; McEwen, 2005).

Exposure to toxic stress alters the size and neuronal structure of the brain in young children, which may lead to differences in learning, memory, and executive functioning (Anda et al., 2006; National Scientific Council, 2014; Shonkoff et al., 2012; Shonkoff et al., 2021). It affects biological and neurological functions in the brain, impeding structural development and physiologic breakdown that can cause negative challenges in learning, behavior, and physical and mental health (Ehrlich et al., 2016; Shonkoff et al., 2021). Specifically, prolonged exposure to adversities and trauma in early childhood reduces the capacity of the hippocampal and amygdala (Weissman et al., 2020). A reduction in the amygdala is highly associated with anxiety (Babaev et al., 2018); a smaller hippocampal is linked to the decline of multiple cognitive domains, including episodic, semantic, and working memory (Dawe et al., 2020). A relationship exists between the ACE score and impairment in multiple brain functions and structures (Anda et al., 2006). As ACE scores increase to three or more, more frequent mental health disorders (Crouch et al., 2017) and psychosocial and behavioral negative outcomes occur (Petrucci et al., 2019). The breakdown of these psychological and cognitive functions is essential when considering the community college student's ability to persist in college.

Children who live with toxic stress may, as adults, struggle with depression, maintaining employment, managing finances, and pursuing education (Centers for Disease Control and Prevention, 2019). Poverty, resulting from reduced educational and employment opportunities,

may exasperate these circumstances (Font & Maguire-Jack, 2016; Katz & Davidson, 2014; Porter, 2010; Centers for Disease Control and Prevention, 2019; Thomas et al., 2021). Huang et al. (2021) conducted a study on the impacts of adverse childhood experiences on adults' physical and mental health and the cumulative life course of poverty. They found that with each additional ACE, there was an 8-18% increase in declined health and psychological distress. It also contributed to 4% of a lifetime spent in poverty. Financial burdens are among the most significant causes of adult learners dropping out of college (Florida Virtual Campus, 2019; Karon et al., 2020; Strada Education Network, 2019).

Historic trauma can ensue when students experience discrimination that may impact their day-to-day functions (Foundation Trust, 2023d). When discrimination is combined with additional ACE exposure, individuals reported higher levels of depression, anxiety, and psychological distress as compared to those with less adverse and traumatic experiences (Helminen et al., 2022). Depression, anxiety, and psychological distress can impact academic success.

ACEs are strongly associated with mental health disorders, including post-traumatic stress disorder (PTSD) (Kalmakis et al., 2020). PTSD is a complex mental health condition with defined diagnostic criteria (American Psychiatric Association, 2022; National Institute of Mental Health, 2023), whereas ACEs are a broader framework used to understand and assess the impact of childhood trauma on overall health and well-being (Fettili et al., 1998). While both ACEs and PTSD can negatively impact levels of anxiety, depression, substance abuse, and academic success (Bachrach & Read, 2012; Boyraz et al., 2015; Crouch et al., 2019; Hinojosa et al., 2019; SAMHSA, 2023; Shalka & Leal, 2022), this study focuses only on the self-disclosure of adverse childhood experiences and its impacts on community college student persistence.

### *ACEs and Covid-19*

The pandemic has increased societal awareness of mental health concerns, particularly its impact on college students. The mandated self-quarantine forced college students to live in loneliness and isolation from their college community, intensifying the mental health crisis (Cao et al., 2020; Tahara et al., 2021). Students' school and social activities were restricted or eliminated, which meant increased time spent alone. The lack of economic stability and the concern of possible academic delays elevated anxiety symptoms (Cao et al., 2020). Students who are caregivers are more likely to delay their education due to economic concerns (Foster, 2022), which is higher among single mothers (Gallup, 2020). Racine et al. (2021) conducted a meta-analysis of twenty-nine studies on depression and anxiety symptoms in children and adolescents up to age 18 during the COVID-19 pandemic. They found that 1 in 4 youth globally experienced depression, while 1 in 5 displayed anxiety symptoms. Depression and anxiety due to isolation appear more prevalent in females than males (Marelli et al., 2021; Racine et al., 2021; Tahara et al., 2021). This increase may be due to females' more mature interpersonal development (Tahara et al., 2021). In the Gallup Poll of *State of the Student Experience Fall 2020*, one-third of college students considered withdrawing within the past six months, citing COVID-19 and mental health. One-half said that the pandemic and excessive stress would likely impact their ability to complete college. Withdrawal consideration was more prevalent among African Americans and Hispanics than whites.

Sadly, the underserved population of African Americans and first-generation students was the least likely to be aware of their college's financial and mental health supports available on campus. Stress, anxiety, and depression are compounded by those suffering adverse experiences (Racine et al., 2021).

The 2023 NC Child Health Report Card reported a drastic increase in mental health concerns for North Carolina children. Post-pandemic high school student suicide attempts increased by over 23%, while depression increased by 25.8% over the established baseline (NC Child, 2023). Less than 5% of these children received professional mental health treatment. These children are future college students (NC Child, 2023). They bring the trauma of the pandemic, which has impacted their mental health and socialization skills. How community colleges respond to their mental health needs will determine persistence and retention to degree completion.

### **Chapter Summary**

This chapter provided a literature review of the theoretical perspectives of child development within an ecological system, student persistence, and resiliency as they relate to individuals exposed to adverse childhood experiences and trauma. The original ACE Study conducted by Felitti et al. (1998) was discussed, outlining the health and academic impacts of early childhood adversities and traumatic events on adults, particularly community college students. Chapter 3 provides the research design, a qualitative case study methodology process, as well as the data collection and analysis, which contributed to the examination of how community college students who indicated a past with adverse childhood experiences and trauma persisted in college from one semester to the next.

## CHAPTER 3: METHODOLOGY

### Introduction

This study explored the effects of adverse childhood experiences on community college students' ability to prevail in college from one semester to the next. College students with a history of childhood trauma reported higher anxiety, depression, and suicidal thoughts (Karatekin, 2018). They also tended to lack the academic readiness skills needed to be successful in college (Hinojosa et al., 2019). The research design guiding this study was a qualitative holistic type I single-case study designed to provide insights into the persistent efforts students with self-identified traumatic experiences encountered while enrolled in a community college degree program (Yin, 2018).

College students' mental health challenges are rising, with severe depression, intentional self-harm, and suicidal thoughts, with documented attempts doubling between 2012 and 2018 (Duffy et al., 2019; Healthy Minds Network & American College Health Association, 2020; Joseph, 2019). Nontraditional college students face many barriers to college persistence (Waters-Bailey et al., 2019). The American College Health Association (2022) surveyed undergraduate students to assess college students' overall health and found that finances, family, anxiety, and severe depression were identified as negatively impacting academic success. Mental health issues, such as high anxiety and depression, are compounded by early childhood traumatic experiences (Felitti et al., 1998; Hinojosa et al., 2019), further perpetuating significant academic barriers (Hinojosa et al., 2019).

This research study chose a qualitative case study methodology to provide a rich description of the experiences of community college students who self-reported childhood traumatic experiences and persist in college. This study was guided by one research question:

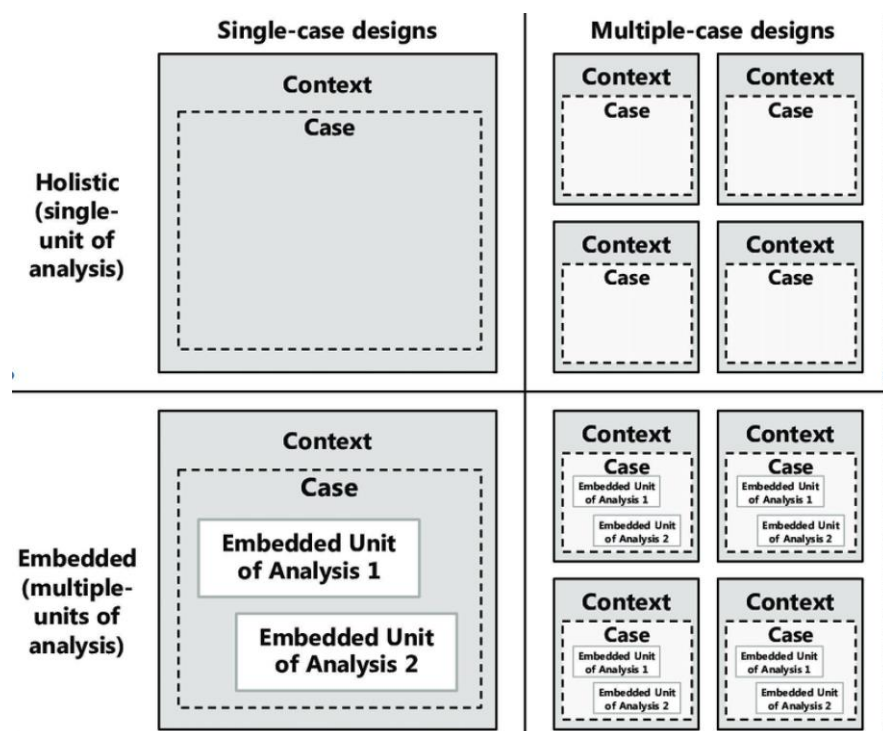
*How do community college students who have experienced traumatic childhood experiences describe the influences that allowed them to persist in college from one semester to the next?*

### Research Design

The research design for this study allowed data to be captured through interviews with community college students about the experiences impacting their ability to persist from one semester to the next despite reporting childhood trauma. Figure 3 is an example of the basic types of case study designs. This study's design fell within the top left quadrant, providing context for the case through a holistic analysis.

**Figure 3.1**

*Basic Types of Designs for Case Studies*



*Note:* Yin, R.K. (2018). *Case study research and applications: Design and methods* (6<sup>th</sup> edition). Sage Publications. Reprinted with permission. (Appendix B).

Researchers' definitions of case studies vary. For this case study, the research design was defined as a process (Yin, 2014), the case (Stake, 2010), and the end product (Merriam, 1998). According to Yin (2013), "the classic case study consists of an in-depth inquiry into a specific and complex phenomenon (the 'case'), set within its real-world context" (p. 321). By asking the questions of "how" or "why," the researcher was able to explore contemporary events where there was little or no control (Yin, 2018). Yin (2018) defines contemporary as "a fluid rendition of the recent past and the present, not just the present" (p. 12). This contextual exploration of the past and present provided meaningful data descriptions for this research. Due to the design of the case study, many points of interest or themes emerged based on what the participants chose to share. The researcher relied on theoretical foundations to guide the data collection and analysis.

These processes were accomplished by obtaining multiple evidence sources and creating data triangulation (Yin, 2018). Yin's (2018) case study design guided this case study research.

### **Rationale for Research**

A case study was the best approach for this study because it explored the phenomena of student persistence among those with a past of adverse childhood experiences (Yin, 2018). The context for this study was a case within a community college, and the contemporary issue was how students who reported adverse childhood experiences described their persistence in college. Participants were given the opportunity to share a history of their educational journey, including challenges and barriers, and the strategies and mindset utilized to persist from one semester to the next. This qualitative case study provided necessary data for a rich description of how community college students with childhood traumatic experiences persist from one semester to the next.



This chapter describes the rationale for the research design and methodology utilized in the study, including participant demographics, data collection, and qualitative data analysis.

### **Qualitative Case Study Methodology**

A qualitative case study is an observational method that relies upon theoretical assumptions to guide the study process, producing data triangulation (Yin, 2018). The case study approach provides an in-depth investigation into a case or phenomenon in its real-life setting. Yin (2018) points out that case studies are appropriate when the how or the why cannot be adequately answered in other research methods. Case studies provide the methods to explore these questions through "direct observation of the events being studied and interviews of the persons who may still be involved in those events" (Yin, 2018, p. 12).

Case studies possess distinctive strengths as a research method, such as their multifaceted evidence collection of documents, artifacts, interviews, and direct observation of the event and persons (Yin, 2018). However, some critics question the validity and rigor of the case study. Since there is only one case, critics feel that objectivity is more challenging to maintain, the ability to refute a hypothesis is more difficult to meet, and generalization is impossible (Stoecker, 1991). Critics surmise that since case study research does not provide experimental controls, there is insufficient distance between the researcher and personal biases (Stoecker, 1991). The scholarly critiques are inconsistent, and the scholarly rigor of case studies is affirmed in research publications.

Yin refutes these premises (2013, 2018). Case studies provide rigor by relying on the skills and expertise of the researcher who follows and documents methodological procedures and data triangulation. They are also "generalizable to theoretical propositions and not to populations or universes" (Yin, 2018, p. 20). Case studies do not need to be discarded as to their value. When

paired with experimental research, case studies can provide the "how" and "why," giving a new dimension to quantitative research. Through a case study approach, this study was "more effectively [able to] analyze causation than quantitative cross-sectional research" (Stoecker, 1991, p. 93). This study sought to gain the perspectives of students who engaged with services offered through a support program within a single population at a community college and how they have persisted from semester to semester after navigating childhood trauma.

### **Positionality Statement**

I am a Caucasian woman, a first-generation college student, and a single mother, with a score of four on the ACEs and Traumatic Event scale. I have faced a lifelong battle with depression and am a survivor of a suicide attempt. My journey has equipped me with a unique perspective, allowing me to perceive the world through the lens of trauma. This perspective has heightened my emotional intelligence in my interactions with others.

My professional career began as a first-grade teacher. Witnessing firsthand how adverse childhood experiences can affect academic learning and social-emotional behaviors, I dedicated myself to providing love, stability, and security to the children in my classroom. Transitioning to the community college setting, I continued to observe the impact of ACEs, this time on my adult students.

I have taught courses and provided leadership in an early childhood education program at a community college. In my early childhood education program, students carry their personal stories and life challenges whenever they enter the college doors. Despite the program's valuable nature, early childhood students have a low retention and persistence rate. While this can be attributed to various factors, including low wages in the early childhood field, students have openly shared experiences involving rape, physical and emotional abuse, homelessness,

historical trauma, and the adverse effects of poverty. These narratives, coupled with my own personal and professional experiences, motivated me to deepen my understanding of ACEs and trauma, particularly exploring how community college students with trauma backgrounds navigate and persist in college.

### **Role of the Researcher and Subjectiveness**

As an early childhood professional, I have over twenty-five years of experience conducting objective observations in the field. I utilize detailed anecdotal observations to record behaviors objectively. Inferences or biases are checked throughout the process of data collection and analysis. Follow-up questions observed in the contextual environment are inquiry-based and do not serve to lead the participants to inferred responses. When conducting field observations, it is my practice to conduct reliability checks periodically to verify the validity of the observation. In my professional career, I employ reflective practices, such as journaling, immediately after conducting observations to capture details and any observed nuances of the subject in the contextual setting (Bloomberg & Volpe, 2019; Creswell & Poth, 2018; Yin, 2016). Reflective journaling allows me to analyze my personal bias to ensure objectivity. I employed these professionally practiced strategies as I interviewed and observed those participating in this study.

As the research instrument for this study, I was “the primary instrument for gathering and analyzing data and, as such, can respond to the situation by maximizing opportunities for collecting and producing meaningful information” (Merriam, 1998, p. 20).

Qualitative research places the researcher as the sole collector of data. Data received is filtered through the background and perspectives of the researcher (Creswell & Creswell, 2018; Merriam, 1998; Merriam & Tisdell, 2016; Yin, 2016). As the researcher of this study, I was sensitive to my personal bias and background as data were collected and analyzed. An

atmosphere of comfort and neutrality was established. Interview questions were open-ended and written with sensitivity to words that made sense to the participant (Patton, 1999). Probes were utilized to encourage the participant to share more information; however, inquiry questions were non-leading to ensure the validity of data (Merriam, 1998). My body language, facial expressions, and spoken words were kept in a neutral tone to avoid conveying any judgment or bias (Merriam, 1998; Merriam & Tisdell, 2016; Yin, 2016). The methodical processes of this research were documented throughout, providing transparency to any bias.

### **Research Question**

Exposure to early childhood trauma can impact individuals into adulthood (Anda et al., 2006; Centers for Disease Control and Prevention, 2019; Felitti et al., 1998; Karatekin, 2018). College students with adverse childhood experiences exhibit higher levels of anxiety and depression (Karatekin, 2018) and tend to possess poor academic preparedness, study skills, and time management (Hinojosa et al., 2019). Barriers faced by community college students, including work, finances, transportation, food insecurities, childcare, and family obligations (Waters-Bailey et al., 2019), lead to moderate to severe psychological stress (American College Health Association, 2022). This study was guided by one overarching research question that served to explore the experiences of community college students with traumatic backgrounds and how they persist while enrolled in college. The research question driving this study was:

*How do community college students who report exposure to adverse childhood experiences describe the influences that allowed them to persist in college from one semester to the next?*

### **Institutional Review Board**

Following approval of the research proposal, an Institutional Review Board (IRB) application was prepared and submitted to NCSU's IRB for review. Comprehensive information

on the study participants' recruitment and selection, permissions, and access were provided, as well as data collection and security processes. The research was reviewed for ethical considerations by North Carolina State University's Institutional Review Board (IRB) and by the institution where the research was conducted prior to beginning the study. The privacy of the participants was protected at all times.

Ethical considerations were examined throughout the study. Human subject training certification was completed and verified. Self-disclosed adverse childhood experiences were utilized for case selection; however, the interview process did not allow space for discussion of the experienced trauma itself. The focus of the study was on how past childhood adverse experiences impacted a student's present-day persistence in college. The researcher employed "do no harm" practices. Participants were informed of possible emotional triggers, and mental health resources were provided. Member checks for clarity and approval gave participants additional control over their interview responses (Bloomberg & Volpe, 2019; Creswell & Creswell, 2018; Merriam & Tidsell, 2016; Yin, 2016).

Once NCSU's IRB approved the research study, the researcher repeated the application and review process at the institutional site where the data collection occurred. The researcher met with the gatekeeper to discuss the study, provided a copy of the approved institution IRB and the NCSU IRB applications, and obtained access to the sample population's student email accounts. Participants were asked to select a pseudonym before data collection so the data were not identifiable.

### **Data Security**

Data associated with this study was stored securely under strong passwords on the North Carolina State University's approved Google Drive and the researcher's personal computer. Any

recorded data from the research was stored in password-protected Zoom and Otter.ai accounts and exported to NSCU's Google Drive. The researcher logged out of Google Drive and the computer after each access. Only the researcher had access to the collected data. Participants' identities were protected by assigning a pseudonym. The pseudonym was used during the coding and storage process (Bloomberg & Volpe, 2019; Yin, 2016). Physical materials were stored in a locked file cabinet in the researcher's home. At the completion of the study, data and results will reside on the researcher's password-protected computer for one year or until it is deemed no longer relevant (Creswell & Poth, 2018). At that time, physical documents will be shredded to ensure confidentiality. Security measures were implemented to provide confidentiality for the participants' identities (Creswell & Poth, 2018).

### **Confidentiality**

Informed consent (Appendix B) was obtained to confirm that the participant knew and understood every aspect of their participation in the study, including the benefits and the risks (Hosely, 2021). The purpose of the study and how the data was collected and shared were presented at the beginning of each interview to enable individuals to voluntarily decide whether to participate in the research (Manti & Licari, 2018). Creswell and Poth (2018) outlined the criteria that required ethically validating consent during data collection: the purpose of the study and data collection procedures, the right to participate and withdraw from the study voluntarily, the associated risks and benefits, how confidentiality was maintained and acknowledgment confirmation by both the participant and researcher. The participants who contributed to this study were notified that their name/identity and college name would be kept confidential throughout the study. Participants were given the opportunity to select a pseudonym and provided consent before each interview took place.

Access to the participants' personal information was password-protected through an approved North Carolina State University (NCSU) Google Drive storage system. Study participants were explained their rights and how their privacy, anonymity, and confidentiality would be protected. To protect their privacy, they were given the right to determine what information may be shared with others and to decline receiving information they did not desire (Bloomberg & Volpe, 2019).

The confidentiality of each participant was protected. The study did not include identifying information such as name and contact information. Each participant was given a pseudonym to ensure readers may not link the content to the individual. The researcher also stored all information in the protected NCSU system under the assigned pseudonym, not the individual's name, eliminating any master crosswalks (Bloomberg & Volpe, 2019; Yin, 2016).

Confidentiality was an agreement between the participant and the researcher outlining how the study information would be utilized (Bloomberg & Volpe, 2019). When the Adverse Childhood Experience and Traumatic Event Questionnaire was emailed to the sample population, the questionnaire included an electronic consent form outlining their rights and a statement giving consent to be contacted by the researcher. The researcher explained the research, its use, and the participants' rights during the interviews. Participants were emailed a copy of the electronic consent form outlining their rights to keep it for their records.

Due to the sensitive topic of adverse childhood experiences, the researcher first and foremost approached the research with the premise of "do no harm." The actual personal traumatic experiences were only discussed in the interview if brought up by the participant, focusing only on the present day and how past experiences impact college persistence. Mental health resources were provided due to potential emotional triggers in the interview process.

Participants were treated as people, not subjects (Merriam & Tisdell, 2016). Building a trusting relationship between the researcher and participants was critical. Upholding the ethical standards of confidentiality contributed to the overall credibility of the study (Bloomberg & Volpe, 2019). Confidentiality of student information, personal identity, self-disclosure of adverse childhood experiences, and interview results were paramount in the research process.

### **Limitations**

This study presented several limitations. An Adverse Childhood Experience and Traumatic Event Questionnaire was emailed to nontraditional college students participating in a student success program at an urban northwest North Carolina community college. The student success program is designed to assist low-income, first-generation college students and individuals with disabilities in progressing through middle school to post-baccalaureate programs. Those who responded to the questionnaire may not be an accurate population sampling or generalize outside this student population group. The screening tool results were limited to the reliability of the survey and the perception of the students responding. Since the screening tool is a nominal scale, participants could not clarify the questions; thus, the results may be skewed.

There were several limitations associated with the interview process. First, during an interview, "not all people are equally cooperative, articulate, or perceptive" (Bloomberg & Volpe, 2019, p. 193). In addition, participants may have lacked the time, interest in completing the survey instrument, or willingness to share their past life experiences. Research that collects data related to traumatic experiences was based on the perception and memory of each participant. The potential existed for participant recall bias (Fergusson et al., 2000; Hardt & Rutter, 2004).



## **Delimitations**

There were several delimitations to the study. The researcher deliberately chose the theoretical frameworks of Bronfenbrenner's Bioecological Theory of Development and Tinto's Theory of Institutional Departure to guide the study. Bronfenbrenner's Bioecological Theory of Development encapsulates the importance of the environment and ecology in shaping human development through person, processes, context, and time (Bronfenbrenner & Morris, 1998). Tinto's Theory of Institutional Departure states that what happens outside the classroom leads to what happens in the classroom. These theories structured the interview questions around how traumatic adverse childhood experiences can impact student persistence (Tinto, 1993; Tinto, 2012). This study was driven only by the lens of these theories.

An urban community college in northwest North Carolina was selected as the research site with a supportive services program designed for students with the greatest needs. This study excluded students who may have experienced childhood trauma but did not choose to participate in the student success program. Additionally, the perspectives of college or program staff and faculty were not explored, as the lenses of staff and faculty would not have contributed to the intended data needed for the study. The Adverse Childhood Experience Questionnaire was sent to potential participants first to create a pool for selecting those with three or more ACEs. The researcher allowed the participants to choose whether to be interviewed face-to-face or via Zoom. Two participants chose to be interviewed face-to-face, and six chose online. Both environments permitted the researcher to observe the participants' body language, voice intonation, and facial expressions during the interview.

This study did not require discussing the personal traumatic experiences shared by participants, only how the experiences impacted their success and the perceived support needed

to persist in school. There was no correlation made between the type of trauma and student persistence.

### **Data Sources**

An extensive literature review was conducted on adverse childhood experiences and trauma and their impact on development and adult outcomes, such as mental health, obtaining employment, incarceration, socioeconomic status, and education attainment. The barriers and challenges nontraditional community college students overcome to attend college were explored in depth. Mental health among college students was described as a result of ACEs and everyday life. The conceptual framework developed from Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Theory of Institutional Departure undergirded this research.

A case study approach provided the conduit to dive deeply into the phenomenon in an authentic context (Yin, 2018). In this case study, multiple data sources created data triangulation to ensure the trustworthiness and credibility of the data. "By developing convergent evidence, data triangulation helps to strengthen the construct validity of your case study" (Yin, 2018, p. 128). Data sources included questionnaire results, interviews, field observations, and journaling. Member checks were also utilized as a data source. Without multiple data sources, the value of the case study would be lost (Yin, 2018). Data triangulation enabled the researcher to develop naturalistic generalizations that can be applied to other cases and populations of similar contexts (Creswell & Poth, 2018). Multiple data sources promoted the study results' credibility, trustworthiness, and transferability (Creswell & Poth, 2018; Yin, 2018).

### **Research Site**

The site selected for this study was a program developed to support student success at a northwest urban community college in North Carolina. The institution chosen as the site offered

nearly 70 associate programs to 9,000-10,000 curriculum credit-earning students. The program provides holistic support to first-generation, low-income, and ability-diverse students, serving approximately 140 students annually. The program served approximately 2% ( $n=140$ ) of the community college students enrolled in degree-granting programs at the time of the data collection. Through services provided by this supplemental program, students received individualized personal, academic, and career counseling. Academic tutoring, resources for locating scholarship opportunities, and assistance completing financial aid applications were also offered. Students were counseled with strategies to become economically and fiscally literate, including planning for transfer to four-year post-secondary education programs. There were opportunities for exposure to cultural events and academic programs. Students participating in this student success program were assigned a mentor who provided guidance and support as they progressed through their educational program. The program was designed to provide academic, social, and cultural support to assist the most vulnerable of students in moving beyond their life circumstances that present barriers and towards achieving degree attainment and transfer opportunities.

The program site was selected for this study because it provided a population of community college students enrolled in degree programs who may have experienced adverse childhood experiences such as poverty, historical and systemic trauma, and trauma related to a disability. Students who participated in the program were required to meet criteria, including being first-generation, low-income, or a student experiencing a need for accommodations due to a disabling condition. Concentrating on this program for the population provided the case for the study. This study explored how students with self-reported adverse childhood experiences persisted from one semester to the next.

### ***Sample Population and Participant Selection***

The participants for this study consisted of a purposeful sample of nontraditional college students enrolled in a student success program at a northwest urban North Carolina community college. This purposeful sample included students of low socioeconomic status, considered first-generation college students (neither parent completed a four-year college degree program), or have a documented disability. An email (Appendix C) introducing the research, intent, questionnaire, and study processes was sent to the 140 students in the success program. In addition to purposeful sampling, snowball sampling was utilized to assist with recruitment efforts. Participants who completed the interview process were asked to identify a peer in the success program who may provide rich information for the study (Creswell & Poth, 2018).

### **Data Collection**

Data collection processes for case study research outlined by Yin (2016) guided this study. This study's case, or phenomenon, was students who experienced adverse childhood experiences. Since the study focused on adverse experiences, including poverty and historical and systemic trauma, much consideration was given to the best population without students feeling targeted for their socioeconomic, race, gender, or cultural status. The study required purposeful sampling with maximum variation. In the event that responses to participate in the study were low, the researcher implemented snowball sampling to broaden access to the sample (Creswell & Poth, 2018; Yin, 2016). Initially, the gatekeeper was contacted to discuss the study and the identified strategies to access the population. Through a purposeful sample, the researcher "...intentionally sample[d] a group of people that can best inform the researcher about the research problem under examination" (Creswell & Poth, 2018, p. 148). The study's sensitivity

and appropriate populations were considered, so a student success program that serves first-generation, marginal-income, or documented disabilities was selected.

The gatekeeper emailed the study information, including a link to the Adverse Childhood Experiences and Traumatic Events questionnaire, directly to the students enrolled in the student success program. Students who desired to learn more about the study and were willing to participate consented to be contacted directly by the researcher. The gatekeeper granted opportunities to share research flyers (Appendix D) and information about the study. Informed consent (Appendix E) was provided to potential participants before each confirmed interview, and consent was obtained from each participant before the study began.

Once the interviews were confirmed, the researcher approached each interview with a semi-structured interview protocol using open-ended questions (Merriam & Tisdell, 2016). The interview protocol (Appendix F) included an introduction and overview of the study, instructions for conducting the interview and using the results, and specific guiding questions (Appendix G) (Creswell & Poth, 2018). The researcher recorded the participants' responses through notetaking, observations, Zoom during virtual interviews, and Otter.ai audio recordings.

Participants' behaviors were observed and noted through field notes taken by the researcher. Immediately following each interview, the researcher journaled reflections and behaviors noted during the interview and began to look for patterns in the data (Creswell & Poth, 2018; Yin, 2016).

The participants were allowed to review interview transcripts to ensure the accuracy of the data collected (Bloomberg & Volpe, 2019). Member checking allowed the researcher to ensure accurate data capture (Bloomberg & Volpe, 2019; Creswell & Creswell, 2018; Yin, 2016).

Participants were allowed to clarify or remove information. This additional measure to confirm the transcripts ensured the study's trustworthiness. Table 1 below demonstrates how each interview question connects with the research question and the two guiding theories of Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Theory of Institutional Departure.

**Table 1**

*Interview Question Matrix: Research and Theory Alignment*

Interview Questions	Bioecological Theory	Theory of Institutional Departure	Persistence
<p>Tell me about your academic journey. For example, share with me how you went from completing high school to enrolling in college. What are some things that impacted the timing of when you decided to enroll in college?</p> <p><i>At what age did you enroll in college?</i></p> <p><i>What did you do between graduating from high school/earning GED, and enrolling in a college program?</i></p> <p><i>How would you describe your academic readiness?</i></p>	X	X	
<p>Tell me about the people who have supported your decision to attend college. Who are your emotional supports?</p> <p><i>How have they emotionally supported your education?</i></p>	X	X	X

**Table 1** (Continued).

Why did you choose to attend college?		X	X
<i>What are your short-term goals?</i>			
<i>What are your long-term goals?</i>			
How do you balance school/work/family while enrolled in college?	X	X	X
<i>What resources have you used on campus to help you be successful?</i>			
What have faculty done to help you persist from one semester to the next?	X	X	X
Who has mentored you during the college experience that has helped you persist?	X	X	X
<i>What did they do?</i>			
Have you participated in any particular programs or received specific types of services that helped to increase your college success and stay enrolled?	X	X	X
<i>What extracurricular activities or clubs have you participated in on campus?</i>			
<i>Are there any services/programs you wish were available to you?</i>			

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**Informed Consent**

Informed consent disclosing the purpose of the study, data collecting procedures, participation and withdrawal rights, confidentiality measures, and any associated risks and benefits were provided in the questionnaire emailed by the gatekeeper. The consent form was

included in the initial email to the sample population as part of the Adverse Childhood Experiences and Traumatic Events Questionnaire. Participants acknowledged their agreement to informed consent before answering the questionnaire. Participants were informed of their rights to participate and were aware that they could choose to withdraw from the study at any time (Creswell & Poth, 2018). While specifics of the participants' childhood traumas were not discussed directly, they were made aware of possible associated risks of emotional triggers related to completing the Adverse Childhood Experiences and Traumatic Events Questionnaire. They could withdraw from the study at any time or choose not to answer a question. Protecting the participants was a priority of the researcher, and efforts were made to provide support if any emotional triggers arose. Campus, local, state, and national mental health resources were provided to each participant (Appendix H).

### **Qualifying Questionnaire**

The Adverse Childhood Experiences and Traumatic Events Questionnaire was included in the email from the gatekeeper to the 140 students, along with written informed consent and detailed instructions for completion. The population was given a 2-week window to complete the questionnaire, and then the gatekeeper resent the information to encourage completion.

Another effort to boost recruitment included a flyer distributed and posted in the program department by the gatekeeper to advertise the research study. The researcher corresponded with the gatekeeper regarding program gatherings so flyers could be distributed. When response rates were low and further recruitment efforts were needed, the researcher arranged with the gatekeeper to resend information about the study. As compensation to acknowledge the participants' contributions, a \$20 Visa gift card was offered to those selected and who completed participating in the interview process.



## Criteria for Selection

Part of the criteria for selection was a pre-screening questionnaire that determined the level of exposure to traumatic events. For the development of the questionnaire designed for this study, three ACE questionnaires were adapted (Burke Harris & Renschler, 2015; Felitti et al., 1998; Hooper et al., 2011), which resulted in the inclusion of an option to select exposure to traumatic events and the altering of wording to provide more clarity to the population. As the researcher received scores from the Adapted Adverse Childhood Experiences (ACEs) and Traumatic Event questionnaire, participants were selected if scores represented four or more (Felitti et al., 1998).

Scores of four or higher levels correlate with a prevalence of alcoholism, illicit drug use, promiscuous sex and sexually transmitted diseases, depression, and suicide attempts (Felitti et al., 1998). Once seven participants with self-reported scores of four and above and one with a score of three were interviewed, the researcher checked the data for saturation. Research has acknowledged that individuals with "4 or more categories of childhood exposure, compared to those who had experienced none, had a 4 to 12-fold increased health risks for alcoholism, drug use, depression, and suicide attempt" (Felitti et al., 1998, p. 245), there is an increased relationship between categories of childhood exposure and health risks (Felitti et al., 1998). Individuals with a score of 3 would still exhibit negative health risks.

The researcher reviewed the questionnaire responses to determine each response's ACE score. The Adverse Childhood Experiences and Traumatic Event Questionnaire provided an overview of the purpose of the study and allowed for an acknowledgment of consent. Questionnaire responses that indicated an interest in moving forward with an interview allowed the researcher to contact them by phone or email for additional questions and to discuss

participation in the interview process. Once the researcher reviewed questionnaire scores, each participant was contacted through email (Appendix I) and informed that they had been selected to move forward with completing an interview for the study (Felitti et al., 1998).

Eight to twelve participants were the target for interviews. However, interviewing until data saturation was critical to determining the maximum number of participants (Hennink et al., 2017; Merriam, 1998; Merriam & Tisdell, 2016). After eight interviews, the saturation of responses was reached when no new information or themes emerged from the data. At this point, data collection was deemed sufficient to address the research objectives, and further interviews or observations were unlikely to yield additional meaningful insights.

### **Interview Process**

Participants were given the option to complete online or face-to-face interviews. It was important that they were in an environment that represented their natural setting (Creswell & Creswell, 2018; Creswell & Poth, 2018). The date, time, and location were confirmed through email. If an online interview was selected, a Zoom link was sent 24 hours before the interview. Participants were emailed 24 hours before the interview as a reminder (Appendix J).

A conference room was obtained on campus for face-to-face interviews. The researcher arrived before the scheduled time to set up the space to provide a pleasant environment. Two comfortable chairs faced each other with a table in between so the researcher could take notes. Water was available and offered. This environment and the virtual connection provided participants with a comfortable interview setting (Creswell & Poth, 2018). This aspect is crucial in qualitative research as it encourages participants to engage more freely with the interviewer when they feel at ease and unthreatened (Creswell & Poth, 2018).

Once the participant arrived, introductions were made. The researcher reviewed the study's premise, confidentiality, and the participants' rights outlined in the consent to participate. Participants confirmed receipt of informed consent by verbally acknowledging it at the beginning of their interview. Permission to record the interview was obtained through verbal recorded confirmation. The researcher confirmed the estimated time for the interview, which was approximately 45-60 minutes. Additionally, participants received instructions on the interview process.

Participants were presented with a chart of colorful butterflies. They were asked to select a type of butterfly as a pseudonym (Appendix K) to protect their identity (Bloomberg & Volpe, 2019; Yin, 2016). Participants were informed that their pseudonyms would be used rather than their names during the study to protect their identity.

The time when the interview began and ended was recorded. The researcher took concise notes to ensure the credibility and validity of the interview in case of audio equipment failure (Yin, 2016). Otter.ai was used to audio record interviews. Those conducted on Zoom were recorded through the online platform. Otter.ai was used to transcribe the audio recordings. Interview questions were semi-structured and open-ended. Follow-up questions were asked to clarify or expand on responses. At the end of each interview, participants were invited to share the research flyer with a peer interested in connecting with the researcher for additional information.

After the interview, participants were given a \$20 gift card to compensate for their time. Participants who opted for online interviews were provided the flexibility to choose between having their Visa gift card mailed to them or leaving it at the Student Success Center for convenient pickup. Once the interview concluded, the researcher reviewed transcripts and

emailed each participant a copy of their transcript (Appendix L). Participants could provide any clarifications or follow-up questions to the researcher within a designated time frame of one week. Member checking allowed the researcher to ensure accurate data capture (Bloomberg & Volpe, 2019; Creswell & Creswell, 2018; Yin, 2016).

The population pool was expanded through snowball sampling to strengthen the response rate. At the end of each interview, the participant could share the informational flyer with a peer who could connect with the researcher for further instructions. To secure participants, the researcher connected with another student success program that served first-generation or low socioeconomic populations on the same college campus. Access was provided through the gatekeeper to distribute the email invitation and flyer. The final number of interviews was determined upon data saturation (Hennink et al., 2017; Merriam, 1998; Merriam & Tisdell, 2016).

Immediately following the interview, the researcher journaled thoughts and perceptions of the interview and began identifying codes that appeared in the data. Following the identification of codes, themes were identified based on the voiced responses of the participants. Each transcription was compared to the notes taken during the interview to ensure no inconsistencies. This was repeated after each interview. Interview data, journal notes, and transcripts were saved in the NCSU Google Drive and the researcher's password-protected computer. Handwritten notes were stored in a locked file cabinet in the researcher's home until the completion of the study. All data and documents will be stored for up to one year after completion and then destroyed.

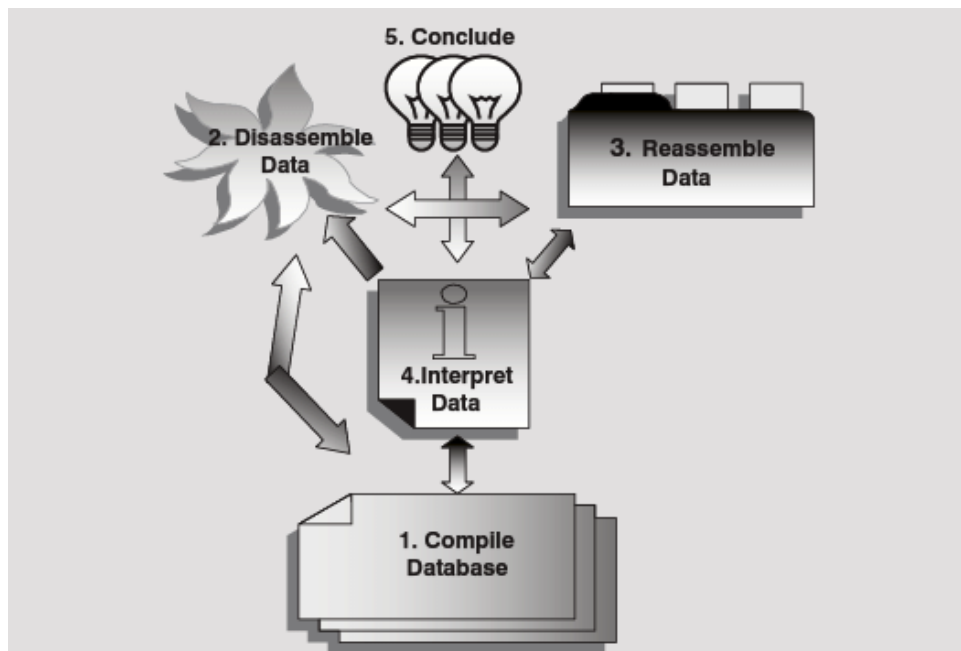
## **Data Analysis**

This study was undergirded by Urie Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Model of Institutional Departure. Theoretical and conceptual frameworks shape this study's data collection and analysis (Yin, 2018).

The researcher used Yin's five phases of data analysis. Data analysis in qualitative research includes compiling and organizing data, assigning labels or codes to emerging ideas, reassembling the codes into themes, interpreting the data, and drawing conclusions from the study (Yin, 2016). Yin (2016) considers the analysis phases a cycle, implying that researchers may cycle back and forth between the different phases. Figure 3.2 graphically demonstrates Yin's phases of data analysis and how research moves nonlinearly from data collection to concluding the study.

**Figure 3.2**

*Five Phases of Analysis and Their Interactions*



*Note:* Yin, R.K. (2016). *Qualitative research from start to finish* (2<sup>nd</sup> edition). Guildford Press.

The first analysis phase was compiling data into an organized, manageable plan (Yin, 2016). Data sources included interviews, field observations, journaling, and member checking. Data collected in this study was securely saved in NCSU's Google Drive and on a password-protected computer. Audio and video-recorded interviews were password-protected in Zoom and Otter.ai. Notes were transcribed during the interview, and coding notes were housed in a locked file cabinet in the researcher's home. Files were labeled by the pseudonyms assigned to the participants to protect anonymity. Data analysis was done by hand, not through computer software. A coding matrix was developed to organize patterns that emerged from the data.

After each interview, the researcher reviewed the written and recorded transcripts and written observations made during the interview. Written notes and any recurring words or ideas were highlighted or written in the margins of the transcript. Reflections were recorded in a journal to summarize the interview and field notes (Yin, 2016).

Disassembling was the second phase of the analytic process (Yin, 2016). Before breaking down the data, the researcher reviewed the research question. The question, based on the theoretical and conceptual framework, enabled the researcher to connect the data collected with the study's purpose.

Analytic memos or journaling on relationships or categories that began to form were recorded after each interview and field observation. The researcher used these categories or codes to assign meaning to the data collected (Yin, 2016).

Coding is an imperative part of qualitative data analysis. It represents "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldana, 2021, p. 5). Saldana (2021) views the first coding cycle as the analysis or "taking things apart" portion. Relying on the participants' words captures "In Vivo" coding, allowing the researcher time for reflection (Saldana, 2021). The second cycle is "putting things together" or synthesizing them into meaningful units through axial coding (Merriam & Tisdell, 2016). Axial coding allows for the In Vivo codes captured during the first cycle to be synthesized further into more inclusive categories (Merriam & Tisdell, 2016; Saldana, 2021).

Initially, Level 1 codes were taken from the data and recorded on sticky notes. These were direct quotes or broad concepts derived from interviews and field observations (Yin, 2016). As concepts emerged, Level 2 or category codes were created. Categorical codes were more

complex and related to the “hows” and “whys” of how participants with adverse childhood experiences persevere in college from one semester to the next (Yin, 2018).

In Phase Three, the researcher looked for patterns in Level 1 and 2 codes to develop themes and theoretical concepts (Yin, 2016). Each interview and field observation was compared and analyzed for emerging patterns. A hierarchical array was developed to organize the emerging data, enabling the researcher to conceptualize and sort the patterns into overarching themes. This hierarchical array, or conceptual tree, was developed on a large chart with sticky notes manipulated to create a conceptual understanding of the codes.

Data are interpreted in the fourth phase of the analysis process (Yin, 2016). The former phases were revisited to review the process and themes from the data before assigning meaning to the findings. A comprehensive interpretation of the data was developed to understand the research. In other words, what themes and theoretical connections were gathered in the analysis processes to inform the researcher of how students with adverse childhood experiences persist in college from one semester to the next? According to Yin (2016), completeness, fairness, empirical accuracy, value-added, and credibility were considered when interpreting data. Thick descriptions of the data created a framework for a comprehensive understanding of the persistence of students with traumatic childhood backgrounds.

The final phase was the study's conclusion (Yin, 2016). Yin (2016) states that “a conclusion is an overarching statement or series of statements that raise the interpretation of a study to a higher conceptual level or broader set of ideas” (p, 235). The conclusion captured the significance of the study and offered suggestions for future research on the impacts of adverse childhood experiences on college persistence.



### ***Data Analysis Process***

This study followed the below steps as data were analyzed:

Step 1: Transcribed interviews, field notes, and observations

Step 2: Reviewed transcriptions

Step 3: Provided participants with member checking

Step 4: Revised transcriptions based on member-checking feedback

Step 5: Compiled notes into functional order

Step 6: Disassembled data through analytic memos

Step 7: In Vivo coded and categorized code data

Step 8: Reassembled data into themes through hierarchical arrays

Step 9: Interpreted data through thick description

Step 10: Drew conclusions on the study by calling for new research

### ***Ethical Considerations***

Research on adverse childhood experiences is sensitive in nature and may elicit emotional triggers from past traumatic experiences. The Adverse Childhood Experiences and Traumatic Event Questionnaire required self-disclosure of past adverse experiences. However, neither the questionnaire nor personal interviews addressed details of the ACEs, age of occurrence, frequency, or timeframe. Participants were asked to reflect and share their perspectives on how their past adverse childhood experiences impacted the trajectory of their higher education journey and ability to persist semester to semester, not the trauma itself. The study utilized a purposeful sampling method and snowball sampling. The researcher acknowledged having access to the population and knowledge of the community in which they live; however, the selected participants were unknown to the researcher and had no academic

connection. The researcher took measures to ensure there were no prior relationships with participants, and participants' identities were protected using pseudonyms. Bracketing was utilized to enhance participant deidentification further and add extra confidentiality. Due to the initial questionnaire's sensitive nature, participants were allowed to withdraw from the study at any time.

### ***Trustworthiness and Credibility***

The trustworthiness of this study was established through rigorous data collection and detailed interpretation and analysis methods to ensure quality (Merriam, 2018; Merriam & Tisdale, 2016; Creswell & Creswell, 2018; Yin, 2016). Several steps were taken to ensure the trustworthiness and credibility of this study.

An audit trail of the steps of data collection and analysis (Guba & Lincoln, 1981) and trustworthiness protocols and procedures (Amankwaa, 2016) were established. Data collection and analysis processes were recorded in detail so any researcher could ascertain how the results were determined (Guba & Lincoln, 1981).

Triangulation using multiple data collection methods, such as interviews, observations, journaling/self-reflection, and member checks, supports this study's credibility. According to Patton (1999), "triangulation is a process by which the researcher can guard against the accusation that a study's findings are simply an artifact of a single method, a single source, or a single investigator's biases" (p. 1197).

With each interview, the researcher self-reflected, taking notes on the process and activities observed. Reflective notes summarizing the interview were used in the analysis process to develop categories and themes (Creswell & Poth, 2018). Once the transcripts were transcribed and reviewed, participants reviewed them for accuracy. Member checks are the "single most

important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of identifying your own biases and misunderstanding of what you observed" (Maxwell, 2013, pp. 126-127).

Qualitative analysts must be rigorous in their thinking. The researcher often cycled through the analysis process to ensure the categories, details, and interpretations made sense and represented the case studied (Patton, 1990).

### **Chapter Summary**

Chapter three provided a review of the qualitative case study methodology approach for this research study of how students with adverse childhood experiences and trauma persist from one semester to the next. The chapter described the research design and reviewed the guiding research question used in the study. A discussion of the researcher's role was presented. Site and participant selection, interview protocol, and techniques used for data collection were discussed. A description of the five phases of data analysis was included, outlining clear steps taken in analyzing data. Limitations and delimitations of the study were explained. The chapter concluded with the strategies employed for trustworthiness and credibility.

## CHAPTER 4: FINDINGS

### Introduction

This chapter presents the results and explains the findings gleaned from interviews held with community college students who self-reported adverse childhood experiences and traumatic events occurring before the age of eighteen and how they persisted from one semester to the next. Themes unearthed through data analysis are identified, and an in-depth discussion of the most prominent findings is presented. The subsequent sections of this chapter explore the results from the qualitative aspects of the study aligned with the overarching research question. Through the findings, connections to the theory and framework associated with this study have been revealed.

Urie Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Model of Institutional Departure served as the foundational frameworks for this study. Bronfenbrenner's perspective, as outlined in 1977 and 1986 publishing's, posited that the interactions between individuals and their external environments are mutually influential. His systems theory is relevant to the dynamic interactions and interconnectedness of individuals within the systems in which they participate (Renn & Arnold, 2003; Moran et al., 2016).

Vincent Tinto's theoretical framework of Institutional Departure suggested that experiences during the initial year of college established the groundwork for students' persistence or departure from academia (Tinto, 1993). Upon entering community college, students confront new expectations that diverge from their prior roles and responsibilities. Negotiating these novel academic, personal, and social expectations necessitate the development of distinct methods and strategies to adapt to college life (Tinto, 1988).

The conceptual framework of this study encompassed Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Theory of Institutional Departure. Student persistence was influenced by factors such as their pre-entry characteristics, adverse childhood experiences, and trauma. College support is crucial in fostering their integration into the academic and social environment. This support included positive interactions with faculty and opportunities for engagement on campus (Bronfenbrenner, 1986; Tinto, 1988, 1993). These frameworks guided the theoretical and conceptual underpinnings of Yin's (2018) data collection and analysis.

### **Participant Demographics**

This study utilized purposeful sampling of non-traditional college students enrolled in a student success program at a community college in urban North Carolina's northwest region. The purposeful sample specifically included students with low socioeconomic status, first-generation college students, or individuals with documented disabilities.

At the beginning of each interview, participants selected a butterfly species from sixteen colorful images as their pseudonyms. The researcher selected the concept of a butterfly pseudonym due to its symbolic meaning. In the Native American culture, butterflies symbolize transformation, hope, and rebirth (Regan, 2021). This symbolism was most fitting for the participants, who had experienced trauma based on their ACE scores. The participant's pseudonym and demographic details are provided, along with a narrative summary of each participant. The findings that resulted from the data collection were substantiated by observations documented during interviews, memos, and journaling.

This study created a space to meet participants and hear their stories. Each participant brought a unique perspective to this work, and their profiles, arranged by pseudonyms, are introduced below.

### ***Silver Studded Blue***

Silver Studded Blue is a twenty-year-old who identifies as a male. The participant's ethnicity is Iranian. Silver Studded Blue is a full-time, first-generation student majoring in engineering. Although the participant initially enrolled in community college in the spring of 2021 and withdrew from all his classes, Silver Studded Blue returned in the fall of 2021 and has been persistent in his academic journey. Silver Studded Blue plans to transfer to a university after completing his associate degree. The participant self-disclosed seven adverse childhood experiences and traumatic events.

### ***Adonis Blue***

Adonis Blue is a nineteen-year-old female who identifies as Hispanic. She is a full-time, first-generation student beginning college in the fall of 2021. She is pursuing an associate degree in science and intends to transfer to a university to pursue a degree in kinesiology with a concentration in exercise science. The participant self-disclosed five adverse childhood experiences and traumatic events.

### ***SwallowTail***

SwallowTail is a nineteen-year-old Hispanic female who immigrated from the Dominican Republic as a child. She is a full-time, first-generation student who began college as a part-time student in the fall of 2020 and became full-time in the fall of 2022. She is a criminal justice major and plans to transfer to the University of North Carolina Greensboro after completing her

associate degree. SwallowTail aspires to be a private investigator. The participant self-disclosed ten adverse childhood experiences and traumatic events.

### ***Red Admiral***

Red Admiral is a twenty-seven-year-old white female. She is a full-time, first-generation college student attempting college for the second time. At twenty-one, Red Admiral dropped out of college and entered the workforce. The participant returned in the fall of 2021 and completed her associate degree in science in the summer of 2023. Red Admiral plans to attend Appalachian State University to pursue a bachelor's degree in computer science. The participant self-disclosed nine adverse childhood experiences and traumatic events.

### ***Purple Hair Streak***

Purple Hair Streak is an eighteen-year-old white female who is a full-time, first-generation college student majoring in marketing. Having graduated early from high school, Purple Hair Streak enrolled in college in the fall of 2021 at the age of sixteen. She plans to transfer to Western Carolina University upon graduation. The participant self-disclosed three adverse childhood experiences and traumatic events.

### ***Monarch***

Monarch is an eighteen-year-old male who identifies as non-Hispanic and African American. The participant is a full-time, first-generation student with documented learning disabilities, majoring in business administration. Monarch began college in the fall of 2022. Despite struggling in school due to diagnosed learning disabilities, Monarch has set a goal to transfer to a university to become an accountant and be an advocate for the African American community. The participant self-disclosed nine adverse childhood experiences and traumatic events.

***Peacock***

Peacock is a thirty-two-year-old female who identifies as non-Hispanic and African American. She is a full-time, first-generation student and military veteran. Peacock is currently enrolled in her second associate degree in nursing, which she began in the spring of 2022.

Peacock is a single mother of four children, ranging in age from one to eight. She self-disclosed five adverse childhood experiences and traumatic events.

***Painted Lady***

Painted Lady, a twenty-eight-year-old female, identifies as non-Hispanic and African American. She is a full-time student currently enrolled in her third associate degree program. Painted Lady has previously earned an associate in arts and Surgical Technology from different institutions. In the fall of 2022, she began an associate degree in nursing. Painted Lady is a single mother of two boys, ages five and eight. The participant self-disclosed four adverse childhood experiences and traumatic events.

In an effort to provide a visual depiction of the participants' demographics using pseudonyms, Table 2 demonstrates each participant's age, gender, race, program of study, employment status, and Adverse Childhood Experiences and Traumatic Events Questionnaire scores. It is important to note that all participants were first-generation students, enrolled full-time (12 credit hours or more), and were considered non-traditional students. This research employed the National Center for Education Statistics (NCES) definition of non-traditional students. According to NCES (n.d.), non-traditional students postpone college after high school graduation, attend college part-time, are caregivers and parents, work full-time, have the sole



responsibility of financially supporting themselves and family, are non-traditional high school graduates, or serve in the military.

**Table 2**

*Demographic Summary of Study Participants*

Participant Pseudonym	Age	Gender	Race	Program of Study	Employment Status	ACEs & Traumatic Events Score
Silver Studded	20	male	Arabic	Associate in science	part-time	7
Adonis Blue	19	female	Hispanic	Associate in science	*part-time	10
Blue Swallow-tail	19	female	Hispanic	Associate in arts	*part-time	5
Red Admiral	26	female	White	Associate in science	part-time	9
Purple Hair Streak	18	female	Hispanic	Associate in arts	part-time	3
Monarch	18	male	Black or African American	Associate in arts	part-time	9
Peacock	33	female	Black or African American	Associate in Arts, Health Tech	non-employed	5
Painted Lady	28	female	Black or African American	Associate in Arts, Nursing	non-employed	4

*Note:* \* Indicates working more than one part-time job

Out of the eight participants, six had recently graduated from high school and enrolled in community college within six months of graduation. All participants except one stated that they were financially responsible for themselves. One participant was a military veteran, while two participants were single mothers. Two participants possessed associate degrees and were returning to pursue another degree to enhance their workforce skills and broaden their opportunities.

## **Findings**

The researcher engaged in notetaking, journaling, and observations during each interview to produce the findings. Once interviews were completed, transcriptions were compared to the audio recordings and edited for clarity. Edited transcripts were emailed to each participant for member checking, which allowed them to ascertain an accurate portrayal of their interviews. The researcher then compared notes taken during the interviews with the transcripts, enhancing the richness of the data review to illuminate key findings.

### ***First Level of Coding***

The researcher employed categories or codes to ascribe significance to the collected data (Yin, 2016). Coding is a crucial element of qualitative data analysis, representing "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldana, 2021, p. 5). The "taking things apart" or analysis phase describes the initial code cycle (Saldana, 2021). Employing "In Vivo" coding, which involves capturing participants' words, gives the researcher time for reflection (Saldana, 2021).

Specific words or phrases began to repeat during transcript review, journaling, and memoing. Rich quotes from the interview transcripts were highlighted. Initially, these Level 1 codes were extracted from the data and documented by hand on sticky notes for each participant, encompassing direct quotes or repetitive words derived from interviews and field observations (Yin, 2016). Each participant was assigned a different color sticky note. Codes derived from each participant and the number of times they repeated were recorded, giving the researcher a broad understanding of what was deemed most important for each participant.

**Table 3***In Vivo Coding Summary*

Participants	Number of Codes	References in Quotations	Coding Cycle
Silver Studded Blue	135	11	1st
Adonis Blue	92	9	1st
Swallow Tail	222	8	1st
Red Admiral	103	4	1st
Purple Hair Streak	103	5	1st
Monarch	121	4	1st
Peacock	105	8	1st
Painted Lady	169	8	1st
Total	1050	57	1st

*Second Level of Coding*

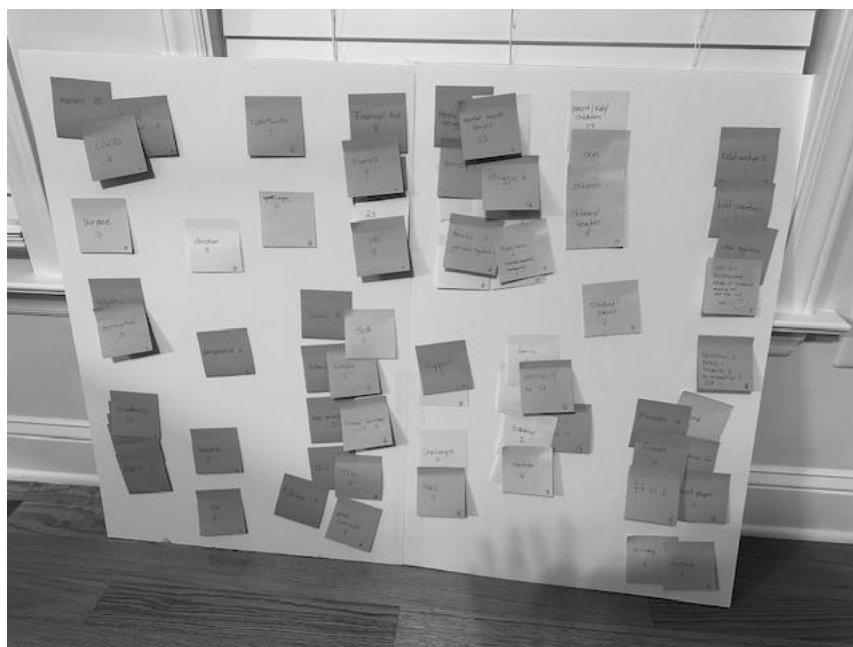
As concepts surfaced, Level 2 or category codes were formulated. Categorical codes delved into more intricate aspects, addressing the "hows" and "whys" of how participants with adverse childhood experiences persist in college from one semester to the next (Yin, 2018). The second cycle involves "putting things together" or synthesizing them into meaningful units through axial coding (Merriam & Tisdell, 2016). Axial coding enables the In Vivo codes captured in the first cycle to be further amalgamated into more comprehensive categories (Merriam & Tisdell, 2016; Saldana, 2021).

During the second level of coding, the sticky notes prepared for each participant were affixed to a large presentation board. The sticky notes were added one interview at a time, enabling the researcher to assess and compare similar codes. After placing all participants' codes

on the board, the researcher sorted and grouped codes, bringing together similar concepts. Initially, codes like work and job were separated. However, using a broader examination, the researcher started to cluster related codes or concepts, such as work and job, to construct comprehensive categories and formulate meaning from what participants voiced about their persistence in college despite past challenges. Figure 4.1 provides a visual representation of the hand-coding process.

### **Figure 4.1**

#### *Visual of Hand Coding Process*



#### *Pattern Development*

During phase three, the researcher examined Level 1 and 2 codes to identify patterns and construct themes and theoretical concepts, as Yin (2016) outlined. Each interview and field observation underwent a thorough comparison and analysis to identify emerging patterns. A hierarchical array was created to organize the evolving data systematically. This structure allowed the researcher to conceptualize and categorize patterns into overarching themes. The

hierarchical array, akin to a conceptual tree, was constructed on a sizable chart using sticky notes, which were manipulated to facilitate the development of a conceptual understanding of the codes. Figure 4.2 illustrates the hand-coding process and the development of the conceptual tree for the initial four categories.

**Figure 4.2**

*Development of the Hierarchical Conceptual Tree Chart 1*

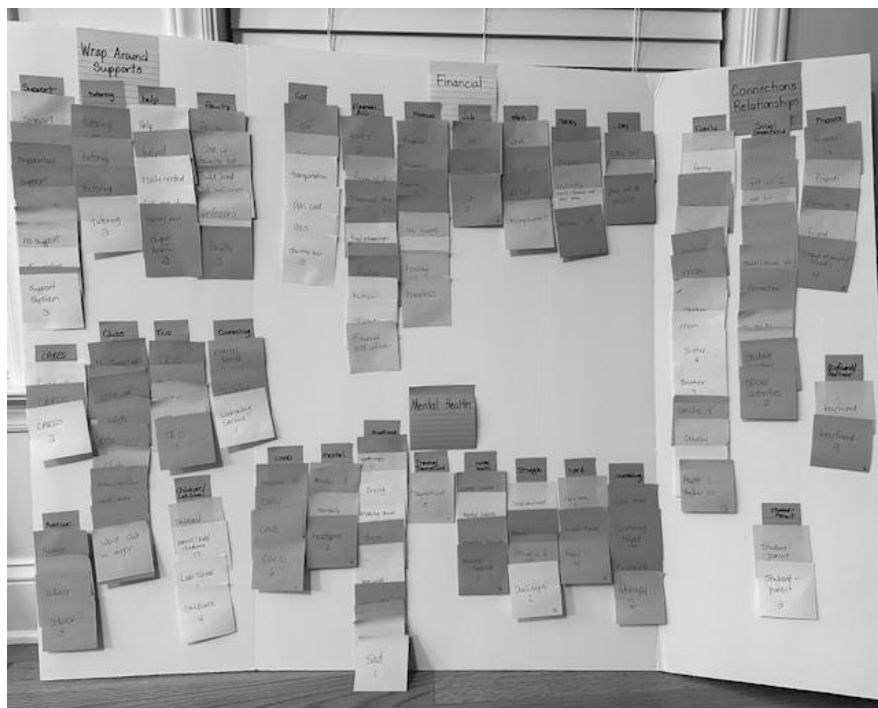


Figure 4.3 visually depicts the hand-coding process and the development of the conceptual tree for the remaining two categories.

**Figure 4.3***Development of the Hierarchical Conceptual Tree Chart 2*

As the hierarchical tree took shape, the researcher reflected upon the codes represented on the charts. To ensure comprehensive representation of all codes and perspectives, the researcher returned to the data. Following the cyclical process, the researcher revisited phases one and two (Yin, 2016). Interview journals, memos, and transcript data were disassembled and reassembled in this iterative process (Yin, 2016). Sticky notes were used to document codes and phrases for each participant, followed by tallying the codes and organizing them into the previously identified broad themes. This iterative process was repeated four additional times.

Table 4 references the number of codes each participant generated and the categories resulting from the interview process. For example, in the row labeled Silver Studded Blue (participant), words about finances and money generated codes that resulted in the category Financial Challenges. The numbers highlighted indicate the highest code count within each broad category.

**Table 4***Generated Participant Codes*

Participants	Sense of Belonging Through Community Building	Financial Challenges	Outside Influences	Academics	Mental Health	Purpose/Motivation
Silver Studded Blue	32	31	32	36	11	25
Adonis Blue	27	34	13	20	29	9
Swallow Tail	31	100	63	23	33	41
Red Admiral	30	23	9	40	8	8
Purple Hair Streak	45	23	34	31	11	7
Monarch	53	4	21	24	30	10
Peacock	53	15	38	10	16	12
Painted Lady	31	65	34	11	41	10
Total	302	295	244	195	179	122

**Research Question**

This qualitative case study aimed to explain how community college students with adverse childhood backgrounds persist in college semester to semester. Undergirded by the conceptual framework of Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Theory of Institutional Departure, the study examined the interconnectedness of ecological systems with a student's decision to persist semester to semester. The overarching question examined was: How do community college students who report exposure to early



childhood adverse experiences describe the influences that allowed them to persist in college from one semester to the next?

### **Identification of Themes**

The interpretation of data took place during the fourth phase of the analysis process, as Yin (2016) outlined. Earlier phases were revisited to review the process and themes derived from the data before attributing meaning to the findings. Data were interpreted to gain insight into the research question. The goal was to discern what the identified themes and theoretical connections revealed about the semester-to-semester persistence of students with adverse childhood experiences. The creation of thick descriptions in the data served as a framework for developing a comprehensive understanding of the persistence patterns among students with traumatic childhood backgrounds.

Figure 4.4 presents a word cloud generated from participant codes reiterated three or more times, visually representing the most significant codes. The size of a word or code in the cloud corresponds to its frequency among the participants, highlighting the most repeated codes of finances, friends and family, advisors, and supports.



emerged from data analysis illuminated the importance of a sense of belonging and community, financial barriers, positive and negative external influences, academic navigation, mental health concerns, and motivational desire for student persistence. The next sections provide more details on the six themes identified.

***Theme 1: Fostering Belonging: Building Community for a Sense of Connection***

Theme 1 is a primary theme for the data, exhibiting the most consensus across participants. Developing relationships and establishing a sense of belonging on campus was critical to student persistence. Participants expressed a need to fit in and belong whether academically or engaging in clubs and extracurricular activities. College persistence can be reinforced by either the institution's academic or social system (Tinto, 1988).

Information gleaned from data analysis fell into four subcategories: sense of belonging, connections, supportive, and extracurricular. Figure 4.5 is a word cloud that illustrates the most relevant codes derived from data analysis. The larger the word indicates the frequency a code was repeated among participants.

**Figure 4.5***Participant Code Responses for Fostering Belonging*

**Belonging.** A student's decision to persist in school is significantly influenced by their sense of belonging in college, as evident in the data analyzed in this study (Carballo, 2022). Relationships are crucial for developing resilience in adolescence and adulthood, with teenagers focusing more on peer and mentor relationships while adults prioritize parenthood and work-based connections (Masten, 2014b).

Resilience refers to the capacity to withstand, adapt and recover from adversity, trauma, threats, and toxic stress (American Psychological Association, 2014). Resilience was a crucial psychological asset, enabling participants to effectively adapt to adverse experiences. The misapplication of the ACE survey is a concern as it has been used to diagnose trauma, which doesn't take into account resilience factors (Anda et al., 2020; NCTSN, 2021). The survey

(Felitti et al., 1998) lacks consideration for the positive experiences that contribute to a child's resilience, protecting them from the negative impacts of childhood adversities (Starecheski, 2015). In a world of uncertainty, supportive relationships served to help alleviate the long-term effects of early trauma experienced by the participants (Starecheski, 2015). College students, particularly those exposed to ACEs, require opportunities to cultivate protective factors, including "supportive relationships, problem-solving and self-regulation skills, self-efficacy and optimism, and beliefs that life has meaning" (Masten, 2019, p. 101).

Participants in this study expressed a desire for a sense of belonging in various aspects of their lives, including relationships with their college, peers, and family. Peacock, a single mother of four, shared a hurtful experience about the desire to belong within her college club. She said:

So, they get to go on these trips. And when I found out that I'm not able to bring my kids and stuff, I just got angry, and I left. And for a split second, I wanted to leave the organization. Like, I didn't want to be a part of it because I feel like when they go on these trips, there's like this sense of closeness when they come back. And so it's like when I go to these meetings, even on leadership, I feel completely disconnected. And I'm kinda, like, the odd man out (Peacock).

Student parents, many single mothers, carry the nonacademic burden of obtaining childcare (Dayne et al., 2023; Cruse et al., 2018; Cruse et al., 2019). Childcare presents a huge barrier for parents due to high tuition fees, transportation, and availability (Baugus, 2020; Cruse et al., 2018; Dayne et al., 2023; Waters-Bailey et al., 2019; Wladis et al., 2018). Currently, there are childcare deserts due to the lack of a childcare workforce and childcare centers, especially in the rural areas of North Carolina (Dukes, 2022; Malik et al., 2018; NC Early Childhood Foundation, 2022). Students with children struggle with balancing family and school

activities. Without viable resources for childcare, student parents are forced to remove themselves from extracurricular activities. Social opportunities play a key role in fostering students' sense of belonging. Peacock wished “there were more resources for student parents” so she could participate in club trips and feel a sense of belonging among the group. Cultivating environments that foster students' connection to the institution by nurturing a sense of belonging within the student body will encourage persistence (Freeman et al., 2007; Demetriou et al., 2017; El Zaatari & Maalouf, 2022).

**Connections.** Participants expressed the importance of establishing connections with faculty and advisors. Successfully transitioning into college relies on building positive interactions with peers, faculty, and college support staff. The absence of positive relationships may result in early departure (Tinto, 1982, 1988). Swallowtail feels more comfortable contacting the faculty of her face-to-face classes than her online faculty. Although building a relationship with faculty online posed more challenges, she acknowledged the benefits, stating, "When you build a bond with your professor, they help a lot" (Swallowtail).

Advisors played a critical role in participants' persistence. Monarch lit up, discussing his relationship with his advisor. He expressed how helpful she was, especially in explaining how credits work and the sequence of classes he needs to earn his associate degree. Monarch felt that his advisor was his cheerleader and believed in him. “She says, see you at graduation. So, I get to see her, you know!” (Monarch).

While advisors can be a student's biggest advocate, Silver Studded Blue expressed frustration in the advising process. His concern was advising took on a cookie-cutter format. He stated:

Perspective is the biggest factor in being successful on and off campus. Faculty and staff

try, but they look at us as a whole. What if someone in the group needed something in a different way? What can be implemented during advising to help relate to my perspective and needs? Implement funding and resources to find the right people to make it better.

Silver Studded Blue emphasized the importance of connecting with his advisor: "I'm not other students. I'm me." The advising process should be personal, involving time spent discussing students' goals and personal needs. The significance of connecting was evident in how Monarch's advisor invested time to provide necessary support and, crucially, expressed encouragement by saying, "I'll see you at graduation." Monarch felt valued, while Silver Studded Blue felt like just a number.

The participants also sought connection with peers. Purple Hair Streak graduated high school from an online homeschool program. When she enrolled in the community college, she sought opportunities to find a friend group. "I think with SGA, it was just I wanted a group of people. I was an online student, and I wanted a group of people that I could get to know" (Purple Hair Streak).

**Extra-Curricular.** The ability of students to persist is influenced by how colleges support their adjustment to the academic and social environment, especially in fostering a sense of connectedness to the campus (Freeman et al., 2007; Hotchkins et al., 2021; Lewis et al., 2017; Museus & Chang, 2021; Van Gennep, 1960; Tinto, 1993). Extracurricular activities help students feel a part of the campus culture. Unfortunately, only three participants participated in extracurricular activities, specifically the SGA and SVA clubs and Phi Theta Kappa. Others either lacked the time to participate or felt that there weren't sufficient options to choose from. Swallowtail missed having a club in her major, and Adonis Blue shared disappointment that

there were no sports options. “As of now being in college, I haven't really been able to get involved in extracurriculars, which I've really been wanting to do that. Like, I wish [community college] had more options when it came to extracurriculars. Because I know for a fact like that's something that would have kept me motivated” (Adonis Blue).

**Helpful.** Students require support to persist in completing college. Faculty and advisors play a big role in providing the support needed. “Faculty has been very helpful in a lot of ways. Um, my advisor from TRIO has been the biggest support system, everything I've had academically that I needed to do, be it financial issues or transferring all kinds of things” (Red Admiral). Swallowtail expressed how the TRIO advisors helped her with scheduling, financial aid guidance, and university applications. Adonis Blue has not met anyone from the college who was not available to help when needed. For the most part, Red Admiral felt valued and supported. “I would say 98% of the time, I feel like a valued student. But there's a good couple of people who, I'm sure, just saw me as my student ID” (Red Admiral).

Persistence is more viable when students are wrapped in support systems. Painted Purple Lady expressed how the CARES Team helped her to persist when she was struggling financially.

I remember this was my first semester of nursing school. It was pretty tough for me because I was making that transition from a full-time job to a PRN job, and my money was looking funny. My finances were horrible. And my mom battles heart failure. So it was just a lot going on at the time, and I don't know, I really needed some help. So I remember our call. Well, I filled out a little questionnaire online, and then [Cares Team member] called me. And I was just like breaking down on the phone, like just breaking down into tears. And I remember, you know, explaining to her what was going on and like you know, that I needed help. And she told me to send a copy of my lease, which I



did and they helped pay my rent, which allowed me to get back on my feet. And not even that, like she also gave me a gas card” (Painted Purple Lady).

Painted Purple Lady utilized other college supports. “I've utilized the food bank quite often. Cause I can't be successful if I'm hungry. I've utilized the, you know the mental health thing you sent me for the counseling services? I have an appointment with them on January 5. So I'm going to talk to them too” (Painted Purple Lady).

Participants in this study embodied resilience, actively seeking assistance and establishing connections on campus to aid in their adjustment and persistence in college (Masten, 2018). Wrap-around support enabled students like Painted Purple Lady to obtain needed resources to be successful. Their success in college was bolstered by support within their ecological systems (Bronfenbrenner, 1977, 1995, 2005; Southwick et al., 2014).

### ***Theme 2: Navigating Academic Persistence in the Face of Financial Challenges***

Financial constraints impacted all study participants. One of the leading factors contributing to the dropout of adult learners from college was the burden of financial challenges (Florida Virtual Campus, 2019; Karon et al., 2020; Strada Education Network, 2019). Those impacted by ACEs and trauma have greater potential of poverty over a lifetime (Huang et al., 2021). As Figure 4.6 visualizes, participants spent many hours working to be able to attend college. Adonis Blue worked three jobs to pay for college and her living expenses. Finding a work-life balance proved to be challenging.

I have to support myself financially. So it's like when it comes to having to see friends or having time for myself, I don't really get that. Especially with being a full-time student and also like carrying three jobs on me. Like I don't really give myself enough time to be with my people or be by myself or give myself maintenance and stuff like that and have

those me days. So it's, I'm still trying to figure it all out. I wouldn't say I completely have it all balanced right now (Adonis Blue).

**Figure 4.6**

*Participant Code Responses for Financial Challenges*



Finances impacted the time two participants were able to enroll in college. Red Admiral graduated from high school right before turning 20 years old and, as a homeschooled student, shared, “I was working a good amount of the week to help put food on the table mostly. And that made graduating take a little bit longer for me” (Red Admiral). Purple Hair Streak was also delayed in starting college and explained, “I enrolled in college as soon as the diploma was paid off, and that was fall of 2022” (Purple Hair Streak).

Community college was not the first choice of several participants; however, financial barriers prohibited them from attending their first choice. Painted Lady wanted to attend a private college to obtain a nursing degree.

I did not have enough money to enroll in that [private] school. I think they wanted me to pay like 500 some odd dollars before I could start classes. And you know, I don't come from a family of money. Nobody had that amount of money to get to me just at the snap of a finger. I had like, maybe less than two weeks to come up with the money. I just couldn't, so that's why I pursued those certificate programs at the community college for free. Like yeah, financial things stopped me as well.

Adonis Blue was accepted to [university]. She attended orientation, obtained her schedule and dorm assignment, but soon realized she couldn't sustain the long-term cost of tuition. Consequently, she withdrew and enrolled at [community college] just one week before its start.

Peacock was homeless for a time. She shared how transitioning from military to civilian life proved challenging: “When I got out of the military, I kind of was having a hard time. I did work a few jobs. I collected unemployment. But nothing I really had a hard time with, like adjusting to civilian life. I felt like a lot of people just didn't understand. And so, I did end up experiencing homelessness” (Peacock).

Financial barriers were interwoven throughout all interviews. Participants shared concerns about obtaining financial aid and seeking funding opportunities to complete community college and transfer to a university. Financial burdens weighed heavily on them.

### ***Theme 3: The Impact of External Forces: Catalysts and Barriers to Student Persistence***

Interviews revealed that participants had family or friends who supported them emotionally to stay in school. Students talked about finding a good group of friends and leaving

behind bad influences to stay in school. They had that one family member or friend who was there to listen and talk with them through feelings of anxiety or overwhelmed emotions. Figure 4.7 highlights the codes that were most frequently repeated in interviews.

**Figure 4.7**

*Participant Code Responses for The Impact of External Forces*



Students needed to distance themselves from their previous social circles, including family, which might hold different values and norms related to their new academic paths. As students progressed and detached from these influences, they adjusted to the college environment. Most participants voiced that their friends provided them with the greatest emotional support. “My friends are my biggest emotional support. Honestly, now that I think about it, I don't remember the last time, like, my stepmom or my dad even asked me like, how are you?” (Silver Studded Blue).

For several participants, forming new friendships became inevitable. Adonis Blue shared that she lost her sole supporter when she entered college. Her previous friendships turned negative, leaving her feeling disheartened, thinking, "I lost the support I had." However, Adonis Blue built new connections, having "a solid three that are truly my emotional support."

Swallowtail had a similar experience. She stated:

So, my academic journey has been a bit hard. When I was in high school, I was in the wrong friend group. So, I was influenced by bad things. I cut off the old friend group I had. Once I started surrounding myself with the right group of friends, I noticed that it helped. And you do have to surround yourself with people that has the same goals as you and same mentality as you.

Family influences played a pivotal role in supporting or hindering college entry and persistence (Tinto, 1993). Swallowtail and her family have a strained relationship. She felt that they saw her as the same person she was in high school, making poor choices and not the person who wanted to do something positive with her life. She disclosed, "...So basically, I didn't have somebody to support me by my side. In my second semester of freshman year, I noticed that I needed to stop looking for my parents' validation. Since my parents would not change their mind about me". Swallowtail relied on her friends and cousin to provide emotional support as she navigates college.

Red Admiral, Peacock, and Purple Hair Streak had different experiences from others and had their mom to turn to for emotional support. "My mom listens to me every time I have to rant about problems. She gives me advice on how to deal with time management and stressful issues. And she's also supported me financially through all of this as well" (Red Admiral). The family of participants was not limited to their immediate family. Monarch's mother and father were not

active in his life. He lived with his great-aunt, who was not kind to him. A family friend stepped in as his “uncle” and was Monarch’s greatest emotional support. Monarch’s uncle was teaching him how to create a budget and manage his finances, as well as other skills to help him be independent and successful.

Painted Lady relied on her mother and brother, with her brother being her greatest emotional support. She spoke of a situation where she was spiraling out of control emotionally. When talking about her brother, she shared, “He kind of plucked off the emotions that came along with that scenario and kind of broke it down from a logical standpoint to make me realize the problem is not as deep as I'm thinking, and I'm just like, in my head too much.”

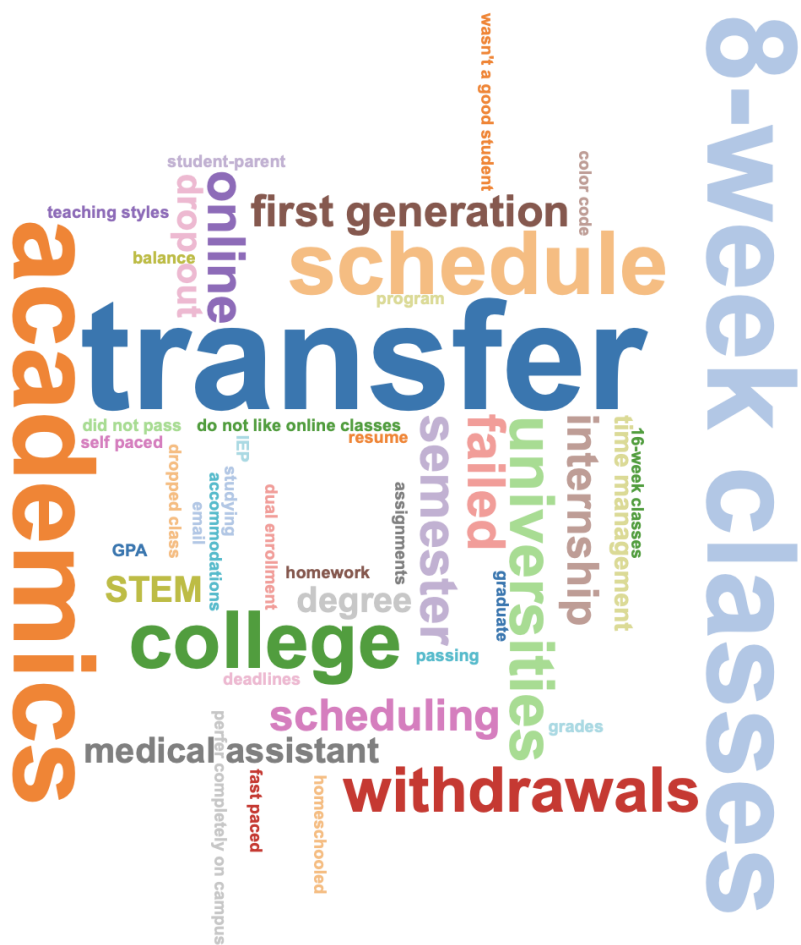
Participants found navigating college on their own daunting. They conveyed the importance of having someone in their corner to provide support in both academic and personal aspects of life.

#### ***Theme 4: Overcoming Academic Hurdles: Navigating Challenges for Student Persistence***

Navigating college poses challenges, particularly for first-generation students (Stephens et al., 2014). Consistent with previous research, these first-generation student participants faced difficulties in both the onboarding process and adapting to college life (Carballo, 2022). Four subthemes emerged from the data collected: first-generation, readiness, course delivery formats, and transfer. Figure 4.8 highlights the academic challenges participants face as they navigate college life.

Figure 4.8

Participant Code Responses for Overcoming Academic Hurdles



**First Generation.** Enrolling in college was daunting for study participants as first-generation students. Silver Studded Blue summed up his experience, “I feel like the public education kind of failed me on the importance of college, applying what to do because they say everything's getting ready for college, AP classes, and all that. But what is it? What does that mean? I didn't really know. My parents wouldn't know because they never went to college, and it was rough”.

**Readiness.** Essential college readiness skills are typically acquired during the formative years of primary and secondary school. However, consistent with previous studies (Hinojosa et al., 2019), participants acknowledged a lack of fundamental readiness and time management skills that posed challenges at the beginning of their college journey. Participants did not feel adequately prepared for college due to the pandemic. COVID-19 emerged as a prevalent theme for participants whose junior and senior years of high school were affected by the pandemic. “I feel like because of COVID, once I got to college, it was like I was not academically ready” (Adonis Blue).

Effective time management proved to be a struggle for all participants. Strategies such as color-coding calendars, developing online calendars, and setting reminders were utilized. Purple Hair Streak color-coded her calendar for work, school, and social life.

I think I was ready in every sense except for time management. I do, I use Google Calendar. And I've, um, I grid, like block it all for like the time I'm in classes, and I have a color code for each class. And then I have a color code for like social activities, and I have a color code for work like different things like that. So, I usually just, I've used that for like the entire time. I've been in college, and that really helped me (Purple Hair Streak).



**Course Delivery Formats.** Class scheduling appeared to be a challenge for participants. They expressed strong preferences regarding course formats and delivery modalities. “My preference was completely on campus because that's what gives me the motivation to, like, keep consistently going and doing my work” (Adonis Blue). Online classes also posed challenges for participants in establishing relationships with faculty. They felt considerably more at ease interacting with faculty in face-to-face classes.

Participants found eight-week classes unsettling on their mental health. The stress of an accelerated format caused great anxiety. Red Admiral expressed her concerns with eight-week classes:

During my second semester, my college, which I don't know whether I'm allowed to name, implemented an eight-week course system. So, instead of having 16 weeks to do material, you had eight weeks. I think the idea was to get credits faster, but instead of streamlining these credit classes, they just crunched 16 weeks of material into eight weeks. I didn't have time to like, do laundry, or cook dinner. I didn't have time to talk to my friends or go out and do things. So, it was a mess. It took a massive toll on my mental health, to be honest. It's awful.

***Theme 5: Charting Success: The Pivotal Role of Mental Health Support in Student Persistence***

Participants selected for this study self-disclosed adverse childhood experiences and trauma exposure before the age of eighteen. The data revealed that every participant grappled with negative mental health outcomes, including anxiety and depression. Figure 4.9 depicts a word cloud of codes used by participants on their mental health. The larger the word, the more frequently it was used.



breakdowns.

For Adonis Blue, “when COVID hit, and everything for school changed for me. I had a lot going on at home. A lot going on mentally, so everything just went downhill”. This emotional breakdown almost kept her from attending college. As a student with learning disabilities, Monarch struggles with confidence. Despite being very social, his “mental condition” keeps him from making the connections he desperately desires. He stated he only had one friend.

Regrettably, traumatic experiences weren't limited to occurring solely before the age of 18 for the participants. Swallowtail was assaulted while on a date.

So basically that person, they tried to like force me to have intercourse with them. And it affected me mentally because I went through stuff like that when I was a kid. So, him doing that just brought me back memories and I was very traumatized by it. So, on top of me not having any motivation at all, that destroyed me mentally. That's one of the reasons why freshman year was a bit hard too.

Participants recognized that it was important to have mental health support. Peacock regularly seeks therapy. “Therapy helps me a lot because some days I am a mess.” It was noted that more campus mental health resources need to be available for students. Adonis Blue expressed a need for individualized mental health access. She suggested, “some type of, like school therapy kind of, where it's like, for people like me who are on a roller coaster where some days it's like they have the motivation for school, but other days, it's like, I don't even want to do this anymore.”

***Theme 6: Fueling Persistence: The Motivational Force of Having a Purpose***

The final theme that emerged from data was a motivational force to persist in college from one semester to the next. As illustrated by the word cloud in Figure 4.10, participants

articulated their motivation to persist for personal growth, opportunities, financial stability, and improved job prospects.

**Figure 4.10**

*Participant Code Responses for The Motivational Force*



Every participant had a distinct motivation or purpose that continually drove them to persist from one semester to the next. As students who are also parents, Painted Lady and Peacock saw obtaining an education as a way to support their family. Painted Lady reflected on needing to break the cycle of poverty. “I just knew that if I didn't do something to elevate myself financially, then I'll be pretty much in like the same cycle of living paycheck to paycheck or

struggling. And that's just not the life I wanted for myself or my children. I knew I had to break the cycle. So, I had to do something. I've been pretty much just all gas, no brakes". Peacock stated that her son was her purpose for persisting.

I chose to attend college because of my son. My son is the reason. He's really my why. I wanted more for him. And I wanted to, like he literally made me push myself to like, just want the best for him and sounds like, I don't know, that he's the driving force (...). I would like to say that all my kids are the driving force. But it's like, if I'm being honest, he's the one that pushed me to want more and to, you know, pursue more and to get out of that. You know, I felt like I had a purpose once he was here.

They recognized that obtaining an education was a way out of their current circumstances. "It's a shitty situation, but you just gotta tell yourself to keep going" (Silver Studded Blue). When the thoughts of dropping out of school occurred, they kept pushing. Dropping out was not an option.

A college degree opens job opportunities; participants possess clear career goals. Red Admiral has worked many jobs, none of which fueled her soul. She enrolled in college because "I wanted to do a job that I didn't hate".

Two participants had deep-rooted reasons for persisting in college. As an African American, Monarch had an altruistic dream of advocating for his race.

I can have the ability to meet new people, learn about, learn about new things, and build connections. Opportunity to have a better life, doing stuff, and breaking barriers. I identify as African American, so having people in my community take secondary education seriously. Like providing support for people like me.

As an immigrant from the Dominican Republic, Swallowtail didn't want to take advantage of the

gift of living in the United States and the privileges it afforded her. She stated,

So, the reason I chose to attend college was, because I grew up in a third-world country. So, where I'm from, we don't have much resources. It's very rare for somebody to get a good career and get a good job if you come from a low-income family. So, if you have money in the Dominican Republic, you're good. If you're rich, you're good. I just noticed that living in the United States, like me living here means that I have privilege. And I have the privilege they don't have. So, I don't want to take advantage of the privilege I have here living in the United States. So that's one thing that also pushes me through college because I don't want to fail myself, because I know that I came to another country for a reason. So, I did notice that a first-world country does offer me a lot. Even if I'm a Hispanic, first-generation student, if I'm an immigrant, I can still do a lot. It doesn't matter who I am.

Participants are motivated to persevere in college, and dropping out is not an option. Their drive is personal, compelling them to overcome any obstacles that may keep them from graduating.

## **Conclusion**

This study explored how community college students with adverse childhood experiences persist from one semester to the next. Students enrolled in a student success program at an urban community college in northwest North Carolina received an Adverse Childhood Experiences and Traumatic Events Questionnaire via email. On the questionnaire, participants who self-disclosed three or more adverse experiences before the age of eighteen qualified to participate in the study. Eight participants were selected and participated in the study. Through face-to-face or online interviews, participants shared their experiences of persisting in college

from semester to semester. The interview questions were guided by the conceptual framework of the theoretical works of Urie Bronfenbrenner's Bioecological Systems Theory of Human Development and Tinto's Theory of Institutional Departure.

### **Chapter Summary**

The interview phase provided valuable insights into participants' strategies for navigating and persisting in college. Through In Vivo coding, 1050 codes or phrases were identified across eight participant interviews. The aim was to understand how students who had encountered adverse childhood experiences before age eighteen persevered from semester to semester. Each participant's generated codes were documented on sticky notes.

During the coding process, axial coding was applied to consolidate In Vivo codes from the initial cycle into more overarching categories. Subsequently, the sticky notes assigned to each participant were arranged on a sizable presentation board. Similar concepts were grouped to understand better the patterns and trends observed.

In phase three, a comprehensive analysis of Level 1 and 2 codes was conducted to pinpoint emerging patterns and formulate themes and theoretical concepts. A hierarchical array was established on the presentation board using sticking notes. The notes were manipulated to facilitate the development of a conceptual understanding of the codes, enabling the systematic organization of data into overarching themes.

During the fourth phase, data interpretation was undertaken to extract insights related to the research question. The aim was to understand what the identified themes and theoretical connections revealed about the semester-to-semester persistence of students with adverse childhood experiences. Six themes emerged from the data: a sense of belonging and community,

financial barriers, positive and negative external influences, academic navigation, mental health concerns, and a motivational desire for student persistence.

Chapter five presents a detailed exploration of the findings derived from the identified themes. It outlines implications for both theory and practice, offering insights for consideration. Additionally, recommendations for future research on student persistence are provided.



## **CHAPTER 5: CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS**

### **Introduction**

This dissertation focused on community college students who experienced adverse childhood experiences before age eighteen and their ability to persist in college from semester to semester. Eight participants were interviewed and shared their experiences navigating college as they balanced work, family, and school responsibilities. Each participant disclosed their primary motivator and the driving force that enabled them to persist in their educational pursuits.

The research question that guided this study was: *How do community college students who report exposure to early childhood adverse experiences describe the influences that allowed them to persist in college from one semester to the next?*

This chapter provides further context into the analysis of data and the findings expounded in chapter four. It addresses the conclusions drawn from these findings within the conceptual framework grounded in Urie Bronfenbrenner's Bioecological Theory of Human Development and Tinto's Theory of Institutional Departure. The implications of these conclusions for practical implementations are then explored, specifically in relation to supporting students who deal with mental health concerns arising from adverse childhood experiences.

### **Summary of the Study**

This research highlighted the experiences of individuals exposed to childhood trauma, who also exhibit a strong need for community and a sense of belonging within the campus setting. Meaningful connections with advisors and instructors emerged as crucial factors in keeping students engaged in the college experience. Equally important was their participation in clubs and extracurricular activities. Participants emphasized a pronounced eagerness to establish connections with peers and to be actively integrated into a larger peer group.

Financial challenges expressed by participants posed significant barriers. Each participant held employment, with two of them managing multiple jobs while enrolled in college. The consistent themes across interviews revolved around the struggle to secure funds to support tuition and living expenses.

Participants consistently expressed their determination to pursue a college degree, attributing their ability to persist to the support and influence of family and friends. Five of the eight participants found emotional support for their educational goals from their friends; however, this often involved letting go of past friendships to form new connections that aligned better with their current objectives. Within the family context, mothers emerged as the primary emotional influencers, offering support through attentive listening, childcare, and financial assistance.

Data analysis revealed four key subthemes: first-generation status, readiness, course delivery formats, and transfer. The onboarding process to enroll in college posed a daunting challenge for first-generation students, who felt the absence of parental guidance left them navigating the college landscape alone. Readiness skills, particularly effective time management, were identified as areas of concern for all participants. Participants addressed these challenges with strategies such as color-coding, developing online calendars, and setting reminders, which were implemented as tools to aid success. The scheduling of classes emerged as another challenge, with participants expressing strong preferences for specific course formats and delivery methods. The condensed nature of eight-week classes was found to negatively impact participants' mental health, causing heightened anxiety. Additionally, online courses were perceived as leaving participants feeling less connected to their instructors. All participants

expressed plans to transfer to a four-year college or university once they graduated from the community college.

This study highlighted previous research confirming that those exposed to adverse childhood experiences before the age of eighteen commonly experienced anxiety and emotional distress. Participants expressed a sense of being overwhelmed, experiencing emotional fluctuations and high-stress levels, and shared experiences of their struggles with confidence. Two participants found relief through counseling on and off campus, expressing the need for additional support options. Two examples would be more one-on-one counseling options and peer group sessions.

Finally, the study revealed that participants were motivated to persist in school for a specific purpose. Each participant's motivational drive was different. The catalysts ranged from family, personal growth, opportunities, financial stability, and improved job prospects.

## **Discussion of the Findings**

### ***Theme 1: Fostering Belonging: Building Community for a Sense of Connection***

The importance of developing relationships and cultivating a sense of belonging on campus emerged as pivotal for student persistence (Carales & Hooker, 2019). Participants expressed a strong need to integrate and belong academically or through involvement in clubs and extracurricular activities. Fostering a sense of belonging is critical for student persistence. This research is substantiated by Tinto's Theory of Institutional Departure (1988), which states that college persistence can be reinforced by either the institution's academic or social systems.

Emotions were palpable as participants shared their experiences of developing a sense of belonging on campus. There was a strong desire to "fit in," participate in the same opportunities afforded to other students and make connections beyond the classroom.

Peacock, a single mother, shared an emotionally raw experience for her. She served on her [name of club] leadership team. She expressed her love of being part of this organization and the closeness she shared with the club advisor. Peacock shared that her advisor provided encouragement when she felt like she could not keep going. These positive experiences were overshadowed by the barrier brought by being a student-parent. The [name of club] has taken out-of-state trips that Peacock could not attend because she was told she could not take her children due to liability issues. Without childcare, Peacock had to stay behind. As a result, she felt angry and left out. Peacock stated they had "this sense of closeness" when the group returned, and she felt "... completely disconnected". As a result of not having student-parent resources on campus, Peacock lost her sense of belonging and connection in her one safe place on campus.

Some participants saw college as an opportunity to connect with a peer group. As a product of a home school K-12 education, Purple Hair Streak joined a club because of the potential to be included among "a group of people that I could get to know." Monarch expressed his desire for a sense of belonging. Openly acknowledging low confidence, he revealed a lack of friendship. Monarch attended an orientation at the student success program in search of connections on campus, where complimentary food was provided. When recounting this experience, the enthusiasm in his voice and the joy on his face were unmistakable. "They were really nice. They gave me food. I got to meet other people. They asked me what I want to do with my future, gets to know me, ate with me and everything!" Despite its apparent simplicity, this interaction held immense significance for Monarch.

While extracurricular activities were acknowledged as available, they were inaccessible to the participants or lacked interest in the options provided. Participants expressed a desire for

additional clubs related to curriculum majors and competitive sports, with a particular emphasis on women's sports.

Forging connections with faculty and staff can facilitate a smooth transition into college for students. The absence of positive relationships could have contributed to students' desires to exit college before obtaining a credential (Tinto, 1982, 1988). Participants highlighted the importance of cultivating relationships with their instructors, particularly those with whom they had face-to-face interactions. Instructors were perceived as advocates for students, dedicated to their success and recognizing the individual. "I could just have a human conversation with. I would say 98% of the time I feel like a valued student" (Red Admiral).

*'Advisor'* was the word most repeated in the coding process. Being among students' initial points of contact during onboarding, advisors play a crucial role in fostering a sense of belonging on campus. Advisors must invest time in meaningful conversations with students. The advising process should be personal, involving dedicated efforts to understand students' goals and unique needs. Silver Studded Blue stressed the importance of tailoring advising approaches, even if it requires reallocating resources to acquire additional advisors, "I think they need, like, specialized advisors on each major, not just someone that knows the class [schedule] layout. I'm not other students. I'm me. They [advisors] don't understand. They probably never even taken half the classes that are in the major. So, what can they really help you with?" (Silver Studded Blue). Silver Studded Blue stressed advising should be about perspective and time spent with the student.

Staff must recognize that the quality of their interactions with students can impact the students' sense of connection to the institution (Hurtado et al., 2018). Formal relationships are evident in staff/faculty/student interaction, such as during advising sessions or classroom

instruction (Vaccaro & Newman, 2016). Informal relationships naturally occur in more relaxed settings, such as campus events (Vaccaro & Newman, 2016). Seeking opportunities for positive interactions beyond those formal settings will help develop connections with students, making students feel connected as part of the college community (Hurtado et al., 2018).

Neither social nor academic connections took precedence over the other. Students valued the overall feeling of an inclusive community (Museus et al., 2018).

### ***Theme 2: Navigating Academic Persistence in the Face of Financial Challenges***

“I need money. I got, you know, car, tuition, and all that” (Silver Studded Blue). Financial worries were foremost in the minds of all participants. Every participant held a job, with two managing multiple positions. Concerns were voiced about obtaining financial aid and seeking funding opportunities to successfully graduate from the community college and transfer to a university.

Research indicates a potential link between Adverse Childhood Experiences (ACEs) and poverty. Individuals with higher ACE scores were more likely to report outcomes such as residing in a household below the poverty level than those with no ACEs (Metzler et al., 2017). Participants in this study referred to being homeless, going hungry, delaying school to work so they could put food on the table, and having no resources. It served as a humble reminder that many students face challenges in meeting basic fundamental needs that are often taken for granted. “I can’t be successful if I’m hungry” (Painted Lady).

### ***Theme 3: The Impact of External Forces: Catalysts and Barriers to Student Persistence***

Among the participants in this study, the impact of friends was more significant than that of family. Only four participants reported positive relationships with their families, with mothers

serving as the primary source of emotional support. Fathers were predominantly absent or indifferent to their children's education.

Swallowtail expressed a range of emotions when sharing her experiences with the academic transition from high school. During her high school years, she found herself in the wrong social circle and was negatively influenced. As graduation approached, she observed her peers applying to colleges, prompting her to apply to community college. Upon starting at the college, Swallowtail quickly learned the importance of distancing herself from her old friends and forming new connections that aligned with her new goals. By then, she mentioned that her parents had already given up on her, "So basically, I didn't have somebody to support me by my side. My new friends... I noticed that, like their parents, they would always be there" (Swallowtail).

Adonis Blue lost her "homeboys" when she decided to enroll in college. This loss broke her heart and almost caused her to drop out of school. "With that whole, like friendship going downhill, like, it kind of messed me up cuz I was like dang, I lost the support I had" (Adonis Blue).

Red Admiral regards her mother as her best friend and greatest emotional support. Peacock and Painted Lady relied extensively on the support of their mothers for childcare as they attended college. It was a shared sentiment that not all family support comes in the form of a mother or father. Painted Lady's most significant support was her brother. Her face lit up as she described the way he knew how to deescalate her emotions by breaking them down one by one from a logical standpoint, "Yeah, I really, really love my brother. That's my guy" (Painted Lady).

The transition to college can pose challenges for students. External factors, including the influence of friends and family, play a role in determining how well students adapt to college life

(Aljohani, 2016; Tinto, 1993; Van Gennep, 1960). Students' direct positive and negative interactions with family and friends directly impact their decisions (Bronfenbrenner, 1999). As these participants demonstrated, decisions may need to be made to let go of old relationships to pursue new goals.

***Theme 4: Overcoming Academic Hurdles: Navigating Challenges for Student Persistence***

As first-generation college students, the participants expressed frustration with the onboarding process. Silver Studded Blue felt "the education system failed" him, having encountered terms like credits, dual enrollment, and AP without anyone explaining them to him. Given that his family lacked a college background, they could not assist him when he enrolled at the community college. Several participants had to rely solely on the college for guidance.

Initially, many participants lacked study and time management skills but adapted quickly. They discussed implementing strategies such as creating calendars for work and school and color-coding classes and assignments.

The primary concern for overcoming academic hurdles revolved around the course delivery format. In 2022, the community college shifted most curriculum courses to an 8-week format to support student completion. However, for this study's participants, the 8-week courses had a detrimental impact on their mental health. During Red Admiral's second semester, the 8-week format affected her schedule. "I didn't have time to do laundry or cook dinner. I didn't have time to talk to my friends or go out and do things. It was a mess. It took a massive toll on my mental health, to be honest. It was awful" (Red Admiral). Silver Studded Blue agreed. He stated that it was impossible to catch up if you had to miss a class.



***Theme 5: Charting Success: The Pivotal Role of Mental Health Support in Student Persistence***

Even though participants were not specifically questioned about their mental well-being, mental health emerged as a pervasive undertone in all the interviews. Words such as 'hard time,' 'crying,' 'struggle,' 'help,' 'mentally,' 'traumatized,' 'stress,' and 'emotions' were frequently used in describing their experiences while persisting in college. Each participant's journey was colored with their own adverse childhood experiences, some a little brighter than others. It was evident that mental health influenced their persistence in college (Cadenas et al., 2022; Freibott et al., 2022; Mullen, 2021).

COVID-19 greatly impacted the mental health of all participants, the majority of whom were in their junior or senior year of high school. The mandatory quarantine forced students into isolation from their friends, exacerbating the mental health crisis (Cao et al., 2020; Tahara et al., 2021). With restrictions or eliminations of school and social activities, participants were starved for interaction and socialization. Each participant mentioned having an emotional support person(s) they could turn to during challenging times, mainly friends. Three participants specifically addressed the importance of mental health services. Peacock disclosed her regular attendance in therapy, emphasizing its role in balancing her life. Adonis Blue advocated for more counseling options on campus, expressing a preference for one-on-one and group sessions. She believed that having opportunities to learn and support others would be a significant source of aid for her.

***Theme 6: Fueling Persistence: The Motivational Force of Having a Purpose***

A distinct motivation or purpose drove participants to persist from one semester to the next. As participants contemplated their persistence experiences, their self-reliance and capacity

to depend on themselves became apparent. There was a sense of pride in accomplishing things independently.

Participants also persisted because of the opportunities that an education would afford them, such as better employment, housing, and cars. For Painted Lady, persisting in college was a means to "break the cycle of poverty."

Family played a crucial role in motivating persistence. Two participants were student-parents, and their children served as significant motivators, providing them with a clear purpose or "why." Both mothers had already achieved at least one associate's degree and were working towards another, each aiming to build a better life for themselves and their children.

Persistence also had an altruistic aspect. Monarch aspired to utilize his education to advocate for African Americans and exemplify the importance of obtaining an education. As an immigrant, Swallowtail aimed to leverage the privilege of attending school in the United States.

Even if I'm a Hispanic, first-generation student, if I'm an immigrant, I can still do a lot. It doesn't matter who I am...I work...I go to school...I have privilege here (Swallowtail).

This study supports the correlation between college students' sense of purpose and their outcomes regarding degree commitment and retention (Yukhymenko-Lescroart & Sharma, 2020).

### **Connections to Scholarly Literature & Theory**

Tinto's Theory of Institutional Departure theorized that there were three stages that a student must successfully navigate to become integrated into the academic and social systems of a college: separation, transition, and incorporation (Tinto, 1993; Van Gennep, 1960). Separation entails the students' ability to distance themselves from past connections. Separation would include families, high school friends, and other local ties. After successfully navigating the

process of separation, the transition phase occurs. During this phase, students move away from the norms and patterns of their past lives but have yet to embrace the norms and behaviors of their new environment fully. Incorporation occurs as students adapt to and adopt their college community's prevailing norms and behavior patterns (Aljohani, 2016; Tinto, 1993; Van Genne, 1960). However, despite successful incorporation, more is needed to ensure persistence.

Urie Bronfenbrenner's Bioecological Theory of Human Development suggests a "complex system of relationships affected by multiple levels of the surrounding environment, from immediate settings of family and school to broad cultural values, laws, and customs" (McLeod, 2023, p.1). These systems create a synergy among one another that directly impacts the individual or environment. During the 1990s, Bronfenbrenner expanded his theory to incorporate the concept of process-person-context, known as the Bioecological Theory. This extension acknowledges that development is affected by the timing and sequencing of events. It emphasizes that individuals are shaped not only by their immediate contexts but also by the historical and temporal aspects of their experiences (Bronfenbrenner, 1999, 2005).

This study's conceptual framework was constructed around these two theories. The themes that emerged from the interviews demonstrated how students continually process the historical and temporal aspects of their experiences while acclimating to the academic and social aspects of college life. Despite their history of trauma, students demonstrated resilience and relied on personal motivation to persevere toward completion.

### ***Theme 1: Fostering Belonging: Building Community for a Sense of Connection***

Students' sense of belonging on campus significantly influences their school experiences. Bronfenbrenner (1979) states that incoming freshmen undergo an ecological transition as they adapt to their new academic environments. During this transition, Tinto's (1988) academic and

social integration model of college student attrition warns about the potential misalignment between the student's needs and goals and the demands of higher education. Students must balance the academic and social aspects to successfully adjust to their new environment (Tinto, 1988).

Belonging can be defined as the “degree to which an individual feels respected, valued, accepted, and needed by a defined group” (Strayhorn, 2012, p. 87). While studies have shown that individuals with ACEs tend to lack a sense of belonging on campus (Cadenas et al., 2022; Strayhorn, 2020), participants in this study expressed the desire to feel valued and accepted in the academic setting. They sought positive relationships with peers, faculty, and staff and perceived respect for the services received.

In this study, Peacock's interview highlighted the challenge presented by the absence of resources for student-parents in fostering a sense of belonging. Student-parents face challenges in finding their place on campus. Access to childcare is a substantial barrier for student-parents (Waters-Bailey, 2019). Sallee and Cox (2019) found that many student-parents were navigating their community college education with minimal on-campus support. Making resources readily available to support student-parents academic success is essential, such as establishing an on-campus childcare center (Sallee & Cox, 2019). Students should feel comfortable bringing their children to campus when accessing services such as advising, registration, financial aid, career counseling, and basic-need assistance (Wladis et al., 2018).

Students need to be surrounded by holistic supports that provide resources for success. They need assistance with financial aid, counseling, transportation options, and food pantries (Sallee & Cox, 2019; Wladis et al., 2018). Painted Lady summed it up well, "I can't be successful if I'm hungry."

The first theme from this case study underscores the importance of a sense of belonging, reminding us of the pivotal role a community college plays in creating a welcoming community for students.

***Theme 2: Navigating Academic Persistence in the Face of Financial Challenges***

Certain racial groups and low-income families are underrepresented among colleges and universities in the United States. The demographic composition of two-year colleges in 2021 included only 14% black students, 26% Hispanic students, 6% Asian students, and 9% American Indian/Alaska Native students (NCES, 2021b). Students from high socioeconomic families are more likely to enroll in college straight out of high school and to persist in earning a college degree than those from low socioeconomic families (McFarland et al., 2017). Family influences can support or hinder a student's college entry and persistence (Tinto, 1993).

The cost of college tuition and textbooks contributes to disparities among students in traditionally underserved and underrepresented populations (Spica & Biddix, 2021). Those unable to afford the required materials may choose to postpone purchases, enroll in fewer classes, drop courses, and achieve lower grades (Florida Virtual Campus, 2019; Martin et al., 2017; Spica & Biddix, 2021). Adult learners, students of color, and individuals with lower income are particularly vulnerable to accumulating outstanding balances, leading to stranded credits (Karon et al., 2020), or accruing debt that causes them to drop out and impedes their return to complete their degrees. (Florida Virtual Campus, 2019; Karon et al., 2020).

Adult learners contribute to family responsibilities and financial burdens as the main reasons for discontinuing their college education (Florida Virtual Campus, 2019; Karon et al., 2020; Strada Education Network, 2019). Student obstacles related to limited economic resources

and work and family responsibilities (Karon et al., 2020; McClellan, 2023; Waters-Bailey et al., 2019) adversely affect their ability to persist in college (Tinto, 1988; 1993).

All participants in this study were underrepresented minorities. They each expressed concerns about funding their education and "breaking the cycle of poverty" (Painted Lady). Despite their adverse backgrounds, this group of eight students has persisted despite their limited economic resources and life responsibilities.

### ***Theme 3: The Impact of External Forces: Catalysts and Barriers to Student Persistence***

As the most inner system, individuals can be significantly influenced by their family and friends (Bronfenbrenner, 1977). Friends can positively and negatively impact the decision to enroll in college (Alvarado, 2021). To adapt to college life, students must distance themselves from their past, including family, friends, and other community ties (Tinto, 1993; Van Gennepe, 1960). In this study, several participants acknowledged the necessity to separate themselves from old friendships and form new ones with shared goals and aspirations. Many leaned on their friends for encouragement and as a source of emotional support.

Families had both positive and negative impacts. Most participants felt their families were unsupportive and uninvolved in their college experience. However, for those with family support, it was primarily their mothers who played a crucial role by being emotionally engaged, offering a listening ear, providing childcare, and giving financial assistance.

### ***Theme 4: Overcoming Academic Hurdles: Navigating Challenges for Student Persistence***

When students enroll in college, they bring invisible characteristics. Each has unique pre-entry attributes, such as trauma, family backgrounds, past educational experiences, and academic readiness. These attributes shape individual goals, intentions, and external commitments, impacting the mindset and ability to persist (Tinto, 1993).

Adjusting to the academic expectations of college life may be more difficult for some individuals (Tinto, 1988). Many college students are not academically prepared (Hinojosa et al., 2019; Ouellette-Schramm, 2022; Perez et al., 2022; Song & Qian, 2020). Students who do not have supportive structures early will drop out of college quickly in the first year (Tinto, 1988, p. 444). Institutions can support student persistence through their academic support systems (Tinto, 1988).

Many community college students are the first in their families to attend college (Toutkoushian et al., 2018, 2021). As a first-generation college student, they are driven by the desire to obtain well-paying jobs that their families may not have accessed previously (Perez & McDonough, 2008).

This study's population consisted of first-generation students. Since their families did not attend college, they were disadvantaged in navigating higher education (Stephens et al., 2014). First-generation students tend to have difficulty adjusting to college and have lower graduation statistics than their peers whose parents attended college (Carballo, 2022).

Silver Studded Blue expressed his frustration with being a first-generation student. He believed the "education system failed him" for not adequately preparing him to transition from high school to college. Without the help of his family, Silver Studded Blue had to navigate the onboarding processes alone. He expressed the need for more guidance in financial aid and selecting a major. Silver Studded Blue registered for classes but dropped out his first semester, only to return the next to declare a different major. Unfortunately, that first semester damaged his access to financial aid. First-generation students would benefit from financial guidance, academic and peer mentoring, and engagement in community activities during their first semester to cultivate a sense of belonging (Ellis et al., 2009).

Many college students identify a lack of academic readiness, inadequate study skills, and difficulties with time management as obstacles to success when they first enroll (Hinojosa et al., 2019). In this study, time management was the area most mentioned. However, participants had developed strategies such as using calendars in Blackboard or on their phone, color-coding classes and assignments, and planning their school and work schedules.

The last academic hurdle for this theme was 8-week courses. Accelerating courses has many benefits, including keeping students motivated (Woods et al., 2012), providing appealing schedules (Krug et al., 2016), and quicker degree attainment (Bowen et al., 2009). However, not all students are prepared for the content speed and application level. Individuals with adverse childhood backgrounds are shaped by the conditions and events of their lives (Bronfenbrenner, 1995), which may leave them easily stressed and highly anxious (Hinojosa et al., 2019). Students with ACEs enrolled in 8-week courses may need additional academic strategies, tutoring, and emotional encouragement from the instructor to ensure success. Colleges should provide and inform students of varying course format options to meet all student needs.

#### ***Theme 5: Charting Success: The Pivotal Role of Mental Health Support in Student***

Participants qualifying for this study self-disclosed scores between three and ten on the Adapted Adverse Childhood Experiences and Traumatic Events Questionnaire at the beginning of the study. Felitti et al. (1998) stated that scores of four or higher are associated with elevated risks of alcoholism, depression, and suicide attempts. Individuals with a score of three would still display negative health risks. Participants were not asked about their current mental health or past adverse experiences during the interviews, only experiences of how they persist in college—however, the state of their mental health colored participants' responses.



There is a positive correlation between an increase in Adverse Childhood Experiences (ACEs) scores and the prevalence of mental health disorders (Crouch et al., 2017). According to Khrapatina & Berman (2017), 75.5% of the college students they examined reported having at least one ACE, with approximately one in five indicating a score of 4 or more ACEs (21.7%). In a 2018 study, college students who experienced two or more adverse experiences were found to have double the likelihood of facing anxiety, depression, or thoughts of suicide. Considering these mental health concerns is crucial when evaluating the ability of community college students to persist in their academic pursuits.

Urie Bronfenbrenner's Bioecological Theory of Human Development highlights that individuals are shaped not only by their immediate contexts but also by the historical and temporal aspects of their experiences (Bronfenbrenner, 1999, 2005). The synergy between the ecological systems, over time, shapes individuals. However, it is not all gloom and doom for those exposed to adverse childhood experiences. Not everyone who undergoes childhood adversity develops mental health issues later in life (Wright et al., 2013). It is crucial to note that an individual's resilience extends beyond their capacity. Much of human resilience is rooted in relationships and social support (Masten, 2019).

In this study, participants had a source of support, whether a friend, family member, college resource, or an internal reservoir of strength. They exhibited resilience.

#### ***Theme 6: Fueling Persistence: The Motivational Force of Having a Purpose***

A sense of purpose guided participants in this study as they navigated their journeys toward completing college. A sense of purpose was commonly characterized as a broad intention to achieve a significant goal, motivating individuals to fulfill various short-term objectives

(Damon et al., 2003). This rationale can be extended to college students, who are more likely to persist in college when they are driven to fulfill their life's purpose (Damon et al., 2003).

First-year students' commitment to attaining a college degree and dedication to the institution is influenced by their entry characteristics, goals, and commitments (Tinto, 1993). Familial influences are considered a pre-entry characteristic. The students' motivations and goals need to be the determining factor in their decision to persevere in college, not their parents' decision.

Degree attainment was a personal aspiration for the participants in this study. For several participants, earning a degree signified improved job prospects, equating to escaping poverty.

At times, a sense of purpose awakens an altruistic drive, as seen in the cases of Monarch and Swallowtail. Monarch's aspiration to earn his degree stems from a desire to advocate for the African American community. He intends to give back and serve as a role model, emphasizing the importance of education. Swallowtail, as an immigrant, is determined not to take for granted the privilege afforded her to acquire an education. Their altruistic purposes have ignited a determination to persist in college, ultimately leading to their degrees (Yukhymenko-Lescroart & Sharma, 2023).

### **Implications for Practice**

This study reflects the voices of nontraditional college students enrolled in a student success program at a northwest urban North Carolina community college. Participants included low socioeconomic status, first-generation college students, or students who demonstrated a documented disability. While this study is not generalizable beyond the selected site, the findings created space for other colleges to consider implications for practice.

During interviews, mental health was an underlying tone that colored the conversations of participants' lived experiences. Students with adverse childhood experiences are more susceptible to high anxiety and depression (Anda et al., 2006; Felitti et al., 1998; Giovanelli et al., 2016; Karatekin, 2018). Three participants discussed their participation in counseling or the need for additional services. Monarch sought a connection to be heard and to be validated. He would have benefitted by talking with a counselor. He shared, "Basically, I feel up and down, but I basically just carry it alone enough and do the best I can. That's all I can do."

All participants expressed worries about covering their tuition, books, and fees, providing for their families, childcare if they were parents, transportation, and securing funding for transferring to a university. Swallowtail and Adonis Blue held multiple jobs to make ends meet, all while attending school full-time. Purple Hair Streak actively sought opportunities to supplement her ways of covering tuition. "My short-term goal, I'm trying to get a scholarship. "Five participants mentioned saving money for a car. Dependable transportation was a crucial necessity as they readied for a transfer to a university.

A sense of belonging emerged as a more prevalent finding in the study. As individuals with adverse childhood experiences, a sense of belonging was critical. Participants strongly desired to feel valued and listened to, particularly by their advisors. They wanted time spent with them to have things explained, courses planned, and registration assistance. They believed that student services should consider the needs of the students, particularly in the development of course schedules. Course schedules should provide options for all students' needs so they can choose the format that works for them. "I do not like online classes. I have a really hard time focusing...I reach out to my professors through email. A lot. It depends, well mostly was the ones that I have in person, not online" (Swallowtail). Swallowtail said that although her online

instructors were good, she did not bond with them. She preferred face-to-face options. Red Admiral found 8-week classes highly stressful. “They just crunched 16-weeks of material into eight weeks. So, I did that for the rest of my degree. And it was not great for anything, but it's over. At least I can say that”. She shared that during the time she took 8-week courses, “it took a massive toll” on her mental health.

Student-parents, in particular, faced challenges finding their place on campus due to lacking resources to support their needs. "I do just wish that there was, you know, more support for student parents” (Peacock). Student-parents have needs that other students may not. As caregivers, they must balance their work and school schedules with the needs and schedules of their children. Going to school can be a massive sacrifice in many ways. "I sacrifice time away from them [children]. But I know that it's for like a better career and better cars, and I know it's gonna open more doors" (Peacock). They may need to secure childcare. However, childcare may not be available when their classes are offered.

My mom has been super hands-on in my education...after I had my first son, she said she will always be there to support me...she watches my boys. She never complains. You know nursing school is hard. So, it's like a lot of times I'll be in here, like crying because I'm overwhelmed (Painted Lady).

Community colleges can modify the delivery of services on their campuses to better align with student needs. This can involve implementing opportunities for student counseling and peer support groups, offering transportation assistance between campuses, and enhancing resources for student-parents. Additionally, colleges can conduct quality assurance checks to assess how effectively their existing student services are addressing students' needs.

***Implication for Practice 1: Extension of Counseling Services for Students***

Mental health issues are escalating on college campuses, with an increasing number of students being diagnosed with depression and anxiety (Duffy et al., 2019; Healthy Minds Network & American College Health Association, 2020; Joseph, 2019). Students with mental health diagnoses face an increased risk of not persisting semester to semester (Arria et al., 2013; Bruffaerts et al., 2018; Cadenas et al., 2022; Hanson, 2022; Revranche et al., 2023).

College students with four or more ACEs are associated with an increased risk of depression and anxiety (Crouch et al., 2017; Watt et al., 2022). With the increasing number of students with mental health needs, there is a growing demand for counseling services. Unfortunately, accessibility to mental health services on community college campuses is not always readily available for students (Burkhart & Moreno, 2019). For example, Burkhart and Moreno (2019) found that health services were closed during evening hours when working students were on campus, information shared on services was inconsistent, and services were unavailable on all campuses.

A recommendation for practice would be to expand mental health delivery services through increased accessibility and offer affinity groups. The first step would be to administer online surveys and conduct focus groups with different student populations to gather information on counseling needs. A college work group should evaluate the feedback and formulate an implementation plan.

To implement best practices, the community college should offer counseling services during the college's operating hours to ensure accessibility for both day and evening students. Essential information about counseling services should be consistently communicated through

the college's website under student resources, in Blackboard classes, and by advisors, staff, and faculty.

Services should be provided on all campuses and off-site centers. Transportation between campuses and off-site centers can be a barrier for students, so services need to be equally accessible. The community college can ensure a counselor is housed at each campus or center to provide face-to-face counseling or provide a Zoom option.

Online counseling has become popular, providing accessibility to more individuals. However, there are pros and cons. Online counseling is very effective in a crisis since it allows students to access services quickly. It provides general therapeutic benefits (Navarro et al., 2020). However, it decreases overall effectiveness due to interpersonal factors and poor conversion to online (Navarro et al., 2020). Given the type of counseling college services provide, online options are an effective option.

I really like [community college] Cares. I was just using them to find out their mental health resources more. I feel like COVID, like now people are starting to talk about mental health more. So like, that's been really helpful for me because I've been very quiet about it...I wish there were more kind of like one-on-one. Maybe, like some type of school therapy for people like me who are on a roller coaster (Adonis Blue).

Privacy should be always prioritized, whether in-person or online. At off-site centers, a designated room can be arranged to ensure that students participating in online counseling have privacy. Counselors should have private counseling offices, electronic notetaking, and a referral system. Establishing partnerships with community mental health providers is crucial to facilitate referrals when students require services beyond what the college can adequately provide. The community college can also develop an online form to submit questions, which provides a

confidential avenue for students who may feel uncomfortable asking in person or are unavailable during regular business hours.

There is also a need to provide group opportunities for socially isolated students, especially those with adverse childhood experiences (Watt et al., 2022). Affinity groups can be formed by faculty and staff to foster an inclusive environment where those with mental health needs feel valued, included, and empowered to succeed. While not all faculty and staff are trained in mental health, having someone on campus actively listening and facilitating conversations around emotions and anxiety can build a sense of community and belonging for those who have mental health disorders.

Another recommendation is for the Human Service Technology Department to create an Affinity Group. Students enrolled in the Human Service Technology program take Group Process and Counseling courses, with lab hours, that equip them with observation, listening, and session facilitation skills. With an instructor's guidance, human service technology majors can utilize lab hours in an Affinity Group to practice facilitation skills while offering peer support to fellow students on campus. It is essential to note that peer support programs complement existing mental health treatment programs rather than replace them (Watt et al., 2022).

Enhancing mental health services by offering flexible hours, online counseling, and Affinity Groups led by faculty, staff, and Human Service Technology Students will increase students' accessibility to these services. Affinity Groups contribute to the peer support essential for fostering a sense of belonging among students.

Students like Adonis Blue may find the mental health support they seek.

***Implication for Practice 2: Trauma-Informed Practice Professional Development for Community College Faculty***

Adverse childhood experiences and trauma exposure before the age of eighteen significantly correlate with mental health challenges (Karatekin, 2018) and academic struggles among college students (Hinojosa et al., 2019). The pandemic has exacerbated mental health concerns, leading to increased academic and behavioral difficulties. In the 2020–2021 academic year, over 60% of students reported encountering traumatic events or mental health challenges, marking a nearly 50% rise in the past eight years (Lipson et al., 2022). Given this prevalence, faculty professional development must prioritize supporting educators in understanding how trauma impacts students' learning abilities. To create a supportive learning environment, educators should adopt trauma-informed practices aimed at enhancing student well-being, academic performance, and retention.

Implementing trauma-informed practices involves engaging with students in a way that minimizes the risk of triggering trauma responses. This approach acknowledges individuals' life experiences and promotes interactions that foster safety, trustworthiness, autonomy, cooperation, and empowerment (Carello & Butler, 2015). Integrating Universal Design for Learning (UDL) and Transparency in Learning and Teaching (TILT) frameworks into course design, assignments, and syllabi through the trauma-informed practice approach enhances transparency, predictability, and consistency, ultimately bolstering student persistence (Elkins et al., 2023).

***Implication for Practice 3: Transportation/Shuttle Bus Between Campuses and Off-Site Centers***

Transportation can be a barrier for many community college students. Individuals from low-income families frequently depend on their social network of friends and family for



transportation help. Often lacking personal transportation or relying on unreliable vehicles, students must depend upon the availability and reliability of friends and family to fulfill their transportation needs (Combs et al., 2016; Shay et al., 2016). This unpredictable transportation situation places the student at a significant disadvantage, resulting in tardiness or inability to attend classes. The community college has an attendance policy. Students who exceed the allowable absences will be dropped from class, impacting their financial aid and deferring degree attainment.

Six of the eight participants in this study shared that they either needed a car, were saving for a new, reliable car, or struggled to buy gas for their car. Transportation is a significant concern and need for those in this case study.

I want to get a car. Like, a car is so beneficial to me. I had one and then literally before college started, it all went downhill and my car messed up. I was like, Oh my God! But that's like my main goal right now is to get a car...I have to ask people for rides, or I ask one of my parents. (Adonis Blue).

The community college's service area in this study expands to two counties. The furthest campus is 54 miles round-trip from the main campus, where most services are provided. Students who live in rural counties will typically travel on average a 52-mile round-trip to the nearest community college (Smith, 2016). Typically, there are no public transportation options in these rural communities.

Public transportation was a viable option for some students enrolled at the site designated for this study. Bus passes are provided for those students to help with costs. However, there are still barriers to this transportation option for all students. First, public transportation is not available to those students who live in the rural part of the college's service area. It can take a

student 45 minutes to an hour to drive to the main campus. Students then avoid going to the main campus due to transportation issues but get frustrated that they do not have full access to the services they need. Second, the time required to utilize public transportation can be more of a hindrance than the associated cost (Bond & Steiner, 2006; Fan et al., 2016). To travel from campus to campus, students may transfer buses several times to reach their destination. Third, the bus routes also do not coincide with evening classes. Students are left waiting at the bus stop late in the evenings for transportation. Waiting for long periods presents a safety issue, especially at night or in secluded areas (Fan et al., 2016).

One of the interview questions in this study was: Are there any services/programs you wish were available to you? Painted Lady responded,

“Maybe transportation support and not just like the gas cards. I know that they have gas cards, but like I just noticed a lot of students in my class have car troubles. So, if we had like some type of shuttle bus...Maybe we can have like a terminal, the shuttle bus that goes there to kind of help students.”

Painted Lady continued to share that transportation seemed to be a significant hindrance to most students in her nursing classes, where they missed class and clinical rotations.

Other colleges have attempted to use shuttle buses to support campus student transportation needs. The College at Staten Island developed a shuttle system, which decreased student commute time and brought in a more diversified student population (Kolodner, 2015). The University of Florida added a transportation access fee to their student tuition so students could have unlimited access to public transportation (Bond & Steiner, 2006). Other colleges have incorporated transportation fees into student tuition, allowing financial aid to be utilized to cover the expenses associated with shuttle buses (Kolodner, 2015).

Colleges could investigate bus parks that provide transit busing for rural communities. Students in rural areas who need to get to the main campus could drive to the bus park and ride the shuttle. While providing a shuttle bus service for students would be costly, the overall outcomes may be worth the cost. It would reduce student transportation costs. Students would also have equitable access to services, promoting a stronger sense of belonging and persistence.

#### ***Implication for Practice 4: Resources for Student-Parents***

Two participants in the study were student-parents. Their interviews were thick with emotion, especially around barriers to their education and meeting the needs of their family. The participants are not only carrying the weight of their personal lives but shouldering additional family responsibilities. Obtaining a higher education is a way for them to break the cycle of poverty and create a better life for themselves and their children.

Many student-parents choose to enroll in community colleges due to their flexible schedules and the opportunity to earn valuable work credentials (Cruse et al., 2019). They can work during the day and take classes at night. Compared to their non-parent peers, student-parents possess unique barriers that community colleges must address to support their success.

Colleges must embrace the culture of care and belonging and prioritize the holistic well-being of each student. Student-parents need a child-friendly campus where they feel comfortable bringing their children to gather the resources they need to succeed. When a student-parent comes for advising or career counseling, there should be a place where their child can play quietly while they receive the information needed to succeed. Parents stressed about bringing their children to campus cannot focus on getting what they need. Community colleges could explore ways to incorporate childcare when demanding days are anticipated. For example, colleges could designate one day towards the end of registration to welcome children so parents

can register. Creating an inclusive family space would not only help boost enrollment of student-parents who often feel left out. However, it could also serve as an opportunity for programs to connect current students to a population or an activity that connects to their learning.

Campus resources should be available daily to students from 8:00 a.m. to 8:00 p.m. to provide accessibility. Nontraditional students work during the day and take online or evening classes. By the time they feed their children and find evening childcare, it is later in the evening before they have the time to access the resources they need.

Students often do not realize the services available on campus. When advisors meet with student-parents, they should make them aware of the resources available for parents on campus. Student-parents should walk away with a pamphlet listing all the resources available, whom to contact, and where on campus to obtain them. A student-parent resource page should be added to the college website so parents can easily access it.

Food insecurities are a significant concern for many college students. Students who report food insecurities are more likely to fail classes (Silva et al., 2017), have poor mental health, and underperform academically (Martinez et al., 2020). Student-parents, especially single parents, are more vulnerable to food insecurities than the typical college student (Phillips et al., 2018). Food pantries should be accessible to all students on the main campus and have locations on all off-cite centers and campuses. The food should hold various options for families, not just filler foods. As student-parents select food options for their children, nutritious choices are needed to support their dietary needs.

Student-parents could benefit from emergency funding should they need housing or basic needs for their children, such as diapers or formula. Transportation assistance could be a game

changer for some parents. Providing public transportation vouchers, gas cards, or shuttle bus opportunities if they live in rural areas would significantly reduce financial burdens.

Breastfeeding students need quiet, private spaces to nurse their babies. Nursing stations should be placed in accessible areas, but colleges must be mindful of their location. They should be positioned away from high-traffic student areas and public entryways, ensuring accessibility while minimizing noise and disturbances.

Childcare poses a significant non-academic obstacle for parents (Cruse et al., 2018; Dayne et al., 2023; Waters-Bailey et al., 2019; Wladis et al., 2018). Childcare deserts are also prevalent in rural areas (Dukes, 2022; Malik et al., 2018; NC Early Childhood Foundation, 2022). The cost of childcare has made quality care unattainable for most parents. The average cost of infant care in North Carolina is \$9,254 a year, while the average annual cost to attend a university is \$7220 (Childcare Aware of America, 2019). Peacock's infant had to live with her mother in South Carolina during the week because she could not afford childcare. Student-parents are struggling.

According to Cruse et al. (2018), access to on-campus childcare can significantly enhance the persistence and completion rates of college education among student-parents. Access to childcare on campus that serves birth through kindergarten and provides afterschool care would eliminate the additional transportation costs and time associated with taking their child(ren) to childcare each day. It also brings comfort in knowing their child is nearby in an emergency.

While the college in this study does have an early childcare facility that serves a dual purpose, allowing college students to receive observation and practical experiences, it can only serve twelve preschool children. To help reduce the financial burden on student-parents, colleges can write grants to subsidize childcare tuition and connect them with childcare in the area.

Painted Lady felt the most sense of belonging among the teachers at the college childcare facility. Her preschool daughter attended the early childcare facility, and she shared that the teachers were proactive in helping her with resources and found funding for her school-age children to participate in summer camp.

Childcare hours are not conducive to student-parents taking evening classes or doing homework. If they are working during the day, they need childcare at night. Drop-in evening childcare would allow student-parents to attend class or do their homework without the additional concerns of finding childcare. Painted Lady must rely on her mother to help her with childcare when she studies or gets up at 3:00 a.m. to study. She stays exhausted.

College involves more than academics; social elements are equally essential for students to find their place on campus. In this study, Peacock voiced how club activities took away her sense of belonging because she had children and could not participate in an out-of-town field trip. Colleges must consider resources so student-parents can participate in extracurricular activities. Drop-in childcare would allow student-parents to participate in most of the activities. Overnight field trips need to be planned well in advance for childcare arrangements to be made. Alternative opportunities that produce equal outcomes should be provided if student-parents cannot attend. Activities should be inclusive, so all students have the opportunity to participate.

Peer groups also allow student-parents to bond and develop a sense of belonging. Finding your tribe on campus is helpful and can help a part of a group.

The goal is to create an environment where student-parents have a sense of belonging on the college campus. Students who "see themselves as a member of a community of other students, academics, and professional staff who value their membership, in other words, that they matter and belong. The result is the development of a sense of belonging" (Tinto, 2017a, p. 3).

### ***Implication for Practice 5: Student Services Quality Assurance Checks***

During this study, participants identified areas of student services where they felt their needs were not adequately met. Quality assurance checks are essential to evaluate the effectiveness of current student service programs, examining factors like program efficacy, student resources, and accessibility. This thorough assessment will enhance student support systems and resources, leading to a more conducive and supportive academic environment.

Students, faculty, and staff should be involved in evaluating the effectiveness of the current services. Electronic surveys and student focus groups can obtain the student's voice. Student focus groups should include all student groups, not just those participating in Student Government or Phi Theta Kappa. While this population would actively engage and participate, feedback is only valuable if it comes from different student sectors such as part-time students, evening students, student-parents, students who are caregivers, full-time students, first-generation, underrepresented minorities, college transfer, and CTE students.

Feedback from the surveys and focus groups could assist the college in selecting additional criteria to include in the evaluation tool. The quality assurance checks should minimally evaluate accessibility, equitable access, including students at off-site campuses, processes, consistent messaging, and student support.

The initial focus of the quality assurance check should be on what students will interact with first. The college website should be evaluated on the ease of utilizing and finding resources, and consistency of the information would ensure that students' first contact with the college is a positive experience. When a student begins the college admissions process, this can be intimidating. Processes can be cumbersome and overwhelming for new students, particularly

first-generation and those with systemic trauma. Colleges can evaluate their admissions processes, minimize the steps, and develop support mechanisms for each.

The advising process was the source of the most significant dissatisfaction among the study participants. There were great inconsistencies across the services received. Some participants received excellent advising and felt valued by their advisors. Others felt like a number and were left feeling unconnected. Monarch had a change in advisors this year. He felt his advisor from last year was much better. "She was, like, well, to be honest, she was really more helpful than the one I have now...Because I struggled to understand how credits work and ...what classes I need to transfer".

Silver Studded Blue expressed frustration with the advising process. He felt it was a cookie-cutter and wanted to be seen as an individual. "I'm not other students. I'm me" (Silver Studded Blue). His point was that advisors need to understand the student's perspective. He recommended that the college redirect funding to hire advisors in each major to provide appropriate advising and support in picking the correct courses and transfer options.

Advisors are critical to helping students develop a sense of belonging on campus. They provide that connective piece outside the classroom. Participants in this study who received advising from the student success program and not the advising center were highly pleased. They expressed that their advisor spent time with them, shared resources, and helped with financial aid and college transfer needs. Consistency of expectations is critical to quality.

Quality assurance checks are crucial for assessing the effectiveness of existing student service programs. They will strengthen support systems and resources for students, fostering a more conducive and supportive academic environment and, as a result, cultivating a campus culture of student belonging.



## **Recommendations for Future Research**

### ***Recommendation for Future Research 1: Longitudinal Effects of ACEs on College Student Persistence***

All participants in this study conveyed plans to transfer to a university upon graduation from the community college. It is essential to thoroughly understand how adverse childhood experiences and trauma affect the academic path and time needed to complete a degree, especially for first-generation students, so student support services can be effectively tailored to support their needs. A recommendation for future research would be to consider how students who were similar to those who participated in this study acclimate and achieve academic goals in a four-year institution. Considering the growing population of transfer students who graduate from two-year community colleges and enter a four-year university, it would be imperative to understand better the supportive structures they experience in the university setting.

### ***Recommendation for Future Research 2: Impact of ACEs on Student-Parent Persistence and Completion***

This study highlighted student-parent experiences, although this particular demographic was not the intention of the population selected for this study. Future research could narrow further to identify student-parents at the community college level and explore the supportive resources within their reach to navigate their community college experience. Many student-parent participants indicated their need for on-campus infant and afterschool school-age care, drop-in campus childcare for evening homework or extracurricular activity participation, counseling services, and financial assistance.

Another opportunity for future research is data collection related to the experiences of single parents, who are often met with no support in the home or outside of it. The data collected

could offer valuable insights into creating a more supportive academic and social atmosphere and fostering a campus culture of student belonging.

***Recommendation for Future Research 3: Impact of ACEs on Part-time Student Persistence***

An unintended outcome of this study was that all participants were enrolled as full-time students. It is a likely assumption that part-time students experience even more significant barriers to the findings mentioned. For example, building a sense of community and belonging on a community college campus or feeling engaged may pose an even more significant challenge for those enrolled part-time. By generating future research that centers on the population of students in community colleges who enroll as part-time students, colleges can develop effective ways of enhancing the academic and social experiences to support student persistence and retention.

***Recommendation for Future Research 4: ACES and Early Departure from College***

A promising avenue for future research lies in examining the experiences of community college students who have encountered adverse childhood experiences or traumatic events prior to the age of eighteen and subsequently struggled to persist in college beyond the first semester. Examining this population could offer valuable insights into the factors contributing to early withdrawals from higher education. By gaining a deeper understanding of their lived experiences, researchers can highlight the intricate dynamics at play and identify potential interventions to support these students in overcoming challenges and achieving academic success. This nuanced exploration holds the potential to inform targeted strategies aimed at enhancing retention rates and fostering a more inclusive and supportive educational environment for all learners.

## Chapter Summary

Persisting is a form of motivation. This characteristic enables an individual to persevere in pursuing a goal, even when faced with challenges. To achieve degree completion, a student must possess the desire to persist, motivating them to exert significant effort (Tinto, 2017b). Nontraditional college students face many non-academic barriers to persisting in college. They must balance family and work responsibilities while finding the financial means to secure housing, food, transportation, and childcare for their family (Waters-Bailey et al., 2019). Adult learners fear not fitting into the college culture (McClellan, 2023). Individuals with adverse childhood experiences may have levels of higher anxiety and depression (Felitti et al., 1998; Karatekin, 2018), which can impact how barriers impact persistence (Bronfenbrenner, 1977, 2005; Tinto, 1993).

This study's conceptual framework was formulated around two theories: Tinto's Theory of Institutional Departure and Bronfenbrenner's Bioecological Theory of Human Development. The identified themes from the interviews showcased how students consistently navigated the historical and temporal aspects of their experiences while adapting to the academic and social facets of college life. Participants shared concerns about financial and academic barriers that have impacted their persistence in college. Outside influences caused both positive and negative effects; however, participants were able to find the best outcome in dire circumstances. Mental health remains a daily struggle. Participants seek a sense of belonging on campus, especially with their advisors. Despite a history of adverse childhood experiences, students exhibited resilience and depended on personal motivation to persist toward completion.

## **Personal Reflection**

I am a White female, first-generation college student, single mother with an ACE and Traumatic Event score of four, who battles lifelong depression and is a suicide attempt survivor. My first adverse experience occurred at the age of seven in a second-grade classroom where fear of school was developed, and physical and emotional traumatic effects ensued. Depression became part of the norm, though neither medically nor personally identified. I pulled out my eyelashes, cried, and vomited daily throughout elementary school. I developed an ulcer by the fourth grade. My family sought counseling, but the psychiatrist said I was just overly sensitive. Counseling was short-lived and frustrating for my family, who desperately wanted me to be emotionally healthy. Much of my childhood has been blocked from my memory for self-preservation. Only a few memories visit my consciousness, and I wonder if they are true memories or recollections of stories told me over the years.

My high school years centered around my social life, where I was confident. However, when it came to academics, I was plagued with insecurities and literal fear, which drove average outcomes at best. I visited my high school guidance counselor in my senior year to discuss college options. She told me that I was not college material. As a child of a mother with a high school diploma and a father with a tenth-grade education, college was never a question. It was the expectation. My parents wanted the education for their children they did not have. Upon high school graduation, I enrolled in a rural community college in Virginia.

The community college saved me. I learned how to study and excelled. While still struggling with my own demons, I became resilient in ways to keep pushing myself forward and became confident in myself as an academic. I transferred to Appalachian State University in 1988 as a declared elementary education major. Determined not to allow the same negative

experience to impact young children as I had experienced, the idea of becoming an elementary school teacher drove me. I excelled. I was recognized in my junior and senior years for my academic achievements, receiving the Outstanding Achievement Award of the college in both years. My GPA was in the top ten of all students in the university. I graduated as a top elementary education student in 1991. I decided to remain at Appalachian State University to earn my master's in arts in Reading Education, Kindergarten-grade Twelve.

I was blessed to teach first and second grades for seven years before transitioning to community college as an early childhood professor. During that time, I taught numerous children who had adverse childhood experiences. The stories were horrific and often took me back to my childhood. However, my personal history gave me the perspective on the instructional needs, support, and love my students needed to thrive in the classroom. I was determined that school would be their safe place.

I have worked in the North Carolina Community College System (NCCCS) for over twenty-three years. I am currently the Department Chair of Teacher Education and a professor. In 2018, the NCCCS partnered with the Center of Child and Family Health, an organization founded in collaboration with Duke University, North Carolina Central University, and the University of North Carolina-Chapel Hill, to develop three early childhood education trauma-informed practice modules. The modules introduce, define, and provide strategies to work with young children and their families who have experienced traumatic experiences and student/teacher self-care. As one of six faculty, we developed three modules and are currently training all NCCCS early childhood faculty on trauma and how to use these modules in the instructional classroom.

Students enrolled in my education courses are typically nontraditional students from low socioeconomic backgrounds. They overcame many barriers to attend college. My passion for supporting students with adverse experiences is palpable. As an adult survivor of attempted suicide, I understand the long-term effects of trauma. Despite being a strong, resilient, educated woman, the past creates daily challenges that must be circumvented.

I bring my bias of adverse experiences on college persistence to the research. However, this case study allowed participants to share their voices. Everyone's story is different, and how they respond is unique to the situation, experience, and personal resiliency factors. Traumatic experiences can impact individuals' health, access, and self-efficacy; therefore, traumatic experiences may impact the persistence of community college students. This study provided valuable information on how students enrolled in an urban community college in northwest North Carolina with adverse childhood experiences persisted from one semester to the next.

## REFERENCES

- Aljohani, O. (2016). A comprehensive review of the major studies and theoretical models of student retention in higher education. *Higher Education Studies*, 6(2), 1–18.  
<http://dx.doi.org/10.5539/hes.v6n2p1>
- Alvarado, S. E. (2021). The role of college-bound friends in college enrollment decisions by race, ethnicity, and gender. *American Educational Research Journal*, 58(6), 1315–1354.  
<https://doi.org/10.3102/0002831221996669>
- Amankwaa, L. (2016). Creating protocols for trustworthiness in qualitative research. *Journal of Cultural Diversity*, 23(3), 121–127.
- American College Health Association. (2022). *National college health assessment undergraduate student reference group: Executive summary*.  
[https://www.acha.org/documents/ncha/NCHA-III\\_SPRING\\_2022\\_UNDERGRAD\\_REFERENCE\\_GROUP\\_EXECUTIVE\\_SUMMARY.pdf](https://www.acha.org/documents/ncha/NCHA-III_SPRING_2022_UNDERGRAD_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf)
- American Psychological Association (2014). *The road to resilience*. American Psychological Association. <http://www.apa.org/helpcenter/road-resilience.aspx>.
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). <https://doi.org/10.1176/appi.books.9780890425787>
- Anastasi, J. S. C. (2007). Full semester and abbreviated summer courses: An evaluation of student performance. *Teaching of Psychology*, 34(1), 19-22.  
<https://www.sfasu.edu/docs/envisioned/full-semester-and-abbreviated-summer-courses-an-evaluation-of-student-performance.pdf>

- Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C., Perry, B. D., Dube, S. R., & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience*, *256*(3), 174–186.  
<https://doi.org/10.1007/s00406-005-0624-4>
- Anda, R. F., Porter, L. E., & Brown, D. W. (2020). Inside the adverse childhood experience score: Strengths, limitations, and misapplications. *American Journal of Preventive Medicine*, *59*(2), 293–295. <https://doi.org/10.1016/j.amepre.2020.01.009>
- Arria, A. M., Caldeira, K. M., Vincent, K. B., Winick, E. R., Baron, R. A., & O'Grady, K. E. (2013). Discontinuous college enrollment: Associations with substance use and mental health. *Psychiatric Services*, *64*(2), 165–172. <https://doi.org/10.1176/appi.ps.201200106>
- Ascienzo, S., Sprang, G., & Royse, D. (2022). “My bad experiences are not the only things shaping me anymore”: Thematic analysis of youth trauma narratives. *Journal of Child & Adolescent Trauma*, *15*(3), 741–753. <https://doi.org/10.1007/s40653-021-00431-4>
- Aytur, S. A., Carlino, S., Bernard, F., West, K., Dobrzycki, V., & Malik, R. (2022). Social-ecological theory, substance misuse, adverse childhood experiences, and adolescent suicidal ideation: Applications for community–academic partnerships. *Journal of Community Psychology*, *50*(1), 265–284. <https://doi.org/10.1002/jcop.22560>
- Babaev, O., Piletti Chatain, C. & Krueger-Burg, D. (2018). Inhibition in the amygdala anxiety circuitry. *Experimental & Molecular Medicine*, *50*(4), 1-16.  
<https://doi.org/10.1038/s12276-018-0063-8>



- Bachrach, R.L., & Read, J. P. (2012). The role of posttraumatic stress and problem alcohol involvement in university academic performance. *J Clin Psychol.*, 68(7):843–859.  
<https://doi.org/10.1002/jclp.21874>
- Baugus, K. E. (2020). Food insecurity, inadequate childcare, & transportation disadvantage: Student retention and persistence of community college students. *Community College Journal of Research and Practice*, 44(8), 608–622.  
<https://doi.org/10.1080/10668926.2019.1627956>
- Bai, Y., Ladd, H. F., Muschkin, C. G., & Dodge, K. A. (2020). Long-term effects of early childhood programs through eighth grade: Do the effects fade out or grow? *Child and Youth Services Review*, 112.  
<https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/20387/Long-termeffectsofearlychildhoodprogramsthrougheighthgrade.pdf>
- Beach, J. M. & Grubb, W. N. (2011). *Gateway to opportunity? A history of the community college in the United States*. Stylus Publishing, LLC.  
<https://ebookcentral.proquest.com/lib/ncsu/detail.action?docID=911865>
- Berens, A. E., Jensen, S. K. G., & Nelson, C. A. (2017). Biological embedding of childhood adversity: from physiological mechanisms to clinical implications. *BMC Medicine*, 15(1).  
<https://doi.org/10.1186/s12916-017-0895-4>
- Bergman, M., & Olson, J. S. (2019). *Unfinished business: Compelling stories of adult student persistence*. IAP.
- 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. <https://doi.org/10.1377/hlthaff.2014.0914>

- Bethell, C. D., 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.  
<https://doi.org/10.1016/j.chc.2015.12.001>
- Bethell, C. D., Carle, A., Hudziak, J., Gombojav, N., Powers, K., Wade, R., & Braveman, P. (2017). Methods to assess adverse childhood experiences of children and families: Toward approaches to promote child well-being in policy and practice. *Academic Pediatrics*, 17(7), 51–69. <https://doi.org/10.1016/j.acap.2017.04.161>
- Bethell, C. D., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive childhood experiences and adult mental and relational health in a statewide sample: Associations across adverse childhood experiences levels. *JAMA Pediatrics*, 173(11). <https://doi.org/10.1001/jamapediatrics.2019.3007>
- Bloomberg, L. & Volpe, M. (2019). *Completing your qualitative dissertation: A road map from beginning to end* (4<sup>th</sup> edition). Sage.
- Blum, R. W., Li, M., & Naranjo-Rivera, G. (2019). Measuring adverse child experiences among young adolescents globally: relationships with depressive symptoms and violence perpetration. *Journal of Adolescent Health*, 65(1), 86–93.  
<https://doi.org/10.1016/j.jadohealth.2019.01.020>
- Boden, J. M., Horwood, L. J., & Fergusson, D. M. (2007). Exposure to childhood sexual and physical abuse and subsequent educational achievement outcomes. *Child Abuse & Neglect*, 31(10), 1101–1114. <https://doi.org/10.1016/j.chiabu.2007.03.022>

- Bond, A., & Steiner, R. (2006). Sustainable campus transportation through transit partnership and transportation demand management: A case study from the University of Florida. *Berkeley Planning Journal*, *19*(1), 125–142. <https://doi.org/10.5070/bp319111492>
- Bowen, W. G., Chingos, M. M., & McPherson, M. S. (2009). *Crossing the finish line: Completing college at America's public universities*. Princeton University Press.
- Boyratz, G., Horne, S. G., Armstrong, A. P., & Owens, A. C. (2015). Posttraumatic stress predicting depression and social support among college students: Moderating effects of race and gender. *Psychological Trauma: Theory, Research, Practice and Policy*, *7*, 259 – 268. <http://dx.doi.org/10.1037/a0037967>
- Boyratz, G., Horne, S. G., Owens, A. C., & Armstrong, A. P. (2013). Academic achievement and college persistence of African American students with trauma exposure. *Journal of Counseling Psychology*, *60*, 582–592. <http://dx.doi.org/10.1037/a0033672>
- Briggs, E. C., Amaya-Jackson, L., Putnam, K. T., & Putnam, F. W. (2021). All adverse childhood experiences are not equal: The contribution of synergy to adverse childhood experience scores. *American Psychologist*, *76*(2), 243–252. <https://doi.org/10.1037/amp0000768>
- Brogden, L. & Gregory, D.E. (2019). Resilience in community college students with adverse childhood experiences. *Community College Journal of Research and Practice*, *43*(2), 94-108, <https://doi.org/10.1080/10668926.2017.1418685>
- Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child Development*, *45*(1), 1–5. <https://doi.org/10.2307/1127743>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *The American Psychologist*, *32*(7), 513-531. <https://doi.org/10.1037/0003-066X.32.7.513>

- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen & G. H. Elder, Jr. (Eds.), *Examining lives in context: Perspectives on the ecology of human development*, 619-647. American Psychological Association.
- Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring environment across the lifespan: Emerging methods and concepts*, 3–28. American Psychological Association Press.
- Bronfenbrenner, U. (Ed.). (2005). *Making human beings human: Bioecological perspectives on human development*. Sage Publications.
- Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Theoretical models of human development*, 993–1028. John Wiley & Sons Inc.
- Bruffaerts, R., Mortier, P., Kiekens, G., Auerbach, R. P., Cuijpers, P., Demyttenaere, K., Green, J. G., Nock, M. K., & Kessler, R. C. (2018). Mental health problems in college freshmen: Prevalence and academic functioning. *Journal of Affective Disorders*, 225, 97–103.  
<https://doi.org/10.1016/j.jad.2017.07.044>
- Burke Harris, N. & Renschler, T. (2015). *Center for Youth Wellness ACE-Questionnaire (CYW ACE-Q Teen SR)*. <https://centerforyouthwellness.org/wp-content/uploads/2018/06/CYW-ACE-Q-TEEN-SR-1-copy.pdf>
- Burkhart, L., & Moreno, M. (2019). Evaluating health services and information on community college campuses. *Community College Journal of Research and Practice*, 43(5), 341–352. <https://doi.org/10.1080/10668926.2018.1480980>

- Cadenas, G. A., Nienhuser, K., Sosa, R., & Moreno, O. (2022, Sept. 8). Immigrant students' mental health and intent to persist in college: The role of undocufriendly campus climate. *Cultural Diversity and Ethnic Minority Psychology*. Advanced online publication.  
<http://dx.doi.org/10.1037/cdp0000564>
- Campbell, J. A., Walker, R. J., & Egede, L. E. (2016). Associations between adverse childhood experiences, high-risk behaviors, and morbidity in adulthood. *American Journal of Preventive Medicine*, 50(3), 344–352. <https://doi.org/10.1016/j.amepre.2015.07.022>
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>
- Carballo, J. (2022, Feb. 8). Parents of first-gen students as college partners. *Inside Higher Ed*.  
<https://www.insidehighered.com/views/2022/02/08/parents-first-gen-students-college-partners-opinion>
- Carales, V. D., & Hooker, D. L., Jr. (2019). Finding where I belong: How community colleges can transform their institutional environments to facilitate students' sense of belonging on campus. *Journal of Applied Research in the Community College*, 26(2), 41–50.  
<https://proxying.lib.ncsu.edu/index.php/login?url=https://www.proquest.com/scholarly-journals/finding-where-i-belong-how-community-colleges-can/docview/2407765911/se-2>
- Carello, J., & Butler, L. D. (2015). Practicing what we teach: Trauma-informed educational practice. *Journal of Teaching in Social Work*, 35(3), 262–278.  
<https://doi.org/10.1080/08841233.2015.1030059>

- Causey, J., Kim, H., Ryu, M., Scheetz, A., & Shapiro, D. (2022, May). *Some college, no credential student outcomes: Annual progress report academic year 2020/21*. National Student Clearinghouse Research Center. <https://nscresearchcenter.org/wp-content/uploads/SCNCRReportMay2022.pdf>
- Center on the Developing Child. (n.d.). *ACEs and toxic stress: Frequently asked questions*. <https://developingchild.harvard.edu/resources/aces-and-toxic-stress-frequently-asked-questions/>
- Center on the Developing Child. (n.d.). *Toxic stress*. <https://developingchild.harvard.edu/science/key-concepts/toxic-stress/#:~:text=Toxicstressresponsecanoccur,hardshipwithoutadequateadultsupport>
- Centers for Disease Control and Prevention. (2021, April 3). *Adverse childhood experiences (ACEs)*. <https://www.cdc.gov/violenceprevention/aces/index.html>
- Centers for Disease Control and Prevention. (2019) *Preventing adverse childhood experiences: Leveraging the best available evidence*. <https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf>
- Chandler, G.E, Kalmakis, K.A., Chiodo, L., & Helling, J. (2020). The efficacy of a resilience intervention among diverse, at-risk, college athletes: A mixed-methods study. *Journal of the American Psychiatric Nurses Association*, 26(3), 269–281. <https://doi.org/10.1177/1078390319886923>
- Chapman, D. P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., & Anda, R. F. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. *Journal of Affective Disorders*, 82(2), 217–225. <https://doi.org/10.1016/j.jad.2003.12.013>

- Cheung, S., Huang, C. C., Zhang, C. (2021). Passion and persistence: Investigating the relationship between adverse childhood experiences and grit in college students in China. *Front Psychol*, 12. <https://doi.org/10.3389/fpsyg.2021.642956>
- Childcare Aware of America. (2019). *Price of childcare in North Carolina*. [https://info.childcareaware.org/hubfs/2019%20Price%20of%20Care%20State%20Sheets/North%20Carolina.pdf?utm\\_campaign=2019%20](https://info.childcareaware.org/hubfs/2019%20Price%20of%20Care%20State%20Sheets/North%20Carolina.pdf?utm_campaign=2019%20)
- Christophersen, K. A. (2020). *Community colleges as economic engines*. Rowman & Littlefield Publishing.
- Cohen, A. M. & Brawer, F. B., Kisker, C. B. (2014). *The American Community College* (6th ed.). Jossey-Bass Publishers.
- Combs, T. S., Shay, E., Salvesen, D., Kolosna, C., & Madely, M. (2016). Understanding the multiple dimensions of transportation disadvantage: The case of rural North Carolina. *Case Studies on Transport Policy*, 4(2016), 68–77. <https://doi-org.prox.lib.ncsu.edu/10.1016/j.cstp.2016.02.004>
- Corner, L. (2015, October 17). What is an ideal childhood? *The Guardian*. <https://www.theguardian.com/lifeandstyle/2015/oct/17/what-is-an-ideal-childhood-michael-morpurgo-jacqueline-wilson-lemn-sissay>
- Credé, M., Niehorster, S. (2012). Adjustment to college as measured by the student adaptation to college questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educ Psychol Rev*, 24, 133–165. <https://doi.org/10.1007/s10648-011-9184-5>
- Creswell, J.W. & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5<sup>th</sup> edition). Sage Publishing.

- Creswell, J.W. & Poth, C.N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th edition). Sage Publishing.
- Crouch, E., Strompolis, M., Bennett, K. J., Morse, M. & Radcliff, E. (2017). Assessing the interrelatedness of multiple types of adverse childhood experiences and odds for poor health in South Carolina. *Child Abuse & Neglect*, 65, 204–211. <https://doi-org.prox.lib.ncsu.edu/10.1016/j.chiabu.2017.02.007>
- Crouch, E., Radcliff, E., Hung, P., & Bennett, K. (2019). Challenges to school success and the role of adverse childhood experiences. *Academic Pediatrics*, 19(8), 899–907. <https://doi.org/10.1016/j.acap.2019.08.006>
- Cruse, L. R., Gault, B., Suh, J. Y., & DeMario, M. A. (2018). *Time demands of single mother college students and the role of child care in their postsecondary success*. Institute for Women's Policy Research. <https://iwpr.org/wp-content/uploads/2020/10/C468.pdf>
- Cruse, L. R., Holtzman, T., Gault, B., Croom, D., & Polk, P. (2019). *Parents in college by the numbers*. Institute for Women's Policy Research. <https://iwpr.org/iwpr-issues/student-parent-success-initiative/parents-in-college-by-the-numbers/>
- Cruz, D., Lichten, M., Berg, K., & George, P. (2022). Developmental trauma: Conceptual framework, associated risks and comorbidities, and evaluation and treatment. *Frontiers in Psychiatry*, 13, 800687. <https://doi.org/10.3389/fpsy.2022.800687>
- Damon, W., Menon, J., & Bronk, K. C. (2003). The development of purpose during adolescence. *Applied Developmental Science*, 7, 119–128. [https://doi-org.prox.lib.ncsu.edu/10.1207/s1532480xads0703\\_2](https://doi-org.prox.lib.ncsu.edu/10.1207/s1532480xads0703_2)



- Dawe, R. J., Yu, L., Arfanakis, K., Schneider, J. A., Bennett, D. A., & Boyle, P. A. (2020). Late-life cognitive decline is associated with hippocampal volume, above and beyond its associations with traditional neuropathologic indices. *Alzheimer's & Dementia*, *16*(1), 209–218. <https://doi.org/10.1002/alz.12009>
- Dayne, N., Jung, Y., & Roy, R. (2023). Childcare, campus support services, and other barriers for college students who are parents at a 4-year Hispanic serving institution. *Journal of Hispanic Higher Education*, *22*(1), 18–32. <https://doi-org.prox.lib.ncsu.edu/10.1177/15381927211005076>
- Demetriou, C., Meece, J., Eaker-Rich, D., & Powell, C. (2017). The activities, roles, and relationships of successful first-generation college students. *Journal of College Student Development*, *58*(1), 19–36. <https://doi.org/10.1353/csd.2017.0001>
- Dodge, K. A., Bai, Y., Ladd, H. F., & Muschkin, C. G. (2017). Impact of North Carolina's early childhood programs and policies on educational outcomes in elementary school. *Child Development*, *88*(3), 996–1014. <https://muser.duke.edu/sites/default/files/publications/2019-08/Dodgeetal2017.pdf>
- Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span. *JAMA*, *286*(24), 3089. <https://doi.org/10.1001/jama.286.24.3089>
- Dube, S. R., Felitti, V. J., Dong, M., Chapman, D. P., Giles, W. H., & Anda, R. F. (2003). Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: The Adverse Childhood Experiences Study. *Pediatrics*, *111*(3), 564–572.

- Dube, S. R., Miller, J. W., Brown, D. W., Giles, W. H., Felitti, V. J., Dong, M., & Anda, R. F. (2006). Adverse childhood experiences and the association with ever using alcohol and initiating alcohol use during adolescence. *Journal of Adolescent Health, 38*(4), 444. [https://www.jahonline.org/article/S1054-139X\(05\)00298-3/fulltext](https://www.jahonline.org/article/S1054-139X(05)00298-3/fulltext)
- Duffy, M. E., Twenge, J. M., & Joiner, T. E. (2019). Trends in mood and anxiety symptoms and suicide-related outcomes among U.S. undergraduates, 2007–2018: Evidence from two national surveys. *Journal of Adolescent Health, 65*(5), 590–598. <https://doi.org/10.1016/j.jadohealth.2019.04.033>
- Dukes, K. (2022, Dec. 1). North Carolina’s economic future ‘inextricably linked’ to child care, report says. *EdNC*. <https://www.ednc.org/2022-12-01-north-carolina-economic-future-child-care-access-affordability-ncecf-nc/>
- Duncan, R. D. (2000). Childhood maltreatment and college drop-out rates. *Journal of Interpersonal Violence, 15*(9), 987–995. <https://doi.org/10.1177/088626000015009005>
- Dwyer, T. (2017). Persistence in higher education through student–faculty interactions in the classroom of a commuter institution. *Innovations in Education and Teaching International, 54*(4), 325–334 <https://doi.org/10.1080/14703297.2015.1112297>
- Ehrlich, K. B., Ross, K. M., Chen, E., & Miller, G. E. (2016). Testing the biological embedding hypothesis: Is early life adversity associated with a later proinflammatory phenotype? *Development and Psychopathology, 28*(4pt2), 1273–1283. <https://doi.org/10.1017/s0954579416000845>

- Elkins, K. M., Collins, S. G., Valais, T., & Westerman, P. (2023). Unlocking Barriers to Learning: Trauma-Informed Faculty Professional Development. *The Journal of Faculty Development, 37*(2), 90-94.  
<https://proxying.lib.ncsu.edu/index.php/login?url=https://www.proquest.com/scholarly-journals/unlocking-barriers-learning-trauma-informed/docview/2810212970/se-2>
- Ellis, J. M., Powell, C. S., Demetriou, C. P., Huerta-Bapat, C., & Panter, A. T. (2019). Examining first-generation college student lived experiences with microaggressions and microaffirmations at a predominately white public research university. *Cultural diversity & ethnic minority psychology, 25*(2), 266-279. <https://doi.org/10.1037/cdp0000198>
- Elmore, A. L., Crouch, E., & Kabir Chowdhury, M. A. (2020). The interaction of adverse childhood experiences and resiliency on the outcome of depression among children and youth, 8-17 year olds. *Science Direct*. <https://doi.org/10.1016/j.chiabu.2020.104616>
- El Zaatari, W., & Mallouf, I. (2022). How the Bronfenbrenner bio-ecological system theory explains the development of students' sense of belonging to school? *SAGE Open, 12*(4).  
<https://doi-org.prox.lib.ncsu.edu/10.1177/21582440221134089>
- Emsi Burningglass (2021). *The collective economic value of North Carolina Community College: Main report December 2021*. [https://bigroifornc.org/wp-content/uploads/2022/03/NCColleges\\_EIS\\_Main\\_1920\\_FinalV2.pdf](https://bigroifornc.org/wp-content/uploads/2022/03/NCColleges_EIS_Main_1920_FinalV2.pdf)
- Eriksson, M., Ghazinour, M., & Hammarstrom, A. (2018). Different uses of Bronfenbrenner's ecological theory in public mental health research: What is their value for guiding public mental health policy and practice? *Soc Theory Health, 16*, 414-433.  
<https://doi.org/10.1057/s41285-018-0065-6>

- Fan, Y., Guthrie, A., & Levinson, D. (2016). *Perception of waiting time at transit stops and stations*. Center for Transportation Studies. University of Minnesota.  
<https://hdl.handle.net/11299/180134>
- Faulkner, W. (1951). *Requiem for a nun*. Vintage Books.
- Feldhaus, C. R. & Fox, P.L. (2004). Effectiveness of an ethics course delivered in traditional and non-traditional formats. *Science and Engineering Ethics*, 10(2), 3 89-400. doi: 10.1 007/s 11948-004-0035-3
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14(4), 245–258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)
- Fergusson, D. M., Horwood, L. J., & Woodward, L. J.. (2000). The stability of child abuse reports: a longitudinal study of the reporting behaviour of young adults. *Psychological Medicine*, 30(3), 529–544. <https://doi.org/10.1017/s0033291799002111>
- Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2013). Improving the adverse childhood experiences study scale. *JAMA Pediatrics*, 167(1), 70.  
<https://doi.org/10.1001/jamapediatrics.2013.420>
- Florida Virtual Campus. (2019). *2018 Student textbook & course materials survey: Results and findings*. <https://bit.ly/3gg4n5L>
- Font, S. A., & Maguire-Jack, K. (2016). Pathways from childhood abuse and other adversities to adult health risks: The role of adult socioeconomic conditions. *Child Abuse & Neglect*, 51, 390–399. <https://doi.org/10.1016/j.chiabu.2015.05.013>

- Forster, M., Grigsby, T. J., Rogers, C. J., & Benjamin, S. M. (2018). The relationship between family-based adverse childhood experiences and substance use behaviors among a diverse sample of college students. *Addictive Behaviors, 76*, 298–304.  
<https://doi.org/10.1016/j.addbeh.2017.08.037>
- Foundation Trust. (2023a). *Acute Trauma*. Complex Trauma Resources.  
<https://www.complext trauma.org/glossary/acute-trauma/>
- Foundation Trust. (2023b). *Chronic Trauma*. Complex Trauma Resources.  
<https://www.complext trauma.org/glossary/chronic-trauma/>
- Foundation Trust. (2023c). *Complex Trauma*. Complex Trauma Resources.  
<https://www.complext trauma.org/glossary/complex-trauma/>
- Foundation Trust. (2023d). *Historical Trauma*. Complex Trauma Resources.  
<https://www.complext trauma.org/glossary/historical-trauma/>
- Foundation Trust. (2023e). *Systemic Trauma*. Complex Trauma Resources.  
<https://www.complext trauma.org/glossary/systemic-trauma/>
- Foundation Trust. (2023f). *Toxic Stress*. Complex Trauma Resources.  
<https://www.complext trauma.org/glossary/toxic-stress/>
- Franke, H. A. (2014). Toxic stress: Effects, prevention and treatment. *Children, 1*(3), 390–402.  
<https://doi.org/10.3390/children1030390>
- Freeman, T.M., Anderman, L.H. & Jensen, J.M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *The Journal of Experimental Education, (75)*3, 203-220, <https://doi.org/10.3200/jexe.75.3.203-220>
- Freibott, C. E., Stein, M. D., & Lipson, S. K. (2022). The influence of race, sexual orientation and gender identity on mental health, substance use, and academic persistence during the

COVID-19 pandemic: A cross-sectional study from a national sample of college students in the healthy minds study. *Drug Alcohol Depend Rep.*

<https://doi.org/10.1016/j.dadr.2022.100060>

Gallup (2020). *The state of student experience: Fall 2020.*

[https://www.holmesmurphy.com/fraternal/wp-content/uploads/sites/2/2021/01/Gallup-Lumina-Foundation-State-of-the-Student-Experience-Fall-2020\\_Report.pdf](https://www.holmesmurphy.com/fraternal/wp-content/uploads/sites/2/2021/01/Gallup-Lumina-Foundation-State-of-the-Student-Experience-Fall-2020_Report.pdf)

Gardner, A. (2022, June). *Persistence and retention: Fall 2020 beginning postsecondary student cohort.* National Student Clearinghouse Research Center.

<https://nscresearchcenter.org/persistence-retention/>

Garg, A., Toy, S., Tripodis, Y., Silverstein, M., & Freeman, E. (2015). Addressing social determinants of health at well child care visits: A cluster RCT. *Pediatrics, 135*(2), 296–304. <https://doi.org/10.1542/peds.2014-2888>

Giovanelli, A., Reynolds, A. J., Mondri, C. F., & Ou, S. R. (2016). Adverse childhood experiences and adult well-being in a low-income, urban cohort. *Pediatrics, 137*(4), <https://doi.org/10.1542/peds.2015-4016>

Gress-Smith, J. L., Roubinov, D. S., Andreotti, C., Compas, B. E., & Luecken, L. J. (2015). Prevalence, severity and risk factors for depressive symptoms and insomnia in college undergraduates. *Stress and Health, 31*(1), 63–70. <https://doi.org/10.1002/smi.2509>

Grigsby, T. J., Rogers, C. J., Albers, L. D., Benjamin, S. M., Lust, K., Eisenberg, M. E., & Forster, M. (2020). Adverse childhood experiences and health indicators in a young adult, college student sample: Differences by gender. *International Journal of Behavioral Medicine, 27*(6), 660–667. <https://doi.org/10.1007/s12529-020-09913-5>

Guba, E. G. & Lincoln, Y. S. (1981). *Effective evaluation.* Jossey-Bass.

- Hanson, M. (2021). College enrollment and student demographic statistics. *Educationdata.org*.  
<https://educationdata.org/college-enrollment-statistics/#high-school-to-college>
- Hanson, M. (2022, June 17). College drop-out rates. *EducationData.org*.  
<https://educationdata.org/college-dropout-rates/>
- Hardt, J., & Rutter, M. (2004). Validity of adult retrospective reports of adverse childhood experiences: Review of the evidence. *Journal of Child Psychology and Psychiatry*, 45(2), 260–273. <https://doi.org/10.1111/j.1469-7610.2004.00218.x>
- Hartley, M. T. (2011, Aug. 8). Examining the relationships between resilience, mental health, and academic persistence in undergraduate college students. *Journal of American College Health*, 59(11), 596–604.  
<https://www.tandfonline.com/doi/abs/10.1080/07448481.2010.515632>
- Harvard Health Publishing. (2020, July 6). *Understanding the stress response*. Harvard Medical School. <https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response>
- Hayano, F., Nakamura, M., Asami, T., Uehara, K., Yoshida, T., Roppongi, T., Otsuka, T., Inoue, T., & Hirayasu, Y. (2009). Smaller amygdala is associated with anxiety in patients with panic disorder. *Psychiatry and Clinical Neurosciences*, 63(3), 266–276.  
<https://doi.org/10.1111/j.1440-1819.2009.01960.x>
- Healthy Minds Network & American College Health Association. (2020, July 9). *The impact of COVID-19 on college student well-being*.  
[https://www.acha.org/documents/ncha/Healthy-Minds\\_NCHA\\_COVID-19\\_Survey\\_Report.pdf](https://www.acha.org/documents/ncha/Healthy-Minds_NCHA_COVID-19_Survey_Report.pdf)

- Heath, C., Sommerfield, A., & Von Ungern-Sternberg, B. S. (2020). Resilience strategies to manage psychological distress among healthcare workers during the COVID-19 pandemic: A narrative review. *Anaesthesia*, *75*(10), 1364–1371.  
<https://doi.org/10.1111/anae.15180>
- Helminen, E. C., Scheer, J. R., Edwards, K. M., & Felver, J. C. (2022). Adverse childhood experiences exacerbate the association between day-to-day discrimination and mental health symptomatology in undergraduate students. *Journal of Affective Disorders*, *297*, 338–347. <https://doi.org/10.1016/j.jad.2021.10.058>
- Hennink, M.M., Kaiser, B.N., & Marconi, V.C. (2017). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, *27*(4), 591–608. <https://journals.sagepub.com/doi/pdf/10.1177/1049732316665344>
- Hinojosa, R., Nguyen, J., Sellers, K., & Elassar, H. (2019). Barriers to college success among students that experienced adverse childhood events. *Journal of American College Health*, *67*(6), 531–540. <https://doi-org.prox.lib.ncsu.edu/10.1080/07448481.2018.1498851>
- Hooper, L.M., Stockton, P., Krupnick, J., & Green, B.L. (2011). The development, use, and psychometric properties of the Traumatic History Questionnaire. *Journal of Loss and Trauma*, *16*, 258–283. <https://doi.org/10.1080/15325024.2011.572035>
- Hosely, M. (2021, Jan. 26). Informed consent: When, why and how it's obtained. *Advarra*.  
<https://www.advarra.com/blog/informed-consent-when-why-and-how-its-obtained/>



- Hotchkins, B. K., McNaughtan, J., & García, H.A. (2021). Black community collegians' sense of belonging as connected to enrollment satisfaction. *The Journal of Negro Education*, 90(1), 55–70.  
<https://proxying.lib.ncsu.edu/index.php/login?url=https://www.proquest.com/scholarly-journals/black-community-collegians-sense-belonging-as/docview/2655181236/se-2>
- Hoyle, R. H., & Crawford, A. M. (1994). Use of individual-level data to investigate group phenomena. *Small Group Research*, 25, 464–486.  
<https://doi-org.prox.lib.ncsu.edu/10.1177/1046496494254003>
- Houtepen, L. C., Heron, J., Suderman, M. J., Fraser, A., Chittleborough, C. R., & Howe, L. D. (2020). Associations of adverse childhood experiences with educational attainment and adolescent health and the role of family and socioeconomic factors: A prospective cohort study in the UK. *PLoS Medicine*, 17(3)  
<http://dx.doi.org.prox.lib.ncsu.edu/10.1371/journal.pmed.1003031>
- Huang, Y., Liu, H., & Masum, M. (2021). Adverse childhood experiences and physical and mental health of adults: Assessing the mediating role of cumulative life course poverty. *American Journal of Health Promotion*, 35(5), 637-647.  
<https://doi.org/10.1177/0890117120982407>
- Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., et al. (2017). The effect of multiple adverse childhood experiences on health: Asystematic review and meta-analysis. *Lancet Public Health*, 2(8), 356–366.  
[https://doi.org/10.1016/s2468-2667\(17\)30118-4](https://doi.org/10.1016/s2468-2667(17)30118-4)

- Hurtado, S., Ruiz Alvarado, A., & Guillermo-Wann, C. (2018). Creating inclusive Environments: The mediating effect of faculty and staff validation on the relationship of discrimination/bias to students' sense of belonging. *JCSCORE*, *1*(1), 59–81.  
<https://doi.org/10.15763/issn.2642-2387.2015.1.1.59-81>
- Jackson, Z. A., Harvey, I. S., & Sherman, L. D. (2023). The impact of discrimination beyond a sense of belonging: Predicting college students' confidence in their ability to graduate. *Journal of College Student Retention: Research, Theory & Practice*, *24*(4), 973–987.  
<https://doi-org.prox.lib.ncsu.edu/10.1177/1521025120957601>
- Joseph, S. (2019, Aug. 29). Depression, anxiety rising among U.S. college students. *Reuters*.  
<https://www.reuters.com/article/us-health-mental-undergrads-idUSKCN1VJ25Z>
- Kalmakis, K. A., Chiodo, L. M., Kent, N., & Meyer, J. S. (2020). Adverse childhood experiences, post-traumatic stress disorder symptoms, and self-reported stress among traditional and nontraditional college students. *Journal of American College Health*, *68*(4), 411-418. <https://doi.org/10.1080/07448481.2019.1577860>
- Kalmakis, K. A., Kent, N. M., Alhowaymel, F., & Chiodo, L. M. (2022). Perceived stress, fatigue symptoms, and posttraumatic stress disorder symptoms among young adult college students. *Journal of Child and Adolescent Psychiatric Nursing*, *35*(1), 60–67.  
<https://doi.org/10.1111/jcap.12352>
- Karatekin, C. (2018). Adverse Childhood Experiences (ACEs), stress and mental health in college students. *Stress and Health*, *34*(1), 36–45. <https://doi.org/10.1002/smi.2761>
- Karon, J., Ward, J., Hill, C., & Kurzweil, M. (2020). *Solving stranded credits assessing the scope and effects of transcript withholding on students, states, and institutions*.  
<https://sr.ithaka.org/publications/solving-stranded-credits/>

- Katz, D. S., & Davison, K. (2014). Community college student mental health: A comparative analysis. *Community College Review*, 42(4), 307-326.  
<https://proxying.lib.ncsu.edu/index.php/login?url=https://www.proquest.com/scholarly-journals/community-college-student-mental-health/docview/1613116871/se-2>
- Kelifa, M. O., Yang, Y., Carly, H., Bo, W., & Wang, P. (2021). How adverse childhood experiences relate to subjective wellbeing in college students: The role of resilience and depression. *Journal of Happiness Studies*, 22(5), 2103–2123.  
<https://doi.org/10.1007/s10902-020-00308-7>
- Khrapatina, I., & Berman, P. (2017). The impact of adverse childhood experiences on health in college students. *Journal of Child & Adolescent Trauma*, 10(3), 275–287.  
<https://doi.org/10.1007/s40653-016-0093-0>
- Kolodner, M. (2015). Can better transportation increase diversity on college campuses? *The Hechinger Report*. <https://hechingerreport.org/can-better-transportation-increase-diversity-oncollege-campuses/>
- Krug, K. S., Dickson, K. W., Lessiter, J. A., & Vassar, J. S. (2016). Student preference rates for predominately online, compressed or traditionally taught university courses. *Innovative Higher Education*, 41(3), 255–267. <https://doi.org/10.1007/s10755-015-9349-0>
- Lensch, T., Clements-Nolle, K., Oman, R. F., Evans, W. P., Lu, M., & Yang, W. (2021). Adverse Childhood Experiences and Suicidal Behaviors Among Youth: The Buffering Influence of Family Communication and School Connectedness. *Journal of Adolescent Health*, 68(5), 945–952. <https://doi.org/10.1016/j.jadohealth.2020.08.024>

- Lewis, K. L., Stout, J. G., Finkelstein, N. D., Pollock, S. J., Miyake, A., Cohen, G. L., & Ito, T. A. (2017). Fitting in to move forward: Belonging, gender, and persistence in the physical sciences, technology, engineering, and mathematics (STEM). *Psychology of Women Quarterly, 41*(4), 420–436. <https://doi-org.prox.lib.ncsu.edu/10.1177/0361684317720186>
- Lipson, S. K., Zhou, S., Abelson, A., Jeinze, J., Jirsa, M., Morigney, J., Patterson, A., Singh, M., & Eisenberg, D. (2022). Trends in college student mental health and help-seeking by race/ethnicity: Findings from the national health minds study. *Journal of Affective Disorders, 306*, 138-147.  
<https://www.sciencedirect.com/science/article/pii/S0165032722002774>
- Liu, S. R., Kia-Keating, M., Nylund-Gibson, K., & Barnett, M. L. (2020). Co-occurring youth profiles of adverse childhood experiences and protective factors: Associations with health, resilience, and racial disparities. *American Journal of Community Psychology, 65*(1-2), pp. 173–186. <https://doi.org/10.1002/ajcp.12387>
- Malik, R., Hamm, K., Schochet, L., Nova, C., Workman, S., & Jessen-Howard, S. (2018). *America's child care deserts in 2018*. Center for America Progress.  
<https://www.americanprogress.org/article/americas-child-care-deserts-2018/>
- Manti, S., & Licari, A. (2018). How to obtain informed consent for research. *Breathe, 14*(2), 145–152. <https://doi.org/10.1183/20734735.001918>
- Martin, M. T., Belikov, O. M., Hilton Iii, J., Wiley, D., & Fischer, L. (2017). Analysis of student and faculty perceptions of textbook costs in higher education. *Open Praxis, 9*(1), 79.  
<https://doi.org/10.5944/openpraxis.9.1.432>

- Martinez, E. F., & Munsch, P. (2019). Developing a sense of belonging in community college students. *About Campus*, 24(5), 30–34. <https://doi-org.prox.lib.ncsu.edu/10.1177/1086482219896044>
- Martinez, S. M., Frongillo, E. A., Leung, C., & Ritchie, L. (2020). No food for thought: Food insecurity is related to poor mental health and lower academic performance among students in California's public university system. *Journal of Health Psychology*, 25(12), 1930–1939. <https://doi.org/10.1177/1359105318783028>
- Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology*, 23, 141–154. <https://doi.org/10.1017/S0954579411000198>
- Masten, A.S. (2014a). Global perspectives on resilience in children and youth. *Child Development* 85, 6–20. <https://doi.org/10.1111/cdev.12205>
- Masten, A. S. (2014b). *Ordinary Magic*. Guilford Publications.
- Masten, A. S. (2018). Resilience theory and research on children and families: Past, present, and promise. *Journal of Family Theory & Review*, 10(1), 12–31. <https://doi.org/10.1111/jftr.12255>
- Masten, A. S. (2019). Resilience from a developmental systems perspective. *World Psychiatry*, 18(1), 101–102. <https://doi.org/10.1002/wps.20591>
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Sage Publishing.
- McClellan, H. (2023, March 24). Why adult learners persist, and how colleges can engage them. *EdNC*. <https://www.ednc.org/why-adult-learners-persist-and-how-colleges-can-engage-them/>

- McElroy, S., & Hevey, D. (2014). Relationship between adverse early experiences, stressors, psychosocial resources, and wellbeing. *Child Abuse & Neglect*, 38(1), 65–75.  
<https://doi.org/10.1016/j.chiabu.2013.07.017>
- McEwen, B. S. (2005). Stressed or stressed out: What is the difference? *Journal of Psychiatry and Neuroscience*, 30(5), 315–318. <https://www.jpnp.ca/content/30/5/315>
- McFarland, J., Hussar, B., De Brey, C., Snyder, T., Wang, X., Wilkinson-Flicker, S., ... & Hinz, S. (2017). The Condition of Education 2017. NCES 2017-144. *National Center for Education Statistics*. <https://files.eric.ed.gov/fulltext/ED574257.pdf>
- McLeod, S. (2023, Feb. 20). Bronfenbrenner's ecological systems theory. *Simply Psychology*.  
<https://www.simplypsychology.org/Bronfenbrenner.html>
- Meloy, B., Gardner, M., & Darling-Hammond. (2019). *Untangling the evidence on preschool effectiveness: Insights for policymakers*. Learning Policy Institute.  
[https://learningpolicyinstitute.org/media/302/download?inline&file=Untangling\\_Evidence\\_Preschool\\_Effectiveness\\_BRIEF.pdf](https://learningpolicyinstitute.org/media/302/download?inline&file=Untangling_Evidence_Preschool_Effectiveness_BRIEF.pdf)
- Mendelson, T., Sheridan, S.C., & Clary, L.K. (2021). Research with youth of color in low-income communities: Strategies for recruiting and retaining participants. *Research in Social and Administrative Pharmacy*, 17(6), 1110–1118.  
<https://doi.org/10.1016/j.sapharm.2020.08.011>.
- Merçon-Vargas, E. A., Lima, R. F. F., Rosa, E. M., & Tudge, J. (2020). Processing proximal processes: What Bronfenbrenner meant, what he didn't mean, and what he should have meant. *Journal of Family Theory & Review*, 12(3), 321–334.  
<https://doi.org/10.1111/jftr.12373>

- Merriam, S.B. (1998). *Qualitative research and case study applications in education: Revised and expanded from case study research in education*. Jossey-Bass.
- Merriam, S.B. & Tisdell, E.J. (2016). *Qualitative research: A guide to design and implementation* (4<sup>th</sup> edition). Jossey-Bass.
- Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect*, *69*, 10–19. <https://doi.org/10.1016/j.chiabu.2017.03.016>
- Metzler, M., Merrick, M. T., Klevens, J., Ports, K. A., Ford, D. C. (2017). Adverse childhood experiences and life opportunities: Shifting the narrative. *Child Youth Serv Rev.* *72*:141–9. <http://doi.org/10.1016/j.chilyouth.2016.10.021>
- Moran, M. B., Frank, L. B., Zhao, N., Gonzalez, C., Thainiyom, P., Murphy, S. T., & Ball-Rokeach, S. J. (2016). An argument for ecological research and intervention in health communication. *Journal of Health Communication*, *21*(2), 135–138. <https://doi.org/10.1080/10810730.2015.1128021>
- Mosley-Johnson, E., Garacci, E., Wagner, N., Mendez, C., Williams, J. S., & Egede, L. E. (2019). Assessing the relationship between adverse childhood experiences and life satisfaction, psychological well-being, and social well-being: United States Longitudinal Cohort 1995–2014. *Quality of Life Research*, *28*(4), 907–914. <https://doi.org/10.1007/s11136-018-2054-6>
- Mullen, M. (2021). 14.4 Hype on campus: Enhancing academic persistence among college students with mental health conditions. *Journal of the American Academy of Child & Adolescent Psychiatry*, *60*(10), 279–280. <https://doi-org.prox.lib.ncsu.edu/10.1016/j.jaac.2021.07.633>

- Museus, S. D., & Chang, T. H. (2021). The impact of campus environments on sense of belonging for first-generation college students. *Journal of College Student Development*, 62(3), 367-372. <https://doi.org/10.1353/csd.2021.0039>
- Museus, S. D., Yi, V., & Saelua, N. (2018). How culturally engaging campus environments influence sense of belonging in college: An examination of differences between White students and students of color. *Journal of Diversity in Higher Education*, 11(4), 467–483. <https://doi-org.prox.lib.ncsu.edu/10.1037/dhe0000069>
- Navarro, P., Sheffield, J., Edirippulige, S., & Bambling, M. (2020). Exploring mental health professionals' perspectives of text-based online counseling effectiveness with young people: Mixed methods pilot study. *JMIR mental health*, 7(1), <https://mental.jmir.org/2020/1/e15564/>
- National Center for Education Statistics. (n.d.). *Who is nontraditional?* <https://nces.ed.gov/pubs/web/97578e>
- National Child Traumatic Stress Network. (2021). *Beyond the ACE score: Perspectives from the NCTSN on child trauma and adversity screening and impact*. <https://www.nctsn.org/sites/default/files/resources/special-resource/beyond-the-ace-score-perspectives-from-the-nctsn-on-child-tauma-and-adversity-screening-and-impact.pdf>
- National Institute of Mental Health. (2023, May). *Post-traumatic stress disorder*. U.S. Department of Health and Human Services, National Institutes of Health. <https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd>



- National Scientific Council on the Developing Child. (2014). *Excessive stress disrupts the architecture of the developing brain*. Center on the Developing Child: Harvard University. [https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2005/05/Stress\\_Disrupts\\_Architecture\\_Developing\\_Brain-1.pdf](https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2005/05/Stress_Disrupts_Architecture_Developing_Brain-1.pdf)
- National Student Clearinghouse Research Center. (2022, June 28). *Persistence and retention: Fall 2020 beginning postsecondary student cohort*. National Student Clearinghouse. <https://nscresearchcenter.org/persistence-retention/?hilite=retention>
- NCES. (2021a). *Total fall enrollment in degree-granting postsecondary institutions, by attendance status, sex, and age of student: Selected years, 1970 through 2029*. [https://nces.ed.gov/programs/digest/d21/tables/dt21\\_303.40.asp?current=yes](https://nces.ed.gov/programs/digest/d21/tables/dt21_303.40.asp?current=yes)
- NCES (2021b). *Total fall enrollment in degree-granting postsecondary institutions, by level and control of institution and race/ethnicity or nonresident status of student: Selected years, 1976 through 2021*. [https://nces.ed.gov/programs/digest/d22/tables/dt22\\_306.20.asp](https://nces.ed.gov/programs/digest/d22/tables/dt22_306.20.asp)
- Nesbitt, A. E., Sabiston, C. M., Dejonge, M. L., Barbic, S. P., Kozloff, N., & Nalder, E. J. (2022). Understanding resilience among transition-age youth with serious mental illness: protocol for a scoping review. *BMJ Open*, *12*(9), e059826. <https://doi.org/10.1136/bmjopen-2021-059826>
- Nicols, H., & Barger, R. (2021). *Policy brief series: Adult learners*. North Carolina State University Belk Center for Community College Leadership and Research. [https://belk-center.ced.ncsu.edu/wp-content/uploads/sites/128/2022/10/Nichols-Barger\\_Adult-Learners-2021.pdf](https://belk-center.ced.ncsu.edu/wp-content/uploads/sites/128/2022/10/Nichols-Barger_Adult-Learners-2021.pdf)

NC Child. (2023). *North Carolina child health report card*. NC Child and NCIOM.

<https://ncchild.org/wp-content/uploads/2023/03/2023-NCreportcard-final.pdf>

North Carolina Early Childhood Foundation. (2022). *Child care & economic recovery across*

*North Carolina during COVID-19*. [https://buildthefoundation.org/wp-](https://buildthefoundation.org/wp-content/uploads/2022/11/NCECF_EconomicReport2022.pdf)

[content/uploads/2022/11/NCECF\\_EconomicReport2022.pdf](https://buildthefoundation.org/wp-content/uploads/2022/11/NCECF_EconomicReport2022.pdf)

North Carolina Early Childhood Foundation. (2019). *The first 2000 days: Powerpoint guide*.

[https://buildthefoundation.org/wp-content/uploads/2023/02/NCECF\\_F2KD-PPTGuide-](https://buildthefoundation.org/wp-content/uploads/2023/02/NCECF_F2KD-PPTGuide-2023.pdf)

[2023.pdf](https://buildthefoundation.org/wp-content/uploads/2023/02/NCECF_F2KD-PPTGuide-2023.pdf)

North Carolina of Public Instruction. (2021, September 25). *Dropout prevention and*

*intervention*. [https://www.dpi.nc.gov/students-families/student-support/dropout-](https://www.dpi.nc.gov/students-families/student-support/dropout-prevention-and-intervention)

[prevention-and-intervention](https://www.dpi.nc.gov/students-families/student-support/dropout-prevention-and-intervention)

NSPCC. (n.d.). *Neglect*. <https://www.nspcc.org.uk/what-is-child-abuse/types-of-abuse/neglect/>

Onwuegbuzie, A. J., Collins, K.M. T., & Frels, R. K. (2013). Using Bronfenbrenner's

Bioecological Theory of Human Development to frame quantitative, qualitative and

mixed methods. *International Journal of Multiple Research Approaches*, 7(1), 2–8.

[https://www.researchgate.net/profile/Rebecca-](https://www.researchgate.net/profile/Rebecca-Frels/publication/273560748_Foreword_Using_Bronfenbrenner's_ecological_systems_theory_to_frame_quantitative_qualitative_and_mixed_research/links/5768c52808aef6cdf9b40ba6/Foreword-Using-Bronfenbrenners-ecological-systems-theory-to-frame-quantitative-qualitative-and-mixed-research.pdf)

[Frels/publication/273560748\\_Foreword\\_Using\\_Bronfenbrenner's\\_ecological\\_systems\\_th](https://www.researchgate.net/profile/Rebecca-Frels/publication/273560748_Foreword_Using_Bronfenbrenner's_ecological_systems_theory_to_frame_quantitative_qualitative_and_mixed_research/links/5768c52808aef6cdf9b40ba6/Foreword-Using-Bronfenbrenners-ecological-systems-theory-to-frame-quantitative-qualitative-and-mixed-research.pdf)

[eory\\_to\\_frame\\_quantitative\\_qualitative\\_and\\_mixed\\_research/links/5768c52808aef6cdf9](https://www.researchgate.net/profile/Rebecca-Frels/publication/273560748_Foreword_Using_Bronfenbrenner's_ecological_systems_theory_to_frame_quantitative_qualitative_and_mixed_research/links/5768c52808aef6cdf9b40ba6/Foreword-Using-Bronfenbrenners-ecological-systems-theory-to-frame-quantitative-qualitative-and-mixed-research.pdf)

[b40ba6/Foreword-Using-Bronfenbrenners-ecological-systems-theory-to-frame-](https://www.researchgate.net/profile/Rebecca-Frels/publication/273560748_Foreword_Using_Bronfenbrenner's_ecological_systems_theory_to_frame_quantitative_qualitative_and_mixed_research/links/5768c52808aef6cdf9b40ba6/Foreword-Using-Bronfenbrenners-ecological-systems-theory-to-frame-quantitative-qualitative-and-mixed-research.pdf)

[quantitative-qualitative-and-mixed-research.pdf](https://www.researchgate.net/profile/Rebecca-Frels/publication/273560748_Foreword_Using_Bronfenbrenner's_ecological_systems_theory_to_frame_quantitative_qualitative_and_mixed_research/links/5768c52808aef6cdf9b40ba6/Foreword-Using-Bronfenbrenners-ecological-systems-theory-to-frame-quantitative-qualitative-and-mixed-research.pdf)

- Ouellette-Schramm, J. (2021). Motivation for persistence among community college English language learners: A constructive- developmental study. *Journal of Applied Research in the Community College*, 28(1), 111-124.  
<https://proxying.lib.ncsu.edu/index.php/login?url=https://www.proquest.com/scholarly-journals/factors-influencing-adult-learners-decision-drop/docview/2139084226/se-2>
- Park, J. H., & Choi, H. J. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Educational Technology & Society*, 12(4), 207–217.  
[https://www.researchgate.net/profile/Ji-Hye-Park-13/publication/220374458\\_Factors\\_Influencing\\_Adult\\_Learners'\\_Decision\\_to\\_Drop\\_Out\\_or\\_Persist\\_in\\_Online\\_Learning/links/00b495243f10b72a43000000/Factors-Influencing-Adult-Learners-Decision-to-Drop-Out-or-Persist-in-Online-Learning.pdf](https://www.researchgate.net/profile/Ji-Hye-Park-13/publication/220374458_Factors_Influencing_Adult_Learners'_Decision_to_Drop_Out_or_Persist_in_Online_Learning/links/00b495243f10b72a43000000/Factors-Influencing-Adult-Learners-Decision-to-Drop-Out-or-Persist-in-Online-Learning.pdf)
- Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004). Emotional intelligence and academic success: examining the transition from high school to university. *Personality and Individual Differences*, 36(1), 163-173.  
[https://doi.org/10.1016/S0191-8869\(03\)00076-X](https://doi.org/10.1016/S0191-8869(03)00076-X)
- Patton, M. Q. (1990). *Qualitative Evaluation Methods* (2nd ed.). Sage Publishing.
- Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, 34(5 Pt 2), 1189-1208.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089059/pdf/hsresearch00022-0112.pdf>
- Pendakur, V., & Furr, S. C. (2016). Critical leadership pedagogy: Engaging power, identity, and culture in leadership education for college students of color. *New Directions for Higher Education*, 2016(174), 45–55.

- Perez, T., Gregory, K. H., & Baker, P. B. (2022). Brief research report: Pilot testing an identity-based relevance-writing intervention to support developmental community college students' persistence. *The Journal of Experimental Education*, 90(1), 77–87.  
<https://doi.org/10.1080/00220973.2020.1800562>
- Perez, P. A., & McDonough, P. M. (2008). Understanding Latina and Latino college choice: A social capital and chain migration analysis. *Journal of Hispanic Higher Education*, 7(3), 249–265. <https://doi.org/10.1177/1538192708317620>
- Petrucelli, K., Davis, J., & Berman, T. (2019). Adverse childhood experiences and associated health outcomes: A systematic review and meta-analysis. *Child Abuse & Neglect*, 97, 104127. <https://doi.org/10.1016/j.chiabu.2019.104127>
- Phillips, E., McDaniel, A., & Croft, A. (2018). Food insecurity and academic disruption among college students. *Journal of Student Affairs Research and Practice*, 55(4), 353–372.  
<https://doi.org/10.1080/19496591.2018.1470003>
- Poole, J. C., Dobson, K. S., & Pusch, D. (2017, Feb.). Childhood adversity and adult depression: The protective role of psychological resilience. *Child Abuse and Neglect*, 64, 89-100.  
<https://doi.org/10.1016/j.chiabu.2016.12.012>
- Porche, M. V., Fortuna, L. R., Lin, J., & Alegria, M. (2011). Childhood trauma and psychiatric disorders as correlates of school dropout in a national sample of young adults. *Child Development*, 82(3), 982–998. doi:10.1111/j.1467-8624.2010.01534.x
- Porter, L. (2010). *ACE reduction and resilience promotion: A powerful framework for strategic action*. Washington Family Policy Council. <http://www.fpc.wa.gov/publications.html>
- Porter, S. R. & Umbach, P. D. (2019). *What challenges to success do community college students face?* Percontor, LLC.

- Provasnik, S., Gonzales, P., & Miller, D. (2009). U.S. performance across international assessments of student achievement: Special supplement to the condition of education 2009. *National Center for Educational Statistics*.  
<https://nces.ed.gov/PUBSEARCH/pubsinfo.asp?pubid=2009083>
- Putnam, F. W., Amaya-Jackson, L., Putnam, K. T., & Briggs, E. C. (2020). Synergistic adversities and behavioral problems in traumatized children and adolescents. *Child Abuse & Neglect*, *106*, 104492. <https://doi.org/10.1016/j.chiabu.2020.104492>
- Putnam, K.T., Harris, W.W. & Putnam, F.W. (2013). Synergistic childhood adversities and complex adult psychopathology. *Journal of Traumatic Stress*, *26*, 435–442.  
<https://doi.org/10.1002/jts.21833>
- Racine, N., McArthur, B. A., Cooke, J. E., Eirich, R., Zhu, J., & Madigan, S. (2021). Global prevalence of depressive and anxiety symptoms in children and adolescents during COVID-19. *JAMA Pediatrics*, *175*(11), 1142.  
<https://doi.org/10.1001/jamapediatrics.2021.2482>
- Regan, S. (2021, July 21). *Do you feel connected to butterflies? Here's what they symbolize.* *mbgmindfulness*. [https://www.mindbodygreen.com/articles/butterfly-symbolism#mbg-1\\_lkH3C9](https://www.mindbodygreen.com/articles/butterfly-symbolism#mbg-1_lkH3C9)
- Rendon, L. I. (2006, Oct.). *Reconceptualizing success for underserved students in higher education*. National Post Secondary Education Cooperative.  
[https://nces.ed.gov/npec/pdf/resp\\_Rendon.pdf](https://nces.ed.gov/npec/pdf/resp_Rendon.pdf)
- Renn, K. A., & Arnold, K. D. (2003). Reconceptualizing research on college student peer culture. *The Journal of Higher Education*, *74*(3), 261–291.  
<https://doi.org/10.1080/00221546.2003.11780847>

- Revranche, M., Biscond, M., Navarro-Mateu, F., Kovess-Masfety, V., & Husky, M. M. (2023). The contribution of childhood adversities to the persistence of severe role impairment among college students: a follow-up study. *Social Psychiatry and Psychiatric Epidemiology*. <https://doi.org/10.1007/s00127-023-02434-y>
- Rosa, E. M., & Tudge, J. (2013). Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. *Journal of Family Theory & Review*, 5(4), 243–258. <https://doi.org/10.1111/jftr.12022>
- Rumberger, R.W., & Rotermund, S. (2012). The relationship between engagement and high school dropout. In: Christenson, S., Reschly, A., Wylie, C. (eds) *Handbook of Research on Student Engagement*. Springer, Boston, MA. [https://doi.org/10.1007/978-1-4614-2018-7\\_24](https://doi.org/10.1007/978-1-4614-2018-7_24)
- Saldana, J. (2021). *The coding manual for qualitative researchers* (4th ed.). Sage Publishing.
- Sallee, M. W., & Cox, R. D. (2019). Thinking beyond childcare: Supporting community college student-parents. *American Journal of Education*, 125(4), 621–645. <https://doi.org/10.1086/704094>
- Salzer, M. S. (2012). A comparative study of campus experiences of college students with mental illnesses versus a general college sample. *Journal of American College Health*, 60(1), 1-7. <https://web-p-ebsohost-com.prox.lib.ncsu.edu/ehost/pdfviewer/pdfviewer?vid=0&sid=389124e9-e062-41d5-9355-25859aa33867%40redis>
- Shalka, T. R., & Leal, C. C. (2022). Sense of belonging for college students with PTSD: The role of safety, stigma, and campus climate. *Journal of American College Health*, 70(3), 698-705. <https://doi.org/10.1080/07448481.2020.1762608>

- Shay, E., Combs, T. S., Findley, D., Kolosna, C., Madeley, M., & Salvesen, D. (2016). Identifying transportation disadvantage: Mixed-methods analysis combining GIS mapping with qualitative data. *Transport Policy*, *48*, 129–138.  
<https://doi.org/10.1016/j.tranpol.2016.03.002>
- Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. *JAMA*, *301*(21), 2252–2259.  
<https://doi.org/10.1001/jama.2009.754>
- Shonkoff, J. P., Richter, L., van der Gaag, J., & Bhutta, Z. A. (2012). An integrated scientific framework for child survival and early childhood development. *129*(2), 460–472.  
<https://doi.org/10.1542/peds.2011-0366>
- Shonkoff, J. P., Slopen, N., & Williams, D. R. (2021). Early childhood adversity, toxic stress, and the impacts of racism on the foundations of health. *Annual Review of Public Health*,  
<https://doi-org.prox.lib.ncsu.edu/10.1146/annurev-publhealth-090419-101940>
- Singh, A. A., Meng, S. E., & Hansen, A. W. (2014). “I am my own gender”: Resilience strategies of trans youth. *Journal of Counseling & Development*, *92*(2), 208–218.  
<https://doi.org/10.1002/j.1556-6676.2014.00150.x>
- Silva, M.R., Kleinert, W. L., Sheppard, A. V., Cantrell, K. A., Freeman-Coppadge, D. J., Tsoy, E., Roberts, T., & Pearrow, M. (2017). The relationship between food security, housing stability, and school performance among college students in an urban university. *Journal of College Student Retention: Research, Theory, & Practice*, *19*(3), 284–299.  
<https://doi.org/10.1177/1521025115621918>

- Smith, A. (2016). Finding a ride. *Inside Higher Education*.  
<https://www.insidehighered.com/news/2016/09/15/community-colleges-negotiate-transportation-options-get-students-class>
- Song, Q., Vicman, J. M., & Doan, S. N. (2022). Changes in attachment to parents and peers and relations with mental health during the COVID-19 pandemic. *Emerging Adulthood (Print)*, 10(4), 1048–1060. <https://doi.org/10.1177/21676968221097167>
- Song, W. & Qian, X. (2020). Adverse childhood experiences and teen sexual behaviors: The role of self-regulation and school-related factors. *J School Health*, 90: 830–841. <https://doi-org.prox.lib.ncsu.edu/10.1111/josh.12947>
- Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: interdisciplinary perspectives. *European Journal of Psychotraumatology*, 5(1), 25338. <https://doi.org/10.3402/ejpt.v5.25338>
- Spica, E., & Biddix, J. P. (2021). Prices they pay: Academic achievement and progress to graduation barriers experienced by community college students due to the cost of course materials. *Innovative Higher Education*, 46(6), 643–662. <https://doi.org/10.1007/s10755-021-09557-7>
- Stake, R.E. (2010). *Qualitative research: Studying how things work*. Guilford Press.
- Stephens, N. M., Hamedani, M. G., & Destin, M. (2014). Closing the social-class achievement gap: A difference education intervention improves first-generation students' academic performance and all students' college transition. *Psychological Science*, 25(4), 943–953. <https://doi.org/10.1177/0956797613518349>
- Stoecker, R. (1991). Evaluating and rethinking the case study. *The Sociological Review*, 39(1), 88–112. <https://doi.org/10.1111/j.1467-954X.1991.tb02970.x>



- Strada Education Network. (2019). *Some college and no degree*.  
<https://www.stradaeducation.org/report/some-college-and-no-degree/>
- Starecheski, L. (2015, March 2). *Take the ACE quiz and learn what it does and doesn't mean* [Audio podcast]. NPR. <https://www.npr.org/sections/health-shots/2015/03/02/387007941/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean>
- Strayhorn, T. L. (2012). *College students' sense of belonging: A key to educational success for all students*. Routledge.
- Strayhorn, T. L. (2020). Sense of belonging predicts persistence intentions among diverse dental education students: A multi-institutional investigation. *Journal of Dental Education*, 84(10), 1136–1142. <https://doi.org/10.1002/jdd.12243>
- Substance Abuse and Mental Health Services Administration (2023, April 4). *Post-traumatic stress disorder (PTSD)*. U.S. Department of Health and Human Services.  
<https://www.samhsa.gov/mental-health/post-traumatic-stress-disorder>
- Substance Abuse and Mental Health Services Administration (2023). *Understanding child trauma*. U.S. Department of Health and Human Services. <https://www.samhsa.gov/child-trauma/understanding-child-trauma>
- Tahara, M., Mashizume, Y., Takahashi, K. (2021). Coping mechanisms: Exploring strategies utilized by Japanese healthcare workers to reduce stress and improve mental health during the COVID-19 pandemic. *International Journal of Environmental Research Public Health*, 18(131). <https://dx.doi.org/10.3390/ijerph18010131>
- Thomas, E. A., Owens, G. P., & Keller, E. M. (2021). Relationships among non-interpersonal and interpersonal trauma types, post-traumatic stress, and posttraumatic growth. *Journal of Clinical Psychology*. <https://doi.org/10.1002/jclp.23190>

- Thomas, E. & McClellan, H. (2022, Aug 2). How N.C. community colleges are working to keep students in college. *EdNC*. <https://www.ednc.org/how-n-c-community-colleges-are-working-to-keep-students-in-college/>
- Thompson, R., Proctor, L. J., English, D. J., Dubowitz, H., Narasimhan, S., & Everson, M. D. (2012). Suicidal ideation in adolescence: Examining the role of recent adverse experiences. *Journal of Adolescence*, 35(1), 175–186.  
<https://doi.org/10.1016/j.adolescence.2011.03.003>
- Thoreson, T. (2017). *Harper College: The first 50 years*. Butler Books.
- Tieken, M. C. (2020). “We don't know how to do this”: Rural parents' perspectives on and roles in enrollment at a private, selective liberal arts college. *Rural Sociology*, 85(3), 706–729.  
<https://doi.org/10.1111/ruso.12316>
- Tinto, V. (1982). Limits of theory and practice in student attrition. *The Journal of Higher Education* (Columbus), 53(6), 687–700.  
<https://doi.org/10.1080/00221546.1982.11780504>
- Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher Education*, 59(4), 438. <https://doi.org/10.2307/1981920>
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2<sup>nd</sup> edition). The University of Chicago Press.
- Tinto, V. (2012). *Completing college: Rethinking institutional action*. The University of Chicago Press.
- Tinto, V. (2017a). Reflections on student persistence. *Student Success*, 8(2), 1–8.  
<https://doi.org/10.5204/ssj.v8i2.376>

- Tinto, V. (2017b). Through the eyes of students. *Journal of College Student Retention: Research, Theory & Practice*, 19(3), 254–269. <https://doi.org/10.1177/1521025115621917>
- Toth, S. L., & Cicchetti, D. (2013). A developmental psychopathology perspective on child maltreatment. *Child Maltreatment*, 18(3), 135-139. <https://doi.org/10.1177/1077559513500380>
- Toutkoushian, R. K., Stollberg, R. A., & Slaton, K. A. (2018). Talking 'bout my generation: Defining "first-generation college students" in higher education research. *Teachers College Record*, 120(4), 1-38.
- Toutkoushian, R. K., May-Trifiletti, J. A., & Clayton, A. B. (2021). From "first in family" to "first to finish": Does college graduation vary by how first-generation college status is defined? *Educational Policy*, 35(3), 481–521. <https://doi.org/10.1177/0895904818823753>
- Tudge, J. R. H., Payir, A., Merçon-Vargas, E. A., Cao, H., Liang, Y., Li, J., & O'Brien, L. T. (2016). Still misused after all these years? A re-evaluation of the uses of Bronfenbrenner's bioecological systems theory. *Journal of Family Theory & Review*, 8, 427–445. <https://doi.org/10.1111/jftr.12165>
- Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological systems theory of human development. *Journal of Family Theory & Review*, 1(4), 198–210. <https://doi.org/10.1111/j.1756-2589.2009.00026.x>
- Umbach, Paul D. (2021). Institutional Report RISC Student Survey Fall 2020, Gotham Technical Community College. Raleigh, NC: Percontor. LLC. University of Montana (2023). *First-generation or non-traditional students*. Global Engagement. <https://www.umt.edu/global-engagement/education-abroad/resources/diversity-and-inclusion/first-generation.php>

- Vaccaro, A., & Newman, B. M. (2016). Development of a sense of belonging for privileged and minoritized students: An emergent model. *Journal of College Student Development*, 57(8), 925–942. <https://doi.org/10.1353/csd.2016.0091>
- Van Gennep, A. (1960). *The rites of passage*. Routledge & Kagan Paul.
- VanOra, J. P. (2019). "I wanted to know more": A narrative exploration of community college students' goals and aspirations. *The Qualitative Report*, 24(5), 1168-1180. <https://proxying.lib.ncsu.edu/index.php/login?url=https://www.proquest.com/scholarly-journals/i-wanted-know-more-narrative-exploration/docview/2236685502/se-2>
- Wladis C., Hachey A. C., Conway K. (2018). No time for college? An investigation of time poverty and parenthood. *The Journal of Higher Education*, 89(6), 807–831. <https://doi-org.prox.lib.ncsu.edu/10.1080/00221546.2018.1442983>
- Wang, Z., Lohrmann, D. K., Buu, A., & Li, H-C. (2021, March 1). Resilience as a mediator between adverse childhood experiences and prescription opioid misuse among U.S. adults. *Substance Use & Misuse*, 56(4), 484-492. <https://doi.org/10.1080/10826084.2021.1879148>
- Waters-Bailey, S., McGraw, M.S., Barr, J. (2019, Sept. 05). Serving the whole student: Addressing nonacademic barriers facing rural community college students. *New Directions for Community Colleges*, 2019: 83–93. <https://doi-org.prox.lib.ncsu.edu/10.1002/cc.20372>
- Watt, T., Kim, S., Ceballos, N., & Norton, C. (2022). People who need people: The relationship between adverse childhood experiences and mental health among college students. *Journal of American College Health*, 70(4), 1265-1273. <https://doi.org/10.1080/07448481.2020.1791882>

- Weissman, D. G., Lambert, H. K., Rodman, A. M., Peverill, M., Sheridan, M. A., & McLaughlin, K. A. (2020). Reduced hippocampal and amygdala volume as a mechanism underlying stress sensitization to depression following childhood trauma. *Depression and Anxiety*, 37(9), 916–925. <https://doi.org/10.1002/da.23062>
- Whiteside, J. L. (2021). Becoming academically eligible: University enrollment among first-generation, rural college goers. *Rural Sociology*, 86(2), 204–228. <https://doi.org/10.1111/ruso.12353>
- Wiens, K., Gillis, J., Nicolau, I., & Wade, T. J. (2020). Capturing risk associated with childhood adversity: Independent, cumulative, and multiplicative effects of physical abuse, sexual abuse, and family violence on mental disorders and suicidality. *The Permanente Journal*, 24. <https://doi.org/10.7812/TPP/19.079>
- Williams, K. L., Mobley, S. D., Campbell, E., & Jowers, R. (2022). Meeting at the margins: Culturally affirming practices at HBCUs for underserved populations. *Higher Education*, 84(5), 1067–1087. <https://doi.org/10.1007/s10734-022-00816-w>
- Wladis, C., Hachey, A. C., Conway, K. (2018). No time for college? An investigation of time poverty and parenthood. *The Journal of Higher Education*, 89(6), 807–831. <https://doi-org.prox.lib.ncsu.edu/10.1080/00221546.2018.1442983>
- Woo, E. (2005, September 27). Urie Bronfenbrenner, 88; co-founder of Head Start urged closer family ties. *Los Angeles Times*. <https://www.latimes.com/archives/la-xpm-2005-sep-27-me-bronfen27-story.html>
- Woods, J. L., Nevarez, C., & Hilton, A. A. (2012). Determinants of transfer among community college students. *Journal of Applied Research in the Community College*, 19(2), 64-69.

- Wright, M. O., Crawford, E., & Castillo, D. D. (2009). Childhood emotional maltreatment and later psychological distress among college students: The mediating role of maladaptive schemas. *Child Abuse & Neglect, 33*(1), 59–68.  
<https://doi.org/10.1016/j.chiabu.2008.12.007>
- Wright, M. O., Masten, A. S., & Narayan, A. J. (2013). Resilience processes in development: Four waves of research on positive adaptation in the context of adversity. In S. Goldstein & R. B. Brooks (Eds.), *Handbook of Resilience in Children* (pp. 15–37). Springer US.  
[https://doi.org/10.1007/978-1-4614-3661-4\\_2](https://doi.org/10.1007/978-1-4614-3661-4_2)
- Wyner, J. S. (2014). *What excellent community colleges do: Preparing all students for success*. Harvard Education Press.
- Yasui, M., Pottick, K. J., & Chen, Y. (2017). Conceptualizing culturally infused engagement and its measurement for ethnic minority and immigrant children and families. *Clinical Child and Family Psychology Review, 20*(3), 250–332. <https://doi.org/10.1007/s10567-017-0229-2>
- Yenney, C. B. (2020). “I trusted her more than I trusted myself”: The impact of academic advising on rural students’ sense of belonging in college. *New Directions for Student Services, 2020*, pp. 29–36. <https://doi-org.prox.lib.ncsu.edu/10.1002/ss.20362>
- Yin, R. K. (2013). Validity and generalization in future case study evaluations. *Evaluation, 19*(3), 321–332. <https://doi-org.prox.lib.ncsu.edu/10.1177/1356389013497081>
- Yin, R.K. (2014). *Case study research and applications: Design and methods* (5<sup>th</sup> edition) Sage Publications.
- Yin, R.K. (2016). *Qualitative research from start to finish* (2<sup>nd</sup> edition). Guildford Press.

- Yin, R.K. (2018). *Case study research and applications: Design and methods* (6<sup>th</sup> edition). Sage Publications.
- Yukhymenko-Lescroart, M. A., & Sharma, G. (2020). Sense of purpose and progress towards degree among freshman college students. *Journal of College Student Retention: Research, Theory & Practice*, Advanced online publication, <https://doi-org.prox.lib.ncsu.edu/10.1177/1521025120975134>
- Yukhymenko-Lescroart, M. A., & Sharma, G. (2023). Sense of purpose and progress towards degree in freshman college students. *Journal of College Student Retention: Research, Theory & Practice*, 25(1), 187–207. <https://doi-org.prox.lib.ncsu.edu/10.1177/1521025120975134>
- Zhu, P., Lau, J., & Navalta, C. P. (2020). An ecological approach to understanding pervasive and hidden shame in complex trauma. *Journal of Mental Health Counseling*, 42(2), 155-169. <https://doi.org/10.17744/mehc.42.2.05>

**APPENDICES**



## Appendix A

### Reprint Permission for Figure 1.3: Tinto's Model of Institutional Departure

3/17/24, 11:52 AM

North Carolina State University Mail - Graphics Permission



Stephanie Lackey &lt;sdlacke2@ncsu.edu&gt;

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#### Graphics Permission

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Mon, Sep 25, 2023 at 5:56 PM

To: Stephanie Lackey &lt;sdlacke2@ncsu.edu&gt;, Books Permissions &lt;permissions@press.uchicago.edu&gt;

Dear Stephanie,

Thank you for that confirmation. Permission is granted for the material in your request to be used in Stephanie Lackey's academic work in the form of a dissertation/thesis. This permission is for one-time use in the context of the dissertation/thesis only. If the dissertation/thesis is later developed into another form for publication—commercial or otherwise—you must reapply to us for permission [at that time](#).

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|

All the best,

Nikki



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## Appendix B

### Reprint Permission for Figure 3.1: Basic Types of Designs for Case Studies

12/11/23, 12:11 PM

North Carolina State University Mail - RP-10777 Permissions

**NC STATE**

Stephanie Lackey <sdlacke2@ncsu.edu>

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#### RP-10777 Permissions

1 message

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**Craig Myles** <jira@sage-cloud.atlassian.net>  
Reply-To: Rights.Permissions@sagepub.com  
To: sdlacke2@ncsu.edu

Wed, Dec 6, 2023 at 4:19 PM

-----  
Reply above this line.

Craig Myles commented:

Dear Stephanie Lackey,

Thank you for your letter. I am pleased to report we can grant your request to reuse Figure 2.4 from "*Case Study Research and Applications: Design and Methods, 6e*," without a fee as part of your dissertation.

**Please accept this email as permission for your request as detailed above. Permission is granted for the life of the dissertation on a non-exclusive basis, in the English language, throughout the world in all formats provided full citation is made to the original Sage publication. Permission does not include any third-party material found within the work. Please contact us for any further usage of the material.**

If you have any questions, or if we may be of further assistance, please let us know.

Kind regards,

Craig Myles (*he/him/his*)  
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Craig Myles resolved this as Done.

## Appendix C

### Adverse Childhood Experiences and Traumatic Events Questionnaire

Survey Flow

Block: Default Question Block (10 Questions)

Page Break

Start of Block: Default Question Block

Introduction Welcome and thank you for agreeing to complete the Adverse Childhood Experiences and Traumatic Events Questionnaire. If eligible to participate, you will complete 20 questions and it should take you no longer than 15 minutes to complete.

Difficult childhood experiences are very common and can affect our health and well-being. The answers you provide in this survey will help community college educators understand how to better serve students with adverse childhood experiences.

Any information you share will be kept confidential, and you may choose to withdraw from this study at any time.

Informed Consent This survey will ask you to recall adverse or traumatic events prior to age 18. Please first review the file attached here about informed consent and acknowledge your

understanding. You may download this file to keep a copy for your records.

To access the form, please click the link below.

Acknowledgement By checking the box yes below, you are acknowledging that you have reviewed the attached informed consent. You can select no if you do not wish to move forward.

You may choose to discontinue this survey at any time.

Yes, I acknowledge informed consent. (1)

No, I do not want to acknowledge informed consent and am choosing not to participate.  
(4)

Skip To: Confirmation of Age If By checking the box yes below, you are acknowledging that you have reviewed the attached informed... = Yes, I acknowledge informed consent.

Skip To: End of Survey If By checking the box yes below, you are acknowledging that you have reviewed the attached informed... = No, I do not want to acknowledge informed consent and am choosing not to participate.

Page Break

Confirmation of Age I can confirm I am 18 years old or older as of today's date. Please select one from the choices provided below. If you are under 18, you will be taken to the end of the survey. You must be 18 years of age or older to participate.

Yes, I confirm I am 18 years or older. (1)

No, I am not 18. (4)

Skip To: Q1 If I can confirm I am 18 years old or older as of today's date. Please select one from the choices p... = Yes, I confirm I am 18 years or older.

Skip To: End of Survey If I can confirm I am 18 years old or older as of today's date. Please select one from the choices p... = No, I am not

Page Break

Q1 Below is a list of 20 difficult or stressful experiences that sometimes occur. Please indicate whether you experienced any of these events prior to your 18th birthday by selecting yes or no next to each item.

We know childhood trauma can be difficult to remember, but we want you to know we value your psychological safety. If at any point you feel uncomfortable answering these questions, you

may exit the questionnaire.

	Yes (1)	No (2)
Experienced unwanted sexual contact such as fondling, or oral/vaginal/intercourse/penetration . (13)	<input type="radio"/>	<input type="radio"/>
Experienced harassment or bullying at school (14)	<input type="radio"/>	<input type="radio"/>
Often treated badly because of race, sexual orientation, disability, or religion. (16)	<input type="radio"/>	<input type="radio"/>
Lived in foster care. (17)	<input type="radio"/>	<input type="radio"/>
Separated from family member(s) through deportation or immigration. (18)	<input type="radio"/>	<input type="radio"/>
Lost a guardian through divorce, abandonment, or death. (19)	<input type="radio"/>	<input type="radio"/>
Lived with anyone who went to jail or prison. (20)	<input type="radio"/>	<input type="radio"/>

- |  |                       |                       |
|--|-----------------------|-----------------------|
| Went without food, appropriate clothing, or a place to live, or had no one to protect you. (21)                                      | <input type="radio"/> | <input type="radio"/> |
| Lived with anyone who had a problem with drinking or abusing drugs. (22)   | <input type="radio"/> | <input type="radio"/> |
| Lived with someone who was depressed, or mentally ill. (23)  | <input type="radio"/> | <input type="radio"/> |
| Lived with someone who attempted suicide. (24)   | <input type="radio"/> | <input type="radio"/> |
| Lived with anyone that made you afraid they would hurt you physically. (25)  | <input type="radio"/> | <input type="radio"/> |
| Lived with anyone that pushed, grabbed, or threw something at you or struck you so hard as to leave marks, bruising, or injury. (26) | <input type="radio"/> | <input type="radio"/> |
| Lived with anyone that swore, insulted, or put you down. (27)  | <input type="radio"/> | <input type="radio"/> |
| Felt unloved and/or unprotected by family members. (28)  | <input type="radio"/> | <input type="radio"/> |
| Had a life-threatening illness. (30)   | <input type="radio"/> | <input type="radio"/> |

Experienced a serious accident where you or someone else you loved was hurt or killed. (32)

Been in a situation where you feared you might be killed by a drunk driver. (33)

Experienced a natural disaster such as a hurricane, tornado, major earthquake, flooding, etc., where you or loved ones were in danger of death or injury. (34)

Experienced a fire or explosion. (35)

Page Break

Interview Process Thank you for providing responses. If you qualify for the study, you will be invited to interview with the researcher who is interested in hearing more about your college experiences. Your name will not be used and all information you share will be confidential. Your participation in this study is voluntary. You can choose to withdraw at any time without penalty. If you decide to be interviewed and change your mind, you can stop participating at any time without penalty.



If you are willing to participate in a follow-up interview, please indicate your preference for a virtual or in-person interview.

The researcher will contact you to confirm a timeframe and meeting preference (virtual/in-person).

The interview will last approximately 45-60 minutes and you will not have to discuss any adverse or traumatic experiences. The conversation will be more focused on your experiences in college.

Choose one option from the list below.

- In-person Interview at RLS Center, room 2383 (1)
- Virtual interview online (2)
- Either in-person or virtual works for me (4)
- I do not wish to participate in an interview (3)

Skip To: Resource If Thank you for providing responses. You are invited to interview with the researcher who is intere... = I do not wish to participate in an interview

Interview Interest To continue, indicate times you are available for an interview that will last approximately 45-60 minutes.

Please confirm your interest by selecting a date from the choices below. You may choose as many dates that may fit your schedule or you may suggest a date that works better for you.

- June 26
- June 27
- June 28
- June 29
- June 30
- Other \_\_\_\_\_

Contact Information Please provide your contact information, and the researcher will follow up with you to provide further instructions about the interview process.

Name: \_\_\_\_\_

Email: \_\_\_\_\_

○ Text: \_\_\_\_\_

Resource Recalling adverse experiences in your life may cause emotional triggers. You are encouraged to contact a mental health resource if you want to speak to someone. To access resources please select the link below.

Next Steps The researcher will communicate with you if you are selected to participate in an interview.

***The study's second phase, the interviews, will not discuss your specific trauma, only how, with your background, you have persisted in college from one semester to the next.***

End of Block: Default Question Block

Adapted from:

Burke Harris, N. & Renschler, T. (2015). *Center for Youth Wellness ACE-Questionnaire (CYW ACE-Q Teen SR)*. <https://centerforyouthwellness.org/wp-content/uploads/2018/06/CYW-ACE-Q-TEEN-SR-1-copy.pdf>

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of Childhood Abuse and Household

Dysfunction to Many of the Leading Causes of Death in Adults. *American Journal of Preventive Medicine*, 14(4), 245–258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)

Hooper, L.M., Stockton, P., Krupnick, J., & Green, B.L. (2011). The development, use, and psychometric properties of the Traumatic History Questionnaire. *Journal of Loss and Trauma*, 16, 258-283. <https://doi.org/10.1080/15325024.2011.572035>

## Appendix D

### Research Flyer

# You are invited to participate in a research study on Community College Student Persistence!

“Resilience is all about being able to overcome the unexpected. The goal of resilience isn’t to just survive but thrive”.

Jamais Cascio

If interested, please contact researcher:

Stephanie Lackey  
sdlacke2@ncsu.edu

Students who complete the study will receive a \$20 Visa gift card.



**Life experiences can affect our health and well-being. Difficult childhood experiences are very common.**

### Recruitment

Your voice is needed to contribute to this study about how adverse childhood experiences impact your ability as a student in college.



<https://blog.mingestudio7.com/download-free-architecture-ebooks/>

### To participate in this study:

1. Complete the qualifying questionnaire provided by the researcher.
2. If you meet the qualifications for the study, you will be invited to participate in an interview, virtual or in person, with the researcher.
3. Interview questions will pertain to how you persist in college from one semester to the next.
4. If you have questions or are interested in participating, contact Stephanie Lackey at [sdlacke@ncsu.edu](mailto:sdlacke@ncsu.edu) or use the QR code provided.

**Any information shared will be kept confidential, and you may choose to withdraw from this study at any time.**

## Appendix E

### Informed Consent Form

#### Informed Consent Form for Participation in Research

**Title of Study:** Impacts of Adverse Childhood Experiences on Community College Student Persistence

**IRB Protocol**

**Principal Investigator(s):** Stephanie Lackey, [sdlacke2@ncsu.edu](mailto:sdlacke2@ncsu.edu), 828-244-2545

**Funding Source:** none

You are invited to take part in a research study. Here are some important things to know:

- Your participation in this study is voluntary. You can choose not to participate without penalty. If you decide to participate and change your mind, you can stop participating at any time without penalty.
- This research study explores how community college students with adverse childhood experiences persist in college from one semester to the next.
- You will be asked to complete an Adverse Childhood Experience and Traumatic Event questionnaire. If you qualify for the study, you will be asked to participate in a 45–60-minute interview. You are not guaranteed any personal benefits from being in this study. Research studies may pose risks to those who participate.
- This research will inform how community college students with adverse childhood experiences persist in college from semester to semester. Information gathered may suggest to community colleges what wrap-around supports are needed to assist in student success.
- Participation in this research may cause the potential emotional triggers from past traumatic experiences.
- If you have questions about your participation in this research at any time, do not hesitate to contact the researcher(s) named above or the NC State IRB office via email at [IRB- Director@ncsu.edu](mailto:IRB-Director@ncsu.edu) or via phone at 1-919-515-8754

Please read the rest of this consent form for more specific details of this research. If you do not understand something, please ask the researcher for clarification or more information.

**What is the purpose of this study?**

The purpose of the study is to explore how students with adverse childhood experiences persist from one semester to the next.

### **How many people will be in the study?**

There will be approximately 8-12 participants in this study.

### **Am I eligible to be a participant in this study?**

In order to be a participant in this study, you must:

- agree to be in the study.
- complete the questionnaire and meet the qualifying criteria to be selected for the interview process.
- and be a first-generation student, be of limited income, or have a documented disability.

### **What will happen if you take part in the study?**

If you agree to participate in this study, you will be asked to do all of the following:

1. Complete an Adverse Childhood Experiences and Traumatic Events Questionnaire.
2. You will be contacted by the researcher if you are selected for the interview process.
3. Participate in a 45–60-minute interview if selected for the study.
4. You will be provided a copy of your research data so that you can confirm the accuracy of the information collected. You can indicate if there's any information or identifiers you want us to delete or not share.

The total time you will participate in this study, including the interview and reviewing your transcript for accuracy, is 75 minutes.

### **Recording in research**

Participants will be audio-recorded during the research activities.

We would like to use these recordings for transcription only. We will keep these recordings until transcriptions have been verified and the research study is finalized.

### **Benefits of participating in this research**

There are no direct benefits to your participation in the research. The indirect benefits include providing insight into how students with adverse childhood experiences persist in college.

### **Risks to participating in this research**

The risks to you, as a result of participating in this research, include possible emotional triggers due to past traumatic experiences. These risks are mitigated through the interview, only focusing on how you persist in school, not the traumatic experiences. Mental health resources will be provided at the conclusion of the interview.

**Researcher obligations**

Due to North Carolina has a mandatory reporting law, NCGS § 7B-301, I have an obligation to report current abuse of an adult ages 28 years old or younger and harassment of students. This means that if I observe instances of, or you tell me about current abuse (physical, emotional or sexual), I am obligated to report that. The risks associated with reporting this information include an inquiry by the Department of Social Services.

**Emergency medical treatment**

If you are hurt or injured during the study session(s), the researcher will call 911 for necessary care. There is no provision for compensation or free medical care for you if you are injured as a result of this study.

**What data will be collected about me, and are there risks associated with that?**

The data that are collected about you include initial contact information, questionnaire responses, and audio-recorded interviews. These data are will be stored under a pseudonym so you cannot be identified. There are no risks to you as a result of collecting this information. Any potential risks will be mitigated through implementing data protections in accordance with NC State data protection standards.

**How will my identity and the data about me be stored and protected?**

After all data is collected, the researchers will go through the data, and remove all direct identifiers and retain pseudonyms with the data.

This list will be stored separately from the data. After the study is over, we will permanently delete the master list.

We will go through the transcripts and do our best to remove or replace any information that can identify you directly. Examples of the information we will remove are names or specific places. After we do this, it is unlikely your identity could be deduced from your responses.

**Who can access my data and how will my data be shared and used in the future?**

Your data, with direct identifiers removed, will be stored, used, and shared with others for future research studies without additional consent from you. This may include sharing your individual de-identified data with other researchers, journals, data repositories, and/or funding sources.

**How will the data about me be reported to the public and are there risks associated with that?** We may quote you or share specific responses from you in our publications and presentations but we will not include your name or any other information that could



easily identify you. As a result, there are minimal risks to you as a result of how we report the data.

### **Right to withdraw your participation**

Your participation is voluntary. Even if you agree initially, consent is an ongoing process. You can stop participating at any time for any reason. To do so, you may exit the questionnaire or interview process at any time. You can also contact the student researcher, Stephanie Lackey, at [sdlacke2@ncsu.edu](mailto:sdlacke2@ncsu.edu) and 828-244-2545.

If you withdraw, we will stop any procedures or data collection that may be happening. We will also delete any data that's already been collected from you whenever possible. We will not be able to delete your data if we cannot identify which responses are yours or if the data has already been published.

### **Compensation**

There is a \$20 Visa card compensation for participating in this study.

### **What if you are a student?**

Your participation in this study is not a course requirement. Your participation or lack thereof will not affect your class standing, grades, or relationship with your instructors or advisors.

### **What if you have questions about this study?**

If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the student researcher, Stephanie Lackey, at [sdlacke2@ncsu.edu](mailto:sdlacke2@ncsu.edu) and 828-244-2545. You can also contact the faculty advisor for this research, Dr. Carrol Warren, at [cwarren@ncsu.edu](mailto:cwarren@ncsu.edu).

### **What if you have questions about your rights as a research participant?**

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NC State IRB (Institutional Review Board) office. An IRB office helps participants if they have any issues regarding research activities. You can contact the NC State University IRB office at [IRB-Director@ncsu.edu](mailto:IRB-Director@ncsu.edu) or 919-515-8754, or at <https://research.Adminstrative Consent Complaint Form.edu/administration/participant-concern-and-complaint-form/>

### **Consent to Participate.**

By signing this consent form, I am affirming that I have read the above information. All of the questions that I had about this research have been answered. If I consent to participate, I understand that I can stop participating at any time without penalty or loss of benefits to which I am otherwise entitled. I am aware that I may revoke my consent at any time.

**Yes, I want to be in this research study.**

Name

Today's Date

No, I do not want to be in this research study. Thank you for your consideration.

## **Appendix F**

### **Interview Guide/Protocol**

#### **Introduction**

Hello. My name is Stephanie Lackey, and I am the researcher conducting this study. Thank you for agreeing to participate. The information you share with me will help to identify ways that community college programs, like the one you participate in, can better serve students who want to achieve a degree.

Your participation is voluntary, and you may choose to withdraw from this interview at any time. Your identity will be protected at all times. Before we begin the interview, you will select a pseudonym from a list of butterflies. Butterflies represent resilience and the ability to be rebirthed into something beautiful. The pseudonym, or butterfly name you chose, will replace your actual name in order to protect your identity. Any individuals you mention will also be kept confidential, and their real names will not be disclosed.

Your name and other identifying information will not appear in any publications or documentation. Your identity will remain protected throughout the entire process. Only I will access the recordings and transcripts, and your chosen pseudonym will be used when analyzing the data to further protect your identity.

There is minimal risk and no direct benefit to you for participating in this study. Since this study addresses early childhood trauma, you may experience emotional triggers. The interview questions will not ask about your early personal childhood exposure to adverse experiences but

will focus on your college experience and how you persist from semester to semester. If at any time you feel overwhelmed or emotionally triggered, we can stop the interview. At the conclusion of the interview, I will provide you with a list of free mental health resources.

I will ask for some general information at the beginning of the interview that is relevant to the study. The remaining questions will be about your experiences in college and how you persist from semester to semester. The questions are open-ended. You can be as detailed in your responses as you like, which will only enhance the depth and understanding we have about your experiences.

I will record this interview to help ensure that no information is lost in this process's transcription and data analysis phases. The interview should last approximately 45-60 minutes. If anything requires clarification after the interview, I may need to contact you over email or schedule a follow-up conversation. You will have the opportunity to review the transcript of this interview and clarify any errors. Information on this process will be provided to you at the end of the interview.

You are being provided with a copy of informed consent. You will have the opportunity to verbally acknowledge that you have received this document and intend to participate in this study.

Do I have your permission to record this interview? YES / NO

Do you have any questions about the interview process or the study before we begin?

Please select a pseudonym from the list of butterfly types. What is your preferred pseudonym?

*BEGIN RECORDING*

### **Interview**

Today's date is \_\_\_\_\_, and the time is \_\_\_\_\_.

Please state the (preferred) pseudonym that you would like to use.

I am meeting today with <<preferred pseudonym>>, and we have just completed the introduction to the study. You were provided with a written consent form earlier in this process.

Please confirm that you have read and understood the consent form and agree to participate in the study with a verbal YES or NO.

### **Questions**

Please introduce yourself. Are you a full-time or part-time student? How many semesters have you completed at this time? Have you taken any breaks between semesters and returned?

This study is about how students with adverse childhood experiences persist in college. What does persistence mean to you? For this study, persistence will be defined as how students return to school from one semester to the next.

1. Tell me about your academic journey. For example, share with me how you went from completing high school to enrolling in college. What are some things that impacted the timing of when you decided to enroll in college?

- *At what age did you enroll in college?*
  - *What did you do between graduating from high school/earning GED, and enrolling in a college program?*
  - *How would you describe your academic readiness?*
2. Tell me about the people who have supported your decision to attend college. Who are your emotional supports?
- *How have they emotionally supported your education?*
3. Why did you choose to attend college?
- *What are your short-term goals?*
  - *What are your long-term goals?*
4. How do you balance school/work/family while enrolled in college?
- *What resources have you used on campus to help you be successful?*
5. What have faculty done to help you persist from one semester to the next?
6. Who has mentored you during the college experience that has helped you persist?
- *What did they do?*
7. Have you participated in any particular programs or received specific types of services that helped to increase your college success and stay enrolled?
- *What extracurricular activities or clubs have you participated in on campus?*
  - *Are there any services/programs you wish were available to you?*

### **Interview Wrap-Up**

That is the last question that I have for you at this time. Before we conclude, is there anything you want to share about your experience that we did not already cover?

Do you have any other questions for me before we conclude?

*STOP RECORDING*

Thank you for your time and willingness to share your experience with me. A reminder of the next steps:

1. I will email you once the transcript has been compiled and ask you to review and confirm that your statements are accurate. If there is anything you would like to adjust or clarify, you can provide additional comments at this time.
2. Here are the free resources I indicated earlier that I would provide to you. (*Give the participant the Mental Health Resource and Visa gift card.*)

If you have any additional questions or concerns, please contact me via email or phone.

I hope that you have a great rest of the day!

## Appendix G

### Interview Questions

Please introduce yourself. Are you a full-time or part-time student? How many semesters have you completed at this time? Have you taken any breaks between semesters and returned?

This study is about how students with adverse childhood experiences persist in college. What does persistence mean to you? For this study, persistence will be defined as how students return to school from one semester to the next.

1. Tell me about your academic journey. For example, share with me how you went from completing high school to enrolling in college. What are some things that impacted the timing of when you decided to enroll in college?
  - *At what age did you enroll in college?*
  - *What did you do between graduating from high school/earning GED, and enrolling in a college program?*
  - *How would you describe your academic readiness?*
2. Tell me about the people who have supported your decision to attend college. Who are your emotional supports?
  - *How have they emotionally supported your education?*
3. Why did you choose to attend college?
  - *What are your short-term goals?*
  - *What are your long-term goals?*
4. How do you balance school/work/family while enrolled in college?
  - *What resources have you used on campus to help you be successful?*
5. What have faculty done to help you persist from one semester to the next?



6. Who has mentored you during the college experience that has helped you persist?
  - *What did they do?*
7. Have you participated in any particular programs or received specific types of services that helped to increase your college success and stay enrolled?
  - *What extracurricular activities or clubs have you participated in on campus?*
  - *Are there any services/programs you wish were available to you?*

## **Appendix H**

### **Campus Mental Health Resources**

#### **Services Offered**

Counseling Services are staffed with trained clinicians who are compassionate and willing to help explore your concerns and develop ideas for effectively dealing with a situation. We offer in-person and teletherapy sessions. We create individualized plans addressing the needs of each student. We offer the following types of Counseling Services: short-term Individual Counseling, Psychoeducation workshops & drop-ins, Crisis Intervention, Group Counseling, Alcohol and Drug Counseling, and referral services to on-campus supports/resources and off-campus referrals to community partners to address mental health and substance abuse wellness needs.

#### **What to Expect**

- Effective counseling that matches your theory of change
- Therapy that is designed to equip you with long-term solutions rather than a quick fix.
- A collaborative approach between you and your counselor to help meet your goals.

#### **Confidentiality**

The Counseling Center adheres to the ethical standards of the National Board of Certified Counselors. No information about a student's contact with the center is shared without the knowledge and written consent of the student, except in legally approved cases. All information discussed is confidential and will not be shared unless circumstances where there is reasonable

suspicion of abuse of children or elderly persons; where the client is likely to harm himself or herself; where a client presents a danger of harm to another person; or a subpoena through court.

**Diversity Statement**

The Counseling Services department does not discriminate against clients on the basis of race, sex, gender, religion, marital status, sexual orientation, age, mental/physical disability, medical condition, or place of origin. All members of the Forsyth Tech Community share a responsibility for creating, maintaining, and developing a learning environment in which difference is valued, equity is sought, and inclusiveness is practiced.

**Location and hours**

Counseling Services is located in Hauser 206. Its hours are Monday through Friday, 8 AM to 5 PM. We accept face-to-face, teletherapy, phone, and walk-in appointments. Our office contact is 336-734-7280.

## **Crisis Numbers**

If you are experiencing a crisis and are on campus, please call Campus Police @ 7911. An emergency or crisis situation may be feeling suicidal or thoughts to plan or harm yourself, thoughts or plans to harm someone else, or having been sexually or physically assaulted. If you are not on campus, please call:

### **National Suicide Prevention Hotline**

dial 988

### **Local Mental Health Crisis Hotline**

1-800-235-4673

### **National Sexual Assault Crisis Hotline**

1-800-656-4673

### **Local Sexual Assault Crisis Hotline**

336-722-4457

### **Local Domestic Violence Hotline**

336-723-8125

### **North Carolina Childcare Professionals Hope 4 Healers Hotline**

919-226-2002

### **North Carolina Hopeline**

919-231-4525 or 877-235-4525

### **Crisis Text Line**

Text HOME to 741741

### **National Alliance on Mental Health Illness (NAMI) of North Carolina**

Provides helpful mental health resources and local referrals.

Call 800-451-9682 or text 919-999-6527

## Appendix I

### Follow-Up Email/Interview Scheduling Template for Qualtrics

Dear Student,

Thank you for agreeing to participate in a semi-structured, audio-recorded interview with me in person or via Zoom for research purposes.

**What type of interview do you prefer?** Please select one:

1. In-person interview

*If this option is chosen, box asks for and collects their phone number*

2. Zoom interview

*If this option is chosen, box asks for and collects their email address*

**Please select at least five dates and times below that work for you to do an interview with me and rank them in order of preference.**

<insert option 1: Day and Time>

<insert option 2: Day and Time>

<insert option 3: Day and Time>

<insert option 4: Day and Time>

<insert option 5: Day and Time>

<insert option 6: Day and Time>

<insert option 7: Day and Time>

<insert option 8: Day and Time>

<insert option 9: Day and Time>

<insert option 10: Day and Time>

<insert option 11: None of these days and times listed above work for me. Here are some days and times that do work for me. <insert section for participant response narrative>

**How would you like me to confirm your interview date and time?**

1. By phone

*If this option is chosen, box asks for and collects their phone number*

2. By email

*If this option is chosen, box asks for and collects their email address*

**I will respond with an email confirming your interview date and time as well as providing information about the web-conferencing platform or building and room details that I will use for your interview.**

**Thank you.**

Stephanie Lackey

## **Appendix J**

### **Reminder Email for In-person/Zoom Interviews**

#### **Reminder Email for In-person Interview**

Hello,

This is a reminder that you are scheduled for <insert day, date, and time> for an audio-recorded interview. We will meet in building XXXX, room XX. The interview will take 45-60 minutes. During our time together, we will discuss how you persist in college from semester to semester.

I look forward to our conversation together. If you have any questions or need to cancel, please do not hesitate to contact me at [sdlacke2@ncsu.edu](mailto:sdlacke2@ncsu.edu) or 828-244-2545.

Thank you,  
Stephanie Lackey

#### **Reminder Email for Online Zoom Interview**

Hello,

This is a reminder that you are scheduled for <insert day, date, and time> for an audio-recorded interview. We will meet on Zoom using the link below. When you sign on, you will enter a waiting room. I will let you in when the interview begins.

The interview will take 45-60 minutes. During our time together, we will discuss how you persist in college from semester to semester.

I look forward to our conversation together. If you have any questions or need to cancel, please do not hesitate to contact me at [sdlacke2@ncsu.edu](mailto:sdlacke2@ncsu.edu) or 828-244-2545.

Thank you,  
Stephanie Lackey

**Appendix K**  
**Butterfly Pseudonyms**

Select a butterfly to be your pseudonym.



**Adonis Blue**



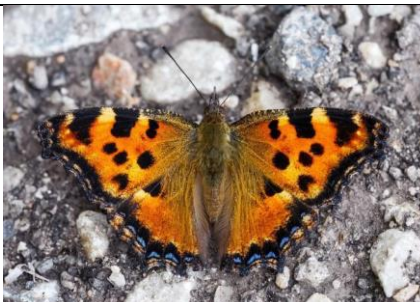
**Brown Argus**



**Common Blue**



**Gatekeeper**



**Large Tortoiseshell**



**Marbled White**





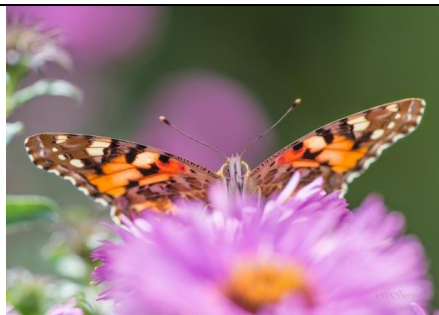
**Monarch**



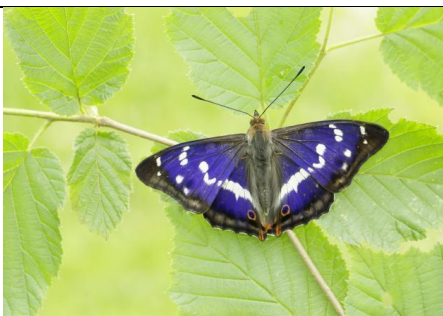
**Orange-tip**



**Peacock**



**Painted Lady**



**Purple Emperor**



**Red Admiral**



**Silver-studded Blue**



**Purple Hairstreak**



**Small Copper**



**Swallowtail**

Butterfly Conservation. (n.d.) *Identify a butterfly*. Retrieved from <https://butterfly-conservation.org/butterflies/identify-a-butterfly>

## Appendix L

### Member Checking Email

Hello,

I hope this e-mail finds you well. I am requesting that you review the interview transcript and themes identified using your interview transcript. This process is referred to as “member checking” and will involve the following steps:

1. I will share your interview transcript via my private North Carolina State University Google Drive folder.
2. You are asked to gain access to the document(s) using your personal computer and a secure network. Both of us will be the only ones able to access this private folder. I suggest completing this activity in a private location, on a private internet connection, and using a web browser in private/incognito mode.
3. You will read through the document(s) in the private folder and comment if you agree, disagree, or would like to clarify or change the content in each document and how you would like to do so. Please use the suggestion mode so I know what you want to clarify or change. I expect this will take about 15- 20 minutes of your time.
4. Please e-mail me when you have finished reading through your document(s) and commenting on them as appropriate. Please do this within two weeks of this email. ***Please do not provide information or feedback in the email you send to us regarding your completion of the task.***
5. Once you complete the verification process, I will remove your access to the private NC State University Google Drive folder with your document(s) in it.

The member-checking activities will take about 15-20 minutes of your time. Please let me know if you have any questions.

Thank you!

Sincerely,

Stephanie Lackey

[sdlacke2@ncsu.edu](mailto:sdlacke2@ncsu.edu)

828-244-2545