A QUALITATIVE INTERVIEW-BASED STUDY OF THE LIVED EXPERIENCES OF NORTH CAROLINA COMMUNITY COLLEGE STUDENTS WHO REPORT FOOD INSECURITY

by

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ABSTRACT

NANCI STAFFORD. A Qualitative Interview-Based Study Of The Lived Experiences Of North Carolina Community College Students Who Report Food Insecurity
(Under the direction of DR. ALAN MABE)

This study represents North Carolina community college student experience with food insecurity. Two-year students have a wide variety of challenges as they make their way to finishing a credential. One such challenge, hunger, has always been a component; awareness and discourse have not. The purpose of the research is to understand the narratives of students experiencing hunger by using a qualitative, semi-structured, brief biographic narrative approach to understand the lived experiences of community college students facing hunger. Using a qualitative interview-based approach, 15 North Carolina community college students were interviewed to know how they manage hunger while working, studying, parenting, and succeeding in school. Several seminal theories such as Bronfenbrenner (1981a), Engle and Tinto, (2008); Tinto (1989); Tinto (2017), in combination with Chickering, 1969; Chickering and Reisser, (1993); Maslow (1943); and Erikson (1963) were used in this study to provide foundations for this research. The findings suggest that community colleges need to implement programs such as basic needs assessments, additional support services, and policies drawing upon student experience with hunger. What also emerged were stories of life-long extreme hardships for the participants. These students tell the tale of their struggles, sacrifices, and tenacity to better their lives through education.

Dedication

Dedicated to my family, Walker and Madison Burt. Thank you for your patience, kindness, encouragement, and love.

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North Carolina Community College Student Experiences with Food Insecurity

Chapter One

I have taught in the community college system for more than 11 years. During this time, I have come to learn - as most of us have - that community college students are rarely "traditional" college attendees. Most of my students have children of their own, struggle to attend classes, work full-time, live at or below the poverty level, and have little time to devote to schoolwork. In 2018, I began to learn more about another barrier facing American students: "food insecurity" - more commonly known as "hunger." As I began researching the topic, I looked at my students through a different lens. How can someone be expected to learn when they have not eaten in a day or two? Are many of the students at my college hungry? My first interview with a student about her experience of food insecurity made it clear that my college had a problem and hearing these stories has enabled me to support my students throughout their two-year college experiences. It has also given me a deeper understanding of their life experiences and how they choose their pursuits. Although I encourage all my students to forge ahead and articulate to a four-year college, some will be unable to do so, as significant barriers - such as basic needs - take precedence over their academic ambitions.

Several news sites have published articles about food insecurity on college campuses (Chessman, 2019; Schmaltz, 2018; A. A. Smith, 2019; Williams, 2019). Many of these reports cover four-year colleges, a few recently mention the challenges of the community college student. My initial exposure to the severity of hunger was through an interview with "JA," who said, "When I come to school hungry, I feel uncomfortable, and I find it hard to focus" (JA, personal communication, September 17, 2019). JA is a 19-year-old Latinx who attends a

community college in North Carolina. Her story is not uncommon for those who are working towards a post-secondary credential and reporting food insecurity. She is a single mother and a full-time student, working at least 20 hours per week. She receives a Pell grant but is not eligible for food stamps under the "supplemental nutritional assistance program" (SNAP) due to her slightly above marginal income. JA is considered to be experiencing a very low level of food security. Nonetheless, she is trying to break out of the cycle of hunger by attending an affordable community college to obtain her degree.

Hungry Community College Students

The United States Department of Agriculture defines food security as "access by all individuals at all times to sufficient food for an active and healthy life" (Economic Research Service, 2018, para. 1). However, some families may not have enough food to satisfy their basic requirements. The USDA defines poor food security without hunger for American households as "lower quality, variety, or attractiveness of diet with little or no decreased food intake" and extremely low food security as "reports of several signs of disturbed eating habits and reduced food intake" (Economic Research Service, 2018, para. 3).

Figure 1. Categories of USDA Food Insecurity. USDA-ERS. (Sethi, 2020)

The United States offers low-income students free and reduced-price breakfasts and lunches in recognition of the need for appropriate nutrition for physical and cognitive development among K-12 pupils (United States Department of Agriculture Economic Research Service, 2019). In addition, the Richard B. Russell National School Lunch Act of 2018 enacted the policy to promote the health and well-being of U.S. students by providing eligible states with extra funding for healthy, fresh, locally grown food (Welch, 2018). Nevertheless, poverty does not stop when a young adult graduates from high school. While the United States has comprehensive laws to safeguard the health and well-being of K-12 children, it falls short when it comes to college students who are hungry. Hunger has symbolic significance, since persons facing severe poverty tend to have a poor level of education, become stigmatized, are often welfare recipients or homeless, and may have mental health difficulties.

According to studies done at four-year universities, one-fourth of students are impacted by hunger (Goldrick-Rab et al., 2017). Although few studies have been conducted at the community college level, CUNY research indicated that 39.2% of the sampled students (about 100,000 persons) had experienced food insecurity in the previous year (Freudenberg et al., 2011). In addition, according to Goldrick-Rab et al. (2018), 40% of Pell award recipients face low food security, and 25% experience very low food security. Community College Equity Assessment Lab (CCEAL) discovered in December 2016 that 12.2% of the assessed students were food insecure and 37.9% were housing insecure (Wood, J. L., Harris III, F. & Delgado, 2016). McArthur et al. (2017) remark that, at the time of their investigation, only one article had been published on the topic of food insecurity in North Carolina. The survey found that 46.2% of 1,093 undergraduate and graduate students in a rural region of North Carolina had experienced food insecurity and 21.9% were assessed to be very low food secure.

Community Colleges in North Carolina

Since the founding of Joliet Junior College in 1901, community colleges have been forced to evolve in response to the shifting demographics of their student bodies and the evolving requirements of the educational system in the United States (Geiger, 2015). According to Karabel (1972), in the 1970s, community colleges switched their focus away from transfer routes and more toward professional and technical skills in order to tailor their curricula to match the demands of the labor market. They started looking for new methods to fill the educational voids that were left by non-traditional students who did not follow the standard academic path. By altering the course of people's lives and professions, two-year colleges and universities made it possible for more people to achieve the goal of living the American dream. The availability of

public open enrollment gave people the chance to improve their circumstances via the pursuit of an education.

In 2001, the year that the American Association of Community Colleges celebrated its centennial, a new emphasis was formed to promote the continuing expansion of the country as a whole (American Association of Community Colleges, 2020). The state of North Carolina is one state which was aligned with the same mission. The North Carolina Community Colleges system (NCCC) reports that there are 58 community colleges in its system, which together served 233,962 full-time equivalent students for the 2018-2019 academic year (NC Community Colleges, 2019a). The mission of the NCCC is to improve the lives and well-being of individuals by providing the following:

• Education, training, and retraining for the workforce, including basic skills and literacy education, occupational, and pre-baccalaureate programs:

• Supportive services for students and their families; and

• Access to high-quality, accessible, educational opportunities that minimize barriers to post-secondary education, maximize student success, develop a globally and multiculturally competent workforce.

• Provision of services to communities and people that contribute to an enhanced standard of living (NC Community Colleges, 2018b).

Barriers

According to the National Center for Education Statistics (1993), two-year students have a diverse range of demographic characteristics. Statistics provided by the Lumina Foundation (2018), indicate that 37 percent of students are at least 25 years old, 46 percent are members of the first generation of their families to attend college, and 42 percent are students of color. Most

of these students have substantial commitments outside of school, such as a family or a job that pays their bills. More than a third of college students struggle with challenges related to poverty, such as not having enough food to eat or not having a place to live (Lumina Foundation, 2018). The rates of college completion, the amount of time it takes to graduate, and the amount of time it takes to enroll in college are all significantly different for the students who participated in this study. Less than half of all students who enroll in a two-year program complete a credential or transfer to a university, according to data done by the Center for Community College Student Engagement (2014).

The fight against hunger is a challenge to efforts being made to raise student achievement (Goldrick-Rab, Richardson, Schneider, et al., 2018; Wood, J. L., Harris III, F. & Delgado, 2016). Students are not just hungry for information; they are hungry for food. There are several additional obstacles in the way such as poverty, few childcare programs, shame, financial obligations, and sporadic support on campuses. Karabel (1972) wrote that one-quarter of community college students were from low-income homes. Karabel (1972, pp. 527-528) writes: “Those students who attended private and elite colleges were from the largest proportion of families with considerable incomes and dads with degrees." The findings of recent studies point to the same ongoing issue(Fry & Cilluffo, 2019; Ma & Baum, 2016; Osei, 2019). This classification remains the same as it was yesterday. Despite the fact that obstacles such as these, a lack of financial resources ensure that inequality still exists, Americans place a high symbolic value on equal access to community college (Calahan & Perna, 2015).

Poverty on Community College Campuses

Hillestad (2014) stated being poor and having a low level of educational achievement go hand in hand with one another. Education is the greatest method for people to lift themselves out

of poverty and increase their chances of moving beyond low wages and finding gainful employment. On the other hand, poverty establishes enormous obstacles that make it difficult to exit from oppressive states. People who have experienced food hardship had greater odds of dropping out of high school and worse cognitive capacity than those who have not (United Health Foundations, 2019). Despite the fact that the poverty rate in the United States is falling thanks to moderate increases in income, "Because of a lack of money and other resources, 40 million people, or nearly one in eight, live in households that have limited access to food that is adequate for their needs throughout the year " (Feeding America, 2018). Per the (Community College Research Center, 2019) Community College Research Center (2019), 37 percent of students attending community colleges had an annual income that was less than $20,000, regardless of whether they lived alone or with dependents. The combination of living in poverty and being a college student produces an unseen population that needs assistance. Poverty is one of the primary factors that contributes to food insecurity. Even though many postsecondary students are eligible for Supplemental Nutrition Assistance Program (SNAP), many do not apply for the program (U.S. Government Accountability Office, 2018). In addition, major risk factors for food insecurity include the usage of loans, independent status, eligibility for the Pell grant, sex/gender, and ethnicity (Brown, 2018; David et al., 2013; Miller, 2019). A student's academic performance and their capacity to make progress toward graduation are directly linked to their ability to sustain a healthy diet and access sufficient resources.

A report released by the Government Accountability Office (GAO) suggests there has been a rise in enrollment by students who originate from homes with low income (U.S. Government Accountability Office, 2018). In addition, the analysis reveals that there are no national statistics available on the magnitude of the problem of food insecurity on campuses,

despite the fact that such data needs to be known. Every college campus has the challenge of combating food insecurity if any percentage of its student body lives in conditions that are economically precarious. Few studies look at the individual experiences of students who are food insecure. Understanding the hunger experiences community college students go through could help find a solution to get beyond the barriers that prevent them from succeeding academically. Nutritional deficiencies make it challenging to persevere in school and thus increasing the dropout rate.

Financial Burdens

The literature indicates that a large percentage of college students receive Pell grants but still suffer from hunger while incurring debt as college costs continue to rise each year. Student need is not only categorized as tuition, books, pens, and pencils; it is also food, clothing, transportation, shelter, childcare, and life's unforeseen demands (American Association of Community Colleges, 2012; Goldrick-Rab et al., 2018, Goldrick-Rab & Cady, 2018). Goldrick-Rab (2016) illustrates the cycle of hardship faced by college students who have both ongoing and sporadic hunger. Such financial difficulties expose students to a multitude of problems.

The Higher Education Act of 1965 was intended to ensure the opportunity for post-secondary education for those seeking to further their learning (Hegji, 2016; Heller & Callender, 2013). Unfortunately, college tuition and living expenses have continuously risen over several decades since its implementation making it very difficult for students to afford college (Hemelt & Marcotte, 2016; McDearmon, 2009; O'Mallet & Ehrenberg, 2002). The increased cost of tuition, room and board, and other fees have created burdens for students and their families. According to College Board (2019) found that during the curriculum year of 2019, the average

tuition for public two-year colleges was $3,730 per year; however, this does not include food, clothing, shelter, and other necessities.

Financial assistance in the form of Pell Grants, workforce development programs, and institutional monies have been helpful to relieve the burden on lower income students. Nonetheless, the patchwork of financial appropriations is insufficient for students to succeed in degree completion with students left sacrificing food, clothing, and shelter to remain in school (Goldrick-Rab, 2016). Research is now beginning to recognize the phenomenon of food insecurity among college students as an obstacle to graduation, higher GPA, mental health, attendance, and not to mention adequate wage compensation (Daugherty et al., 2016; Goldrick-Rab, 2010; Healthy CUNY and CUNY Graduate School of Public Health and Health, 2018).

The Government Accountability Office (2018) compiled information on the state of financial aid and current student demographics summarizing that more and more students are enrolling in community colleges. The Government Accountability Office (GAO 19-95) report examined (1) college student food insecurity and SNAP use; (2) how selected colleges are addressing student food insecurity; and (3) how federal programs help students experiencing food insecurity (US Government Accountability Office, 2018, p. 1). The GAO reported statistics from the National Postsecondary Student Aid Study (NPSAS) data where the percentage of nontraditional students having one or more characteristics which could promote barriers to students seeking a credential (See table).

A growing number of students from low-income households are enrolling in college. The NPSAS reports that the proportion of undergraduates with household incomes at or below 130 percent of the federal poverty line increased from 28 percent in 1996 to 39 percent in 2016. Tuition expenses, which can make it harder for them to afford food and necessary living costs

(National Center of Educational Statistics, 2015). The rising cost of college has increased the proportion of food and housing expenses that students must pay in addition to college expenses. Some researchers speculate that cuts to federal and state funding for higher education may have contributed to this phenomenon (Broton & Goldrick-Rab, 2016; Dubick et al., 2016; Knol et al., 2018; Lumina Foundation, 2018; Miller et al., 2019).

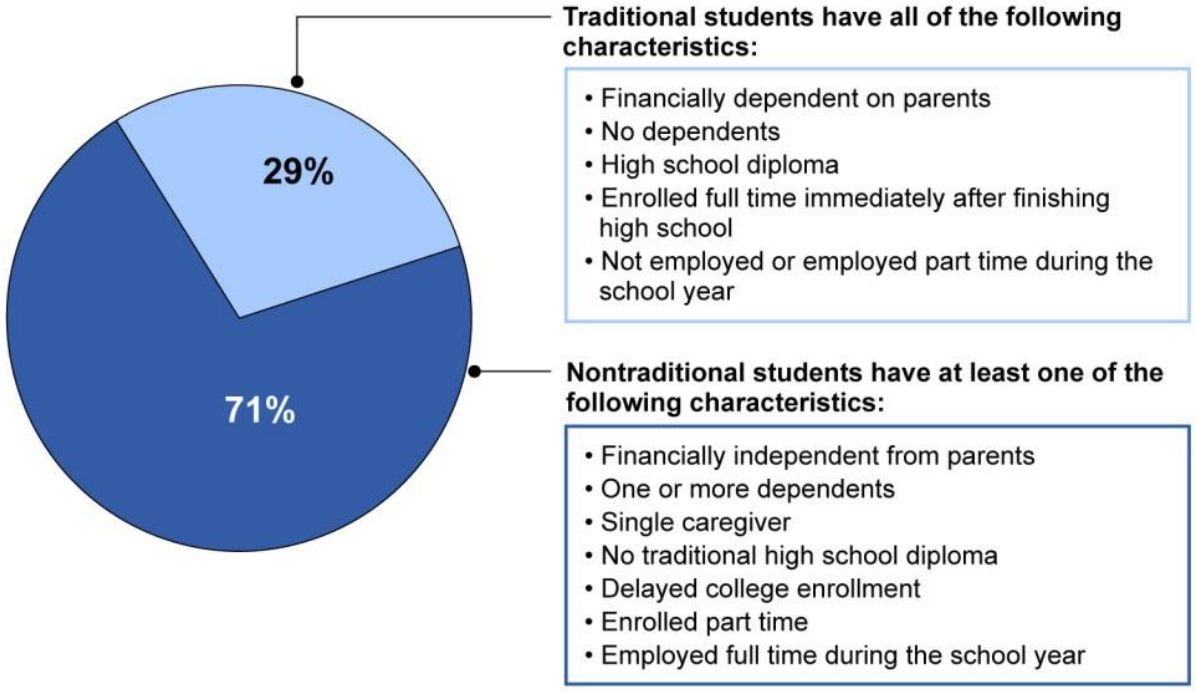


Figure 2. Differences in Traditional and Non-Traditional Students (GAO, 2016).

Stigma - The Silent Struggle

The feelings of shame and exclusion among students who suffer from hunger are real (Cady, 2014b; Henestroza et al., 2018; Henry, 2017; S. M. Martinez et al., 2017; Nikolaus et al., 2019; Payne, 2003). Henry (2017) noted that students who were unable to support themselves kept silent and did not ask for help. Many students find themselves giving up food to pay for other college necessities. Ultimately, hunger keeps students from realizing their potential and is often kept secret to avoid additional impacts on their lives.

Purpose and Research Questions

Students affected by food insecurity must be studied in order to understand their experiences and the implications of the problem. Thus, the purpose of this narrative study is to understand the lived experiences of food insecure North Carolina community college students. This study will aim to answer the following questions:

RQ1. How does food insecurity shape the experiences of community college students in North Carolina?

RQ2. How do students view the relationship between food insecurity and their college success?

Conceptual Framework

Within the literature of from (Chickering (1969); Chickering & Reisser (1993); Chrysikos et al., (2017); Engle and Tinto (2008); Erikson (1963); Maslow (1943) and Tinto (1987) educational research has focused extensively on student retention and success. The methods proposed by these seminal researchers are further extended in this study by using Bronfenbrenner's (1981) work of ecological systems theory.

Bronfenbrenner's ecological systems theory (EST) comprises four interconnected systems (the micro-, macro-, meso-and exosystem). It is applied here to understand how hunger affects each facet of human development. Bronfenbrenner (1981, p. 21) defines the ecology of human development as involving the scientific study of the progressive, mutual accommodation throughout the life course, between an active human being-and the changing properties of the immediate setting in which the developing person lives, as this process is affected by relations between these settings, and by the larger context in which the settings are embedded. The ecological systems theory (EST) draws on the inference that individuals are active participants

who adapt to their environment. These accommodations have a mutual and reciprocal relationship that affects each system in the environment, and individual accommodations are made to interact with systems.

Bronfenbrenner points out that the person being studied should be viewed in a social context as a human being, as they "adapt, tolerate, and create the ecologies in which one lives" (Bronfenbrenner 1981, p. xiii). A person's perception of their environment can be vastly different from that of another person within any culture or subculture. He adds that the cultural and subcultural structures can be negatively or positively altered, which can influence behavior and development (p. 4). Ecological systems theory blends with Maslow's hierarchy of needs, and Erickson's stages of development to best understand movement through the life course. The sociological theories used in this study overlap with Tinto's (1987) retention model and Chickering's (1969) theory of student development, both of which have been expanded to account for the changing student population. To be more precise, the conceptual framework of this study provides foundational reference in which I investigated how hunger affects North Carolina community college students' efforts to succeed.

Maslow (1943) posits that self-actualization, or the actualization of one's potential, is necessary for all humans. They must initially address basic necessities such as food, shelter, affection, and self-respect. Maslow's hierarchy of needs illustrates fundamental requirements at the bottom and humanistic requirements at the top. Food, water, relaxation, and shelter comprise the pyramid's base. After fulfilling these core demands, safety and security can be considered. Ascending the pyramid, our social and psychological requirements increase. Our existence requires emotion, connection, and company. Our urge to leave an indelible mark on the world is

driven by our need for self-respect and success. Self-actualization, the motivation to realize one's maximum potential, was promoted by Maslow.

Erikson (1950) maintained that personality develops in a predetermined order through eight periods of psychosocial development, from infancy to maturity. During each stage, an individual experiences a psychosocial crisis that may have a positive or negative effect on personality development. According to Erikson (1950), these crises are psychosocial because they involve conflicting psychological needs of the individual (i.e., psycho) and society requirements (i.e., social). The successful completion of each stage, according to the idea, results in the development of a healthy personality and the attainment of fundamental qualities. Basic virtues are identifying characteristics that the ego could use to address future difficulties. Failure to complete a stage may result in a lessened ability to complete future stages and, as a result, a less healthy personality and sense of self. In the future, however, these steps can be resolved efficiently.

Educating the future workforce requires student-centered techniques that adapt and evolve. The completion agenda must continue beyond two-year credential, graduation, and leaving college. However, highlighting the educational theories mentioned above, they do not account for actual behavior; they give the representation of broader reasons for the withdrawing of students. The broad concept of EST does not provide specifics as to an individual’s system and their effects. While these theories are widely used, there are still drawbacks when not taking a closer look at student experiences.

Not all universities have the resources to feed hungry students. While 13.3% of households with community college students were food insecure, few community institutions are doing anything to address the problems (Bladd et al., 2017). Hanson (2008) suggests that two-

year institutions should concentrate on connecting their colleges to real problems arising in their community. It is well understood that feeding hungry students correlates to college success (Dubick et al., 2016; Goldrick-Rab & Cady, 2018; Martinez et al., 2018; McArthur et al., 2017; Patton-López et al., 2014; Pizzolato & Olson, 2016). Much of the current investigations of food insecurity among college students contain a section on interventions that universities can implement to effectively manage their basic needs programs and support the organization's success.

Argyris (1964) notes that institutions that fail to meet the humanistic and fundamental requirements of their students ultimately cause the students to disengage, resist, and leave. As a result, community college students find themselves without the necessary credentials to improve their lives through higher paying occupations. Cliburn-Allen and Alleman (2017) like Hanson (2008), hold the view that campuses that do not utilize programs to identify hunger and provide interventions have a higher rate of student non-completion, subpar academic resources, and students with extended degree completions and lower or marginal GPAs.

The study would provide policymakers, community colleges, researchers, and higher education institutions with an understanding of how food insecurity affects low-income community college students. While there are many factors that affect completion rates, organizations might benefit from knowing how hunger affects student development. There is a shortage of literature regarding the lived experiences of hungry students and their management of college and other life circumstances, hence the need for this inquiry through narrative research.

Overview of the Research Methodology

The narrative study examines how community college students in North Carolina approach surviving, going to school, and succeeding academically despite hunger. This research is intended to identify critical themes about the topic, which can help colleges in addressing student needs. From three North Carolina community colleges, fifteen students were interviewed about their experiences of student hunger and how the issue affects their college experience. I contacted administrators at each institution, asking them to identify at least 5-10 students who are living on incomes of less than $20,000, claiming independent status, and, if possible, qualifying as first-generation students; however they chose to send a predesigned recruitment messages to their student body. Due to Covid-19, fliers were sparingly posted around each campus to seek participants.

The goal of this narrative inquiry is to promote understanding of the lives of hungry college students, and I hope that, on this basis, college will take steps to address student hunger. Thus, attention is given to how the basic needs of the two-year constituents are being met. These narratives will play a vital role in aiding organizational change.

I began by conducting two sets of interviews. The first in-person interviews via virtual methods, were focused on how food insecurity had shaped the experiences of community college students in North Carolina and how they viewed the relationship between food insecurity and college success. The follow-up phone interviews addressed any afterthoughts by the students since the first meeting, which had occurred two weeks prior. The research process took place at the end of the spring semester 2021 and over a period of 2-3 months, depending on student availability.

Assumptions and Delimitations

The aspect of the study that is within the control of the researcher is the time limit when the interviews are conducted and transcribed. The interview size included 15 participants. I suspected that most students and some community colleges would not understand the term "food insecurity," so it was useful to define food insecurity as "hunger." Another predicted difficulty was in identifying appropriate students at each college. I was expecting the students to be somewhat inhibited in their disclosure of subjective experiences of hunger, as studies have identified that embarrassment about admitting hunger issues prevents many students from fully sharing their problems (Cliburn-Allen & Alleman, 2017; Henry, 2017; Mukigi et al., 2018). I sought to address this challenge by building rapport and trust during the informational session over the preliminary call before meeting online. Rapport was built using verbal and non-verbal skills, active listening, and small talk. Empathy is also imperative, as this allows for interviewing rhythmic flow and dimension in matching the interviewee so that they feel sufficiently safe to discuss this highly sensitive subject (Prior, 2018). An authentic and genuine connection with the researcher allowed for open and honest feedback about the effects of food insecurity on college experiences.

Definitions

This dissertation employs several terms with which the reader will need to be familiar. Thus, definitions are provided here.

Barriers. These include college costs, remedial coursework, low income, transportation, housing, food, supplies, gender differences, mental health, race/culture.

Completion/graduation rates. The percentage of a school's first-time, first-year undergraduate students who complete their program within 150% of its published time. For

example, students who complete a four-year degree program within six years are included in graduation data (FAFSA, n.d.)

Delay to graduation. The lag in the time that it takes for a student to graduate from college.

Food security. The USDA defines as follows: "access by all people at all times to enough food for an active, healthy life" (Economic Research Service-USDA, 2018). The USDA further explains that, for the American household, low food security without hunger is the "reduced quality, variety, or desirability of diet with little or no reduced food intake," and very low food security is defined as "reports of multiple indications of disrupted eating patterns and reduced food intake" (Economic Research Service, 2018, para. 3).

Supplemental Poverty Measure. "An Interagency Technical Working Group on Developing a Supplemental Poverty Measure was formed in 2009 and charged with developing a set of initial starting points to permit the U.S. Census Bureau, in cooperation with the Bureau of Labor Statistics, to produce a Supplemental Poverty Measure. The Supplemental Poverty Measure does not replace the official poverty measure and is not used to determine eligibility for government programs. Instead, the Supplemental Poverty Measure is designed as an experimental poverty measure that defines income thresholds and resources in a manner different from the official poverty measure" (US Census Bureau, 2017).

Summary

Chapter 1 introduced the topic of North Carolina community college student hunger. There are various barriers to college students' well-being and success that have significant impacts on GPA and completion rates, and lack of access to quality food creates many additional hardships. The action (or inaction) of colleges identifying and addressing food insecurity can

seriously impact the life of the student. The chapter summarizes the difficulties community college students face in light of hunger. Chapter 2 presents the literature review and theoretical frameworks that draw a connection between the aforementioned theories. Chapter 3 details the methodologies of narrative inquiry research. Chapter 4 delves into the research findings and data analyses and describes the systematic application of the research methods. Chapter 5 discusses the results and expounds their importance, meaning, and magnitude.

Chapter Two

Literature Review

Students attending two-year community colleges face considerable obstacles on their path to academic achievement and credential completion. According to research conducted by the Center for Community College Student Engagement (2014), less than half of all students who enroll in a program lasting two years graduate with a credential, a certificate, or make the transition to a program lasting four years. Students often find themselves juggling many responsibilities at once, including work, childcare responsibilities, financial concerns, and lack of academic preparation (Center for Community College Student Engagement, 2014). Goldrick-Rab et al. (2018) and Wood et al. (2016) found that hunger may be caused by a variety of circumstances. Students attending a community college are not only eager to learn, but they are also often hungry for sustenance.

This chapter provides a literature analysis and discussion on how contemporary community college students are affected by poverty and social restraints, with a particular emphasis on hunger. It then goes on to explain, with the help of current research and the conceptual frameworks of Bronfenbrenner's ecological systems theory, Astin's theory of student engagement, and Tinto's model of student integration (1975), how difficult it is for students to remain persistent throughout their college careers regarding the barrier of hunger.

The Face of Poverty

In 2016, the U.S. Census Bureau estimates that nearly 18.5 billion adults have earnings that fall below 100 percent of the poverty line (Semega et al., 2018). According to the U.S. Census Bureau, poverty in the United States is determined by an income criterion and family size (Institute for Research on Poverty, n.d.). Each of these assessments may be compared to the

"supplemental poverty measure," which "reflects 21st-century social and economic reality and government policies" (Institute for Research on Poverty, n. d., para. 7). Forty-three percent of individuals suffering poverty were children, and 60 percent of those youngsters were persons of color (National Center for Children in Poverty, 2016). Poverty has inherent effects on human functioning, behavior, and psychosocial development (Maslow, 1970). Poor pay and inconsistent employment might impede children's capacity to learn and lead to psychological and societal issues in low-income households (National Center for Children in Poverty, n.d.).

The Child Nutrition Act of 1966 (CNA) was enacted when Congress acknowledged the need of nutrition for physical and mental development (*2 Sec. 2 Child Nutrition Act of 1966*, 1966) In tandem with the CNA, the Richard B. Russell National School Lunch Act of 2018 was adopted to safeguard the health and well-being of U.S. students by providing qualified states with extra funding for healthy, fresh, locally produced meals (Welch, 2018). However, the government's ongoing attempts to address the nutritional requirements of youngsters have not been extended to college students.

Assistance to people with low incomes has played an important role in surviving. The use of Bronfenbrenner's paradigm implies that a person becomes more integrated as they get older. As a result of the individual's growing contacts with and effects on the environment, the self becomes integrated into the broad contextual framework as a result of the combined impact of genes and the environment (Sameroff, 2010, fig. 2, p 10). Sameroff (2010) more specifically holds that circumstances have a ripple effect across the entire ecological system. Because Bronfenbrenner’s paradigm is dynamic and integrative, it can aid our understanding in resolving problems and lead to improving colleges and advancing their students. See Figure 3:

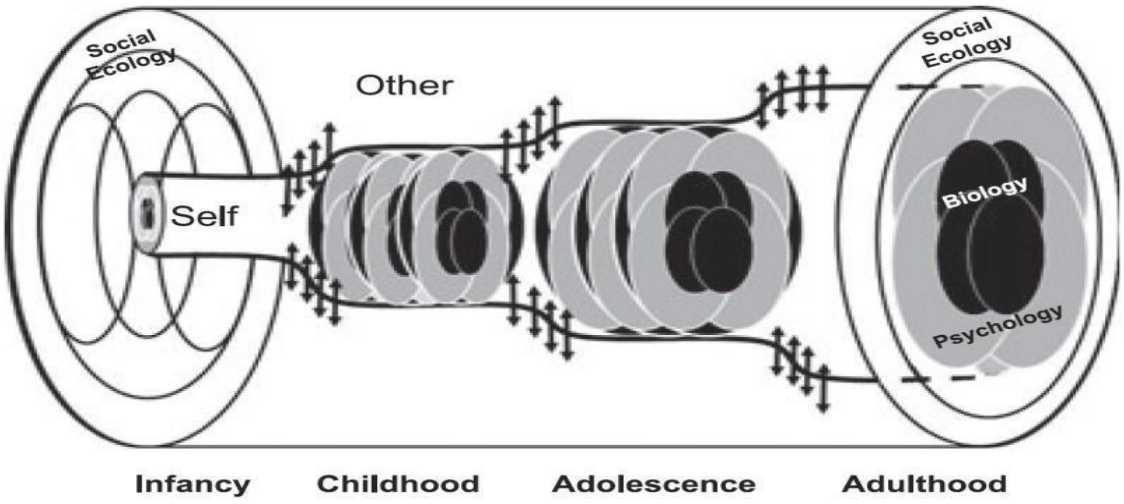


Figure 3. Unified Theory of Development. Sameroff (2010)

In accordance with Astin's (1999) theory of student involvement, institutions provide students with opportunities to participate in on-campus activities. His model reflected the energy displayed by students in relation to student success. According to his theory, the desired outcomes for higher education institutions are regarded in relation to how students change and develop as a result of participating in extracurricular activities. Unfortunately, as you will see, students who suffer from food insecurity have little time and energy to devote to such pursuits.

Poverty on Community College Campuses.

Tinto's (1993) theory on student integration says a student's dedication to school and/or extracurricular activities affects both social and academic integration. Students bring education, skills, and abilities to college. Together, these three things lead to commitments, goals, and plans for success in an institution. Students know what they want to achieve before starting school. Students may become accustomed to school attitudes and values through these interactions. Formal social integration occurs outside of school, while informal social integration occurs with fellow students. High levels of contact can lead to more students finishing and staying in school (Tinto, 1993). Recent figures from the Pew Research Center indicate that the percentage of students living in poverty increased from 29% in 1996 to 42% in 2016 (Fry & Cilluffo, 2019). In

college, students' income discrepancies persist. According to Greenstone et al. (2013) more than one-third of American children are reared in disadvantaged households, but the top five percent have doubled their family's wealth. This disparity has made the future of education and employment more uncertain. This follows each child throughout his or her school experiences, even through college, until the completion of their education. Those from lower socioeconomic backgrounds are less likely to complete college than those from socioeconomic backgrounds. This issue, in turn, penetrates into employment markets and social systems (Greenstone et al., 2013). As indicators of a civilization's "bad health," established socioeconomic structures of privileged and disadvantaged groups, such as poverty, are widely considered (Smith, 2009, p. 8). Strategies for ensuring the inclusion of at-risk students continue to be the subject of much discussion. Nonetheless, rigorous planning and execution of change, as well as understanding of social inequities, are certainly required.

Community Colleges and Non-Traditional Students

In the 1970s, community colleges shifted away from transfer programs and toward career and technical education (Karabel, 1972). Colleges wanted to broaden their programs to satisfy the requirements of the job market and to narrow the education gap between conventional and non-traditional students. Community colleges offered the upward mobility necessary to realize the American ideal, altering the course of countless lives and careers. Public open enrollment provided individuals the opportunity to alter their circumstances via education. Students have discovered that despite the principle of equal access, certain colleges restrict their access to good quality higher education. Americans place a high importance on equitable access to community college, but financial hurdles sustain inequality at high levels (Calahan & Perna, 2015). Although there is a big population of non-traditional students attending community colleges, they are not

the only ones. There is a possibility that students who enroll in community colleges directly after high school will also be food insecure.

Typology of Non-Traditional Students

Non-traditional students are more likely than conventional students to 1) be older, 2) attend part-time, 3) work full-time, 4) be independent, 5) have dependents, 6) be single parents, and 7) possess a GED or high school completion certificate (National Center for Education Statistics, 1993). According to the same research, 14 to 15 percent of postsecondary students were minimally non-traditional, possessing at least one feature. Twenty-five to thirty-one percent of undergraduates possessed two or three of these qualities and were classified as somewhat non-traditional. Students with four or more non-traditional qualities were classified as very non-traditional (U.S. Department of Education, 1993) and one in four students belonged to this category (Cerven, 2013). Thirty-seven percent of students are at least 25 years old, 46 percent are first-generation college students, and 42 percent are students of color, according to statistics published by the Lumina Foundation in 2018.

The majority of students have substantial commitments outside of education, such as a family or paid job, according to the research. There are disparities between high-income and low-income students in terms of college completion rates, time to graduation, and late college entry. More than a third of students deal with poverty-related challenges such as food insecurity and homelessness (Lumina Foundation, 2018). Cahalan et al., (2018) imply that the average college student is no longer a recent high school graduate aged 18 years old. According to the Institute for Women's Policy Research "the living conditions of independent college students, and therefore their college experiences, are often significantly different from those of dependent students" (2018, p. 1).

In 2015, the National Center for Education Statistics reported that roughly 6.4 million students were enrolled in community colleges. According to Gault et al., (2014) these individuals are not traditional college students; rather, they are adults over the age of 25, autonomous, enrolled full- and part-time, in paid jobs, first-generation, of varied racial and ethnic origins, and parents. Non-traditional students are those with specific characteristics of race, ethnicity, class, sexual orientation, national origin, first language, physical and learning ability, learning style, and age, as well as first-generation students, immigrants and international students, veterans, and students with mental health issues (Clark, 2012; Goldrick-Rab & Cady, 2018; The Hope Center for College, Community, 2018; Wisconsin HOPE Lab, 2016).

Societal Constraints for Non-traditional College Students

The theme of social justice has received a great deal of critical attention, particularly in higher education. In a world of evaluations and graduation rates, institutions might lose sight of the value of inclusion. Higher education is a catalyst for mobility, yet not all student identities and experiences are treated equally. According to Cohen and Kisker (2010) the American system of higher education was based on organized teaching pedagogies to serve the privileged. Such elitist attitudes have unavoidably caused fairness and access problems. There was intensive recruiting of a more diversified student population throughout the 1960s. However, schools did not anticipate the intellectual, social, and financial assistance that these students would need (Sandeen & Barr, 2006).

Community colleges in the United States exemplify democracy by giving formal instruction in an educational environment to the general population (Boggs, 2010). Community colleges have adapted to the changing world for over a century (Cohen & Kisker, 2010). However, fundamental issues persist, including a singular emphasis on college completion and a

failure to address impediments and disparities. The objective of community colleges, according to McCants (2003) is to educate students from middle-class and lower socioeconomic backgrounds. However, inequities in access distribution, identification, and interpretation must be highlighted, and individuals should be able to participate in decision-making (Woods, 2018).

Due to the changing demographics of the student body, diversity requires colleges to reexamine their missions, purposes, policies, and inclusion processes. Entrenched societal systems, such as poverty, are regarded as markers of "ill health" for a civilization (Smith, 2009). Debate continues pertaining to optimal strategies about the inclusion of diverse students, but deliberate planning and implementation of change - coupled with recognition of societal injustices - is necessary.

When comparing GPAs, access, and other consequences of inequality, diversity on campuses throughout the country continues to create a split between students who are white or Asian and those of African American and Latinx descent (Bauman et al., 2005). The pursuit of social justice is essential to the achievement of students in higher education. Woods (2018, p. 1538) uses the phrase "moves to foster and achieve equality, in a context of human rights and respect of diversity" to provide a broad definition of social justice. The idea of a social manner is essential to the practice of social justice. This refers to the movement's efforts to promote equal access to essential services, such as education and healthcare, for all people, irrespective of their gender, race, religion, social standing, class, and life experiences.

Challenges

There is a significant gap between the narratives of conventional students and those of non-traditional students. The Carnegie Classifications of Institution of Higher Education (2017) recently shared student’s daily routine accounts of three students of how society imagines when

college students are discussed: they wake up, go to yoga, attend their first class, eat lunch, attend more classes, visit friends, walk their dogs, and do their homework. On the other hand, in contrast to students attending conventional colleges, those belonging to underrepresented groups on community college campuses encounter hurdles posed by the system. They may need help completing the applications for financial aid, finding ways to pay for their education, and paying for things like books and transportation. According to research by Goldrick-Rab et al., (2012) the majority of community colleges do not emphasize meeting the nonacademic needs of their students. According to Smith (2009) in order for higher education institutions to remain relevant in today's complex world, they must emphasize the importance of student involvement and place social justice at the center of their missions and goals.

Every student who attends college carries with them their own unique perspective on the world, which is shaped by the unique combination of their background, experiences, and education. In bell hooks's film, *Cultural Criticism & Transformation,* she speaks and encourages students to advocate for themselves and think critically about their experiences with social justice and equity (Gabriel, P. et al., 1997). Critical pedagogy, when strengthened with critical theory and supported by dynamic education, is a road via which universities may begin to grasp the narratives of various students, as noted by (Davis & Harrison, 2013).

Food Insecurity in the United States

The USDA defines low food security without hunger as the "reduced quality, variety, or desirability of diet with little or no reduced food intake." Very low food security is categorized as "reports of multiple indications of disrupted eating patterns and reduced food intake" (Economic Research Service, 2018, para. 3).

Coleman-Jensen et al. (2019), under the title, Household Food Security in the United States in 2018 states that:

- The 2018 prevalence of food insecurity declined, for the first time, to the pre-recession (2007) level of 11.1 percent.
- In 2018, 88.9 percent of U.S. households were food secure. The remaining 11.1 percent (14.3 million households) were food insecure. Food-insecure households (those with low and very low food security) had difficulty at some time during the year providing enough food for all their members due to a lack of resources. The decline from 2017 (11.8 percent) was statistically significant and continued a decline from a high of 14.9 percent in 2011.
- In 2018, 4.3 percent of U.S. households (5.6 million households) had very low food security, not significantly different from 4.5 percent in 2017. In this more severe range of food insecurity, the food intake of some household members was reduced, and normal eating patterns were disrupted at times during the year due to limited resources.
- Large numbers of "adults who could not afford balanced meals, ate less than they believed they should, reduced the amount of their meals, or missed meal(s) in the preceding three months" were also identified in the study (para. 10). Similar percentages of families with children experienced food insecurity (Economic Research Service, 2018, para. 10).

In the aftermath of the current epidemic, global food insecurity has emerged as a major worry. Those who have previously endured adversities have a formidable obstacle to food security (Food and Agriculture Organization of the United Nations, 2020). Educational institutions that offer sources of nutritional support are now required to alter the manner in which aid is provided. Access, job loss, usage, and the stability of the food supply are nested barriers

that violate the human right to a healthy diet and food security. Further, the impact of COVID-19 likely presented even more challenges for community colleges and their students.

Food and Health

Nutritious food is a source for a healthier life. Poor nutrition can result from both unhealthy eating and not eating enough, because nutrition requires more than just getting enough calories (Bekdash, 2021). A balanced diet containing the recommended amount of each vitamin is required for a child's proper growth and development (Adan et al., 2019). Making healthy eating choices and understanding nutrition will make it easier to achieve optimal health. A healthy diet is essential for people to stay healthy throughout their lives, both now and in the future.

Socioeconomic factors such as a person's education level, income, and whether they are married, have children, or live at home all have an impact on their nutritional status (Mahboub et al., 2021). Demographic evidence suggests a link between diet and mental health, but it is unclear what causes it or how it works. Recent findings from intervention studies suggest that changing one’s diet—often in conjunction with changing your lifestyle could help in the prevention and treatment of mental health issues (Adan et al., 2019).

Food Insecurity and Non-Traditional College Students

Hope Center for Community College (2018) discovered that non-traditional students suffer with housing and homelessness, food security, legal concerns, financial challenges, employment, family pressures, and lack of resources more often than conventional students. The survey reveals that 54 percent of college students are unable to meet their basic economic needs. Similar studies have confirmed that many college students struggle to make ends meet (Bruening et al., 2017; Cliburn-Allen & Alleman, 2017; Goldrick-Rab & Cady, 2017; Patton-López et al.,

2014; Wood & Harris III, 2018). While college students continue to pursue chances for higher education, many struggle to cover the additional costs.

It has been shown that food instability presents several challenges for students. According to data from the Government Accountability Office (GAO), enrollment in community colleges among students from low-income families has increased (U.S. Government Accountability Office, 2018). However, the GAO observes that there are no national statistics on the extent of food insecurity on college campuses, despite the need for such data to drive the development of more effective reform initiatives. As a significant proportion of college students live near the poverty line, food insecurity should be an overarching issue for the majority of community institutions. Nevertheless, many educators do not prioritize the nonacademic requirements of their students.

McArthur et al. (2017) remark that there was just one published analysis of food insecurity at the time of their research. A cross-sectional online survey of 1,093 graduate school sophomores in rural North Carolina revealed that 46.2% had experienced food insecurity and 21.9% were very low food secure. The research also revealed that part-time jobs, additional Pell grants, life-skills training, and transportation might offer less hardships for students. Additionally, the students struggled to use effective coping strategies. The most prevalent coping strategies were extending the duration of food supply, consuming fewer healthy meals, preparing menus prior to food shopping, attending events where free food was given, and obtaining part-time jobs to supplement income. Surprisingly, just 4.7% of students have used campus food pantries. Payne-Sturges et al. (2018) discovered that the prevalence of food insecurity was greater among non-traditional students. As described by McArthur et al. (2017), many off-campus students suffered with hunger. Both findings emphasize the need for more study on the

longitudinal effects on student academics, delayed graduation, interrupted enrollment, and diminished academic goals. According to the Institute for Women's Policy Research (2018) and McDonnell (2017) the features of contemporary college students are drastically different from those of their predecessors.

Since the majority of students attending community colleges are non-traditional, many obtain financial help. During 2010-2011 and 2016-2017, government assistance programs only increased from 74% to 75% (U.S. Department of Education National Center for Educational Statistics, 2019). There has not been a time when federal help was more vital for giving the resources to attend college. Several government programs, such as the GI bill, the American opportunity tax credit, the lifelong learning tax credit program, and Title IV aid which includes federal work-study, subsidized and unsubsidized loans and Pell grants aid to students. Despite these well-resourced institutions, however, students continue to struggle to make ends meet. Scott-Clayton (2017) states that despite the fact that institutions are becoming more upfront about true college expenses, many students and families are unaware that this information exists. In 2011-2012, the research estimates that 30 percent of students who did not complete a FAFSA would have qualified for a Pell Grant (p. 22).

The American Council on Education (2006) reported that approximately 30 percent of undergraduates work while attending school, the majority of whom are low-income, older, part-time students, and members of underrepresented groups. While the majority of students struggle to pay for tuition, books and living costs, these same students no longer have sufficient funds for food; thus they remain food insecure.

Effects of Food Insecurity on College Students

Studies have examined the prevalence of food insecurity and its association with college success (Dubick et al., 2016; Goldrick-Rab, Richardson, & Kinsley, 2018; Martinez et al., 2018; McArthur et al., 2017; Patton-López et al., 2014; Pizzolato & Olson, 2016). Although the burgeoning research on food and housing instability is not vast, it describes how environmental stresses impact college student achievement and suggests that campuses are missing the wider picture of student persistence and graduation rates (Cooper, 2010; Dubick et al., 2016; Goldrick-Rab, 2010; Goldrick-Rab et al., 2012).

Broton and Goldrick-Rab (2018) claim that few studies have concentrated on the fundamental basic needs requirements of students. Their comparative analysis of data from four surveys indicates that twenty percent of community college students had extremely poor food security. The research quantified food insecurity using the USDA scale by combining data on students' income and FAFSA eligibility. According to the data, two-year students are more likely to report food insecurity issues. In addition, home instability, coping mechanisms, employment troubles, attendance, and poor completion rates constituted obstacles and difficulties. Many college students said that tax refunds and social sector interventions helped them meet their fundamental necessities. The authors argue that further study is required to properly comprehend the effects of food insecurity (Broton & Goldrick-Rab, 2018a).

College students' food insecurity is beginning to be understood as a barrier to graduation, a desired GPA, and good mental health, as well as a cause of low attendance and inadequate future earnings (Goldrick-Rab, 2016). To continue in school, students are sacrificing food, clothing, and housing. Food poverty among college students is starting to be recognized as an impediment to graduation, a preferred GPA, and favorable mental health, as well as a source of

low attendance and insufficient salary recompense. Food insecure college students often work at least 20 hours per week, causing them to struggle in school, take fewer course credits, and postpone graduation, leading to increased education fees and loss of future earnings (Goldrick-Rab, 2016).

There are obstacles to predicting community college students' fall-to-fall perseverance and total grade point average (David et al., 2013; Martinez et al., 2018). Increasing tuition, textbooks, and living costs are challenging for students. Although few studies have investigated the relationship between food insecurity, mental health, and academic performance, the available evidence supports both direct and indirect links between hunger, mental health difficulties, and lower GPAs. Silva et al. (2017)conclude that students with high rates of food and housing instability have trouble doing well in class, sustaining attendance, passing courses, and eventually graduating.

In addition, a study by Mukigi et al. (2018) indicated that there are consequences on academic performance, mental health, physical health, and social health. Due to the shame involved with asking for assistance from friends, family, and roommates, both studies indicate that food-insecure students must have a support network. Goldrick-Rab et al. (2015); Maguire and Crutchfield (2018); and Maroto et al. (2015) all found that the majority of students who experience food and housing instability are African American or members of other underrepresented groups.

Inadequate nutrition contributes to a lack of persistence and a lower degree completion rate, hence hindering academic achievement (Goldrick-Rab, 2010; Martinez & Nazmi, 2018). McArthur et al. (2017) remark that, at the time of their investigation, there was only one published evaluation of food insecurity. A cross-sectional online survey of 1,093 sophomores at

a rural North Carolina institution revealed that 46.2% had experienced food insecurity and 21.9% were extremely low food secure. The research indicated that food security may be improved by the provision of part-time employment, higher Pell grants, training in life skills, and transportation. Students might also use other coping methods, such as extending the shelf life of food, consuming healthier foods, preparing meals before grocery shopping, attending events where free food was provided, and working part-time to increase their income. Surprisingly, just 4.7% had used a campus food bank in the past. In the author's analysis, a number of traits emerged. Comparing students who were food secure to those who were food insecure, the research found that those who were food insecure had lower GPAs, were more likely to live off-campus, had a family history of food insecurity, and were of lower socioeconomic position (McArthur et al., 2017). Individuals react uniquely to these obstacles. There is evidence that a shortage of food and resources inhibits resilience (Calahan & Perna, 2015).

Considerations and Strategic Approaches

Over the past three decades, colleges have seen significant developments. Students use technology, take remote-taught classes, and are more diverse, to name a few examples (Childers, 2019.) The framework used in this study help to investigate the persistence, social integration, and retention of students. Additionally, sociological, and psychological theories offer supporting evidence to conceptualize life experiences that shapes the community college student.

Educational Frameworks

Tinto (1993) and Chickering and Reisser (1993) establish a link between student achievement and the environment, social interactions, campus support, and life difficulties. For example, Chickering and Reisser outlined general development and seven vectors that process through male student identity.

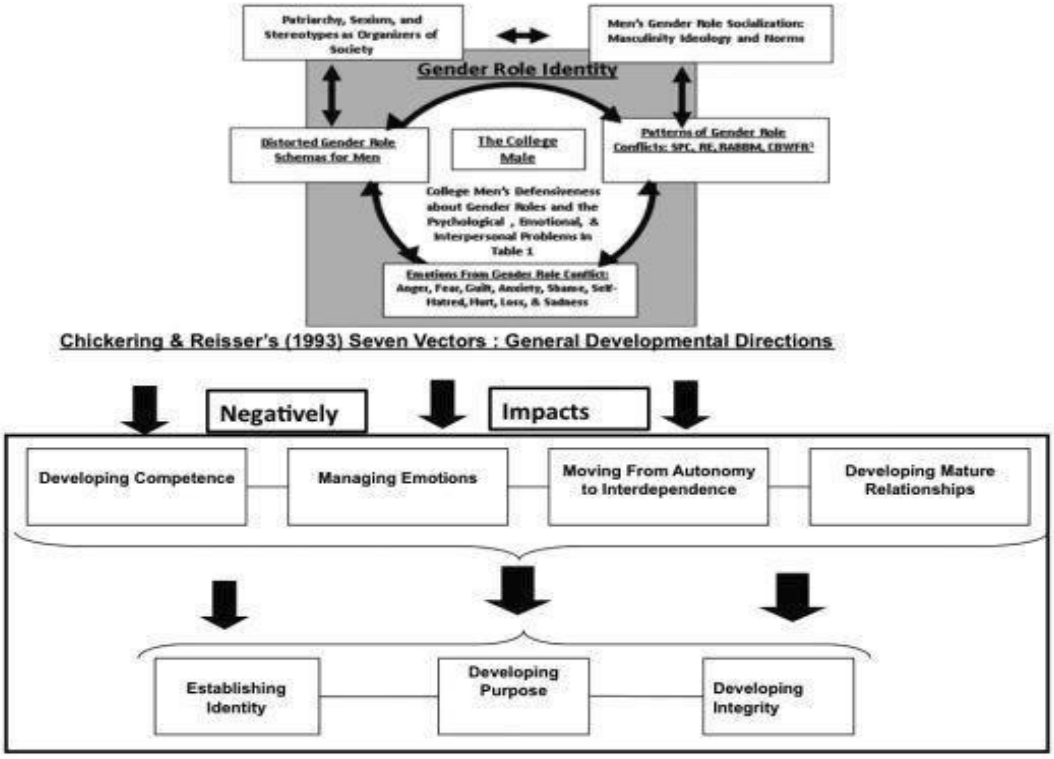


Figure 4. Seven Vectors of Development. Chickering & Reisser (1993).

As one can see, the life course of prior role experiences can impact both positively and negatively depending on the student experience. Chickering and Reisser (1993), in their original works, had limitations. The value of the above-described approach is questionable for this study since it does not include women, specific details of factors associated with the theory. However, the development direction is generally accepted as an overall framework of student development.

Tinto's (1993) theory of student engagement is widely accepted and documented in the literature. There is a large body of literature surrounding the methods and solutions to assisting colleges to inclusively understand what students need, how to address such needs, and to ultimately graduate. Tinto's (1993) theory on student integration posits a student's dedication to school and/or extracurricular activities affects both social and academic integration. Students bring education, skills, and abilities to college. Together, these three things lead to commitments,

goals, and plans for an institution. According to the theory, students are aware of their goals before beginning school because their influences have served as a guide for them. Students may become accustomed to school attitudes and values through these interactions. Formal social integration occurs outside of school, while informal social integration occurs with fellow students (Chrysikos et al., 2017). High levels of contact can lead to more students finishing and staying in school (Tinto, 1993). With this in mind, this theory has some limitations. Several of the existing models in this field are restricted in applicability due to the macro approaches when addressing student success. Tinto's (1993) model has tiny nuances that do not incorporate differences with each student. There is an underlying belief that students can resolve their barriers by moving past them. However, it is difficult to move beyond basic need deficits. Engle and Tinto (2008) present additional literature which closely addresses community college students. Though this work examines low-income community college participants, it does not address essential necessities which are necessary for academic and social integration.

Sociological Frameworks

Bronfenbrenner's EST framework was chosen to guide this study. Bronfenbrenner's ecological model of human development provides a larger view of how the lifetime experiences of individuals (students) contribute to their success or failure (Bronfenbrenner, 1981). The ecology of human development, according to Bronfenbrenner, is "the scientific study of the progressive, mutual adaptation throughout the life course between an active human being and the changing features of the developing person's immediate environment" (p. 21). According to Bronfenbrenner's EST model (1981), each sociological system influences humans through multimodal layering and interaction with the environment.

People are directly influenced by microsystems such as food, clothing, shelter, family, and supportive relationships. Next, the mesosystem connects a person's local environment to the larger community through school, organizations, and neighborhoods. Exosystemic refers to larger institutional structures, such as political, educational, governmental, and religious institutions. The macrosystem is interconnected to the individual's environment. The chronosystem is a time continuum in which all ecological systems contribute to the formation and growth of an individual. Student relationships with colleges have the potential to improve persistence, GPAs, and graduation rates. These theories propose to what degree barriers such as food and housing insecurity connect to persistence and graduation rates. The student's road to a higher quality life may be jeopardized by these challenges.

EST posits that an individual as the center of five layered structures. When a change happens at one level of an ecological system, it may affect other levels and indirectly or directly influence an individual's developmental outcomes via various contextual alterations. Assessing the role of family, friends, social networks, and the college would be a consideration for unraveling the experiences of food insecurity among college students at the intermediate level. Bronfenbrenner's EST, a holistic framework, is a guide to broaden and incorporate the development of individuals and interactions of all systems.

Another conceptual framework is Erikson’s (1950) eight stages of development. The concept states that one must master each stage in the life course in order to gain strength, competence, a sense of belonging, safety, self-esteem. However, proficiency in the life course is dependent on passing through these stages. When barriers are blocking mastery, some may fail. Erikson maintained that personality develops in a predetermined order through eight periods of psychosocial development, from infancy to maturity. During each stage, an individual

experiences a psychosocial crisis that may have a positive or negative effect on personality development.

All humans should rise to self-actualization, according to Maslow (1943). Food, shelter, affection, and self-respect must come first. Maslow's hierarchy of needs shows basic and humanistic wants. The pyramid's base is food, water, rest, and shelter. Safety and security can follow these key requirements. Climbing the pyramid increases our social and psychological needs. We need emotion, connection, and company. Self-respect and success motivate our desire to leave an unforgettable impression. Maslow encouraged self-actualization or reaching one's potential.

Understanding the potential connections between changes in adult identity and other methodologies, such as adult education, requires analyzing the effects of lived experiences on belonging and how they are incorporated into adult interpretations (Quigly, 1997). Given the relationship between identity and learning, it is necessary to understand hungry college students in the context of psychological development for greater understanding. Through historical ideas such as Chickering's seven vectors development theory (1969), Maslow's hierarchy of needs (1970), and Erickson's eight stages of development (1950), investigation into psychosocial factors influencing the learner's context.

Much of the study on student food insecurity focuses on how hunger weakens a student's emotional and physical ties to school, resulting in higher dropout rates (Goldrick-Rab, Richardson, et al., 2017; Healthy CUNY and CUNY Graduate School of Public Health and Health, 2018; Wirt, 2017). Students from low-income homes confront unique obstacles, such as peer rejection, under-resourced schools, and generational poverty. In addition, poverty results in poor health and inadequate dietary supplies, damaged communal environments, and bad housing,

among other negative outcomes. These particular demands may impair a student's quest of success and result in poor academic performance. As food insecurity is a particularly major stressor among community college students, it is the subject of this investigation.

Evans et al. (2010) examined that human development might explain student procedures but not outcomes such as graduation. The basis of ecosystems contributes to contextual growth and development. As college students interact with their peers, systems develop, and "these very fundamental principles of human ecology theory, adjustment for survival and ecosystem position, socio-cultural, and natural physical-biological environments-provide a lens for understanding college students and campus life" (p. 160). The lack of basic requirements tends to determine how students' survival skills are evaluated. Food insecurity frequently hinders resilience, and those who suffer food insecurity may perceive additional barriers to success.

The systems in which a student is embedded may challenge, support, or positively influence the individual's perception of his or her environment. Student relationships within the surrounding context, as well as distant ties with systems beyond one's classmates, university, and place of employment, may all have a direct impact on one's academic performance (Higbee, 2002). Policy and governance may not appear to have a direct impact on students, yet macrosystem activities have profound implications on completion rates. The conceptual framework of this study outlines the context of my examination into the effects of hunger on North Carolina community college students.

Conclusion

In general, the body of previous research and more current studies indicate how the elimination of obstacles is essential to the success of college students. This study investigates the relationship between hunger in conjunction with the ability to continue academically while

graduating from community college. Food insecurity is only one of the challenges that many students attend community college to overcome. Many students attending community colleges are confronted with a variety of challenges, most of which are attributable to the non-traditional student status that they have.

These scholars establish a connection between the environment, social relationships, and campus support and student achievement. Student relationships and college support may increase persistence, GPAs, and graduation rates. In addition to integrating with Bronfenbrenner's EST (1981) holistic frameworks extend and integrate the development interactions of all systems. A framework combining intersubjective experiences and Bronfenbrenner's ecological systems theory is compared to identity beliefs (p. 817). As food insecurity is a particularly significant stressor among community college students, it is the focus of this investigation, which employs these foundational theories. Primarily using EST as the framework of this study and ideas of the seminal works provides a foundation for understanding food-insecure community college students in North Carolina.

Chapter 3: Methodology

Overview of Research Plan and Methodology

Although research has been conducted on hungry college students, Broton and Goldrick-Rab, (2018b); Mukigi et al. (2018); and U.S. Government Accountability Office (2018) few investigations have taken a biographical, narrative approach. Weiss (1994) describes qualitative interviewing as a means of understanding life and what constitutes the human condition. Qualitative research is a "process of understanding based on a distinct methodological approach to inquiry that explores a social or human problem. The researcher builds a complex, holistic picture; analyzes words; reports detailed views of participants; and conducts the study in a natural setting" (Creswell & Poth, 2018, p. 326).

Narrative inquiry allows for the unpacking of stories in which an individual is shaped by interruptions, successes and failures, and the impact of their experiences (Clandinin & Connelly, 2000). It also provides recognition of a growth continuum, as each experience builds upon another (Clandinin & Connelly, 2000). Clandinin and Connelly (2000) describe the purpose of a narrative study as follows:

A collaboration between researcher and participants, over time, in a place or series of places, and social interactions with milieus. An inquirer enters this matrix in the midst and progresses in the same spirit, concluding the inquiry still in the midst of living and telling, reliving, and retelling the stories of the experiences that make up people's lives, both individual and social (p. 20).

The use of life story data has a relatively long tradition with qualitative researchers beginning in the early 1900s (Jolly, 2001). This form of interviewing "illuminates the intersection of biography, history, and society" (Mills, 1959). These "plots" or stories present accounts of time and space. These accounts can be "organized thematically and episodically"

(Riessman, 2003). However, if personal accounts of specific life events are not asked well, narratives could extend to additional data, which may not be needed for the analysis (Riessman, 2003). According to Saldana (2011), "qualitative research consists of an eclectic collection of approaches and methods used in several social science disciplines" (pp. 1-2). These collections include interviews, autobiographies, field notes, anecdotes, records, audio and video recordings, and other materials that provide annals of life experiences. The semi-structured interview process allows for questions to be determined before the actual interviews, and "allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic" (Merriam & Tisdell, 2016). By utilizing this method, it provided deeper insight into how these students are making their way through college, what can be learned from their experiences, and a way to capture the complexities of the phenomenon.

The review of the literature and conceptual framework of Bronfenbrenner (1981) provided the backdrop for this study as it attempted to learn about the lived experiences of hungry community college students. Chapter three lays out a plan to understand how students continue in school while they are hungry, how the strain of hunger disrupts their success and their perspective of how hunger affects their college experience. While research is beginning to uncover the magnitude of the problem, very few studies have focused on the actual stories of students living with food scarcity as they attempt to succeed in college (U.S. Government Accountability Office, 2018). This study's narratives uncover relevant barriers and experiences encountered while attempting to complete academic work and obtain a credential.

This chapter provides an account of the qualitative methodology used in this study, the subjectivity of my role as a researcher, the relevant ethical considerations, the setting and selection of participants, data collection and analysis, strategies for quality and rigor, and the

limitations and delimitations of this work. This qualitative research study on North Carolina community college students' experiences of food insecurity seeks to understand a phenomena found on community college campuses across the country (Goldrick-Rab et al., 2017; Goldrick-Rab & Cady, 2018; Martinez et al., 2018).

Student life experiences do not end when they enter college. Many are subjected to hardships faced during their K-12 years. Ecological systems theory tells us that, where the individual is viewed as part of a system, that relationships are influenced by the immediate environment, and by larger systems, in this case, education.

Research Questions

The purpose of this narrative study is to understand the lived experiences of students who report being food insecure. The following central research questions guide the study:

RQ1: How does food insecurity shape the experiences of community college students in North Carolina?

RQ2: How do students view the relationship between food insecurity and their college success?

Subjectivity and the Researcher's Role

After obtaining my master's degree in social work in 1991, I began to provide clinical therapeutic services to children and families in need of restorative functioning. While I wish to conduct my research without bias or fixed thinking, I accept that there will be some bias in my interpretation of the data, due to my 20+ years of experience in the field. Some of my biases include identifying with those who are single mothers, who have been obliged by their circumstances to seek help from governmental programs, who have been homeless or at risk for homelessness, who have been worried about where their next meal was coming from, or who have been oppressed because they are female. Although I have personal experience in this

subject matter, listening to the lived experiences of students experiencing food insecurity can be difficult. However, my own experience is also helpful, in that it enables me to empathize with student experiences of poverty and other psychosocial hardships. As a new researcher, I am disadvantaged by not having had the background of this reduction process, which is defined by Husserl as "an unfolding of abstract features shared by appropriate sets of fictitious or real-life examples" (Stanford encyclopedia of philosophy, 2016). These biases also offer an opportunity to understand the student better and view them with empathy and compassion. I have a strong belief in people and their desire to help one another.

I am currently employed at a community college, where I regularly see students who experience poverty, food insecurity, and homelessness, which affects their attendance, graduation timing, and ability to purchase books and other materials needed to succeed in school. Many of my students are financial-aid recipients. Our student support services seem to see the student through the lens of education, without considering other aspects of their needs. The purpose of the community college is to meet the educational needs of the community by offering affordable education (Cooper, 2010).

I am enthusiastic about uncovering the genuine issues that affect community college students, and this passion comes from frustration with the system that does not view students holistically. Using a paradigm grounded in a constructionist and interpretive viewpoint, I engaged with my role respectfully and as a less authoritative inquirer, recognized overlapping views of how hunger affects college students (Rubin & Rubin, 2012). In my role as the researcher, I am partnered with the participant. Moustakas (1994) suggests that the researcher and participant are "co-researchers" with both learning how the phenomena are affecting their lives. I must position myself as a listener and establish trust through rapport building (Rubin &

Rubin, 2012). Food insecurity is a sensitive issue; thus, the investigator must have an empathic nature to provide opportunities to share without judgment or shame.

My role as the researcher also involves the following:

- listening and being aware of my bias
- conducting exit interview check-ins with a colleague to discuss any concerns and measures or bias that could have leaked into the research
- showing respect to all participants (Rubin & Rubin, 2012)
- refraining from expressing my point of view (Rubin & Rubin, 2012) ● honoring the promises that I make (Rubin & Rubin, 2012)
- doing no harm (Rubin & Rubin, 2012)
- asking open-ended questions (Merrian & Tisdell, 2016) ● avoiding leading questions (Creswell, 2013)
- continually requesting feedback from my chair and methodologist

Ethical Considerations

Ethical considerations are essential to ensure the safety of the participants. The National Research Act, PL 93-348, requires that all human subjects involved in research be protected by governing committees (H.R.7724 - 93rd Congress, 1974). The Institutional Review Board (IRB) approval was obtained at the university and from each community college, through their respective research review boards, thus guaranteeing the rights and confidentiality of each volunteer to ensure the safety of all participants. Informed consent was obtained to safeguard the participants. The following information was explained to the participants: (a) the purpose of research, (b) the participant's right to decline, (c) risk disclosure, (d) the prospective benefits of

the research, (e) the limits of confidentiality, (f) the incentives for participation, and (g) the researcher and participant's contact information for questions and answers (American Psychological Association, 2003). Ethical interview behavior included the avoidance of discriminatory interactions and questions, sparked by my desire to help students suffering issues of hunger. It was also my responsibility to recognize that issues of food insecurity can cause shame and embarrassment. I ensured that each respondent received a list of referral sources for use in the event of psychosocial difficulties arising due to involvement in the research.

Protection of Human Subjects

With any research study, the protection of data is required to ensure the integrity of the study and the privacy and confidentiality of the participants. Confidentiality can be defined as "the privacy of individuals will be protected in that the data they provide will be handled and reported in such a way that the data cannot be associated with the research participants personally" (Mertens, 2015). There were several approaches taken to safeguard the confidentiality of every volunteer. For this study, each participant was assigned a pseudonym to de-identify any data that could link back to any collected information. The pseudonyms were stored in a file that is securely locked behind two doors and a locked file cabinet.

Secondly, interview locations were dually chosen by the participant and the researcher. However, due to the current pandemic of COVID-19, many of the interviews were done over WebEx with only the volunteer and the researcher in the virtual room. The interviews were recorded, field notes were taken, and all written and recorded material was stored on the University of North Carolina at Charlotte's (UNCC) Google Drive for safety and security.

The participants were given written documentation on issues of confidentiality, informed consent, rights to privacy, and the right to withdraw without penalty. I was conscious of the need

to preserve the safety of the participants and to ensure they were free from harm, mistreatment, and manipulation. The research was conducted with integrity and honesty, with a focus on my responsibilities to the participants and their experiences. I performed virtual check-ins to mediate my personal biases (American Psychological Association, 2003). These check-ins took place through discussions with dissertation committee members and with reviews of the audiotape of each interview. I did not practice outside of the scope of my competence (American Psychological Association, 2010; National Association of Social Workers, 2017).

Research Sites and Participants

Settings

As noted in Chapter 1, North Carolina has the third-largest community college system in the nation, with 58 colleges throughout the state. The mission of the North Carolina community college system is to provide a high-quality education that minimizes barriers and maximizes student success (North Carolina Community College System, 2020). It has one of the lowest levels of tuition costs in the southeast region, with an average tuition price for in-state students of $3,911 (Community College Review, 2020). During 2017-2018, the number of FTE headcounts was 221,929.5 (NC Community Colleges, 2019b). Moreover, in 2020, the number of FAFSA applications that received financial aid awards in North Carolina was 64,412 (The Office of the U.S. Department of Education, 2020).

The Carnegie Classification of Institutions of Higher Education was used to determine the category of three community colleges in North Carolina to ensure a well-rounded study. This classification system is generally used to categorize higher education. It has been the “leading framework for recognizing and describing institutional diversity in [the] U.S. higher education

for the past four and a half decades" (The Carnegie Classification of Institution Higher Education, 2017).

The first college in the study is categorized as a high transfer/high non-traditional college with an FTE count of 2747.1 students during the year of 2018-2019 (NC Community Colleges, 2019a). It is more than 100 years old and is situated in the middle of the state, with two campuses. For anonymity, the college is referred to as "Middle Enrollment College" (MEC). MEC students are working towards degrees, diplomas, certificates, and GEDs, or taking continuing education classes (NC Community Colleges, 2018). The assessment of student need is in its early stages as the institution opened a very small food pantry in the late fall of 2019.

The second college is a mixed transfer/career and technical-high traditional community college with an FTE count of 2,707.1 students during the year of 2018-2019 (NC Community Colleges, 2019b). It is located in the north-central region of the state and opened in 1962 as an industrial college. The college will be referred to here as Lowest Enrollment College (LEC). It has a food pantry that serves both students and personnel. A food pantry was developed in January of 2020. The college relied on word-of-mouth and minimal advertising about the service. However, since the beginning of the pandemic, the pantry has changed how it assists students who are food insecure. The college now provides food distribution through curbside pickup. Criteria have also been extended to give food amounts that would feed six family members, even if the total number of a family is only one. If a student is continuously asking for food (over $400), the pantry refers the student to their counseling services where community referrals are given.

The third institution under study, High Enrollment College (HEC), is the largest of the three. It was formed in 1960 and is categorized as a mixed transfer/career and technical-high

traditional with 7,985.2 FTE students(NC Community Colleges, 2019a). Currently, they are working to provide students with a pantry.

Participant Selection

Recruitment for this study was done in two stages. I contacted each college and spoke with personnel in the student services departments, those who volunteer in the campus food pantries, and to student activities personnel to identify 10-15 students. Participant recruitment flyers were also posted around each campus and on the respective college's website.

Once a potential candidate's information was shared with me, I made phone calls to each pool member and shared the purpose of my research to see if they had an interest in participating. Essentially, I wanted to establish that they had, at some point during their college career, experienced food insecurity. Each was informed that they would be compensated with a $30 gift voucher once the interviews were completed.

Data Collection

Patton (2015, p. 46) notes that "documentation of interviews and observations generate dense data that requires careful review, consideration to process, and responsiveness to situation dynamics." The best interview protocol involves "open-ended questions and probes in-depth responses about people's experiences, perspectives, opinions, feelings, and knowledge. Data consists of verbatim quotations with sufficient context to be interpretable. Patton (2015) also describes fieldwork strategies as taking an empathic stance by using no judgment, sensitive, respectful, aware, responsive, and being present in the moment.

Student hunger is a sensitive subject. Students have different sets of coping mechanisms, resiliency, prioritizing, purpose, and future goals and path. Eighty percent were female, 20% were male, 47% were Black, 33% were Caucasian, .06% to higher education. Questions were

aligned with the theoretical frameworks of ecological systems theory and phenomenological variants of ecological systems theory. The questions were carefully crafted to allow the participant to give as much information as possible by providing the historical effects of how their nested environments, self-perceptions, and other variants, such as hunger, impacted their schooling.

Mertens (2015) suggests beginning the interview process through building rapport and trust by sharing the purpose, presenting the researcher's credentials, and promising confidentiality. Rapport can be created using verbal and non-verbal skills, active listening, and small talk. Mertens (2015) notes that interview questions should be sequential, and when there is a question about a participant's response, one should seek clarification. It is also best to ask a variety of types of questions and refrain from asking too many closed-ended questions, as these elicit less information and may "cut off" the conversation with the participant. Additional techniques for obtaining qualitative narratives include paraphrasing and summarizing what the participant has said.

The following questions were asked during the interviews:

1. Tell me a little about yourself [probe for further information].
    a. Where did you grow up?
    b. Who was in your family?
    c. What is their schooling history?
    d. What are your struggles/barriers?
2. Did you ever grow up not having enough food in your home?
3. How did those experiences shape you and your development?
4. Did hunger impact your relationship with others, your community influences?

5. What stressors did you feel when you could not eat?

6. When you experience food insecurity, where did you turn for help? What was effective? (Skip if 2-5 are answered no)

7. How has hunger affected your experiences with how you look at yourself and your college experience?

8. Have you ever worried that your lack of food was going to affect your college performance, i.e., homework, tests, etc.?

9. How does hunger affect your success in college?

10. Is there anything else you feel I should know about your experiences with hunger?

Question one was asked in order to provide the interviewer context of each participant's life experiences. Questions two through six sought to understand how each participant's micro and meso environments with food insecurity molded their development. The questions were utilized to frame the participants' answers closely to my conceptual framework of EST. Questions seven through ten allowed for further discussions with student narratives and their self-perception in relation to hunger.

Data Analysis Procedures

Merriam and Tisdell (2016) state that the objective of data analysis is to make sense of the data and formulate concepts, and Polkinghorn (1995) suggests that the purpose of arranging narrative information is to deduce the meaning of the research. A comparison of the collected stories provides the opportunity to interpret the context (Patton, 2015).

Creswell and Poth (2018, p. 199) note that through data analysis in a narrative study, the researcher must identify and describe the stories in chronological order, identify any epiphanies and contextual developments, and interpret larger meanings. Manning and Kunkel (2014, p. 49)

describe interviewing as designed into three areas. They recommend “beginning with the background or history of the interviewee and their experiences, then the recent experiences of the interviewee, and meanings of the interviewee’s experience and how those experiences might relate to the future. It was imperative to probe the interviewees’ experiences of hunger and identify their associated behaviors to obtain valuable information. Each interview was recorded by audiotape, and field notes were made to ensure that specific questions that arose during the interview were addressed. After each interview, the audiotape was transcribed using Scribbr software and stored in the UNC Charlotte Google Drive, complying with appropriate safety and security measures (Mertens, 2015). I followed the general protocols for qualitative interviewing, as proposed by (Rubin & Rubin, 2012):

1. Transcribing and summarizing each interview.
2. Coding excerpts to highlight relevant concepts, themes, events, examples, names, places, dates, etc.
3. Identifying excerpts with the same coding, sorting them into a single file, and summarizing them.
4. Sorting and resorting the material within each file and comparing the data in different subgroups, then summarizing the results of the sorting.
5. Using the framework to discover whether or not food insecurity embeds student success. Operating through the questions being asked to the students.
6. Integrating the data from each interview to create a complete picture.
7. Combining concepts and themes to generate themes, then labeling each data set and organizing them for further analysis (p. 190).

Saldana (2016, p. 43) describes coding as 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.” He suggests coding the initial interview, field notes, and any other data obtained by the researcher to establish possible patterns, assertions, theories, or additional insights that may help to connect meaning. Additionally, Saldana (2016) suggests analytic memo writing to consider options for codes and to provide opportunities to analyze information, challenge hypotheses, and open opportunities to formulate data. Analytic memoing provided the researcher with a chance to see the patterns that evolved throughout the research. He also contends that coding is heuristic, the approach to problem-solving, learning, or discovery can connect the data and ideas (p. 8).

Coding research data is a process that evolves through numerous steps like deliberate coding into groupings, recoding, and regrouping, all of which should lead to important themes or theories (Mertens, 2015; Riessman, 2003; Saldana, 2016; Weiss, 1994). The preliminary coding was first done by hand to help the researcher get to know the datum. Coding, which is information that occurs naturally, was used to quote exact verbiage from the respondents (Saldana, 2016).

Understanding that I would be employing Bronfenbrenner's theory, I designed the EST-related questions around its inner workings. For example, questions one through four focused on the individuals' lives previous to attending college. The second set of questions focused on the community college experience and were created using EST.

When the original interviews were recorded via Zoom, I transcribed them using Scriber. I took the documents from each transcription and, using various highlight colors, highlighted, and identified themes that I observed emerge. I then took each document's color-coding statements

for text, clipped them out, and sorted them. After repeatedly sorting through the color-coded scripts, I adopted Bronfenbrenner's theological framework and examined the location of each finding inside the EST framework. I then entered the data into deduce, where I concluded my investigation.

Following hand-coding, I utilized a computer-assisted coding program to stabilize common themes, characteristics, and other useful information (Charmaz, 2014; Creswell & Poth, 2018; Mertens, 2015; Weiss, 1994). Dedoose was chosen due to its capabilities to electronically journal, transcribe audio files, import ease, organizational capacity when formulating data chunks, and extensive support for the researcher (SocioCultural Research Consultants, 2021). The purpose of coding for my research is to establish themes that emerge from the data. These themes were used to answer my research questions of how food insecurity shapes the experiences of community college students in North Carolina and how students view the relationship between food insecurity and their college success.

Strategies for Quality

Patton (2015, p. 87) notes the concept of "epoche" in narrative research, which is the "pure state of being required for fresh perceiving and experiencing." I began by developing a subjectivity statement to provide openness and clarity and avoid potential bias. I needed to analyze my thoughts, opinions as well as experiences before beginning the study. Second, I aligned my perspective with the desired contextual framework mentioned in Chapter two (Bronfenbrenner, 1981a; Chickering & Reisser, 1993; Engle & Tinto, 2008; Erikson, 1963; Maslow, 1943; Tinto, 1975a, 1993). The quality of the interview questions provided more insight into how food insecurity affects student success (Lincoln & Guba, 1985). Patton (2015) and

Merriam and Tisdell (2016) stress the importance of cross-checking data to increase credibility and internal validity in the form of triangulation.

Additionally, sufficient data were gathered to reach a saturation point, at which no new information was found (Rubin & Rubin, 2012). I also solicited feedback from the participants, namely sharing the written transcripts with them and allowing them to review the record and provide an opportunity to make corrections. I acknowledged that I am new to research and require guidance from those with more experience in the field, thus seeking supervision to ensure the reliability of my findings.

Limitations

Retelling stories, as Josselson (1996) points out, may be a difficult procedure because the researcher will almost certainly extract meaning based on their own point of view. This can make the process more convoluted. In order to ensure that they are delivering an accurate account of the experiences that others have had, the researcher conducting narrative inquiry needs to be cognizant of ambiguity, interpretation, quality, authenticity, and integrity (Clandinin & Connelly, 2000; Josselson, 1996; Peshkin, 1988).

It should be noted that this study had certain limitations. It is imperative that those who are interested in continuing research about the real-life experiences of those who face obstacles, such as these participants, seek support to prevent possible secondary or vicarious trauma as a consequence of their research. Also, given how humiliating food insecurity is, many participants might not have wanted to participate and share their personal accounts with hunger. In addition, Covid-19 was ongoing, and many community college campuses were unavailable for in-person meetings.

Participant Summary

Fifteen participants who experience food insecurity made the brave decision to share their stories. The table below gives information about the participants. Follow-up interviews were conducted seeking additional context for the participants' experiences of hunger. Field notes were prepared by the researcher containing records of body language, word inflection, and meanings, and documenting all the offered descriptive details (Clandinin & Connelly, 2000; Kohler Riessman, 1993; Polkinghorn, 1995; Rossman & Rallis, 2017). As suggested by Polkinghorn (1995) and Rossman and Rallis (2017), all 15 transcriptions were checked and corrected for accuracy with the actual audio/video interviews.

Table one provides information about the actual participant’s demographics. Eighty percents were female, 20% were male, 47% were Black, 33% were Caucasian, .06% were Latinx, and .06 are Cambodian. Seventy-three percent of students attended a MT/C college, 13% attended a MEC college, and 13% attended a LEC college.

Table 1

Participant Demographics

Participant	Sex	Race	College Type
Abby	Female	Black	MT/C
Amanda	Female	Black	MEC
Anyiah	Female	Black	MT/C
Brian	Male	Caucasian	MT/C
Carrie	Female	Caucasian	MT/C
Danielle	Female	Cambodian	LEC
David	Male	Caucasian	MT/C
Gary	Male	Black	MT/C
Heather	Female	Caucasian	MT/C
Iona	Female	Latinx	MEC
Jenny	Female	Caucasian	MT/C
Kathy	Female	Black	MT/C
Keelie	Female	Black	MT/C
Marissa	Female	Black	MT/C
Sam	Female	White	LEC

Table 1. Summary of participant demographics in study using Carnegie Classifications of Colleges by Enrollment. LEC- Low Enrollment College, MT/C-Mixed Transfer/Career, MEC-Middle Enrollment College

Throughout the course of the study, the participants discussed a variety of difficulties, including but not limited to living in poverty; having a difficult childhood; being in foster care; having a mental illness; abusing substances; experiencing shame and secrecy; having poor grades; having poor attendance; having difficulties concentrating; having specific eating practices; and having financial difficulties.

Table 2.

Findings of Participant's Struggles Prior to Entering Community College

Participant	*Childhood Adversities*	*Grew up in Poverty*	*Foster Care*	*Mental Illness*	*Substance Abuse*
Abby	X	X		X	
Amanda	X	X			
Anyiah	X	X	X	X	
Brian	X	X	X[1]	X	X
Carrie	X				
Danielle	X	X			
David	X	X	X[1]	X	X
Gary	X	X			
Heather					
Iona	X	X		X	
Jenny	X	X	X		
Kathy	X	X		X	
Keelie	X	X	X	X	
Marissa	X	X			
Sam	X				

Table 2. Results of participants struggles before entering community college. X[1] alternative placement outside of home.

Delimitation

My focus was on the depth of understanding of how interviewees view hunger and its impact on their success or lack at their college, which means it is not necessarily generalizing across the student population. Nonetheless, this study has the possibility of illuminating the meaning of quantitative data on food insecurity.

Conclusion

This chapter has provided the methodological justification and procedures for this biographical, narrative study. The study sought to illuminate the experiences of hungry college students at three community colleges in North Carolina. The participants volunteered for the

study and were chosen based on their interest. Each was given a $30 gift voucher for participating.

The first interview was semi-structured and asked for a brief biographical history of the respondent and their experience with hunger along with its role in their achieving college goals. Follow-up interviews were conducted over the telephone to collect any data missed during the first interview and participants were given a $30 voucher for their time. The audiotaped interviews were transcribed and then coded first by hand and then using Dedoose for data analysis.

This chapter discussed the research questions, the researcher's positionality, ethical considerations, and data collection methods and analysis, along with the study's limitations, delimitations, and approaches for quality. Chapter 4 presents the results of the study, and Chapter 5 provides an interpretation of the results.

Chapter Four: Research Findings

Introduction

As noted in Chapter 1, this study seeks to understand the problems and experiences of hungry North Carolina community college students. This chapter addresses the two specific research questions presented in Chapter 1. First it reports on the life experiences of these students; it then examines the effects of hunger while they are studying at a community college. To gather these answers, I asked the following research questions:

RQ1. How does food insecurity shape the experiences of community college students in North Carolina?

RQ2. How do students view the relationship between food insecurity and their college success?

This chapter outlines the study process, organizes the findings, and summarizes each participant's story, including their formative years, their experiences with hunger as a community college student, and the impact that experience has had on their academic progress. This data analysis identifies the connected experiences that then enabled the development of sixteen overarching findings to answer the research questions.

Summary of the Interview Outcomes

The outcomes of this research sample included vital information about the participant's experiences prior to entering a two-year college. The sample comprised of 93% of students having difficulties growing up, 33% of student living outside of their biological homes, 47% of students reporting mental health concerns, and 13% of participants having histories of drug and alcohol abuse. The findings are presented in the following tables.

The outcomes of the participant's current level of food security at the time of this study is represented in Table 3. Ninety-three percent of students indicated low food security and .06% reported being very low food secure. These findings are listed in the following table:

Table 3

Categorization Level of Food Insecurity

Participants	Low Food Security	Very Low Food Security
Abby	X	
Amanda	X	
Anyiah	X	
Brian	X	
Carrie	X	
Danielle	X	
David	X	
Gary	X	
Heather	X	
Iona	X	
Jenny		X
Kathy	X	
Keelie	X	
Marissa	X	
Sam	X	

Table 3. Food level result were at the time of the study.

Table four represents the findings in interviews that were focused on the experiences of students while at their perspective community colleges are located in the table below. Sixty percent of student reported shame, 53% of students indicated lower grades, 2% stated having difficulty with class attendance, 67% of students communicated poor concentration, 33% indicated devising eating strategies to effectively get by with what food they had, 2% of students had awareness there were pantries on their campus, and 2% of students reported the financial relief that the government gave during the pandemic.

Table 4

Summary of Participant's Interviews

Participant	*Shame*	*Low Grades*	*Low Atten-dance*	*Poor Concentration*	*Eating Strategies*	*Campus Pantry Awareness*	*Financial Relief During Covid-19*	*Mothers*
Abby				X	X			
Amanda		X						
Anyiah	X						X	X
Brian	X	X		X	X		X	
Carrie		X	X	X				X
Danielle		X						
David	X			X		X		
Gary				X	X			
Heather	X	X			X			
Iona	X	X	X	X		X		X
Jenny	X	X	X	X			X	X
Kathy	X			X				X
Keelie								
Marissa	X	X		X				X
Sam	X			X	X	X		X

Table 4. Summary of Participant's Interviews

Summary of the Research Procedure

Using a narrative approach in accordance with typical phenomenological research, data analysis methods were utilized to precisely understand the lived experiences of food insecure NC community college students. After 24 scheduled interviews, the results were that only 15 students completed the study by meeting with the researcher. Some contacts were not utilized because, after reading the purpose and objective of the study, these students did not identify themselves as food-insecure students. In addition, there were scheduled interviews in which the students were unable to meet with the interviewer. The participant pool consisted of two-year community college students who volunteered and agreed to be interviewed. The respondents are

both men and women who wished to help people understand their food insecurity experiences and who aspire to alleviate the plight of many two-year students.

The interview questions next focused on the participants' experiences of hunger during community college. These included the stressors from being hungry, their personal perspective as a hungry college student, how lack of food affected their college performance, and their success in college despite having food insecurity. The interview questions are listed below:

1. Tell me a little about yourself.
    a. Where did you grow up?
    b. Who was in your family?
    c. What is your schooling history?
    d. What struggles/barriers have you encountered?
2. Did you grow up not having enough food in your home?
3. How did those experiences shape you and your development?
4. Did hunger impact your relationship with others, your community influences?
5. I would like to shift a bit and talk about your experiences with hunger.
6. What stressors did you feel when you could not eat?
7. When you experienced food insecurity, where did you turn for help? What help was effective and what was not?
8. How has hunger affected your experiences about how you look at yourself and your college experience?
9. Have you ever worried that your lack of food would affect your college performance, i.e., homework, tests, etc.?
10. How has hunger affected your success in college?

11. Are there any other details you feel I should know about your experiences with hunger?

Participant Summary

Abby. Abby is a 46-year-old online community college student. Abby explained that when she first started at [college name], she was worried she would not have enough to eat. Abby ate only two meals a day until she received food stamps and Medicaid.

Abby has lived in North Carolina her entire life. She grew up in poverty with her brother and a single parent. She believes that her family has suffered many difficulties in life, including growing up in a split family, as well as having a mom who worked several jobs to make ends meet and was too prideful to accept government assistance. Abby's family was also very involved in church which would later become a factor in her development.

Abby suffers from severe mental illness which she believed began at an early age. She suffers from schizoaffective disorder and depression where she would hear voices, suffered from mood dysregulation, and had angry outbursts which caused her to struggle as a young person. When she was young, her mother felt that her church could help her mental illness versus receiving conventional medicine. This treatment was not effective, and she was not treated medically at the onset of her illnesses.

During her K-12 years, Abby described herself as "different." She saw herself as unconventional and gravitating toward similar peers who also did not quite fit in. She was interested in art and music and focused on her creativity. Coming from poverty, Abby received free and reduced lunches, and reported that she was embarrassed by that assistance, even going to the point to hide her lunch card and sometimes skipping meals, so others "wouldn't think I was poor because it was embarrassing." The family's food insecurity was so significant that she

would hoard and stretch her food supply whenever she received meals to the point that she would make one meal last for the entire day.

As a community college student, Abby continues to monitor the number of times she eats. When Abby started college, her focus was on getting her next meal. Now she says that "I can focus on my studies, on my education, and my classes because that worry is off of me," as she now receives disability support, food stamps, and Medicaid.

Amanda. Amanda is in her second semester at community college, but her community college journey began as an Early College student. However, she found that she was not a good fit for this program and returned to her public school. She says she does not have strong feelings about college, but she "needs to do it." She reported that her early experiences caused her some anxiety and depression and stated it has "gotten worse due to bipolar disorder." She "wished she had been warned about the [stressors] of college." Amanda cares for her younger sister. The family has moved around to several areas in North Carolina due to Section 8 housing issues.

She grew up with food stamps and other assistance from the government. She described a year in which her family did not receive food stamps and had to go to several food pantries for assistance. Amanda reported that this food insecurity was hampering her development. She sometimes went without lunch, which did not help her diabetes. "Food stamps would not go far, and eating healthier substitutions are too high priced."

Life for Amanda was mixed because of her being gay, but says she had a good LGBT community, and her family accepted her. However, she also described her family as having a lot of 'drama,' as many members had difficulties with addictions and violence. She also witnessed physical abuse in her immediate family and felt afraid of her dad because of his anger. Amanda's mom raised her as a single mother as her dad was not around.

Amanda moved to [area] and lived in an apartment complex where she had her best memories. At the time, she enjoyed friends and crafting. She also liked church. During her middle and high school years however, she felt as if she did not fit in anywhere.

As a community college student, Amanda received financial aid. She uses the help to pay for her schooling and books and what she has left she gives to her mother to help pay for food and bills. Amanda and her family currently do not receive food stamps and have to be very frugal with money. The stress of the last semester at college caused her to eat cheap unhealthy foods. Physically, she suffers from headaches two and three times a week. “I’m lucky if I eat twice a day because of my mental state and the cost.” Amanda says she loses focus in class, often tunes out, and does not absorb the information from her professors. Because of this issue, she stresses about “getting some work done or is it going to be good enough.” She revisits the class lecture recordings to get help.

Aniyah. Aniyah is a first-year community college student who recently moved to North Carolina from Wisconsin and is now working toward her two-year degree. She shared her struggles with food insecurity and what it is like to be successful while still hungry:

I mean, yeah, definitely when you don't eat a good breakfast or meal, you're not thinking... You're not thinking properly. You're not yourself. I get angry when I'm hungry, so... Absolutely, it [hunger] could affect it in that's why they say you need to eat breakfast, that you need to have breakfast. And when I wasn't eating, I wasn't all there, and I couldn't think the way I needed to.

During Aniyah’s early years, her parents divorced. She moved around a lot with her family and lived in four different foster homes between the ages of 16 through 18. During those moves, she saw violence, gangs, and riots. Aniyah says she was a bit rebellious but interested in school; she “just wanted to get away from her family.” She was also diagnosed as bipolar at 15. At the age of

18, Aniyah aged out of foster care, but she was able to access financial resources from the State and obtain SSI. Aniyah had one son at 19 and a second at 24.

Aniyah moved to North Carolina with her boyfriend and said they were financially stable. However, when Covid-19 arrived, she lost her job, and her boyfriend left the house. These predicaments left them unable to pay for accommodations and food. She remembers times when she even forgot to eat and lost 35 pounds. Despite her food insecurity, she always made sure that she fed her children. She accepted food from her college, pantries, churches and received financial help from her father. She explained that "The life that you believe you are living can be snatched from you. You can be one of those people who fight for food, for a home in the twinkling of an eye." Aniyah said that living with hunger is a humbling experience.

Aniyah's food insecurity produced barriers for getting her education. She has trouble concentrating and gets angry when she is hungry.

In college, I fell behind because I was so worried more about my bills and things like that, that I'd be present in class, but not present mentally, 'cause I would be making phone calls while listening to class, trying to figure out how and what I'm going to do because there are times, I have to be on hold for three hours of unemployment and it's like, I'm stressing out. I'm taking care of my baby, I have to go pick up my seven-year-old from school, and it was a lot.

Brian. Brian, 33, identifies as a Caucasian male and is a North Carolina community college student. He recently received approval for a new apartment as it is hard to acquire a place to live because he is a convicted felon. Growing up, Brian had a lot of good memories but many difficult experiences. His parents separated when he was only one. His Dad took custody of him. He says he felt taken care of for the most part but describes his father as "abusive." Brian returned to his mother's home, where he became involved in church and sports. However, he was

rebellious with antisocial behavior when he was older, including selling and using drugs and alcohol.

Brian grew up with free and reduced lunches and frequently asked his friends for food. During his K-12 years, Brain learned how to cope with the lack of food. He would go to the cafeteria and purchase day-old food, where he was able to purchase double the amount of food for half of the price. He was a gifted student but had to graduate “out the backdoor” due to the interference from his drug use. He remembers that his mom would go to food banks for assistance.

Brian was active in sports and the Boy Scouts. He also describes his dad as “pretty abusive” and, as Brian got older, he became a “handful.” He began smoking marijuana very early and started smoking crack cocaine at 12. Brian has witnessed violence during drug transactions and detention as a young student and he describes himself as having early-onset antisocial behaviors. In his late adolescence, he was active with his addiction, which resulted in several bouts of incarceration until his late 20’s, one for three months, and another for five months. Brian was ashamed of his experiences in life. Currently, he has a DUI pending from two years ago. Due to restitutions he owes from his legal troubles, he struggles with money.

Brian is concerned about paying for his living expenses, going to school, and continuing his journey as a healthy adult. Brian was proud to share that he and his girlfriend work closely to budget the meals and shared that the stimulus checks from COVID relief have helped. He is also proud he is on the President’s list for his grades.

For Brian, the key to managing supplies in the past six months has been to budget. He takes food from baskets that the school provides when he is on campus. His performance at

school is challenging whenever he is hungry. He has difficulty concentrating, has low energy vitality in school, and has lost weight. Brian says that his grades suffer as well.

As a hungry student, Brian finds his food insecurity to be a humbling experience. He shares that he has underachieved because of hunger. He sometimes uses credit cards to buy food and has also found that "nearly" expired meat can be discounted if you ask the manager." There is also a local 'give-and-take' box that houses food. He picks up goods, but is embarrassed to use this resource and says, "I don't want to go to a food pantry all my life."

COVID-19 government assistance was extremely helpful to make ends meet. Brian received foundation dollars from school to help pay for his tuition, but he is concerned about the student loans he has had to take out. He reports being proud of the fact that he helps others much like himself as a peer support specialist, "Yeah...I am just trying to make it, and I feel like I have been given a new life." Brian wants to transfer to UNCG and become a social worker to help others who have similar struggles. Brian is active in his recovery. He understands it, as he and the rest of his immediate family have histories of addictions and incarcerations.

Carrie. Carrie is a 35-year-old community college student who is pursuing her diploma as a paralegal. She describes her childhood as chaotic, as her parents divorced when she was in middle school. Her father is an alcoholic; her mother has been married multiple times. The food in their home came from them receiving mostly packaged meals. As a child, food was simple and sometimes scarce.

Her family received food stamps, which entitled her to free and reduced lunch. She and her siblings sometimes stayed at their friends' houses and would eat there because "somebody would feed you...cause it's the South." Carrie stated that while she struggled with sustenance, her grades would drop. Her concentration lacked, and "all she could think about was how hungry she

was." She remembers a time when her instructor could "see how hungry she was because he knew her circumstances" and would bring her back to his office, where he would provide her with a drink and snack. Food stamps also carried a stigma.

As a community college student, Carrie skips meals, but she feels sick when she does. She has turned to her college's food pantry for help but states that the gift cards she received were much more helpful than some of the foods she was given. Carrie was reluctant to share that she had stolen food. She shared that she does not buy proteins due to the cost. She has not utilized other resources in her community either.

As a single mom, Carrie takes her two-year-old child with her while delivering food through Postmates. She will not allow her child to go hungry and ends up forfeiting her food because of this dedication. She shared that there were many times while in school that she was "so hungry, so miserable that I did not even pay attention to what was being said by my teacher. I was just sitting there in a zone, thinking about what I'm gonna do and how I'm gonna be able to afford to get more food."

Her lack of food was a concern for her because she did not want to miss something important that she needed to know for a class. She has trouble with attendance because she feels sick from hunger. Carrie says that she has some instructors who understand her situation, but others, not so much. Her poor attendance has caused her to be dropped from some classes which delayed graduation. She describes her resiliency as wanting to change the generational strongholds for her daughter.

Danielle. Danielle is a returning college student. She recently graduated with her bachelor's degree but changed her desire for a career in nursing and is now attending a local

community college due to the lower costs it provides her. “Money is definitely something I worry about now, especially during the pandemic.”

Danielle was born and raised in Virginia, where she lived with her parents and sister. Her parents were immigrants from Cambodia. Her parents came to America with nothing, and she is proud to say that her parents possessed the financial means to provide for her and her sister. Danielle said her family did not have many food insecurities, but they would use coupons to make ends meet. She did receive free and reduced lunch when she moved to North Carolina. Danielle summarized by saying that she had a happy childhood.

According to Danielle, she transitioned well to the move and enjoyed her middle and high school years. She shared that she experienced some embarrassment and shame when going to breakfast at school, as it separated her from the “other students who had money.” She found that she would have to pack a lunch or refused to eat on campus to save money in college. It took her six years to graduate because she took a year off from school to work and stated that her return to college was less of a struggle because of her income. She lives at home most often, but also lives with her boyfriend at times. She finds that she eats more brunch to substitute two meals. They split meals to save money as well.

On the days that she skips meals, she eats a protein bar. On those days, she has trouble performing. “I have no energy throughout the day, and I can’t function well or think well or do my homework or concentrate or even have the energy to go do a workout, which I usually do at the end of the day. On the days I do skip lunch, I can’t function.” Danielle also says that she makes sure she eats well if she has a test to take.

David. David is in his last year at community college. He works between 22-25 hours a week, helping to manage a homeless shelter. He also receives financial aid.

David described his growing up as "difficult." He described it as follows:

I had a rough past, but I decided to turn it around when I was about 26, 27 years old, and I decided that I wanted to get my GED and get on Social Security and start working. So, a lot about... A lot of that transition involved a lot of financial hardships and difficulties transitioning from receiving a Social Security check into now working jobs at $8 an hour and not having that extra cushion….I went from struggling so very hard for so many years for two, three, four years, and then I found out that my family had money for me. They just wanted to see what I would do. I'm so grateful that I was in and out of homeless shelters and jail…hospitals and rehab."

His mother drank when she was pregnant with him and continued to drink throughout her life. After his parents divorced, David discovered that he could manipulate his mom for money. He started to use drugs and alcohol in fifth grade. David went to military school in South Carolina due to his addictions, defiant behavior, and academic problems. Leaving military school, he wanted to live with his dad but was rejected and made to live with his mother. He was a high school student and continued his drug and alcohol use. Eventually, he was kicked out of his house, ending up homeless and suffering from suicidality, and he had stints in centers for mental health management.

David said there were few problems with food insecurity. However, the food was fast food and junk food. At 18 and in a homeless shelter, he learned about Food Stamps, Medicaid, and SSI. He found that the number of food stamps was not enough.

Around the age of 20-21, he was kicked out of the homeless shelter; his family did help him with getting a start in life with a car. He began his first job and got fired for not showing up.

At 24, he received SSI, admittedly saying he manipulated the system by claiming he was suicidal, bipolar, and suffered from anxiety. His addictions led him to sell his food stamps. When David attended community college, his heavy class schedule led to his having trouble balancing his life. “When you're hungry, you kinda get irritable.” He utilizes food pantries every two weeks, where he sometimes gets vegetables and frozen meat. He can thus eat more nutritious meals versus his prior eating habits; however, he still eats cheap fast food.

At school, the effects of his low level of food security make his mood difficult. Nevertheless, he states, “I feel like if I would have taken more consideration into having a healthy diet that my college grades would have suffered, as weird as that sounds. If I would have basically put two or three hours a day into actually prepping and eating something healthy, I feel like that those two or three hours spent prepping I could have put in school.” He works more than most college students because of his low food security and poverty. Time and money create obstacles for his eating healthily. He feels that if community colleges had a way to offer something like an Electronic Benefits Transfer (EBT) card, it would ease the stressors for many students.

Gary. Gary has a college degree in international studies and has decided to go back to community college to get a certificate in paralegal studies and an associate degree in accounting. He chose to go back to community college because of the costs and financial aid does not pay for a second degree. Luckily, Gary has the advantage of a portion of the overall cost of school is currently paid by his employer.

Gary grew up in a military family and moved around as required by the government. He has three siblings, and his parents divorced when he was in elementary school. He says his life

was “pretty normal,” but he saw the differences when his parents divorced as money became a big concern for his parents.

Gary’s family purchased food from military bases. The cost of food is heavily reduced there due to governmental supplements when enlisted. However, when his parents divorced and they moved off of the base, food costs were much more expensive than they were used to. While living in a single-parent home, finances became more of an issue, and restrictions on food supply or other necessities made them more difficult to get.

Gary did receive free and reduced lunch when he was in middle school. He attended a Title 1 school that stated it was the norm, so he did not experience any shame or embarrassment. When Gary turned 21, he was diagnosed with multiple sclerosis. He did not expect that he would need help.

While in college, Gary receives accommodations for his academic work and scheduling. He has reduced work hours due to the pandemic and has experienced food insecurity where he has to weigh the cost of tuition and food. He says he stretches his eating and accommodations to save more for future meals. He has thought about using credit cards to purchase food but realizes that the food would then cost more in the end. He sees that he needs food for energy and other activities. He has used drive-through pantries and eats more fiber to cut down his hunger. Gary says that he feels like he has not planned well when he has less food, and the pandemic has affected his ability to purchase provisions.

As a student, Gary plans when he completes his assignments and studies. He finds that when hungry, his mind feels clouded and he is unable to concentrate. He moves his schoolwork schedule, but notices his grades are lower when he does not eat.

Heather. Heather is currently completing her pre-requisites for the dental hygiene program at her college. She already has an associate in science degree from [school name] in culinary studies but felt the hours and the demands of that type of job are too time-consuming. Heather decided to go back to school due to a volunteer opportunity to go to Ethiopia and assist with a dental clinic. She stated she was moved by this trip so much that she needed to change her career. Heather says she would eventually like to go to dental school, if possible,

According to Heather, she grew up with an two-parent family with two younger sisters. “I had a pretty good life, and we were never in need for anything that we wanted or needed, so that was great growing up; it was a great home life, we were all happy. We went to Disney World and went on cruises, so it was a lot of fun growing up, and I have good memories of that.”

Heather says that she and her family did not experience food insecurities or free and reduced lunch. She had an uneventful K-12 experience and graduated on time. However, in her adult years, she has struggled.

Things changed for her once her father passed away, as the family’s assets were depleted. She found that she bounced around, living with friends and bartending. The start of school was when things became ‘pretty hard.’ She stated she does intermittent fasting to save money, so she does not eat three meals daily. She “usually eats one big meal a day, like eggs, then I’ll eat maybe crackers and a Boost drink for dinner.” Because money is tight, Heather finds that she misses hanging out with her friends as many of them go out for dinner or to grab a beer. Heather explained:

I will go out to meet my friends, but I will eat at home. And that's hard for me because I never had to experience that growing up, I was always just able to do what I want whenever I wanted. So that's been hard and really honestly, God's provided, He really has in this year that I haven't had a job, but I am getting close to my credit cards being maxed out, I can't buy really healthy things like protein and stuff like that to keep me like [satiated] throughout the day ... The hardest part, the biggest stressor is just not having enough energy because I'm not eating correctly, and so getting day-to-day that is pretty stressful.

Tearfully, Heather says that she is ashamed of her food insecurity. Her mom is struggling, so Heather has not told her about her lack of food. Heather currently lives with a roommate and has kept this issue private from her.

As a student, Heather says she experiences brain fog and has difficulty remembering to turn her work in on time. She says that she has missed a few of her assignments because her mind is on everything else. She also says that she had more elevated grades when she was not food insecure during her last time at the university. However, now that she suffers from food insecurity, she struggles with her classes.

Iona. Iona is a community college student in the last year of her degree. She is of Latinx descent. Iona stated that she "had to mature at a very young age." She grew up in a single-parent home and describes her childhood in one word, "struggling." Money was the biggest factor for why things were difficult for her and her family. Iona did not have a permanent home and often lived in and out of shelters and people's homes. Food was scarce for her family. She stated that their means of food came from churches and food pantries. She and her siblings could not complain about the food they ate because there was not enough of it, so she appreciated what she

had. Her family did receive food stamps until there was an issue with her mother's citizenship, and the help was "taken away." She was often embarrassed and ashamed by their level of poverty. Growing up, Iona received a free and discounted lunch while a K-12 student, but claiming the meals were minimal in terms of nutrition

Iona became a teenage mother at the age of 16. She worked for minimum wage but had difficulty getting to and from work due to unreliable transportation. She and her son were supported by her mother. Iona believes the barriers of poverty and being pregnant at 15 were difficult for her with her peers; however, she finished high school and began community college. Iona shares that her original desire to enter community college was to obtain a certificate, but she decided to pursue her associate in science degree due to encouragement from her instructors.

Iona's income comes from part-time work and financial aid, but those funds were not enough to help support both her and her son while pursuing her degree. Her experience with food insecurity continued as she took classes. She states that she would forgo eating to pay for bills, gas, and other necessary items. She remembers driving 30 minutes to get to the campus and would often not eat, so she could travel to campus. When Iona did eat, it was cheap fast food on the go. Iona appreciated her instructors that provide her and other students with snacks so as not to spend money on food.

While pursuing her degree, Iona had trouble concentrating in class and was exhausted from work, parenting alone, a lack of food, and studying. She shared that she would skip meals to ensure that her child was able to eat. Iona now believes that her struggles with food helped her not to ever judge others.

Jenny. Jenny is a North Carolina community college student. She and her seven siblings grew up in foster care from the age of 8 to 13 in five different homes. At 13, she was adopted

along with two of her siblings. Her other siblings were placed in numerous other homes. She describes her early years as “rough.” She stayed in homeless shelters and experienced both physical and sexual abuse.

Jenny said she got bullied often because of a stutter. Before her adoption, she received free and reduced lunch as a young child. However, she was only allotted access to food if she were deemed a “good kid today,” as her foster mother would withhold food if she was not. Currently, Jenny has trouble buying food because of her living expenses. When she does have money, she tries to buy non-perishable food when food is scarce. Her food source often consists of getting help from her boyfriend’s mother and the government’s stimulus check because of COVID-19. She has gone to local food pantries but finds it very embarrassing as she feels guilty about seeking assistance. Because Jenny’ finances are quite limited she says, “I can’t pack a lunch when I go to school.”

Jenny struggles with an anxiety disorder and is on “edge all the time.” Food insecurity adds to her problems with mental health. While Jenny works as a certified nurse assistant, her salary is quite low. Jenny said she has tried to make healthy foods work for her budget; however, cheaper food lasts longer. Food insecurity has also caused a weight problem for her due to the food types she eats.

Her food insecurity has caused her to go to class hungry. She cannot focus on lectures, classwork, and clinicals for 8.5 hours a day. She struggles with studying, focusing, and paying attention in classes. Most of her income goes toward rent, transportation, and other living expenses. She received financial aid a few times and stated her grades were very low before she received the COVID stimulus checks.

Kathy. Kathy lives in eastern North Carolina, where she is studying early childhood development in the hope of owning a daycare center someday. She is originally from Michigan and moved to the Carolinas when she was 7. Her family, including five siblings, moved to several different towns in North Carolina. As a child, she moved around often with her five siblings, bringing her unique challenges. She was homeschooled with Type I diabetes, and she did not stabilize well in the public K-12 system. She returned to public school and graduated from a local high school. As an adolescent, the family endured very low food security. She received free and reduced lunch, but still had to manage her diabetes. “I try to do a lot better for my kids [so] they don’t have to go up through the same experiences I went through growing up.” Kathy also shared that her family’s food insecurity left her feeling a lot of shame.

She became a young mom (19), and while having her first daughter, she lost her vision due to diabetic retinopathy. Kathy receives food stamps from the Federal Government to help feed her and her two children. She is a vegetarian but goes without meals several times a week, as her diet is laborious. As a student at community college, Kathy finds herself financially strapped and does not get support from her family nor utilize food pantries. She currently works full-time at a COVID-19 testing site.

Because COVID-19 has changed the educational delivery method for colleges, she stays at home with her children when she is not working. When she was going to campus, her lack of food caused her difficulty in concentrating. She said this problem caused her to have lower grades. “I needed to go to the campus for registering; however, the appointment time was the same as the time when I could go and get food from the pantry...I chose to cancel my school appointment.”

Keelie. As a young child, Keelie, a North Carolina community college student, grew up in an environment where she was physically and sexually abused. Her mother abandoned her when she was an infant, and she was found in a drawer in a stranger's home. Due to her living situation, she entered foster care due to her mother's negligence. She was ostracized by her mother, beaten, and harshly punished. Her mother would not let her have friends and only eat what little they had in her bedroom. "I remember living off of bread, water, and potted meat." Keelie had difficulty in school and wound up dropping out. She felt lost in the system and was also deemed a difficult child. She was committed a few times to a psychiatric unit. She aged out of foster care at 18.

In her adult years, she has had four marriages and suffered domestic violence in three of those relationships. She tried to go back to school and get her GED, and she was "not allowed" to do so because her past relationships controlled what she could do. In her late 40s, she wanted more for her life and received her GED five years ago, then became a community college student. She graduated with a criminal justice certificate and is continuing her education in the Human Services program. She wants to work with those who have experienced domestic violence eventually. Her mental health suffered from the times she spent in institutional settings.

She remembers being food insecure most of her life. Now she only eats one meal a day to ensure that her husband eats. They do not receive food stamps. Currently, she has a very part-time job while she attends school and cares for her disabled husband. Keelie receives financial aid but finds that the amount she gets only goes so far. She finds her experience with hunger directly affects her ability to think whenever she is trying to complete her college work. She believes that she would not function in school if it were not for the local food pantries. She suffers from headaches, nausea, and poor concentration when there is little food. She lives about

an hour away from her campus. Although she is a remote student right now due to COVID, transportation costs would increase her cost of living.

Marissa. Marissa is 24 and in her first year at community college. She also has a child who is one year old. Being one of six kids, she took on most of the parenting responsibilities during her formative years. She grew up in Mexico, and there she was raised by her grandmother. She reunited with her mother in the United States and moved to North Carolina when she was five.

Marissa shares that school was good for her, but she had many insecurities, mostly around food. She would eat only breakfast and lunch and forgo dinner at home. She received free and reduced lunch, which made her feel like she stood out from everyone else. Marissa's mother would get most of the family's food from churches and pantries but was ashamed of her food insecurity and tried to keep it a secret. Additionally, the family moved from place to place, which kept her from completing a school year at one school, which caused even more stress when she was a child. Marissa described how she developed an eating disorder due to a "poor relationship with food." She graduated early to work and help pay the family's bills until Covid-19 caused her to lose her job.

Marissa receives a Women Infants and Children supplement (WIC) and works part-time. She shared that the lack of food causes her much stress. To combat the problem, she visits food pantries. She and her child often go to her sister's house for dinner to supplement their nutrition.

Marissa often wonders if other community college students have similar food insecurity concerns. The effects of dealing with low food security have caused her to have trouble concentrating and completing assignments. "Like I won't be able to focus and feel overwhelmed when I can't eat because I would be thinking about food and not schoolwork."

Sam. As a welding student, Sam has to maintain her energy to handle the equipment she works with at school. She shared that the small window requires her to concentrate because of her helmet when she works with heat.

Yeah, there is a lot of concentration required on a very small space, like my welding helmet. You can see how small the spaces I can see out of it are, it's not a very big view and I have... Basically, I have a piece of steel metal and I clamp it with a ground clamp, and then I have my electrode holder, and as soon as I touch it, it creates an electrical spark and fire happens. So, I'm melting metal into a plate, and it requires a lot of attention to detail, so I have to be on my a-game and just to do well in this class if I wanna work in this industry... I have all leather on and my face is right up in the flame and it's hot. Yeah, I need to be well fed and I'm sweating.

She continued saying:

My concentration is just not on work. It's not where it should be. I'm so distracted, I'm messing up. Last night, for instance, so Tuesday, I had an amazing day. I finally passed the level I was on, and I was ready to advance to the next level, and Thursday was the day that I was gonna start that level. I didn't have a chance to eat, I was able to start dinner, but my husband had to finish it 'cause I had to get my ass to class, and I had to kinda get by on a granola bar before that time being and the whole class, I was screwing up so bad, I did absolutely nothing that class it was... It [was]a total waste because I was just... It wasn't a good day for it. Or I was hungry, if I had a full belly, if I have the energy to focus like that [it would] probably have been fine, but I was hungry and I was totally off my game, and I kind of wasted my whole class. I'm not gonna get what I need to get out of these classes, I'm not gonna be successful in this industry. Maybe I get C's or whatever, we... I barely get a degree by the skin of my teeth, I'm not gonna know squat, I'm supposed to get a job doing this stuff.

Presentation of Findings

Each interview was transcribed, and coded using the initial interviews, field notes, and other data collected by the researcher to identify patterns, assertions, theories, or other insights that connect themes. I utilized analytical memoing to summarize the information I gathered during and after the interviews. The memoing showed the interesting research patterns. Following an analysis of the interview transcripts, many codes were generated. These included the following:

Current hunger	Food Insecurity as a Child
Shame	Foster Care
Lack of Concentration	Multiple Moves
Attendance Problems	GED
Life-long Poverty	Choices and Sacrifices Made
Lack of Support	Mental Health
Somatic Issues	Abuse and Neglect
Federal Assistance	Divorce and Single Parent Homes
Unstable Educational Experiences	COVID-19

From these codes, 16 findings were established to enable me to discover narrative nuances and insight regarding the study's primary inquiries. I collected a substantial amount of data from which I extracted findings, which I then grouped together into themes. I classified themes as

parts of participant accounts that exemplified particular perspectives and/or experiences pertinent to the study's questions.

This chapter summarizes the research findings from fifteen community college students in North Carolina. Each theme extracted from the sample interview responses is elaborated on in the finding's discussion. Moreover, I compared the study's findings to the literature reviewed in Chapter 2. Furthermore, I discuss the implications of these findings as well as the research's limitations. Finally, recommendations for future research are made.

The following section explores the sixteen themes and descriptions that emerged from the participant interviews. These research findings are listed below:

Table 5

Findings for Research Questions One

RQ1: How does food insecurity shape the experience of community college students?

Findings	Descriptions

Finding 1	Almost all the students who experienced food insecurity in college also faced many adversities growing up, ranging from split families to poverty, which led to food insecurity.
Finding 2	Students who have food insecurity in college are coming from a history of food and housing insecurity.
Finding 3	Most who experience food security in college have a history of experiencing shame for seeking help or visiting food pantries.
Finding 4	A number of participants facing food insecurity had spent time in foster care systems and aged out of those systems.
Finding 5	Food insecurity is implicated in a wide range of health issues; some health issues, such as diabetes, are especially difficult when facing food insecurity.
Finding 6	Substance and alcohol abuse were common among families' experiencing food insecurity.
Finding 7	Many families sought support from both public and private sources, Federal, State, and local support programs, as well as religious and community organizations.

Table5. Findings of Research Question One

Table 6

Findings for Research Questions Two

RQ2: How do students view the relationship between food insecurity and their college success?

Findings	Descriptions
Finding 8	A student experiencing food insecurity in college who also has children, will most likely try to feed their children before feeding themselves.
Finding 9	The associated shame for many who received free and reduced lunches or visited food pantries tends to be secretive about one's situation regarding food and its sources even in college.
Finding 10	Those experiencing food insecurity are well aware of its effects on their energy level, their ability to concentrate, and on how much effort they can muster.
Finding 11	Having experienced food insecurity for much of one's life seems to be a motivator to succeed in college to escape the effects of food insecurity.
Finding 12	Food insecurity affects academic performance negatively.
Finding 13	Self-awareness of the impact of food insecurity leads to an attempt by college students to be strategic and manage their limited intake of food so as to have the maximum impact on their being successful in their academic performance.
Finding 14	Stresses from food insecurity can interact with mental health issues and exacerbate those issues.
Finding 15	Class attendance is negatively affected by food insecurity.
Finding 16	Widespread lack of knowledge by students that their college had a foodbank and what its services were.

Table 6. Findings for Research Questions Two

Summary of Findings

It was evident that the participants did have difficult family experiences. Many participants experienced living in a single-parent home, out-of-the-home placement, abuse and neglect, and multiple moves. Poverty illuminated and exacerbated the family problems associated with food insecurity, clothing, and stable housing. Federal assistance and financial security were erratic. Participants made multiple moves due to unstable family experiences which required many changes in schools for the students. The physical and psychological effects of living with food insecurity as a college student created numerous challenges.

RQ 1: How does food insecurity shape the experience of community college students?

The theme of childhood adversity emerged as a major topic that helped shed light on the experiences of North Carolina community college students who experienced food insecurity. It is important not to negate the early lives of the participants, however, their past experiences with food insecurity have also led them to continue their struggles today as community college students.

The participants' narratives offered similar experiences of struggle and resilience, chronic family dysfunction, and family food insecurity. Half of the participants have experienced homelessness at least once in their life. Thirteen out of fifteen participants experienced poverty growing up. Many shared multiple reports of homelessness, chronic food insecurity, and reliance on Federal funding programs like SNAP, AFDC, and WIC. The participants were also affected by poor educational stability, as they changed schools several times due to moving or school and behavior problems. Poor academic outcomes and multiple school changes made the already difficult lives of these young students even more taxing. In addition, the students experienced a wide variety of mental health problems. Indeed, 80 percent of the participants had mental health

problems, which included official psychiatric diagnoses, fatigue, stress, frustration, and two students who experienced drug and alcohol problems.

Finding One. Almost all the students who experienced food insecurity in college also faced many adversities growing up, ranging from split families to poverty, which led to food insecurity. Childhood adversity described the systemic problems and challenges that these children face. There was evidence of a higher risk of food insecurity among individuals who were raised in single-parent homes and cohabitating partners versus growing up in families with two-parent parents (Coleman-Jensen, 2019; Kramer, 2019).

Family problems were identified in 14 out of 15 participants in this study. Several sub-themes were identified, including family status, foster care, abuse and neglect, and trouble with the law. This topic came up during the interviews regarding the family life of the participants. A shared experience of nine of the participants was that they did not live in an two-parent home; Mother or father, or two-parent home. This family status contributed to problems throughout the micro and mesosystem of each participant. When the interviews took place, there was clear evidence that the stability of the nuclear families was at risk. All of the respondents had family problems. There were recurring incidents of chronic family discord in their stories that resulted in single-parent or divorced families except for one participant.

Anyiah, who grew up in a single-parent family, said that her split family was difficult. She finds herself in the same situation now, as she and her boyfriend had ended their relationship when he abruptly left their home. She had two children with him and was now financially and emotionally responsible for caring for the three of them. She explained that while she had savings to help her, that money soon ran out. She also lost her job due to COVID and was out of money. She tried to get supplementary assistance with bills and food, but she did not qualify

because her boyfriend was on the lease. The urgency of Anyiah's experience highlighted common issues faced by many of the participants.

Many participants had divorced parents. Carrie's experience with the split of her parents was when she attended elementary school. She has a challenging time recalling her childhood, saying, "It's a blurry picture of what happened here and there." Brian, Marissa, Iona, Jenny all lived with single parents too. In the Iona interview, she shared that her father left the family, which resulted in her mother working two to three jobs. Iona eventually looked after her siblings while trying to maintain her own status as a student. As soon as Iona could go to work, she did to help her mother with the household finances. Iona found it difficult to remain a child. In addition, Kathy struggled to feel looked after and cared for by a supportive and nurturing family. She said she never felt wanted. Her mother left, and while her father tried to care for her, she ended up in numerous family homes and eventually foster homes. While Sam's family separated when she was young, she is able to recall the aftermath of her parents' divorce. She says she ended up living with her mother, who married four more times. She talked about how she still has no relationship with her father. The unreliability of her family status challenged her emotionally. Overall, there appeared to be a trend for having adverse childhood experiences in all the participants.

These participant examples help us understand the complications that come with chronic family problems. Being embedded in the Bronfenbrenner microsystem, individuals with basic needs caused persistent distress. A major factor emerging from this problem was that the split families received less financial and educational support.

Abuse and neglect, along with other negative childhood experiences, will increase the likelihood of food insecurity (Chilton et al., 2015; Jackson et al., 2018). These results cannot be

claimed to be the case for all participants universally; however, several had experienced abuse and neglect from their primary caregivers. Kathy shared her story of extreme abuse and neglect:

I grew up in Michigan. My Mom left, my dad went out and took me with him when I was a baby, he never married her, they never married. She just wasn't that type. I remember living in a foster home when I was living in New Orleans when I was about five. Man, it was a pretty bad situation. I was sexually abused by the foster mother's son.

Kathy ended up going back with her mother and her new stepfather. She recalls being treated unfairly by both parents, who admitted she was not wanted. Kathy ended up with food restrictions and harsh punishments, such as being locked in her room for a long time and forced to use a pot as a toilet. “My mother, the last thing she said before she died was that she only has one daughter, and that was my sister.”

Jenny further shared that her parents withheld food from her. Amanda shared that she had a “weird relationship with her dad. She said, “ I loved him, and he would be like, you know, joking and stuff like that, but I always stayed in my room because it was his temper. He would never abuse me or anything, but he would get frustrated, or he would yell easily. And so, I always had a love-scared relationship with my father.” Amanda shares that out of fear, she kept her sister under her protection. Her father is in prison for child sexual abuse.

Finding Two. **Students who have food insecurity in college are coming from a history of food and housing insecurity.** There were many cases where students and their families moved around more than one or two times. Many had numerous changes in their housing due to a variety of issues. Poverty played a large factor in the necessity of their parents

to have a steady, stable job. In addition to this, it was found that the unstable housing situation was largely caused by the stresses associated with finances, the support of family, and the community. Interestingly enough, students did not seem to be bothered by the fact that they were constantly moving to different schools as they were growing up. Also, it appeared that the students considered moving a part of how their family operated. Shifting and changing schools and communities required much resiliency for these students, and the period for the adjustments these students had to make seemed to create additional barriers for food security that combined with the financial stressors from shifting of schools, housing, and community (see finding 2). These students craved parental support, however, due to limited means, many families required parents living in the home to work numerous jobs, which left less parenting time.

Many of the students remember the hardships and have continued them today. For example, Marissa stated that not having enough food was not typical for her; she believed that the family's moving-related stresses were challenging due to the costs incurred by the family while relocating from city to city. She also describes that her mom was a single mom and could not afford rent and was not consistent with her rent payment. She felt that constantly moving was a barrier to keeping friends and feeling a part of her community. If we recall David's developmental younger life consisted of several housing and school moves. It also consisted of many decisions; because of his difficulty controlling his behavior and increasingly adolescent trouble, he was forced to move to a military school. He did come back to the area, and as he shares connected with the wrong people that led him into wrong places. He also mentioned that because of his mom's mental health issues and the divorce of their parents, his mom's financial status for lack of financial income ended up having to foreclose on their home. He eventually moved, where he continued his poor behaviors. He discovered a lack of food in the home when

he was raising himself. Unlike David, Gary assured that he had a pretty stable housing situation; however it was embedded in the military system. The government was very helpful in supplying the necessities for many families. He also shared that growing up as a military kid removed him from what it was like outside his community. When his parents left the military, they ended up divorcing. He then was able to see what life was really like. Several moves required his family, especially his mother, to provide for the basic needs of him and his siblings. His mom is a single mom who struggled to make those ends meet.

The participants who lived in foster care also needed to be noted here. Anyiah, Jenny, and Keelie spent years in the foster care social services system. Because of severe family problems, the three participants moved as the system does not or has trouble helping children to have one stable home. Although the Department of Social Services strives for children and families to stay together, it is not uncommon to have several different foster care placements. With Anyiah, Keelie, and Jenny, we can see that moving and experiencing unstable environments while in the system added another barrier.

In childhood, economic hardships resulted in chronic food insecurity for many participants. While some lived in foster families, those who lived with their families suffered from food shortages, except Heather, who grew up with both of her parents in a financially stable home until she entered college.

Iona shared that her mother had numerous jobs trying to keep the family of three afloat. “Even while working, there was never enough money to pay for a place to live, bills, AND food.” Iona continued describing her mother’s attempt to care for all of their needs, “So sometimes my mom didn't have enough money, she was also illegal and didn't have citizenship, so she had to make money by cleaning houses so she could help us survive. A lot of our time

[was spent] to get food from churches that would give out at food pantries. My mom, she'd make the meals, we'd never have the right stuff, and every time I'd go with my friends, they have name brand stuff, and I grew up having to get off-brand stuff, maybe it wasn't things that we liked...I just had to eat it because I couldn't be too picky, so it was just more of we had to eat to survive."

Similarly, most respondents had dealt with childhood food insecurity, just like Iona. Keelie shared that during her "rough" childhood, she remembered not having enough to eat. Unfortunately for Marisa, her recollection of growing up food insecure affected her more than just being hungry. She shared, "I had a lot of insecurities growing up. Mostly around food. And it was my mom, she was a single mom. Most of the time that I was in school, I would only eat breakfast and lunch, and I wouldn't have dinner when I went home. I developed an eating disorder [as] I didn't have a good relationship with food." Jenny experienced unfortunate problems with food insecurity. She went without food quite often, as she describes. Her foster family punished the kids, thirteen in her family, by withholding food. She says that "food was scarce, and family members would go out and fish for food and have only three tiny fish for the home or family."

Gary, unlike Keelie, did not know what food insecurity was while he was growing up. He explained that having a two-parent family and growing up on military bases, he did not experience having enough food while he was young. However, he continued to share that once both of his parents were discharged, they divorced and soon after learned what it was like to have low food security. Heather also grew up in a two-parent household and did not experience any problems with food supply. Her food insecurity problems came as an adult after her father passed away, saying she did not feel comfortable asking her mom for financial help.

Barring four students, Heather, David, Sam, and Gary, the respondents reportedly qualified as young children with low or very low food security. These childhood food insecurity experiences did not stop once the respondents turned 18. Universal patterns of poverty and food insecurity have extended into their adult years. Brian stated, “Being hungry, it’s more of something to [you] aim to prevent, and not be caught up in a systemic pattern, I guess because I very much feel like I could be a stat and the system pattern of having fallen into a place, being stuck in like a poor dollar degradation, addiction, incarceration, and poverty. Stuff like that is something that I have a healthy fear of.”

As mentioned earlier, the findings of poverty and chronic family problems, children who frequently move or are displaced from their living situations find themselves at the mercy of adjusting to many new areas and new school placements. This theme encompassed and defined students’ experiences during their K-12 school years for all the participants. Students found themselves continually having to adjust to new settings, friends, and academic placements. Neighborhood experiences gave way to other barriers to academic and living success which, later caused interruptions to their lives and community college history.

Finding Three. Most who experience food security in college have a history of experiencing shame for seeking help or visiting food pantries. Several participants shared that their family was extremely ashamed of using food banks in churches in the area. The repercussions have continued with their experiences as college students. Anyiah, who grew up in a household with more than ten people, saw the effects of living at the poverty level. Unlike Anyiah, Heather's family's financial status allowed her to escape from poverty and enjoy food and security. However, as a current community college student, she still only eats two meals a day.

Several participants' families illustrate the theme. Poor neighborhoods deter quality educational experiences based on the research and graduation rates. Household income and mobility are often linked, as poverty determines where families live versus families having more opportunity to select areas where education is well funded and a higher quality.

Poverty illuminates many difficulties for families. When family finances are limited, tough decisions must be made to pay the necessary bills. Many times, food becomes less of a priority than are lights and rent. Jenny agrees with this as she claims, "If I can't afford food, I can't afford bills."

Poverty also played a factor in their families' decision about choosing the absolute necessities, and food was the first thing to go. The participants living at or below the poverty level recollected using community food banks and churches to help supplement their food supply. Many of the participants' communities would be considered food deserts, where food is scarce for most of the area's population. All but four participants experienced difficulties with adequate financial needs while growing up.

Finding Four. **A number of participants facing food insecurity had spent time in foster care systems and aged out of those systems.** Some exceptional cases needed to be considered. Although only three participants ended up in the foster care system, here it is worth mentioning in this research because of the nature of chronic family problems. As mentioned above, abuse and neglect can, in principle at least, have led to some of these participants ending up in state care.

Jenny lived in at least five foster homes due to the neglect and abuse committed by her mother and father. Jenny explained that her mother would choose to use her finances to pay for things she wanted instead of taking care of the basic needs of the thirteen children in her home.

Her father ended up in jail for sexually abusing minors. The many care places where she was sent were difficult for Jenny. However, she was finally taken into a loving home with three siblings. Unlike Jenny and Keelie, Iona, Sam, Kathy, and Carrie struggled with more neglect problems, Anyiah grew up in foster care, and due to her parents' neglect, she simply aged out of the system. She shared her thoughts:

So it was an interesting situation. Like I said before, I was in a foster home. It was my mother's sister and me and my stepfather. My stepfather was violent, so I went to a foster home, and my father fought for me, but my mother fought for a long time and tried to fight it because she didn't want to admit that my father was a better parent than her, so she tried to use everything against him. He worked on the third shift. I had no supervision at night, it was a mess, so I technically grew up with her through high school and then grew up in one, two, three, four different foster homes between the ages of 16 and 18.

Keelie, like Jenny, experienced the foster care system. “I remember a foster home that I lived in when I was living in New Orleans when I was like five years old, man, it was a pretty bad situation.” Although many of the respondents indicated that they did not want to live in foster families, the opposite was the case with Amanda. Still, Anyiah’s foster care experience denied her a steady home life. The foster mother was abusing drugs and alcohol, which eventually caused a car accident with Anyiah and caused multiple injuries. She was eventually moved to another home. Even though the purpose of the foster care system is to provide a safe and secure home for at-risk children, it does not always care for children correctly. This was the experience for Jenny, Keelie, and Aniyah.

Finding Five. Food insecurity is implicated in a wide range of health issues; some health issues, such as diabetes, are especially difficult when facing food insecurity. Sustained good health, however, requires adequate nourishment and rest. Underfed students lead to homelessness, poor grades, concentration problems, and attendance difficulties. Several of the students also mentioned mental health as a concern.

Physical health concerns and the costs associated with them were seen through the lenses of Gary, Kathy, and Amanda. Gary explained:

In college, … I found out [I had] MS …and just when I first became on Disability Services, it was just like I get extended time and a switch to the treatment. Yeah, the treatment was like a big adjustment 'cause I went from not being normal… Yeah, I thought that it was okay for me to have those kinds of things that I needed. You don't expect yourself to have it, so I guess like I just switched. And so that was like it... extended class time for tests and it was harder to learn... Well, yeah, you had to learn a new way to learn things, like it switched... I think it was like re-learning to do things, change the process, and scheduling everything.

Gary's MS exacerbated the pre-existing stressors in his life, and the cost of treatment affects his finances and his ability to meet his basic needs. Unlike Gary, but with similar problematic health concerns, Kathy and Amanda suffer from juvenile diabetes. Diabetes requires healthy eating, but healthy eating is expensive. Amanda explained:

They [healthy stuff] were expensive. So I just had to make do with what we had and just try not to eat a lot. There are times where I'm hungry because I couldn't eat a lot because of the high calories and I only ate a small amount, but I would still be hungry. My sugar used to be stable, and now it's unstable, and the last time I had appointment had an A1C of 13, and I feel

like because the stress of... the stress of last semester, so I would just eat things. Sometimes feel better, sometimes I didn't care.

Amanda's experience shows that the balance between a healthy diet and the cost of healthy eating coupled with school stressors made her complacent. Kathy's diagnosis of juvenile diabetes requires her to eat healthy; however, she suffered from diabetic eye disease and unfortunately lost one of her eyes. Both Kathy and Amanda live at or below the poverty line and rely on food stamps to supplement their food sources.

These stories reflect the prominence of stressors that present additional challenges and constraints related to finances and an adequate food supply. For many of the participants, conditions such as these were directly related to their difficulty accessing healthy food. Additionally, the students had to determine how to manage money, care for themselves and their basic needs, and still be successful community college students.

As we can see, there are direct causes that lead to these experiences of community college students. Viewing students as a whole, as Bronfenbrenner suggests, offers key insights into the system and the implications of the relationships of students with their immediate families and the surrounding community systems.

Finding Six. Substance and alcohol abuse are common among families who experience food insecurity. While many participants shared their stories and life histories, two had significant stories that led them to experience hunger while attending community college.

Brian, a convicted felon, tells of his purpose of getting a good education beginning at the two-year level. He has a desire to change his history through educational opportunities. However, his childhood and young adulthood created barriers to his gaining that success.

He describes the relationship with his mother as one of abandonment. His father was the parent who raised him, whom he viewed as “pretty abusive.” More importantly, he describes himself as a “handful” and having early onset antisocial behaviors, but still very smart. He played sports and had many friends. Brian’s troubles began early on during school before his peers saw any trouble. He reported smoking marijuana, as well as smoking crack cocaine with his sister as early as middle school. His use of illegal substances put him very behind in academics, so he had to graduate through the “back door.” He eventually found himself in jail, a three-month stint and subsequentially a 10-month incarceration period.

While Brian knew his behaviors were out of control, it did not stop him from being around others using drugs and alcohol in dangerous places. He explained:

I've had some near-death experiences, was shot at through Baltimore, I guess, 'cause I was just in the wrong place at the wrong time, ... It was a drug deal, and he shot at me, and I lost some of my teeth, which I no longer have, and I could have been killed, and I had to sort of escape that area.

The difficulties with the law did not stop there. He shared that while he was heavily drinking, he drove the wrong way on the Interstate. He received a DUI two and a half years ago, and those charges are still pending. Brian struggles with putting his past behind him as the long-term effects of his legal history weigh heavily on him now. His felon status has created issues with him getting internship placements, jobs, a place to live, and of course, food.

David, who currently works at a substance abuse center, received his GED from his local community college. David describes his past as “rough, but I decided to turn it around when I was 26/27.” David's problems began in the womb due to his mother drinking while she was pregnant. Her alcoholism continued throughout his childhood. He never lived anywhere close to poverty, but the finances changed when his parents divorced.

He describes the age of ten as “jumping on the same train” as his mother’s drinking and smoking pot. He learned to manipulate his mom and established an addiction to drugs and alcohol. He soon transferred to a military school in South Carolina but did not stay long by convincing his dad he had changed. David's manipulating behaviors continued when his dad refused to let him live at his home. This rejection fueled his reason to use illegal substances further. Tenth grade was a pivotal switch for Brian. His drug use became increasingly more complicated; he dropped out of school, was in and out of jail, and mental institutions. At 18, Brian’s mother gained a restraining order against him and kicked him out of his home.

Brian found himself in homeless shelters while still continuing his addictive and manipulative behaviors. He spent time in mental institutions and manipulating the system to get financial help. He stated, “Being completely homeless” changed his outlook on life; he decided to go to community college to better his life.

Other individuals did not discuss their concerns, legal problems, substance misuse, or alcoholism in their discussions. However, it is useful to recognize that impediments of this nature do affect the relationship between decreased academic performance, job placements, lower pay, and a lack of financial resources for food. This understanding can assist alleviate some of these issues.

Finding Seven. Many families sought support from both public and private sources, Federal, state, and local support programs, as well as religious and community organizations. The next significant piece of this theme is the importance of that aid. Aid, for these nine participants, resulted in their families receiving assistance from the Federal government in the form of food stamps and free and reduced lunch. The Federal Government assists families who qualify by giving them food stamps. Depending on the income of the family,

the monetary amount can vary. Students whose families qualify for food stamps will generally qualify for free and reduced lunch during their K-12 years. Families with marginal incomes (below 130% of the Federal poverty level) who do not receive food stamps can also qualify for free and reduced breakfast and lunch. However, they must fall below 130% of the Federal poverty level (U.S. Department of Agriculture, 2022).

Receiving Federal aid may not seem of particular importance at first; however, there is a lot of evidence that food stamps and free and reduced lunch are lifelines to nutrition for the respondents. A number of the participants discussed the importance of their families getting food stamps and free and reduced lunch.

Abby qualified for free and reduced lunch while in a summer program. At school, she said she could bring home food but would hoard food and make one meal last an entire day. She was “fearful of being completely out of food.” Food scarcity at home was common for the participants who qualified as low income.

Qualifying for free and reduced lunch does not necessarily mean a child received free and reduced lunch until graduation. A child must qualify for Federal assistance yearly or if the family income changes. Iona had a completely different problem. Her mother, not being a citizen of the U.S., received food stamps and free and reduced lunch. However, when her mother became a naturalized citizen, the family did not qualify for services. Iona did not quite understand why this occurred, but feeding the family was an insurmountable need. “My Mom had to go back and work really hard to get food; it was never really the same.”

Jenny only received a reduced lunch due to her family's income, even though she was in a foster family. Amanda's family qualified for free and discounted lunches for most of their lives due to their federal grocery branding system status. However, the system stopped assisting for an

entire year without any explanation. The family then used several resources outside of government support, such as extended family and food banks. Amanda says that her mother currently has a good job that excludes her from receiving assistance but only delivers the income for certain bills and not enough for food.

The students who reported receiving free and reduced lunch found it embarrassing as a child. Many described being in different lunch lines and being singled out if you went to breakfast in the mornings. The negative impact of getting free food at school still haunts many today.

Through student narratives, there was a clear stream of evidence that poverty creates significant food insecurities. They described many trips to local churches to receive food staples. They reflected on their experiences of what it was like as a child when they went to food banks. This pattern is relatively consistent throughout most of the narratives, except for those who grew up outside poverty levels.

As expected, community food banks were also helpful to the respondent's families. Many used food banks to help supplement food scarcity problems. It appeared that food banks were the second-largest suppliers of food. Students reflected on their memories of going to the food pantries with their mothers. Several remembered how embarrassed they felt about doing this, and it is motivating them even more to have a degree to get a better-paying job.

Summary of Research Question One. How does food insecurity shape the experience of community college students?

It was clear that almost all students who experienced food insecurity in college had also faced many adversities growing up, ranging from split families, to poverty, to housing instability to food insecurity. In reviewing Table 1, based on the data, growing up with hardships did not

end once the student became an adult. All but two of the participants provided evidence about the continuation of poverty and food insecurity. Student histories provide opportunities to see into how their life experiences shaped their college experiences. The stigma and guilt that are associated with not having enough food to eat makes people vulnerable in society, in terms of their health and wellness, and in terms of losing control over their fundamental needs. Additionally, the evidence indicated that students who have food insecurity in college had already lived with a history of food insecurity.

North Carolina community college students' experiences with food insecurity were made worse by childhood trauma. Many participants reported multiple instances of homelessness, chronic food insecurity, and dependency on government programs like SNAP, AFDC, and WIC. Many, due to relocation or issues with school and family, attended multiple schools. Also, some experienced subpar learning due to frequent school transfers which made life more challenging.

Eighty percent of the participants experienced mental health difficulties, including psychiatric diagnoses, weariness, tension, and frustration; other students also mentioned having mental health problems; two students additionally had alcohol and/or drug problems. Due to severe family issues, three children were given to foster care. As was already mentioned, some of these individuals and their families may have sought governmental assistance.

Several individuals who took part in the interviews said they felt ashamed to use church food pantries. This effect lasted all through college. Due to a lack of money, tough decisions had to be made in order to pay the bills, with food frequently being sacrificed in favor of utilities and rent. Although free or reduced-cost lunches and food stamps may not seem essential at first look, there is evidence to support their importance for students' survival. Participants' early food insecurity has led to their current difficulties as community college students.

RQ2: How do students view the relationship between food insecurity and their college success?

Food insecurity issues extended to the college experiences of all the participants. Several students had to ponder the choice between educational expenses, living expenses, and food. Food insecurity affected class attendance, gasoline for transportation, difficulty concentrating, feeling bad on campus, grades, and finding fewer support systems.

Finding Eight. A student experiencing food insecurity who has children will most likely try to feed their children before feeding themselves. The participants were very clear about that when speaking about taking care of their children. All the mothers stated they made food sacrifices for their children. These sacrifices were made from necessity; however, each found that they struggled with grades when they were hungry. Marissa says that eating plays a big part in her college success, '[Eating] has a lot to do with the grades you get in your class, but the things that I realized that affects me the most is being able to complete assignments on time because I have to worry about getting food or making dinner or making sure my baby has something to eat." Planning when to eat helped students. None of the male respondents, however, stated they were supporting children.

Many of the students had minimum wage or slightly above minimum wage jobs. Although financial aid had been awarded, that money was insufficient and not enough for them to get by. The students' economic security depended on the completion of their diplomas or degrees. Overall, these barriers have caused several concerns for their futures. Jenny clearly explains this sentiment for all of the participants, "because if I can't afford food, I can't afford bills." Food is the first to go.

Hunger prevented many students from coping well with schoolwork, attendance, concentration, and situational stress. The students also shared that they had to make complex decisions about their money. All participants revealed their tense financial situations. The lack of money forced them to prioritize necessities, which meant eliminating the non-essentials, and unfortunately, one of these non-essentials was food. Iona's story was a little bit different. She has a young son who relies on her. She makes just over the poverty limit to receive food stamps. She is reticent and said that she will make sure that her son has all the food he needs before she even feeds herself.

Finding Nine. The associated shame for many who received free and reduced lunches or visited food pantries tends to be secretive about one's situation regarding food and its sources even in college. Shame is a painful self-conscious feeling caused by the belief that one has done or said anything dishonorable, immodest, or indecent (APA Dictionary of Psychology, n.d.). Shame can cause avoidance and psychological studies links shame-proneness to depression, anxiety, eating disorders, subclinical sociopathy, and low self-esteem (Callow et al., 2021; Cândea & Szentagotai-Tăta, 2018; Hedman et al., 2013; Weingarden et al., 2016). Poverty stigmas compound self-judgment.

The participant's shared story after story of the impact of shame and stigma attached to their food insecurity. Jenny, for instance, said that she is embarrassed to go to a food pantry but does so out of necessity. Her experience with needing food is compounded by personally shaming herself because she and her family are hungry. She minimizes her food insecurity and says that others are more in need of food than she is but at the same time, experiences hunger. Jenny said, "I keep on fighting with myself, I feel like there's more people out there that could

use it worse than I could" [meaning others are in more need than she is]. Danielle shared similar sentiments as Jenny when referring to going to a food pantry. Danielle said:

> It's also the shame or embarrassment too though, like going to that as a 24-year-old who can't provide, and a make enough, so I guess it's more of a... or guilt too. I'm using the resources when another student could possibly use it more than me. I feel like other students look at you when you go there, so it's kind of like a shame or embarrassment that you have to rely on this, but I know a student that or one of my friends who actually went there and he did it with no shame, but he was very financially insecure, I guess, but he used that resource, but I never did because I didn't wanna rely on that or I don't know, go and feel the embarrassment of having to end up doing that.

According to Goffman (1963, p. 3), stigma is an attribute that extensively discredits an individual, reducing him or her "from a whole and usual person to a tainted, discounted one." The stigma that comes from hunger is one that can haunt anyone. Heather, who had not experienced food insecurity as a child, said that she was so ashamed of being hunger she would pretend not to be hungry when she was with her friends. She was afraid that they would know her secret, and she could not bear them knowing she has little to no food. She shared, "I hate to ask for help, so I don't ask anybody for help at all, so I usually just buy really cheap stuff at Walmart." Heather also shared that after she lost her father, she did not want to burden her mother by telling her mom about her struggles. She did not want her mom to think any differently of her.

Finding Ten. **Those experiencing food insecurity are well aware of its effects on their energy level, their ability to concentrate, and its impact on how much effort they can muster**. In this finding, the relationship between focusing and grades is discussed. While several

factors can cause difficulty in concentrating, many of the students quickly answered questions about their ability to concentrate.

Carrie finds that her concentration is so impaired that she falls into a fog and describes herself as sitting and staring as time passes in class. Jenny states “If you don't have something in your stomach, it's hard to study, and if you're not studying for tests really well, you're gonna fail, and it's happened to me.”

Jenny shares that she has gone to class completely hungry due to nothing in the house. “I couldn't focus on my lectures or anything of this work, or me going to clinicals doing an eight-and-a-half-hour day, a whole job that I don't get paid for it. To my knowledge, and it's been really tough just going all day on nothing and I couldn't even pack anything for lunch.” Being a nursing student, her need to concentrate and learn affects everyone.

Amanda felt confident when taking any tests if she had adequate nutrition. Peg, the nursing student, makes sure that she eats before a test because she knows she will not do well without food. Heather, a nursing student, finds it very difficult to finish her day, as her schedule is tight, and she often skips lunch while working her clinicals. She shared her thoughts:

“If I had a test that day and I ate…I guess, I would feel more confident taking a test or have a better mindset because I get distracted. I think it would...impact me. Not a great deal, but it would help.”

Danielle explained that she needed brainpower. Danielle said, “If I didn't eat well before a test or major assignment, and yeah, I would not have enough brainpower to get through the assignment period.” She and several participants shared that being hungry affects their success in college, as they all try to eat when there is enough money. For these students, fast food is the biggest option because it is cheap. Affordability makes the difference.

Finding Eleven. Having experienced food insecurity for much of one's life seems to be a motivator to succeed in college in order to escape the effects of food insecurity. Students understood that in order to change the trajectory of their life, college education or technical training is necessary. As most of the participants shared their job experiences, many were low paying and were barely enough to support life's basic needs. Knowing that going to college would require them to further extend themselves, they felt gaining a credential would help change the course of their life. While the desire of a preferrable financial future existed amongst the participants, there was shared aspirations to be a part of society and more independent of systems outside of the home. For instance, Carrie explained that she does not want her daughter to have to suffer and be without when she gets older. Iona shared the same sentiments, "I still have the same chain of all of my mom and me being a single mom, but I don't have to make that into a bad situation, I can only go above and beyond and get a better result." Additionally, Brian voiced that his financial limitations prevent him from eating healthily and receiving his college degree will correlate to him being in a better position to meet his basic needs. There appears to be a positive association between going to community college, getting a credential, and having more financial security.

Finding Twelve. Food insecurity affects academic performance. Academic attainment while hungry was difficult and often revealed underlying academic struggles. Academic attainment while hungry highlighted the students' connection to academic problems. There was a strong negative relationship between hunger and academic progress. Many students shared how hunger prevented them from actively attending class and earning passing grades. Many found that simply studying without any nourishment made achieving very difficult.

This finding illustrated the student's concerns about food insecurity and getting passing grades. Students spoke of their experiences of coping and strategizing about what they would eat. Jenny was asked if the lack of food has affected her grades; she summed it up nicely by saying:

"Grades? Well, not positively, but I have done my best to push through because I've always wanted to go to college. That's why I'm here. Like I said, it affects my grades, it affects my performance, affects my focus, I guess that's performance, but it's just if you don't have good fuel for the day for your body, I mean, how are you supposed to have a good outcome for school for that day?"

Jenny's views were the same for many of the respondents. Students also had trouble getting assignments turned in on time. Amanda said she had issues as "a few of my assignments I've turned in late just because they've completely slipped my mind, even though I will put it on my calendar." It was the first time she had ever earned a C in college.

There are two aspects where food insecurity and grades intersect-- strategy and rationing. Brian says he has to make his food stretch and coordinate his intake around his testing and assignment. David recalls having a Spanish test and not studying for his test, "I just felt like I didn't have the energy, I didn't have the vitality or the time... So, I got the worst grade I've gotten in college, pretty much for three semesters."

Finding Thirteen. **Self-awareness of the impacts of food insecurity leads to an attempt by college students to be strategic and manage their limited intake of food to have the maximum impact on their being successful in their academic performance.** There are two aspects where food insecurity and grades intersect-- strategy and rationing. Heather spoke about how she would go without one meal a day in order to have enough to eat twice a day. She found that strategizing this way was affordable and effective for her with very little money.

David, as mentioned earlier, has found his way of strategizing to make sure he has enough food. He specifically speaks with a butcher at large box stores about which meats and poultry items are on sale close to expiration and which are good enough to purchase and consume without any danger. In turn, he can save more money to buy additional food to help meet his needs. He also finds his college's walk-in food bank is very helpful. On the interview day, David received food items and personal care items from his food bank at school. He was quite excited to know his community college provided such support. Heather’s strategy includes fasting in the morning or simply skipping a meal.

Similar to Brian, Gary noticed that being hungry caused his lower grades. He became very systematic about how and when he eats. He used a calendar system to plan and coordinate his food purchasing and eating when tests were scheduled, and assignments were due.

Finding Fourteen. **Stresses from food insecurity can interact with mental health issues and exacerbate those issues too**. Mental health can be a crucial factor for students. Several participants reported having had a mental diagnosis in adulthood, while many found that their positive mental health deteriorated when food insecurity stressors were high. Whether a prospective student enters the community college system with a psychiatric diagnosis or experiences emotional difficulties due to the stress of basic needs, these selected participants have clearly struggled with that concern.

Several participants described one or more diagnoses of bipolar, schizoaffective disorder, depression, addiction, ADHD, antisocial personality disorder, social anxiety, anorexia nervosa, and generalized anxiety disorder. Mental health shaped these respondents' experiences, in addition to the previous topics that shaped the respondents' experiences. There are some implications to consider when looking at their mental health history.

Abby's diagnosis of schizoaffective disorder caused significant problems. During her K-12 years, she saw herself as different. Her mother's religious beliefs led the elders to pray away her paranoia, hallucinations, and depression. She finds it more effective to take online courses in order to manage her mental illness. However, her social support and connection with others remain quite limited. The resources available, including the pantry, are limited to her unless she visits the campus. Abby receives SSI and food stamps, but because she was hoarding food as a child, she finds that she still continues the same behavior because of insufficient resources. She continues to experience low food security.

The participants understood how family problems are plausible causes of mental illness and how they relate to their struggles with food insecurity. They shared stories about the challenges that arose between their mental health and their success in college. The essence of these difficult life experiences created their present challenges in maintaining their basic needs. This was particularly the case with David. As noted earlier, Davis's family history, problems with alcohol and drugs, ADHD diagnosis, and antisocial behaviors certainly are associated with his current issues in meeting his basic needs, especially food.

The students who grew up in foster families also suffered from mental illnesses. Anyiah was diagnosed with bipolar disorder, and Jenny's three years in homeless shelters and five foster care placements undoubtedly caused depression and anxiety. Unlike the previous stories, some respondents did not share their mental health status as they grew up; however, most students reported they had emotional challenges in college related to life stressors and lack of basic needs. Their environment required new adaptation strategies to function well enough to attend college.

Finding Fifteen. **Class attendance is negatively affected by food insecurity.** Attendance was a big problem for students. At the time of the interviews, COVID-19 had

interrupted the typical college experience. Some of the students could recollect what it was like to be hungry when on-campus learning was required. For example, Iona lived about 30 minutes from campus. The distance was an issue, but she explained that she would be tired and want to sleep late when she was hungry. However, because she has the responsibility of her child, she would try very hard to get up and attend school. While class attendance was required, she found herself lethargic and unable to focus. She also shared her view that sleeping had an extra benefit. She explains that she does not have to feel the hunger if she's sleeping. She shares, “So I know it would have affected my attendance a lot because I wouldn't wanna get up or how am I gonna go to school and not be focused on that... I'm too tired, so mentally, I just get tired when it comes to certain things like that, so I would have probably not shown up.”

Carrie and a few other students spoke about the connection between hunger and attendance. Even though students could work from home, hunger affected their ability to attend classes. Hunger made many of the students feel nauseated, causing non-attendance. Recently Carrie received an email from her school telling her that she would be removed from the course if she missed one more class this semester.

Finding Sixteen. **Widespread lack of knowledge by students that their college had a foodbank and what its services were.** The evidence suggested that students needed to address the lack of food in their outside support. Notably, community food banks were what the students knew and used. In Brian's case, he found that severely low food security was something he tried to prevent lest it led to further trouble in college. He often received support from local pantries. During his interview, he was currently at his college pantry for the first time. He did not realize he could get more than just food. The pantry offered him personal care items and school

supplies, which he was delighted to receive, as buying those items would reduce his budget tremendously.

It was found out through the interviews that more than half of the people who participated were unaware of whether or not their school had food pantries on the premises. The vast majority of those who took part thought that having food pantries on campus would be beneficial. Additionally, some of the participants were unaware that they could be eligible for SNAP benefits. As a result of Covid-19, the students' stimulus check proved to be an especially useful resource in terms of making ends meet. The Covid-19 stimulus checks appeared to have been a source of relief and benefit for people who were going through a period of food insecurity in a comprehensive manner.

Summary of Research Question Two. How do students view the relationship between food insecurity and their college success?

The participant's repeated stories about the negative effects of the stigma and shame associated with their lack of food were coupled together. Additionally, other factors associated with their desire to complete a credential to alter the course of their lives.

Academic success while hungry was challenging and frequently indicated underlying academic problems. Hunger-related academic performance brought attention to the students' relationship to difficulties in learning. The association between hunger and low academic success was very high. Many students described how their inability to effectively participate in class and get passing grades was caused by hunger. Several students discovered that studying without any good nutrition made success very difficult. Food insecurity-related stress can intersect with mental health conditions and make those conditions worse. Some students have undoubtedly suffered from mental illness and the strain of unmet basic needs. Attendance was also a major

issue. COVID-19 had disrupted the regular collegiate experience at the time of the interviews. Some of the students remembered what it was like to be hungry during obligatory on-campus learning which made it more difficult for them.

Summary

This chapter provides documentation and a summary of the findings that emerged from the interviews with fifteen students who were enrolled in community college programs in the state of North Carolina at the time of the interviews. The findings of this study are derived from the interviews, which took careful note of the experiences that the participants had in order to achieve a more in-depth comprehension of those experiences. The outcomes considered the challenges, roadblocks, and setbacks that the students encountered while working toward achieving their objectives. The research offers a broader and more in-depth understanding of what it is like to grow up without consistent access to enough food and to continue to struggle with this problem as an adult

The adult participants who suffered from food insecurity had the chance to share and retell "stories" about their lives. They shared much of their early life experiences, some in depth, and some were reserved due to the shame involved with admitting they struggled with hunger. The various strategies and attempts to overcome food insecurity were challenging. However, each participant’s goal was to end their academic career with a credential to have a higher quality of life.

The next chapter provides a description of the study, examines, and interprets the research findings as they relate to and apply to the previous research that has been done in the area, and then culminates with some conclusions. The next chapter will discuss the limits of the present research study, the consequences of the research findings, and make suggestions for

more research to be conducted in the same subject. The findings took into consideration the challenges, restrictions, and disadvantages that students faced while attempting to be successful in higher education despite their lack of consistent access to food.

Chapter Five: Discussions and Future Considerations

Summary of Study

The purpose of this narrative study was to gain an understanding of the lived experiences of selected hungry community college students in North Carolina. Limited substantial research has been conducted to explore the histories and current experiences of student hunger in North Carolina. This study details how hunger, along with other obstacles have impacted their education.

The questions asked in this research sought to capture the context between familial histories and the adversities students face with hunger. These connections are important for institutions whose mission is to minimize disruptions faced by their students so that they can earn a credential. This study examined these issues as a continuum of experiences within the context of ecological systems theory and community college objectives. Both are contradicted when only educational attainment is considered. The challenges faced by students and how they impact their time in higher education come together to make a unique story of encounter, challenge, and optimism. The phenomena give rise to ideas on how the institutional framework of the colleges they attend views these embodied experiences.

Two-year colleges are educational opportunity centers (American Association of Community Colleges, 2022). Over time, access to this opportunity has evolved. There has been a significant increase in students with lower socioeconomic status between 1996 and 2016, as well as an increase of 60% non-white students, with 60% of those non-white populations being female (Fry & Cilluffo, 2019). Quantitative information on the number of college students who have low or extremely low food security has been presented to Capitol Hill. The issue is becoming more well known, but as living costs and tuition rise, more has to be done to address

this problem (Temple University, 2018). Given this confluence of college-and-poverty-related causes, it is plausible that the literature on higher education student persistence may not accurately capture the intricacies, viewpoints, and experiences of how hunger affects community college completion. This argument is elaborated by a number of themes that developed from the key findings.

Significance of Findings

In Chapter 4, sixteen findings were determined to be significant based on the experiences of the participants. Seven themes were discovered to have similarities with the major results after using analysis to identify, characterize, and categorize unique themes that arose from the data. These seven key results best convey the essence of how students have experienced hunger and how it effects persistence in community college. Some of the topics that emerge from this study differ from those that may have emerged via a literature review. Other findings suggest that the themes echo/reinforce those already studied in the literature.

Diet influences both the clarity of one's thinking and one's capacity to absorb new information. Those who participated in the study are dealing with hunger. When undertaking an investigation of the incidence of food insecurity on college campuses, it is essential to consider the stigma and secrecy that surround the issue of food hardship. The most important finding of this study was that mothers placed greater emphasis on meeting their children's dietary needs than on meeting their own. Insights on these factors are intended to help to a better understanding of how hunger affects the experiences of community college students:

Table 7

Themes Derived from Research Findings Research Question One.

RQ1: How does food insecurity shape the experience of community college students?

Themes	Descriptions
Theme 1	Hunger is well known among participants.
Theme 2	Food contributes to mental wellness and enhanced learning capacity.
Theme 3	Shame and secrecy are factors that should be considered when assessing food insecurity on campuses.
Theme 4	Mothers will make sure their children eat before they do.

Table 7. Themes Derived from Research Finding Research Question One.

Table 8

Themes Derived from Research Findings Question Two.

RQ2. How do students view the relationship between food insecurity and their college success?

Themes	Descriptions
Theme 5	Students created strategies to succeed while hungry.
Theme 6	Extra sources of money were a blessing.
Theme 7	Community colleges should take student hunger into consideration since it is identical to other forms of hunger.

Table 8. Themes Derived from Research Findings Question Two

Research Question One

RQ1. How does food insecurity shape the experiences of community college students in North Carolina?

Theme 1. Hunger is Well Known Among Participants. Hunger is well-known among participants, and it acts as a gateway to more hunger experiences in community college. Experiencing hunger was nothing new for the participants; they know struggle. These participants identified food insecurity as a life-long problem where many resided in low-income and violent areas and their families had to rely on government assistance. Life for the participants was filled with multiple transitions, temporary housing, low incomes, homes with one parent, and other struggles beyond what most experience in a lifetime.

Based on the interviews, the students' lived experiences were quite difficult for them and had lasting effects into adulthood. In general, education was an important part of their lives, but it was perceived more as a duty for them to conduct than anything else. In order to make it through the day, it was necessary to consume food from non-home sources because returning home did not always guarantee that there would be food availability. The carefree feeling that one enjoys as a youngster was replaced by worry about when or where the next meal would be provided.

In 2016, the Wisconsin Hope Lab, now known as Hope4College, conducted a large-scale study to assess the number of students suffering from the lack of basic needs (Wisconsin HOPE Lab, 2016). There was overwhelming evidence that food insecurity was not an entity all by itself. This issue is often coupled with housing insecurity and lack of resources for assistance. According to the conceptual framework of EST (1981), the occurrences of food insecurity are nested into poverty and its' systemic impacts are seen with each student's life. The

environmental, familial, and social relationships were significantly problematic for participants, yet a mere quantitative view of how college students experience hunger does not explain the historical causes of the problem and how students face this challenge every day.

Physiological needs, according to Maslow's Hierarchy of needs, notes that food, clothing, and shelter, is essential to every life (Maslow, 1943). However, when individual survival needs are not met, one has trouble moving to the next generative rung of the ladder. Interview participants shared their continuous hardships and creative ways in which they generated sources for food. While a portion of the students explained they used local pantries; others made do by using their past survival mechanisms of bargaining for cheaper prices or rationing food supplies.

A survival-mode view provides a more efficient narrative of the challenges faced prior to their college careers. For most of the students, the promise of scholastic achievement is alluring, however, the possibility of achieving success while meeting all the other necessities of life is overwhelming. While the role of hunger has negative connotations for these students, it is also a motivator for them to achieve a credential and attempt to escape the life they live (Center for an Urban Future, 2009). As community college student enrollments continue to decline (Sedmark, 2020), these participants are choosing to stay in school despite the barriers they face, to work towards decreasing the need for welfare resources and increasing their upward mobility. Several students shared they wanted to succeed in college to change the pathway of their lives.

Theme 2. Food Contributes to Mental Wellness and Enhanced Learning Capacity. Chronic health concerns are a given when discussing food insecurity. Students did not correlate mental health and hunger during the interviews, however, participants in this study shared their difficulties with mental health issues alongside food insecurity. Being hungry can exacerbate mental health challenges (Acri et al., 2017; Knifton & Inglis, 2020; Weinreb et al., 2002). Diet

affects body composition, emotions, and health. Poor diet may cause anxiety, depression, and other neuropsychiatric disorders. Early exposure to healthy or unhealthy meals can impact the gene expression in the brain. Compounding parental challenges of basic survival needs led to neglect of mental health concerns for their children (Adan et al., 2019; Bekdash, 2021; Yam et al., 2015).

Chilton et al. (2017) wrote that the effects of food insecurity on genetics and life experiences from one generation to the next led to more problems with depression and other major mental health disorders. The participants grew up without mental health knowledge of the connection to nutritious food. As one participant shared, her family dealt with extremely low poverty and very low food security. Consequently, the lack of adequate and nutritional food along with her genetic history of schizophrenia became the perfect storm for mental illness. Her need to eat had a lesser association with her mental health versus eating because she was hungry.

Theme 3. Shame and Secrecy are Factors that Should Be Considered When Assessing Food Insecurity on Campuses. Tinto (1975b) developed the College Dropout Model where social and financial barriers, background characteristics of students, contact with campus employees and support, informal contacts play a large role in assisting students towards completion. When examining the background characteristics of college students, there are an excessive number of variables that can occur, including hunger. However, there is no way of knowing what students may be experiencing unless there are mechanisms in place to inform campus personnel of troubles like hunger and thus shame and secrecy are quiet barriers to knowing about the lack of food. Tinto hypothesizes that students are more likely to remain enrolled at an institution if they become involved in its social and academic environment. Food

insecurity mixed with shame and stigma must recognize as an inhibiting factor for students improving perseverance, achievement, and success.

Memories of being teased, ousted, or isolated for being on free and reduced lunch programs were widely known by the participants. Additionally, the respondents had childhood memories of their parents going to food banks and seeking food from others in their families or churches and even shared they were so ashamed they would hide their hunger to maintain friendships. Participants who felt ashamed of their hunger had trouble communicating with others about their nutrition. Participants demonstrated this in a variety of ways, including consuming a small snack before meeting with friends and avoiding food pantries.

As demonstrated by the actions of the study participants, shame was a deterrent in seeking help. Sznycer et al. (2016) suggests that shame is a defense strategy that may be employed by people in order to protect self-esteem. Their study's findings support the concept that shame is an adaptation designed to protect against the risk of social devaluation. Individual shame is demeaning in and of itself and devalues the individual in their environment. It is suggested that people employ shame as a protective mechanism to balance the competing demands of self-effectiveness and lack of self-economy by being extremely sensitive and can have a disregard for oneself.

Hunger and shame are not well-known topics that have been thoroughly researched. While there has been some discussion, research on shame and hunger has focused more on K-12 students rather than community college students. What I found in researching this topic is that the shame system is inherent for all of the participants, and they feel they stand out amongst those who do not suffer from food insecurity. This concept reinforces the barrier that keeps these

students from requesting help, participating in campus activities (unless there is food), and going to food pantries.

For these participants, shame is closely associated with traumatic experiences while being children and adolescents. Many were exposed to frequent, painful circumstances, which, as Walker et al. (2011) wrote, tends to internalize feelings of shame to such a degree that a state of "toxic shame" develops. Consistent with a number of quantitative and qualitative research studies, food insecurity is the top cause of stress, depression, suicide ideation, and adverse experiences among adults, children, and adolescents worldwide (Alaimo et al., 2001; Frongillo et al., 2021; Murphy et al., 1998).

The social barrier of shame kept most respondents unaware that others faced difficulties with food insecurity. Students said they did not know anyone else at their school who was talking about it, and they were unable to find any material on campus that was aimed toward others in the same situation as them. For instance, the greatest way to express how food insecurity made them feel was the experience of looking around their classes and on campus and thinking that no one else suffers hunger or feels the way they do. Students who, for fear of being embarrassed, chose to keep to themselves and have maintained social isolation from one another. Hunger shame discourages students to engage in campus life. Several theorists, like Chickering and Reisser (1993); Maslow (1943); Shelton (2019); Tinto (1987, 1993, 2017a) have demonstrated that achievement, and integration are avenues out of systemic problems like hunger.

Theme 4. Mothers Sacrifice Food for their Children. Mothers are a generous portion of those who suffer from very low food security. They make up 8.2 % of the total number of food insecure Americans (Coleman-Jensen et al., 2022). Supplementary data can be found in the

appendices. In this study, it was found that 53% of participants were mothers who were experiencing hunger problems.

Mothers were willing to forgo eating so they could provide their children with the best opportunities in life. It is natural for moms to want the best for their children, and most mothers are aware that hunger presents substantial obstacles not just to the physical health of their children but also to the cognitive, social, and emotional development of their children. Food insecurity may indirectly affect children through its consequences on parenting. As "nutritional gatekeepers," parents have a considerable influence over what and how much food kids eat. Parents' intentions and actions related to feeding their children, as well as how they obtain, prepare, and give them food, can all be impacted by food insecurity (Arlinghaus & Laska, 2021, p. 1).

Giving food to children is only one aspect of feeding them. The act of feeding someone can represent control over one's life, love, and concern for one's family, and passing down cultural and familial traditions to future generations (Ahye et al., 2006; Larson & Story, 2009; Murphy et al., 1998). Socially determined parental expectations and female identity interact (Chen, 2016). Even if other people can prepare meals for children, mothers are the most frequent ones to do so.

In the study, all mothers shared the food sacrifices they made for their children. Foregoing food was not a choice; it was mandatory. The impact of their sacrifices however, had a negative effect on their college attendance, focus, grades, and the amount of time it took them to graduate, which increased the risk that they would drop out of school. The student attrition models by Bean and Metzner (1985) and Spady (1970) are carefully reflected in the social

aspects and retention probabilities with the demands placed on non-traditional community college students and especially mothers.

Research Question Two

RQ2. How do students view the relationship between food insecurity and their college success?

Throughout the research of Bernardo et al. (2016); Cady (2014); Dubick et al. (2016); Grimes (1997); Payne-Sturges et al., (2018); Phillips et al. (2018); and Weaver et al. (2020) notable information was reported by studies that indicated students who experience hunger have more difficulty with concentration, absenteeism, headaches, low energy which led to lower GPAs and lowered academic success and student involvement on campus. These and other studies provide readers with analyzed data about the phenomenon. While this study generated similar information, interesting discoveries were made.

Theme 5. Students Created Strategies to Succeed While Hungry. The respondents know how to maximize the food they have by limiting their meals and eating a full lunch immediately before an important exam. Students with limited access to food are more likely to grasp how to maximize the nutrition they do have. The participants in this study have gained skills to address their hunger because of their long history of hunger. After experiencing the harmful effect hunger had on their academic performance, students in the present study revealed a remarkable aptitude to modify their food-buying habits and meal scheduling based on cost. They rationed food, relied on the assistance of their professors, and utilized food banks in the surrounding area as resources to help them achieve their scholastic objectives. This method was intended to facilitate their academic success. However, this was not without difficulties. When picking up food from the food pantries, students said that several of the products were things

they would not consume due to cultural restrictions and the type of food. Fresh food was occasionally available, although most food bank recipients received canned or prepared food.

Theme 6. Extra Sources of Money Were a Blessing. According to Dubick et al. (2016), the rising price of higher education and the growing proportion of students from marginalized populations may be signs that food insecurity is increasing very quickly. This issue is said to be made worse in community colleges, where a sizable portion of the student population consists of low-income and students of color. Food insecurity during college may cause or exacerbate dependency on financial aid, loans, or credit cards for economic support. Such behaviors may result in debt, which can negate the anticipated socioeconomic benefits of a college education (Gaines et al., 2014). The combination of a policy response and an increase in campus resources would assist in overcoming the obstacles associated with student food insecurity. Additional resources were somewhat limited during the time of this study due to COIVD-19. The participants with low incomes saw a significant decrease in their capacity to meet basic needs because of campus food pantries being closed during the epidemic. Many found the COVID-19 assistance grants to be useful, and taking classes online meant they had the ability to save money on things like gas and childcare, but that money did not last long.

The inability of students who had low incomes to meet their fundamental requirements was considerably exacerbated by the fact that food pantries on campus were forced to close as a consequence of the pandemic. The global impact of COVID-19 and its subsequent rippling effects have made it significantly more difficult to fulfill one's fundamental requirements. The people who were interviewed struggled to fulfill even their most fundamental financial commitments. Many individuals reported that the amount of financial assistance they received was not sufficient to support them over the entire school year.

Theme 7. Community Colleges Should Take Student Hunger into Consideration Since It Is Identical to Other Forms of Hunger. Hungry students have additional challenges while trying to graduate. Holding down jobs, children, studying, and attending college courses. exacerbates the difficult challenge of college. Students had to determine how to manage money, care for themselves and their basic needs, and still be successful community college students. Food insecurity has important implications for academic performance, which have been shown repeatedly in studies of children and college students (Dubick et al., 2016; Martinez et al., 2020; Patton-López et al., 2014; Slopen et al., 2010). Hunger has its' complications for anyone, however, those who are trying to attend classes also have a job, children, day care issues, transportation costs and time constraints to study have exceeding drawbacks.

Many students struggle to afford college and basic necessities. Food-insecure students must make challenging financial decisions which might impair overall grades. Feeding America says this includes students who work full-time and attend school part-time (Hoelke, 2021). Students face new challenges. Many student parents are single. Single-parent homes have increased food insecurity (30.2%) and unmarried fathers (15.4%) were food insecure (Coleman-Jensen et al., 2021). Increasing tuition, parenting, and a full-time job make successful college life difficult.

Integrating Findings with Literature Review

Interestingly, the interviews took place while historically significant issues like food insecurity and poverty were being discussed in a larger context in America. More than one-third of college students face poverty-related issues such as food insecurity and homelessness. Institutions may lose sight of the importance of inclusion in a world of evaluations and graduation rates.

Student Hunger and the Presenting Theoretical Framework

The outcomes of the interviews supported Bronfenbrenner's theory that students' environments have a substantial impact on their lives and experiences. Bronfenbrenner's ecological systems theory highlights the significance of an individual's context and quality. According to him, as a person ages, the interaction between multiple contexts becomes more complex. This complexity might result from the maturation of a person's physical and cognitive components. If a student's environment, also known as their ecological environment, is stressed, it can have a transforming effect on how they view themselves and interact with systems. The increased involvement of students in systems throughout time is a course of lifetime experiences.

As was said before, the mission of community colleges is to educate students whose families come from lower-middle class and middle-class socioeconomic backgrounds (McCants, 2003). Community colleges want their students to graduate. The students in this study have the same goal, but they are met with fundamental challenges.

The underlying causes of food insecurity among college students are clarified by merging theories such as Bronfenbrenner (1981), Maslow (1943) and Erikson (1950). Changes at one or more levels of the ecological system may have direct or indirect effects on the maturation of an individual. The interaction between family, community, environment, and the social landscape fuels and directs the development of an individual. Incorporating the academic literature referenced in this study, these lenses were used to examine the food insecurity of community college students. Concerns raised by students may be considered by college staff and support would look at how the university addresses meso-level food insecurity and how the macrosystem of the college student analyzes societal causes that contribute to socioeconomic disadvantage (Barnett et al., 2019).

It became apparent that the conceptual framework developed by Bronfenbrenner and Maslow, and Erickson provided an informative context for understanding the investigation. This was clearly explained by the participants' experiences as well as the way they saw themselves in connection to a bigger system like a community college.

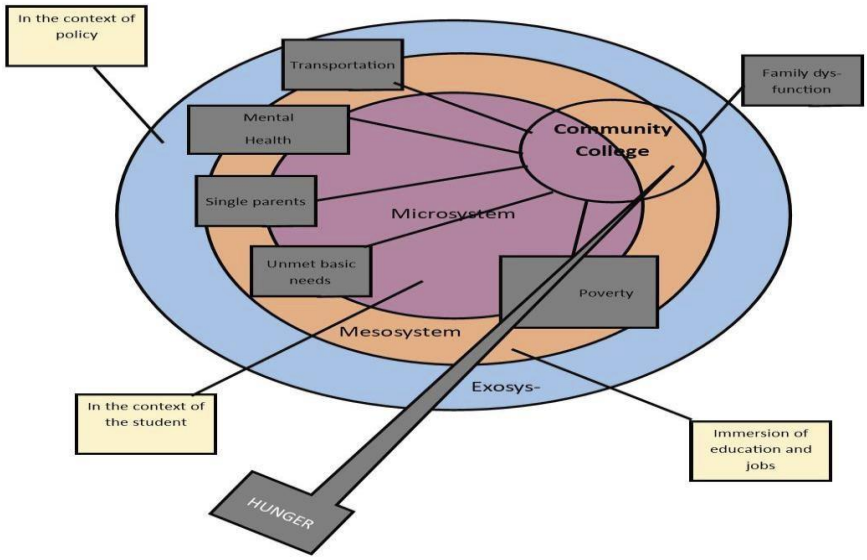
Student retention, persistence, and graduation rates at community institutions are persistently and significantly problematic. Despite decades of research on the subject, academic institutions continue to struggle to build student success programs considering the landscape of our country and the needs of its' students.

Conceptualizing and combining the results of this study provided an opportunity to overlay student-in-environment and community colleges. I have taken Bronfenbrenner's EST diagram and embedded it with the participant's reports of a variety of challenges while simultaneously considering the entity of community college. The overall system ecology, education and community college, and the micro issues that students experience are intertwined with one another. No one factor stands by itself.

But it is quite clear that the interactions of the fifteen students I interviewed with their environments helped characterize where they are at the point of the interviews and help explain some of their current motivation. These students had a difficult background and faced many negative and challenging experiences, but their interaction with their environment seems to have steeled them to be resilient and to work hard to overcome their challenges, and to be successfully in completing their education at almost any cost. I am sure there are others who proceeded along similar paths that have dropped out and given up. Some many of the students in the study had some encouragement to pursue further education either from parents or significant others in their life. We can speculate that some many of these students found some environmental stimulation

toward more education, while that may have been missing for those who dropped out. Bronfenbrenner not only helps us understand the students we interviewed and developed a rich account of their environment, but it would likely help us better understand those who may have dropped out along the way.

Figure 5. Overlapping of Student Hunger and EST



Limitations

The purpose of this study was to better understand the lived experiences of hunger among students attending community colleges in North Carolina. Due to the scope of this study, it is not possible to determine what percentage of students attending community colleges in North Carolina go hungry. These findings are restricted, since the research concentrated on three community colleges in the state of North Carolina and did not investigate other two-year colleges. This work provided a limited look at the experiences that students have in life and the challenges of hunger that college students face. The research was complicated by the fact that students lacked knowledge of what the USDA considers to be the actual definition of food

insecurity. I was under the impression that being labeled as someone who is suffering from very low or low food security is, at most, uncomfortable. The label itself brought shame and embarrassment.

Recommendations for Practice

All institutions devoted to postsecondary education should prioritize the development of strategies that are more effective in encouraging student achievement. Students who struggle intellectually, socially, financially, or in any other element of their lives, as well as those who cannot satisfy their most basic educational demands are more likely to drop out of school. Due to the uniqueness of each student's context, generalizations about the fundamental requirements of students may be deceptive. Institutional policymakers, researchers, educators, and decision-makers have significant impacts on the lives of students battling hunger. A critical point of convergence that tells a unique story of encounter, challenge, and optimism is where students struggle; here is where their experiences in higher education and this battle are related. Housing instability and a lack of aid resources are frequent coexisting issues with this food insecurity. Mental health problems can be made worse by hunger (Acri et al., 2017; Knifton & Inglis, 2020). Anxiety, depression, and other neuropsychiatric conditions may result from a poor diet. But the bottom line is that educational institutions must develop solutions to suit the multifaceted demands of the contemporary college students. This could be useful in terms of both colleges and students succeeding together.

Awareness for Colleges

Assessments. Community colleges that aim to educate and graduate productive citizens should direct themselves to assess and evaluate nonacademic needs for their students. The general position that community colleges should adopt is one in which there is no presumption

about hunger. If there are students, there are students who are hungry. Colleges that create strategies for contemporary decision-making and reorganization of their structures can properly address the needs of their students. College campuses are encouraged to compile data on the number of students who experience food insecurity and housing instability, according to the United States Government Accountability Office (2018). However, factors such as shame and humiliation may contribute to a reduced rate of reporting.

The experiences of the participants in this study portray needs of North Carolina community college students. Students participating in this study narrated a lack of resources in their area and on campus. There was a desire by participants to better their lives by going to college. Basic need barriers and secondary problems associated with poverty, childcare, transportation, and living expenses often take precedence over hunger and classes. Campuses can consider preventative measures by addressing the basic needs of their students. The literature suggests additional approaches to addressing hunger on college campuses (Kirst & Stevens, 2015).

For schools looking to gauge the extent of student insecurity on their campuses, data collecting is essential. College students' basic requirements were surveyed as part of a recent study in Georgia (Goldrick-Rab et al., 2018b). Through this study, the state was able to pinpoint regions where meeting basic needs had an impact on student achievement. On a smaller scale, each college can provide a screening assessment to identify the needs of students. Assessments can be added to the application packet and reviewed by admission staff. If a student is flagged based on the assessment or if a student goes to personnel on campus, the Student Services Department can reach out to a student and offer forms of support through the college and the community. Collecting data is essential for colleges to better understand the depth of student

needs. In the absence of identification of basic needs, institutions face several consequences. (See appendices E and F)

Flagging systems are particularly useful for ascertaining students who are doing poorly in their classes. While this is a fantastic way to connect with students and their academic achievements, college personnel need training to ask students if they are struggling with barriers beyond their grades. It has been my experience that instructors are reluctant to connect with students in this way or have said that is not their job and do not want to do take on a burden such as this.

The early model by Tinto (1975b) which was heavily inspired by Spady (1970) is restricted in that it does not address the hunger/food dilemma. Given the manner in which it has been presented and debated, it can be challenging to adapt it to mirror students' actual conditions. Dropout or some forms of educational problems may be associated with student's problems meeting their basic needs.

Even though the model recommends combining information about an individual's integration into the academic and social system, when the theory was designed, food insecurity on college campuses was not considered a concern for students. The integration concept focused on connecting with others on campus, student's having goals, being a part of the college culture. Colleges that are able to include models from Tinto and other scholars and overlay Bronfenbrenner's concept of ecology may have a better understanding of what their students need for academic success outside of the classroom and social connectedness.

Assessment to Action. The action of assigning admissions personnel the duty of establishing the first connection to the student, assessing other needs such as food, clothing, and shelter, can increase the institutional awareness and intervene to help students relieve some of

the pressures they experience. Colleges that can have a referral network available for student, such as SNAP, college and local food pantries, tax preparation, imparting life skills, and awareness-raising campaigns are a few potential remedies. Through programs like Single Stop: Imagine the Possibilities (2018, p. 1) colleges can provide space for helpful services to students. Through wrap-around programs, some states have effectively addressed the needs of students. For instance, CUNY has established food banks on every campus of a community college (*Governor Cuomo Announces SUNY and CUNY Campuses Statewide to Have Food Pantries by End of Fall Semester*, 2018).

It is proposed that syllabi be modified to include information on fundamental needs because instructors frequently have the closest interaction with students(Goldrick-Rab, Richardson, et al., 2017; Hallett & Crutchfield, 2017; U.S. Government Accountability Office, 2018). Early detection of students' basic needs, early and continual evaluation, and support may help students get past their obstacles. Identifiable basic needs, such as a lack of food, can be met by food banks and other comparable programs (Suzanna M Martinez et al., 2018). However, organizational frameworks, practices, resource limitations, competing interests, and political factors turn simple ideas into challenging realities.

Amarillo College in Texas is a good example of holistically assisting their students. Many of their students are Latinx and are enrolling in college for the first time in their families (Goldrick-Rab & Cady, 2018). The college has started educating its professors and employees about the experiences of the students using a campus-wide, top-down strategy. The organization is discovering how unmet needs affect retention rates, graduation rates, and enrollments as it gains an understanding of the gravity and scope of the injustices that its students experience.

Each college's proactive communication of food and other supply services can combat students' embarrassment, need, and lack of support through ongoing efforts to raise awareness and promote the availability of food and other supplies. The student services departments can also identify the needs of each college's student population and provide wraparound assistance.

Micro Efforts. Goldrick-Rab (2016) suggests that all college syllabi have information about basic needs supports. She suggests:

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so.

I would prefer a friendly approach knowing that talking about these issues is difficult for students. One can notice clues while teaching such as student lethargy, distraction, and absenteeism. Fruits and snacks can also be offered by teachers to be consumed by hungry students. This is a terrific method for boosting energy for class and exam days. As Maslow's (1950) theory posits, one must have food, clothing, and shelter to function upward towards the next level of functioning. Without this, growth is stagnant.

Obviously, there is a cost associated with providing food; and the cost should not always be the burden of an instructor. The entire college can participate in food drives and the endowment program can inform and advocate for funds towards the endeavors of helping students succeed by specifying money to be allocated for basic needs of students.

Pantries. Not all community colleges have food pantries. In order to promote and support the establishment of food pantries on college campuses across the United States, the College & University Food Bank Alliance (CUFBA) has teamed up with the Lumina Foundation and the HOPE Center for College, Community, and Justice to relaunch more information and

ways to promote student success by offering nutrition support (College & University Food Bank Alliance, 2019). In my research, I learned that pantries who are staffed by those who are enthusiastic about addressing student hunger only stay open while those dedicated to the program stay at the college. Notably, if there is not a formal directive by administration to have a working pantry, the informal pantry can be obsolete.

A pantry's supply can be difficult to manage, but there are pantries on the campuses of four-year institutions. Community colleges would benefit from learning more about how other colleges supply, run, and advertise their presence. It is not just food that can help. American Association of Community Colleges reported in 2016 that the average full-time community college student spends around $1,700 year on transportation costs. As you have read, students sacrifice food so they can pay for other necessities. Giving students grocery and gasoline gift cards are a huge help to prevent the need to choose between living expenses and food.

Student's Cost of Living. It is well-known that a substantial number of minority, first-generation, and low-income students attend community colleges (Ma & Baum, 2016). These students face financial constraints with respect to the current increased cost of living. In 2020, around 40 percent of renters in the United States paid gross rent that exceeded 35 percent of their income (Statista Research Department, 2022). Affordable housing does not mean free rent. Additionally, many students live in rural areas where affordable housing is limited (*H1114: NC Affordable Housing Act*, 2022). USAGov (2022) reports how affordable housing collaborates and provides housing by partnering with local housing owners at determining the typical cost of rent in regard to a person's income.

Students in this study shared financial problems with the cost of housing. The study's participants were mostly non-traditional students who are facing what all American's are facing,

inflation. As noted in this study, with already limited resources, housing costs becomes one of the first to be paid and food was often the last to be secured. While all of the students interviewed received funds to attend college, the money was never enough.

The participants shared that the temporary Covid-19 relief monies were of immense help, but the funds were not enough. Higher rates of non-completion and mediocre academic performance on campuses that do not adopt initiatives to identify hunger and provide solutions lead to longer credential completion times and lower or nonexistent GPAs (Cliburn-Allen & Alleman, 2017). According to Hanson (2008), two-year institutions should put more emphasis on creating ties with their relevant communities and connecting resources to students.
Although enrollment decreased in years 2020-2021, North Carolina community colleges are seeing an uptick in enrollment CCSR (2022) which could coincide with student's unmet basic needs.

Colleges that can incorporate concepts from Tinto and other researchers and overlay Bronfenbrenner's concept of ecological systems may have a better knowledge of what their students require for academic achievement outside of the classroom and social connectedness. Spady (1970) suggested that universities should evaluate student tenacity and academic and social frameworks as success factors. His concept can be expanded to meet the needs of modern students.

Policy. According to Cliburn-Allen and Alleman (2017), colleges are in a catch-22 scenario since they must encourage student achievement while also operating as a business. It is vital that local, state, and federal policies and programs evolved to suit the non-academic requirements of today's students, as student demographics have changed. Additional efforts to establish financing sources and referral networks through endowment projects to increase

awareness and support, community college can help nontraditional students overcome the system obstacles they face. There are significant initiatives underway to grasp the demands of nontraditional community college students, and policymakers, state and local governments are recommended to take these efforts into account when implementing changes (Aspen Institute, n.d., *Higher Education and Student Parent Supports: Barriers, Challenges, and Opportunities — Generation Hope*, n.d.; California Senate Bill 20, 2022; Madeleine R. Kerrick, Evaluation Director, EdInsights, n.d.; Upadhyaya et al., (2021).

Funding for colleges is based on student enrollment. Local and state bodies need viable data to guide funding decisions. The more information available to correlate basic need obstacles and student achievement that can be provided to local, state, and federal institutions, the more likely it is that colleges will receive additional funding to support their students.

However, increased rates of non-completion and subpar academic performance contribute to longer degree completion timelines and lower or nonexistent GPAs on campuses that do not embrace measures to identify hunger and give solutions (Cliburn-Allen & Alleman, 2017). According to Hanson (2008), two-year colleges should place a greater emphasis on establishing connections with their respective communities and linking resources. Students and their communities in which they live have more opportunity to prosper, find employment, and grow as a result of the establishment of connections between community relationships and the demands placed on students attending community colleges.

Thomas & Urquhart (2021) published an interview with Dr. Rebecca Tippett, director of Carolina Demography at the Carolina Population Center at UNC-Chapel Hill, in an article for EdNC. Tippett pointed out that the large number of college students who do not earn a degree is another reason why schools are increasingly focusing on non-traditional category of students.

You can't just count on increasing numbers of 18-20-year-olds, she said. "In some cases, you need to replace those students with other groups. There is no way that you will be able to construct the workforce pipeline that is required with only traditional students. It is impossible from a mathematical standpoint."

Without recruiting and supporting more non-traditional students, the mission of community colleges may fade.

Colleges that develop strategies for contemporary decision-making and restructuring of their systems share comparable mindsets and motives, allowing them to meet the demands of their students effectively; efforts would make going to a two-year college quite attractive if students knew they would be supported for their non-academic needs. Institutions are in a double bind, according to Cliburn-Allen and Alleman (2017), because colleges are largely run as business and continue to increase tuition, yet they must also assist their students in reaching success. It is more likely that students will earn a degree or certificate if they have access to meals, supplies, financial aid, and childcare.

Future Research

The purpose of this study was to better understand the lived experiences of North Carolina community college student's hunger. While the findings of this study provide important insights into student's experience of hunger while in college, further research needs to be conducted to fully understand several aspects discussed in this study. They are as follows:

For Colleges:

- Colleges recognizing there are problems such as food insecurity on their campuses.
- How to assess basic needs on college campuses.
- How colleges are addressing food insecurity on their campuses.

- How to collaborate with the local community to provide support.

For students:

  - Understanding how students are managing and strategizing hunger.
  - How shame is associated with hunger, studying how students' opportunity to be academically and socially integrated may be adversely affected by hunger.
  - How student parents manage food insecurity and college courses.
  - How to locate basic need support on campuses and in the community

It is imperative that local, state, and federal policies and programs evolve to address the non-academic needs of today's students, as student demographics have changed. Higher rates of non-completion and mediocre academic performance on campuses that do not adopt initiatives to identify hunger and provide solutions lead to longer credential completion times, lower or nonexistent GPAs and higher percentages of dropouts.

Summary

This section concludes by examining the impact of hunger on North Carolina community college students. The findings highlighted unexplored relationships with personal histories and current life circumstances of hunger while being a community college student. Combining the study's results allowed me to compare student-in-environment and community colleges. The results of the study suggest a need for additional research on the causes and effects of food insecurity among community college students.

Postsecondary schools can explore basic need measures to boost student achievement. Generalizations about students' fundamental needs can be inaccurate considering each of them has specific circumstances. Educational institutions must create solutions that cater to the needs

of today's college students if they are to benefit both colleges and students. Where student struggle and higher education intersect is a unique story of encounter, challenge, and optimism.

Summary of Study

The purpose of this narrative, qualitative study was to understand the lived experiences of 15 North Carolina community college students who are hungry. This is a phenomenon that is frequently encountered by community college students however, the magnitude is unknown. The two research questions that informed this study were:

RQ1. How does food insecurity shape the experiences of community college students in North Carolina?

RQ2. How do students view the relationship between food insecurity and their college success?

Many students expressed the desire to achieve in college in order to alter the course of their lives. Their desire and the impact of higher education come together to portray a unique story of encounter, hardship, and resiliency. Many students life serves as an example of how institutional position is entwined with poverty and food insecurity. The results of this study have added up-to-date, detailed knowledge for organizations who are interested in helping students thrive in college. These phenomena provide a viewpoint on the way in which formal institutions make sense of the specific embodied experiences of its students. Given this confluence of college and poverty-related causes, it is plausible that the literature on higher education student persistence may not accurately capture the intricacies, viewpoints, and experiences of how hunger affects community college completion. This argument is elaborated by a number of themes that developed from the key findings.

There are enough problems students face; being hungry may intensify their difficulties. Institutions and their students must prioritize the creation of awareness, assessment, and support on their campuses. The foundational work was employed to raise awareness among

postsecondary institutions of students' experiences with hunger while enrolled in community college.

This study gave insight into community colleges and the population they serve in addition to learning about the experiences of hungry college students and provided interconnections to early events that shed light on a person's historical moments, experiences, and unfortunate experiences during their K-12 years. Institutional policymakers, researchers, professors, and decision-makers have a substantial impact on students' lives and higher education institutions must develop solutions to support the needs of today's college students. The results of the study highlight the importance of conducting more research to develop and enhance programs for undernourished students. The challenges that students confront while pursuing higher education and the ways in which those challenges affect them form a point of confluence that produces various stories of overcoming challenges and discovering a sense of hope in the midst of adversity.

References

2 Sec. 2 Child Nutrition Act of 1966. (1966). https://legcounsel.house.gov/Comps/Child%20Nutrition%20Act%20Of%201966.pdf

Acri, M. C., Bornheimer, L. A., Jessell, L., Heckman Chomancuzuk, A., Adler, J. G., Gopalan, G., & McKay, M. M. (2017). The intersection of extreme poverty and familial mental health in the United States. *Social Work in Mental Health*, *15*(6), 677. https://doi.org/10.1080/15332985.2017.1319893

Adan, R. A. H., van der Beek, E. M., Buitelaar, J. K., Cryan, J. F., Hebebrand, J., Higgs, S., Schellekens, H., & Dickson, S. L. (2019). Nutritional psychiatry: Towards improving mental health by what you eat. *European Neuropsychopharmacology : The Journal of the European College of Neuropsychopharmacology*, *29*(12), 1321-1332. https://doi.org/10.1016/J.EURONEURO.2019.10.011

Ahye, B. A., Devine, C. M., & Odoms-Young, A. M. (2006). Values expressed through intergenerational family food and nutrition managements systems among African American women. *Community Health*, *1*, 5-16. http://dx.doi.org/10.1097/00003727-200601000-00003

Alaimo, K., Olson, C. M., & Frongillo, E. A. (2001). Food insufficiency and American school-aged children's cognitive, academic, and psychosocial development. *Pediatrics*, *108*(1), 44-55. www.aappublications.org/news

American Association of Community Colleges. (2020). *Mission statement*. https://www.aacc.nche.edu/about-us/mission-statement/

American Council on Education. (2006). *Working their way through college: Student employment and its impact on the college experience*. www.acenet.edu

American Psychological Association. (2003). *Five principles for research ethics*. https://www.apa.org/monitor/jan03/principles

APA Dictionary of Psychology. (n.d.). Retrieved November 11, 2022, from https://dictionary.apa.org/shame

Argyris, C. (1964). *Integrating the individual and the organization*. Wiley.

Arlinghaus, R., & Laska, M. N. (2021). Parent feeding practices in the context of food insecurity. *International Journal of Environmental Research and Public Health*, *18*(2), 1-12. https://doi.org/10.3390/IJERPH18020366

Aspen Institute. (n.d.). Improving mental health of student parents: A Framework for Higher. Washington. Educationhttps://ascend.aspeninstitute.org/wp-content/uploads/2021/05/MentalHealthFramework_Final.pdf

Astin, A. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, *40*(5), 518-529

Barnett, T.M., Olivo, R., & Christy, K. (2019). Theoretical application to understand food insecurity among college students: A multi-systems life course perspective. *Sociology Study*, *9*(2), 75-83. https://doi.org/10.17265/2159-5526/2019.02.004

Bauman, G. L., Bustillos, L. T., Bensimon, E. M., Brown, C. B., & Bartee, R. D. (2005). *Achieving equitable educational outcomes with all students: The institution's roles and responsibilities*. https://aacu.org/sites/default/files/files/mei/bauman_et_al.pdf

Bean, J. P., & Metzner, B. S. (1985). A Conceptual Model of Nontraditional Undergraduate Student Attrition. *Review of Educational Research*, *55*(4), 485-540. https://doi.org/10.3102/00346543055004485

Bekdash, R. A. (2021). Early Life Nutrition and Mental Health: The Role of DNA Methylation. *Nutrients*, *13*(9). https://doi.org/10.3390/NU13093111

Bernardo, A., Esteban, M., Fernández, E., Cervero, A., Tuero, E., & Solano, P. (2016). Comparison of Personal, Social and Academic Variables Related to University Drop-out and Persistence. *Frontiers in Psychology*, *7*(10). https://doi.org/10.3389/fpsyg.2016.01610

Bladd, K., Whitmore-Schanzenbach, D., Gundersen, C., & Ziliak, J. (2017). *Assessing food insecurity on campus*. Urban. https://www.urban.org/research/publication/assessing-food-insecurity-campus

Boggs, G. R. (2010). *The White House summit on community colleges conference papers. Democracy's colleges: The evolution of the community college in America*. https://www2.ed.gov/PDFDocs/college-completion/01-democracys-colleges.pdf

Bronfenbrenner, U. (1981). The ecology of human development. In *American Anthropologist 83*(3), 643. https://doi.org/10.1525/aa.1981.83.3.02a00220

Broton, K., & Goldrick-Rab, S. (2016). The dark side of college (Un)affordability: Food and housing insecurity in higher education. *Change: The Magazine of Higher Learning*, *48*(1), 16-25. https://doi.org/10.1080/00091383.2016.1121081

Broton, K. M., & Goldrick-Rab, S. (2018a). Going without: An exploration of food and housing insecurity among undergraduates. *Educational Researcher*, *47*(2), 121-133. https://doi.org/10.3102/0013189X17741303

Brown, K. (2018). *Putting Pell Grants to work for working students. How modernizing our federal higher education policy can improve outcomes for students and employers in today's economy*. National Skills Coalition.

https://www.nationalskillscoalition.org/resources/publications/file/Putting-Pell-Grants-to-work-for-working-students-1.pdf

Bruening, M., Argo, K., Payne-Sturges, D., & Laska, M. N. (2017). The struggle is real: A systematic review of food insecurity on postsecondary education campuses. *Journal of the Academy of Nutrition and Dietetics*, *117*(11), 1767-1791. https://doi.org/10.1016/j.jand.2017.05.022

Cady, C. L. (2014a). Food insecurity as a student issue. *Journal of College and Character*, *15*(4), 265-272. https://doi.org/10.1515/jcc-2014-0031

Cahalan, M., Perna, L. W., Yamashita, M., Wright, J., & Santillan, S. (2018). *Indicators of higher education equity in the United States - 2018 Historic Trend Report*. www.pellinstitute.org

Calahan, M., & Perna, L. (2015). *Indicators of higher education equity in the United States - 45-year trend report*. http://pellinstitute.org/indicators/

California Senate Bill No. 20. (2022) An act to amend Section 69519.3 of the Education Code, relating to student nutrition. Chapter 1667. https://legiscan.com/CA/text/SB20/2021

CCSR. Comprehensive Curriculum Student Report (2022). *Total head count*. North Carolina Community Colleges. https://www.nccommunitycolleges.edu/analytics/dashboards/total-headcount

Center for Community College Student Engagement. (2014). *Characteristics of community college students*. http://www.ccsse.org/docs/HIP_StudentCharacteristics.pdf

Center for an Urban Future. (2009, November). *Community colleges as a pathway out of poverty*. https://nycfuture.org/research/community-colleges-as-a-pathway-out-of-poverty

Cerven, C. (2013). Public and private lives: Institutional structures and personal supports in low-income single mothers' educational pursuits. *Education Policy Analysis Archives*, *21*(17), 1-27. http://epaa.asu.edu/ojs/

Charmaz, K. (2014). *Constructing grounded theory*. Sage.

Chen, W. T. (2016). From "junk food " to "treats." *An International Journal of Multidisciplinary Research*, *19*(1), 151-170. https://doi.org/10.1080/15528014.2016.1145008

Chessman, H. (2019). *ACE2019: An examination of food insecurity in higher education*. Higher Education Today. https://www.higheredtoday.org/2019/03/14/ace2019-examination-food-insecurity-higher-education/

Chickering, A. W. (1969). *Education and identity*. Jossey-Bass.

Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). Jossey-Bass.

Childers, L. (2019). *25 ways college has changed in the last decade*. Stacker. https://thestacker.com/stories/3663/25-ways-college-has-changed-last-decade

Chilton, M., Knowles, M., & Bloom, S. L. (2017). The Intergenerational Circumstances of Household Food Insecurity and Adversity. *Journal of Hunger & Environmental Nutrition*, *12*(2), 269. https://doi.org/10.1080/19320248.2016.1146195

Chilton, M., Knowles, M., Rabinowich, J., & Arnold, K. T. (2015). The relationship between childhood adversity and food insecurity: 'It's like a bird nesting in your head.' *Public Health Nutrition, 18*(14), 2643-2653. https://doi.org/10.1017/S1368980014003036

Chrysikos, A., Ahmed, E., & Ward, R. (2017). Analysis of Tinto's student integration theory in first-year undergraduate computing students of a UK higher education institution. *International Journal of Comparative Education and Development*, *19*(2/3), 97-121. https://doi.org/10.1108/IJCED-10-2016-0019

Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. Jossey-Bass.

Clark, L. (2012). When nontraditional is traditional: A faculty dialogue with graduating community college students about persistence. *Community College Journal of Research and Practice*, *36*(7), 511-519. https://doi.org/10.1080/10668926.2012.664090

Cliburn-Allen, C., & Alleman, N. (2017). *A private struggle at a private institution: Effects of student hunger on social and academic experiences.* https://www.researchgate.net/publication/322508933

Cohen, A. M., & Kisker, C. B. (2010). *The shaping of American higher education* (2nd ed.). Jossey-Bass.

Coleman-Jensen, A. (2019). *USDA ERS - Food insecurity among children has declined overall but remains high for some groups*. https://www.ers.usda.gov/amber-waves/2019/december/food-insecurity-among-children-has-declined-overall-but-remains-high-for-some-groups/

Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2019). *Household food security in the United States in 2018*. www.ers.usda.gov

Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2021). *Household food security in the United States in 2020*. www.ers.usda.gov

Coleman-Jensen, A., Rabbitt, M. P., Hashad, R. N., Hales, L., & Gregory, C. A. (2022). *Key statistics & graphics*. ERS. https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/#verylow

College & University Food Bank Alliance. (2019). *CUFBA: About us*. https://cufba.org/about-us/

College Board. (2019). *Trends in college pricing 2019*. https://research.collegeboard.org/trends/college-pricing

College Board. (2021). *Trends in college pricing and student aid*. PowerPoint Presentation.

Community College Research Center. (2019). *Community College FAQs*. https://ccrc.tc.columbia.edu/Community-College-FAQs.html

Community College Review. (2020). *North Carolina community colleges by tuition cost*. https://www.communitycollegereview.com/tuition-stats/north-carolina

Congressional Budget Office. (2013). *The Pell Grant program: Recent growth and policy options*. https://www.cbo.gov/publication/44448#section

Contreras-Mendez, S. and Cruse, L. (2021). Busy with purpose: Lessons for education and policy leaders from returning student parents. Institute for Women's Policy Research. Washington. https://iwpr.org/wp-content/uploads/2021/03/Busy-With-Purpose-v2b.pdf

Cooper, M. (2010). *Student support services at community colleges: A strategy for increasing student persistence and attainment*. http://www2.ed.gov/PDFDocs/college-completion/04-student-support-services-at-community-colleges.pdf%3E

Creswell, J. W. (2013). Qualitative Inquiry & Research Design: Choosing Among Five Approaches. In *Qualitative Inquiry and Research design : Choosing Among Five Approaches* (3rd ed.). SAGE. http://www.ceil-conicet.gov.ar/wp-content/uploads/2018/04/CRESWELLQualitative-Inquary-and-Research-Design-Creswell.pdf

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Sage.

Daugherty, L., Johnston, W. R., & Tsai, T. (2016). *Connecting college students to alternative sources of support*. Rand. http://www.rand.org/pubs/research_reports/RR1740.html

David, K. M., Lee, M. E., Bruce, J. D., Coppedge, B. R., Dickens, D., Friske, J., Hall, A. J., Singleton, M., Swicegood, J., & Thorman, J. (2013). Barriers to Success Predict Fall-to-Fall Persistence and Overall GPA among Community College Students. *Journal of Applied Research in the Community College, 21*(1), 5-13. https://www.proquest.com/scholarly-journals/barriers-success-predict-fall-persistence-overall/docview/1640488111/se-2

Davis, T., & Harrison, L. M. (2013). *Advancing social justice: Tools, pedagogies, and strategies to transform your campus*. Jossey-Bass.

Dubick, J., Mathews, B., & Cady, C. (2016). *Hunger on campus: The challenge of food insecurity for college students*. Students Against Hunger. https://studentsagainsthunger.org/wp-content/uploads/2016/10/Hunger_On_Campus.pdf

Economic Research Service. (2018). *USDA ERS: Definitions of food security*. www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx

Economic Research Service. (2018). *Definitions of food security*. ERS. www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx

Engle, J., & Tinto, V. (2008). *Moving beyond access: College success for low-income, first-generation students*. www.pellinstitute.org

Erikson, E. (1950). *Childhood and society* (2nd., rev.). Horton.

Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2010). *Student development in college: Theory, research, and practice* (2nd ed.). Jossey-Bass.

FAFSA. (n.d.). *What are graduation, retention, and transfer rates?* https://fafsa.ed.gov/help/fotw91n.htm

Feeding America. (2018). *Food Insecurity and Poverty in the United States*. https://hungerandhealth.feedingamerica.org/wp-content/uploads/2018/10/Food-Insecurity-Poverty-Brief_2018.pdf

File:Bronfenbrenner's Ecological Theory of Development (English).jpg - Wikimedia Commons. (2012, November 20). https://commons.wikimedia.org/wiki/File:Bronfenbrenner's_Ecological_Theory_of_Development_(English).jpg

Food and Agriculture Organization of the United Nations. (2020). *Policy briefs: Novel Corona Virus (COVID-19)*. http://www.fao.org/2019-ncov/resources/policy-briefs/en/

Freudenberg, N., Manzo, L., Jones, H., Kwan, A., Tsui, E., & Gagnon, M. (2011). *Food Insecurity at CUNY: Results from a Survey of CUNY Undergraduate Students A Report from: The Campaign for a Healthy CUNY*. https://www.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Centers/Center for Human Environments/cunyfoodinsecurity.pdf

Frongillo, E. A., Bernal, J., Rampalli, K. K., Massey, E., Adams, E. J., Rosemond, T. N., & Blake, C. E. (2021). Experiences and situations of shame among food-insecure adolescents in South Carolina and Oregon. *Ecology of Food and Nutrition*, *61*(1), 64-80. https://doi.org/10.1080/03670244.2021.1956484

Fry, R., & Cilluffo, A. (2019, May 22). *A rising share of undergraduates are from poor families*. Pew Research Center. https://www.pewresearch.org/social-trends/2019/05/22/a-rising-share-of-undergraduates-are-from-poor-families-especially-at-less-selective-colleges/

Gabriel, P., hooks, B., Hirshorn, H., Hughes, J., Neumann, K., Patierno, M. (1997). *bell hooks: Cultural criticism & transformation*. Media Education Foundation. https://uncc.kanopy.com/video/bell-hooks-cultural-criticism-transformation

Gaines, A., Robb, C. A., Knol, L. L., & Sickler, S. (2014). Examining the role of financial factors, resources, and skills in predicting food security status among college students. *International Journal of Consumer Studies*, *38*(4), 374-384. https://doi.org/10.1111/ijcs.12110

Gault, B., Reichlin, L., & Román, S. (2014). National Postsecondary Student Aid Study (NPSAS:08 and NPSAS:12) presented in. In *National Bureau of Economic Research*. http://www.nber.org/papers/w17744.pdfhttp://www.clasp.org/admin/site/publications/files/workforce-effectiveness.pdf.

Geiger, R. I. (2015). *The history of American higher education: Learning and culture from the founding to World War II*. Princeton University Press.

Goldrick-Rab, S. (2010). Challenges and opportunities for improving community college student success. *Review of Educational Research*, *80*(3), 437-469. https://doi.org/10.3102/0034654310370163

Goldrick-Rab, S. (2016). *Paying the price*. The University of Chicago Press.

Goldrick-Rab, S., Broton, K., & Eisenberg, D. (2015). *Hungry to learn: Addressing food & housing insecurity among undergraduates*. https://postsecondary.gatesfoundation.org/wp-content/uploads/2016/11/Hungry-to-Learn.pdf

Goldrick-Rab, S., Broton, K. M., & Hernandez, D. C. (2017). *Addressing basic needs security in higher education: An introduction to three evaluations of supports for food and housing at*

community colleges. https://hope4college.com/addressing-basic-needs-security-in-higher-education/

Goldrick-Rab, S., & Cady, C. (2017). *Distributing emergency aid to college students: Recommendations and sample distribution protocol*. https://hope4college.com/wp-content/uploads/2018/09/emergency-aid-distribution-sample-protocol.pdf

Goldrick-Rab, S., & Cady, C. (2018). *Supporting community college completion with a culture of caring: A case study of Amarillo College*. Shoes Training Initiative. https://shoestringinitiative.com/wp-content/uploads/2021/03/Goldrick-Rab-and-Cady-2018-Completion-with-a-Culture-of-Caring-A-Case-Study-.pdf

Goldrick-Rab, S., Harris, D. N., Kelchen, R., Alon, P., Attewell, E., Bettinger, D., Deming, S., Desjardins, S., Dynarski, F., Elwert, D., Figlio, D., Heller, B. T., Long, D., Mundel, J., Smith, K., & Stange, C. T. (2012). *Need-based financial aid and college persistence: Experimental evidence from Wisconsin**. http://www.finaidstudy.org/documents/Goldrick-Rab Harris Kelchen Benson 2012 FULL.pdf

Goldrick-Rab, S., Richardson, J., & Hernandez, A. (2017). *Hungry and homeless in college: Results from a national study of basic needs insecurity in higher education*. Hope4College. http://wihopelab.com/publications/Hungry-and-Homeless-in-College-Report.pdf

Goldrick-Rab, S., Richardson, J., & Kinsley, P. (2018). *Guide to assessing basic needs insecurity in higher education*. http://www.wihopelab.com/publications/Basic-Needs-Insecurity-College-Students.pdf

Goldrick-Rab, S., Richardson, J., Schneider, J., Hernandez, A., & Cady, C. (2018). *Still hungry and homeless in college*. The OTX. https://www.theotx.org/wp-content/uploads/2018/05/Wisconsin-HOPE-Lab-Still-Hungry-and-Homeless.pdf

Governor Cuomo announces SUNY and CUNY campuses statewide to have food pantries by end of fall semester. (2018). https://www.governor.ny.gov/news/governor-cuomo-announces-suny-and-cuny-campuses-statewide-have-food-pantries-end-fall-semester

Greenstone, M., Looney, A., Patashnik, J., & Yu, M. (2013). *Thirteen economic facts about social mobility and the role of education*. https://www.brookings.edu/wp-content/uploads/2016/06/THP_13EconFacts_FINAL.pdf

Grimes, S. K. (1997). Underprepared community college students: Characteristics, persistence, and academic success. *Community College Journal of Research and Practice*, *21*(1), 47-56. https://doi.org/10.1080/1066892970210105

H1114: NC Affordable Housing Act. (2022). Testimony of North Carolina General Assembly. https://app.keepupstate.com/bills/8345?utm_medium=H1114_link&utm_source=user_301_embed

Hallett, R. E., & Crutchfield, R. (2017). Homelessness and housing insecurity in higher education: A trauma-informed approach to research, policy, and practice. *ASHE Higher Education Report, 43*(6), 7-118. https://doi.org/10.1002/aehe.20122

Hanson, C. (2008). Putting community back in the community college: The case for a localized and problem-based curriculum. *Community College Journal of Research and Practice*, *32*(12), 999-1007. https://doi.org/10.1080/10668920701831274

Healthy CUNY and CUNY Graduate School of Public Health and Health. (2018). *Promoting health for academic success: An assessment of challenges and opportunities at City University of New York.* https://d1keuthy5s86c8.cloudfront.net/static/ems/upload/files/ivlnk_Promoting_Health_for_Academic_Success.2.12.18_FINALpdf_2.13.18.pdf

Hedman, E., Ström, P., Stünkel, A., & Mörtberg, E. (2013). Shame and guilt in social anxiety disorder: Effects of cognitive behavior therapy and association with social anxiety and depressive symptoms. *PLoS ONE*, *8*(4), 61713. https://doi.org/10.1371/JOURNAL.PONE.0061713

Hegji, A. (2016). *The Higher Education Act (HEA): A Primer*. https://fas.org/sgp/crs/misc/R43351.pdf

Heller, D. E., & Callender, C. (2013). *Student financing of higher education: A comparative perspective.* Routledge.

Hemelt, S. W., & Marcotte, D. (2016). The changing landscape of tuition and enrollment in American public higher education. *The Russell Sage Foundation Journal of the Social Sciences*, *2*(1), 42-68. https://doi.org/10.1353/rus.2016.0002

Henestroza, M., Alcala, C., Warden, J., & Powers, K. (2018). College Ready, hungry, and homeless: An overview of basic needs insecurity in California's public higher education system (Issue July). https://ccleague.org/sites/default/files/images/college-ready-hungry-and-homeless_assembly_office_of_research.pdf

Henry, L. (2017). Understanding food insecurity among college students: Experience, motivation, and local solutions. Annals of Anthropological Practice, 41(1), 6-19. https://doi.org/10.1111/napa.12108

Higbee, J. L. (2002). The application of Chickering's Theory of Student Development to student success in the sixties and beyond. *Research and Teaching in Developmental Education*, *18*(2), 24-36. https://www-jstor-org.librarylink.uncc.edu/stable/pdf/42802531.pdf?refreqid=excelsior%3A77d1a3db51abab1be5dbf84afc4066a8

Higher Education and Student Parent Supports: Barriers, Challenges, and Opportunities — Generation Hope. (n.d.). Generation Hope. https://www.generationhope.org/focus-group-report

Hillestad, S. (2014). *The link between poverty and education*. https://borgenproject.org/link-poverty-education/

Hope Center for College, Community, and J. (2018). *Basic needs security among students attending Georgia colleges and universities*. https://hope4college.com/wp-content/uploads/2018/10/GeorgiaSchools-10.16.2018.html

H.R.7724. 93rd Congress (1973-1974): An Act to amend the Public Health Service Act to establish a program of National Research Service Awards to assure the continued excellence of biomedical and behavioral research and to provide for the protection of human subjects involved in biomedical and behavioral research and for other purposes. Library of Congress. https://www.congress.gov/bill/93rd-congress/house-bill/7724

Ind. [@clinpsych_ind]. (2021, November 15). Bronfenbrenner's ecological systems model adapted for Black youth development and attachment processes in context. [Tweet]. https://twitter.com/clinpsych_ind/status/1460165178247503872

Institute for Research on Poverty. (n.d.). *How is poverty measured?* Retrieved March 23, 2019, from https://www.irp.wisc.edu/resources/how-is-poverty-measured/

Institute for Women's Policy Research. (2018). *Understanding the new college majority: The demographic and financial characteristics of independent students and their postsecondary outcomes*. https://iwpr.org/wp-content/uploads/2018/02/C462_Understanding-the-New-College-Majority_final.pdf

Jackson, D., Helton, J. J., Vaughn, M., & Scheetz, G. (2018, January 12). Preventing child abuse by reducing household food insecurity. *Society for Social Work Research*. https://sswr.confex.com/sswr/2018/webprogram/Session9172.html

Jolly, M. (2001). Encyclopedia of Life Writing: Autobiographical and Biographical Forms (1st ed.). Routledge.

Josselson, R. (1996). *Ethics and process in the narrative of lives*. Sage.

Karabel, J. (1972). Community colleges and social stratification. In *Harvard Educational Review*. 41(4). http://hepgjournals.org.librarylink.uncc.edu/doi/pdf/10.17763/haer.42.4.46m2826725l7k642

Kerrick, Madeline R. Evaluation Director, EdInsights. (n.d.). *Classes, Cradles and Careers: How Data Can Address Equity Gaps for Parenting Students | EdInsightsCenter*. https://edinsightscenter.org/classes-cradles-and-careers-how-data-can-address-equity-gaps-for-parenting-students/

Kirst, M. W., & Stevens, M. L. (2015). *Remaking college: The changing ecology of higher education*. Stanford University Press.

Knifton, L., & Inglis, G. (2020). Poverty and mental health: policy, practice, and research implications. *Psych Bulletin*, *44*(5), 193. https://doi.org/10.1192/BJB.2020.78

Knol, L. L., Robb, C. A., McKinley, E. M., & Wood, M. (2018). Food insecurity is related to financial aid debt among students. *Journal of Family & Consumer Sciences*, *110*(4), 35-41. https://doi.org/10.14307/JFCS110.4.35

Kohler Riessman, C. (1993). *Narrative analysis*. Sage.

Kramer, S. (2019). *U.S. has world's highest rate of children living in single-parent households | Pew Research Center*. Pew Research Center. https://www.pewresearch.org/fact-

tank/2019/12/12/u-s-children-more-likely-than-children-in-other-countries-to-live-with-just-one-parent/

Larson, N., & Story, M. (2009). A review of Environmental influences on food choices. *The Society of Behavioral Medicine*, *38*(1), 56-73. https://doi.org/10.1007/s12160-009-9120-9

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.

Lumina Foundation. (2018). *By the numbers: Today's students*. https://www.luminafoundation.org/resources/todays-student-infographic

Ma, J., & Baum, S. (2016). Trends in community colleges: Enrollment, prices, student debt, and completion. *College Board Research*, 1-23. https://research.collegeboard.org/media/pdf/trends-community-colleges-research-brief.pdf

Maguire, J., & Crutchfield, R. (2018). *Basic needs initiative*. https://www2.calstate.edu/impact-of-the-csu/student-success/basic-needs-initiative/Documents/Day1_Keynote.pdf

Mahboub, N., Rizk, R., Karavetian, M., & de Vries, N. (2021). Nutritional status and eating habits of people who use drugs and/or are undergoing treatment for recovery: A narrative review. *Nutrition Reviews*, *79*(6), 627-635. https://doi.org/10.1093/NUTRIT/NUAA095

Manning, J., & Kunkel, A. (2014). *Researching interpersonal relationships: Qualitative methods, studies, and analysis*. Sage.

Maroto, M. E., Snelling, A., & Linck, H. (2015). Food insecurity among community college students: Prevalence and association with grade point average. *Community College Journal of Research and Practice*, *39*(6), 515-526. https://doi.org/10.1080/10668926.2013.850758

Martinez, S. M., Frongillo, E. A., Leung, C., & Ritchie, L. (2018). 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*. https://doi.org/10.1177/1359105318783028

Martinez, S. M., Maynard, K., & Richie, L. D. (2017). Global food initiative: *Food and housing security at the University of California*. UCOP. www.ucop.edu/global-food-initiative.

Martinez, S., & Nazmi, A. (2018). *The research talk measuring food insecurity on your campus*. https://d1keuthy5s86c8.cloudfront.net/static/ems/upload/files/rdfeg_Assessing_food_insecurity_in_higher_ed_1.pdf

Martinez, S. M., Webb, K., Frongillo, E. A., & Ritchie, L. D. (2018). *Food insecurity in California's public university system: What are the risk factors? What are the risk factors? Journal of Hunger & Environmental Nutrition*, *13*(1), 1-18. https://doi.org/10.1080/19320248.2017.1374901

Maslow, A. H. (1943a). *A theory of human development*. https://doi.org/https://doi.org/10.1037/h0054346

Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50(4), 370-396. https://doi.org/10.1037/h0054346

Maslow, A. H. (1970). *Motivation and personality* (2nd.). HarperCollins.

McArthur, L. H., Lanae, B., Danek, A. C., & Holbert, D. (2017). A high prevalence of food insecurity among university students in Appalachia reflects a need for educational interventions and policy advocacy. *Journal Nutrition Education and Behavior*, *50*(6), 564-572. https://doi.org/10.1016/j.jneb.2017.10.011

McCants, J. (2003). The early history of the Higher Education Act of 1965. In *National TRIO Clearinghouse*. http://www.pellinstitute.org/downloads/trio_clearinghouse-The_Early_History_of_the_HEA_of_1965.pdf

McDearmon, J. T. (2009). Tuition rising: Why college costs so much. *International Journal of Educational Advancement, 9*(1), 54-56. https://doi.org/10.1057/ijea.2009.20

McDonnell, K. (2017). *Addressing the changing demographics of the new college student*. The Evolution. https://evolllution.com/attracting-students/todays_learner/addressing-the-changing-demographics-of-the-new-college-student/

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Mertens, D. M. (2015). *Research and evaluation in education and psychology* (4th ed.). Sage.

Miller, B. (2019). *The continued student loan crisis for Black borrowers*. Center for American Progress.

Miller, B., Campbell, C., Cohen, B. J., Hancock, C., Kreiter, S., & Hancock, J. (2019). *Addressing the $1.5 Trillion in Federal Student Loan Debt*. www.americanprogress.org

Mills, C. W. (1959). *The sociological imagination*. Sage.

Moustakas, C. (1994). *Phenomenological Research Methods*. Sage.

Mukigi, D., Thornton, K., Binion, A., Brown, K., & Church, M. (2018). Food insecurity among college students: An exploratory study. *Journal of Nutrition and Health Sciences*, *5*(1), 1-9. https://doi.org/10.15744/2393-9060.5.106

Murphy, J. M., Wehler, C. A., Pagano, M. E., Little, M., Kleinman, R. E., & Jellinek, M. S. (1998). Relationship between hunger and psychosocial functioning in low-income American children. *Journal of the American Academy of Child and Adolescent Psychiatry*, *37*(2), 163-170. https://doi.org/10.1097/00004583-199802000-00008

National Association of Social Workers. (2017). *Code of ethics of the National Association of Social Workers*. NASW. www.socialworkers.org

National Center for Children in Poverty. (n.d.). *Child poverty*. Retrieved March 23, 2019, from www.nccp.org/topics/childpoverty.html

National Center for Children in Poverty. (2016). *Basic facts about low-income children*. http://www.nccp.org/publications/pub_1194.html

National Center for Education Statistics. (1993). *Nontraditional undergraduates: Definitions and data*. U.S. Department of Education. https://nces.ed.gov/pubs/web/97578e.asp

National Center of Educational Statistics. (2015). Trends in Pell Grant receipt and the characteristics of Pell Grant recipients: Selected years 1999-2000 to 2011-2012. National Center of Educational Statistics.

NC Community Colleges. (2018a, February 18). *Statistical reports.* https://www.nccommunitycolleges.edu/sites/default/files/data-warehouse/statistical-reports/cursta01.pdf

NC Community Colleges. (2018b, September 5). *Mission & History*. https://www.nccommunitycolleges.edu/mission-history

NC Community Colleges. (2019a). *Annual curriculum student enrollment by college.* https://www.nccommunitycolleges.edu/reports-due-dates/spring-2019-estimated-fte

NC Community Colleges. (2019b, October 23). *Total instructional activity.* https://www.nccommunitycolleges.edu/analytics/dashboards/instructional-fte-total

NC Community Colleges, (2020). *Mission and history*. https://www.nccommunitycolleges.edu/mission-history

Nikolaus, C. J., Ellison, B., & Nickols-Richardson, S. M. (2019). College students' interpretations of food security questions: Results from cognitive interviews. *BMC Public Health*, *19*(1). https://doi.org/10.1186/s12889-019-7629-9

North Carolina Community College System. (2020). *Get the facts*. https://www.nccommunitycolleges.edu/get-facts

O'Mallet, J. W., & Ehrenberg, R. G. (2002). *Tuition rising: Why college costs so much, with a new preface.* Harvard University Press. https://doi.org/10.1360/zd-2013-43-6-1064

Osei, Z. (2019). *Low-income and minority students are growing share of enrollments, and 2 other takeaways from new study*. The Chronicle of Higher Education. https://www.chronicle.com/article/Low-IncomeMinority/246346

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.

Patton-López, M. M., López-Cevallos, D. F., Cancel-Tirado, D. I., & Vazquez, L. (2014). Prevalence and correlates of food insecurity among students attending a midsize rural university in Oregon. *Journal of Nutrition Education and Behavior*, *46*(3), 209-214. https://doi.org/10.1016/J.JNEB.2013.10.007

Payne, R. K. (2003). *Understanding and working with students and adults from poverty*. AHA Process. https://www.ahaprocess.com/

Payne-Sturges, D. C., Tjaden, A., Caldeira, K. M., Vincent, K. B., & Arria, A. M. (2018). Student hunger on Campus: Food Insecurity Among College Students and Implications for Academic Institutions. *American Journal of Health Promotion*, *32*(2), 349-354. https://doi.org/10.1177/0890117117719620

Peshkin, A. (1988). In search of subjectivity-one's own. *Educational Researcher, 17*(7), 17-22.

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

Pizzolato, J. E., & Olson, A. B. (2016). Poverty and knowing: Exploring epistemological development in welfare-to-work community college students. *The Review of Higher Education, 39*(4), 571-596. https://doi.org/10.1353/rhe.2016.0025

Polkinghorn, D. E. (1995). Narrative configuration in qualitative analysis. *Qualitative Studies in Education, 8*(2).

Prior, M. T. (2018). Accomplishing "rapport" in qualitative research interviews: Empathic moments in interaction. *Applied Linguistics Review, 9*(4), 487-511. https://doi.org/10.1515/applirev-2017-0029

Quigly, A. (1997). *Rethinking literacy education: The critical need for practice-based change*. Jossey-Bass.

Riessman, C. K. (2003). Analysis of personal narratives. In J. F. Gubrium (Ed.), *Inside interviewing new lenses, new concerns* (pp. 331-346). Sage.

Rossman, G. B., & Rallis, S. F. (2017). *An introduction to qualitative research* (4th ed.). Sage.

Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Sage.

Saldana, J. (2011). *Fundamentals of qualitative research*. Oxford University Press.

Saldana, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage.

Sameroff, A. (2010). A unified theory of development: A dialectic integration of nature and nurture. *Child Development, 81*(1), 6-22. https://doi.org/10.1111/J.1467-8624.2009.01378.X

Sandeen, A., & Barr, M. (2006). *Critical issues for student affairs*. Jossey-Bass.

Sameroff, A. (2010). A unified theory of development: A dialectic integration of nature and nurture. *Child Development*, *81*(1), 6-22. https://doi.org/10.1111/J.1467-8624.2009.01378.X

Schmaltz, J. (2018). *'Hungry to Learn.'* The Chronicle of Higher Education. https://www.chronicle.com/interactives/insecurity

Scott-Clayton, J. (2017). *Undergraduate financial aid in the United States*. https://www.amacad.org/sites/default/files/academy/multimedia/pdfs/publications/researchpapersmonographs/CFUE_Financial-Aid/CFUE_Financial-Aid.pdf

Scribner, J. D., Aleman, E., & Maxcy, B. (2003). Emergence of the politics of education field: Making sense of the messy center. *Educational Administration Quarterly*, *39*(1), 10-40. https://doi.org/10.1177/0013161X02239759

Semega, J., Fontenot, K., & Kollar, M. (2018). *Income and poverty in the United States: 2017* (No. P60-263). https://www.census.gov/data/tables/2018/demo/income-poverty/p60-263.html

Sedmark, T. (2020, December 17). *Fall 2020 college enrollment declines 2.5%: Nearly twice the rate of decline of fall 2019*. National Student Clearinghouse. https://www.studentclearinghouse.org/blog/fall-2020-college-enrollment-declines-2-5-nearly-twice-the-rate-of-decline-of-fall-2019/

Sethi, S. (2020). *Hunger and food insecurity are not the same. Here's why that matters—and what they mean.* The Counter. https://thecounter.org/hunger-food-insecurity-covid-19-feeding-america/

Shelton, L. G. (2019). *The Bronfenbrenner Primer: A guide to develecology*. Routledge.

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*, *19*(3), 284-299. https://doi.org/10.1177/1521025115621918

Slopen, N., Fitzmaurice, G., Williams, D. R., & Gilman, S. E. (2010). Poverty, food insecurity, and the behavior for childhood internalizing and externalizing disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, *49*(5), 444-452. https://doi.org/10.1016/J.JAAC.2010.01.018

Smith, A. A. (2019). New research finds discrepancies in estimates of food insecurity among college students. Inside Higher Ed. https://www.insidehighered.com/news/2019/04/30/new-research-finds-discrepancies-estimates-food-insecurity-among-college-students

Smith, D. G. (2009). *Diversity's promise for higher education*. The John Hopkins University Press.

Society for Social Work and Research 22nd Annual Conference - Achieving Equal Opportunity, Equity. and Justice. (2018, January 12). Preventing child abuse by reducing household food insecurity. https://sswr.confex.com/sswr/2018/webprogram/Session9172.html

SocioCultural Research Consultants, L. (2021). *Dedoose* (9.0.17). https://www.dedoose.com

Spady, W. G. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange*, *1*(1), 64-85. https://doi.org/https://doi.org/10.1007/BF02214313

Stanford Encyclopedia of Philosophy. (2016, November 1). *Edmund Husserl*. https://plato.stanford.edu/entries/husserl/#EpoPerNoeHylTimConPheRed

Statista Research Department. (2022, May 12). *Gross rent as a share of U.S. household income*. https://www.statista.com/statistics/186732/gross-rent-as-a-percent-of-household-income-in-the-us/

Stern, J. A., Barbarin, O., & Cassidy, J. (2021). Working toward anti-racist perspectives in attachment theory, research, and practice. Attachment &Amp; Human Development, 24(3), 392-422. https://doi.org/10.1080/14616734.2021.1976933

Sznycer, D., Tooby, J., Cosmides, L., Porat, R., Shalvi, S., & Halperin, E. (2016). Shame closely tracks the threat of devaluation by others, even across cultures. *Psychological and Cognitive Sciences*, *113*(10), 2625-2630. https://doi.org/10.1073/pnas.1514699113

Temple University. (2018, September 5). *Sara Goldrick-Rab speaks on Capitol Hill at first legislative briefing on college student hunger*. College of Education and Human Development. https://education.temple.edu/news/2017/12/sara-goldrick-rab-speaks-capitol-hill-first-legislative-briefing-college-student-hunger

The Carnegie Classification of Institution Higher Education. (2017). *Carnegie Classifications*. https://carnegieclassifications.iu.edu/lookup/view_institution.php?unit_id=197850&start_page=lookup.php&clq=%7B%22first_letter%22%3A%22S%22%7D

The Hope Center for College, Community, and J. (2018). *Basic needs security among students attending Georgia colleges and universities*.

The Office of the U.S. Department of Education. (2020). *FAFSA® data by Postsecondary school and state of legal residence: FAFSA® volume reports*. https://studentaid.gov/data-center/student/application-volume/fafsa-school-state

Tinto, V. (1975a). *Dropout from higher education: A theoretical synthesis of recent research. Review of Educational Research*, *5*(1), 89-125. https://doi.org/10.3102/00346543045001089

Tinto, V. (1975b). Dropout from higher education: A theoretical synthesis of recent research. *American Educational Research Association, 45*(1), 89-125. https://doi.org/10.2307/1170024

Tinto, V. (1987). *The principles of effective retention*. Maryland College Personnel Association.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). University of Chicago Press.

Tinto, V. (2017a). Reflections on student persistence. *Student Success: A Journal Exploring the Experiences of Students in Tertiary Education*, *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

United Health Foundations. (2019). *Public health impact: Concentrated disadvantage*. https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/concentrated_disadvantage/state/NC

United States Department of Agriculture Economic Research Service. (2019). *Survey Tools.* ERS https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools/

Upadhyaya, S., Blocker, C. P., Houston, H., & Sims, M. R. (2021). Evolving two-generation services to disrupt the intergenerational effects of poverty and promote family well-being. *Journal of Business Research, 125*, 324-335. https://doi.org/10.1016/j.jbusres.2020.12.019

U.S. Department of Agriculture. (2022, February 16). *Income Eligibility Guidelines*. https://www.fns.usda.gov/cn/income-eligibility-guidelines

U.S. Department of Education. (NCES). (1993). *National Postsecondary Student Aid Study*. https://nces.ed.gov/pubs/web/97578e.asp

U.S. Department of Education National Center for Educational Statistics. (2019). *The Condition of education 2019 (NCES 2019-144)*. Sources of Financial Aid. https://nces.ed.gov/fastfacts/display.asp?id=31

U.S. Census Bureau. (2017). *Supplemental Poverty Measure*. https://www.census.gov/topics/income-poverty/supplemental-poverty-measure/about.html

U.S. Government Accountability Office. (2018). *GAO-19-95, Food insecurity: Better information could help eligible college students access federal food assistance benefits*. https://www.gao.gov/assets/700/696254.pdf

USAGov. (2022, July 8). *Find affordable rental housing*. https://www.usa.gov/finding-home

Walker, S. P., Wachs, T. D., Grantham-Mcgregor, S., Black, M. M., Nelson, C. A., Huffman, S. L., Baker-Henningham, H., Chang, S. M., Hamadani, J. D., Lozoff, B., Gardner, J. M. M., Powell, C. A., Rahman, A., & Richter, L. (2011). Inequality in early childhood: Risk and protective factors for early child development. *The Lancet*, *378*(9799), 1325-1338. https://doi.org/10.1016/S0140-6736(11)60555-2

Weaver, R. R., Vaughn, N. A., Hendricks, S. P., McPherson-Myers, P. E., Jia, Q., Willis, S. L., & Rescigno, K. P. (2020). University student food insecurity and academic performance.

Journal of American College Health, *68*(7), 727-733. https://doi.org/10.1080/07448481.2019.1600522

Weingarden, H., Renshaw, K. D., Wilhelm, S., Tangney, J. P., & Dimauro, J. (2016). Anxiety and shame as risk factors for depression, suicidality, and functional impairment in body dysmorphic disorder and obsessive-compulsive disorder. *The Journal of Nervous and Mental Disease*, *204*(11), 832. https://doi.org/10.1097/NMD.0000000000000498

Weinreb, L., Wehler, C., Perloff, J., Scott, R., Hosmer, D., Sagor, L., & Gundersen, C. (2002). Hunger: its impact on children's health and mental health. *Pediatrics*, *110*(4). https://doi.org/10.1542/PEDS.110.4.E41

Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. The Free Press.

Welch, P. (2018). *H.R.7161 - 115th Congress (2017-2018): Local School Foods Expansion Act of 2018*. https://www.congress.gov/bill/115th-congress/house-bill/7161

Williams, J. P. (2019). *A fight against food insecurity, hunger on college campuses*. US News. https://www.usnews.com/news/healthiest-communities/articles/2019-02-04/a-fight-against-food-insecurity-hunger-on-college-campuses

Wisconsin HOPE Lab. (2016). *What we're learning: Food and housing insecurity among college students. A data update from the Wisconsin HOPE Lab* (No. 16-01). Wisconsin HOPE Lab.

Wood, J. L., & Harris III, F. (2018). Experiences With "acute" food insecurity among college students. *Educational Researcher*, *47*(2), 142-145. https://doi.org/10.3102/0013189X17752928

Wood, J. L., Harris III, F. & Delgado, N. R. (2016). *Struggling to survive-striving to succeed: Food and housing insecurity in the community college*. https://cceal.org/food-housing-report/

Woods, A. (2018). The SAGE encyclopedia of educational research, measurement, and evaluation. In *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation* (pp. 1537-1539). Sage.

Yam, K. Y., Naninck, E. F. G., Schmidt, M. v., Lucassen, P. J., & Korosi, A. (2015). Early-life adversity programs emotional functions and the neuroendocrine stress system: the contribution of nutrition, metabolic hormones, and epigenetic mechanisms. *Stress (Amsterdam, Netherlands)*, *18*(3), 328-342. https://doi.org/10.3109/10253890.2015.1064890

Appendices

Appendix A: Initial Letter to All Participants

Department of Educational Leadership

9201 University City Blvd, Charlotte, NC 28223

Dear……

Thank you for participating in this research. The purpose of this letter is to provide you with information about the study and how it affects you. At the interview, I will give you a consent form to sign, and you will need to sign just to make sure we have covered all the necessary questions you have and address confidentiality as it pertains to this study. You will have up until seven days to decide if you would like to participate. I am happy to talk with you to answer any additional questions you may have.

I look forward to working with you on this very important research topic.

Sincerely,

Nanci Burt

Department of Educational Leadership

9201 University City Blvd, Charlotte, NC 28223

My name is Nanci Burt, and I am a doctoral student in the educational leadership program at The University of North Carolina at Charlotte (UNCC). I am conducting a research study about hunger and the North Carolina community college student. I would like for you to participate in this research, but before you decide, you need to know what is involved and why it is being done. Please take your time while reading the following information. I am happy to answer any questions you may have. Please take your time while you are considering participating. I will be reaching out to you in seven days to hear your decision.

I will be conducting this research in accordance with the requirements of the IRB from UNCC and the local community college in which the student attends.

Question 1

What is the purpose of this research study?

- Many people misunderstand students who live with hunger (the absence of daily nutrition). This study aims to understand the college student experiences of living with hunger through the personal stories they tell.
- Present the findings to the UNCC dissertation committee and possibly to those who can address assisting students with basic needs such as food.

Question 2

Do I have to take part?

- No. You are free to decide whether to participate or not.

Question 3

Can I withdraw from the research?

- Yes. You are free to withdraw at any time without reason. Please inform me if you decide to exit the study.

Question 4

What are the benefits of participating in this study?

- This study may contribute to new understandings of how hunger affects the lives of community college students.

Question 5

Why have I been chosen?

- You expressed an interest in this study either based on a flier, a referral from someone at your college, or an email that was generated to you.
- You may have indicated you sometimes go to college without having eaten
- You are a community college student residing in North Carolina

Question 6

What will I have to do if I decide to participate?

If you participate, you will be asked to have one face-to-face interview and a follow-up phone call. I will be asking you about how hunger affects you as a college student and life experiences that might have shaped your life now.

These interviews can be conducted at any mutually agreed upon place and time, including a web chat if we are still in caution mode due to the Covid-19 virus. This interview can last anywhere from 60-90 minutes in length.

Question 8

Will someone find out who I am?

- No. Participating in this study is strictly voluntary. Your identifying information will be confidential. All personal information, such as your name and college, will be identified with a pseudonym to ensure your privacy.
- However, I am legally required to break confidentially if you share that you could harm yourself or others. This will be done with your presence to ensure your safety.

Question 9

What happens to the results?

- Results will be shared with the doctoral program at UNCC and eventually be placed in the UNCC library. Again, no identifying information will be related to you. If you would like a copy of the results, I am more than happy to share them with you.

Question 10

Will I be compensated for my time?

- Yes. Each participant will be awarded a $30 gift card upon completing the interviews.

For further questions, please contact me at nburt1@uncc.edu. Thank you for taking the time to read this important participating information questions and answers.

Nanci Burt,

Researcher

Appendix B: Initial Interview Questions

Department of Educational Leadership

9201 University City Blvd, Charlotte, NC 28223

Researcher: Nanci Burt, The University of North Carolina at Charlotte

Dissertation Chair: Dr. Alan Mabe, The University of North Carolina at Charlotte

Study Title: North Carolina Community College Student Experiences with Food Insecurity

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The following research questions will be used in this study:

RQ1: How does food insecurity shape the experiences of community college students in North Carolina?

RQ2: How do students view the relationship between food insecurity and their success in college?

First Interview: (Thank you)

Hi, thank you for participating in my research study. My name is Nanci Burt, and this interview is part of a research study. We will be discussing the nature of your experience here at _____ and how hunger has affected you and your college life. You need to understand the risk, benefits, and scope of the study before consenting to participate. We will read over this

information on the consent form. When you sign it, I will keep one, and you will have a copy for yourself. You have the choice to participate or not to participate. I invite you to ask any questions you may have about the consent form. Is there anything about the study you would like for me to know before we begin?

Consent form distributed, reviewed, and gathered. Any questions the respondents have are answered here.

The goal of the study: I want to understand any life experiences that may have contributed to you dealing with hunger and an understanding of how hunger affects you as a community college student.

Warm-up includes questions such as what year are you at your college? What is your major? Probe for further information to build rapport using active listening, reflecting, paraphrasing, small talk.

1. Tell me a little about yourself [probe for further information].
    a. Where did you grow up?
    b. Who was in your family?
    c. Schooling history
    d. Struggles/barriers
2. Did you ever grow up not having enough food in your home?
3. How did those experiences shape you and your development?
4. Did hunger impact your relationship with others, your community influences?

I would like to shift a bit and talk about your experiences with hunger.

5. What stressors did you feel when you could not eat?

6. When you experience food insecurity, where did you turn for help? What was effective?

7. How has hunger affected your experiences with how you look at yourself and your college experience?

8. Have you ever worried that your lack of food was going to affect your college performance, i.e., homework, tests, etc.?

9. How does hunger affect your success in college?

10. Is there anything else you feel I should know about your experiences with hunger?

Second Interview:

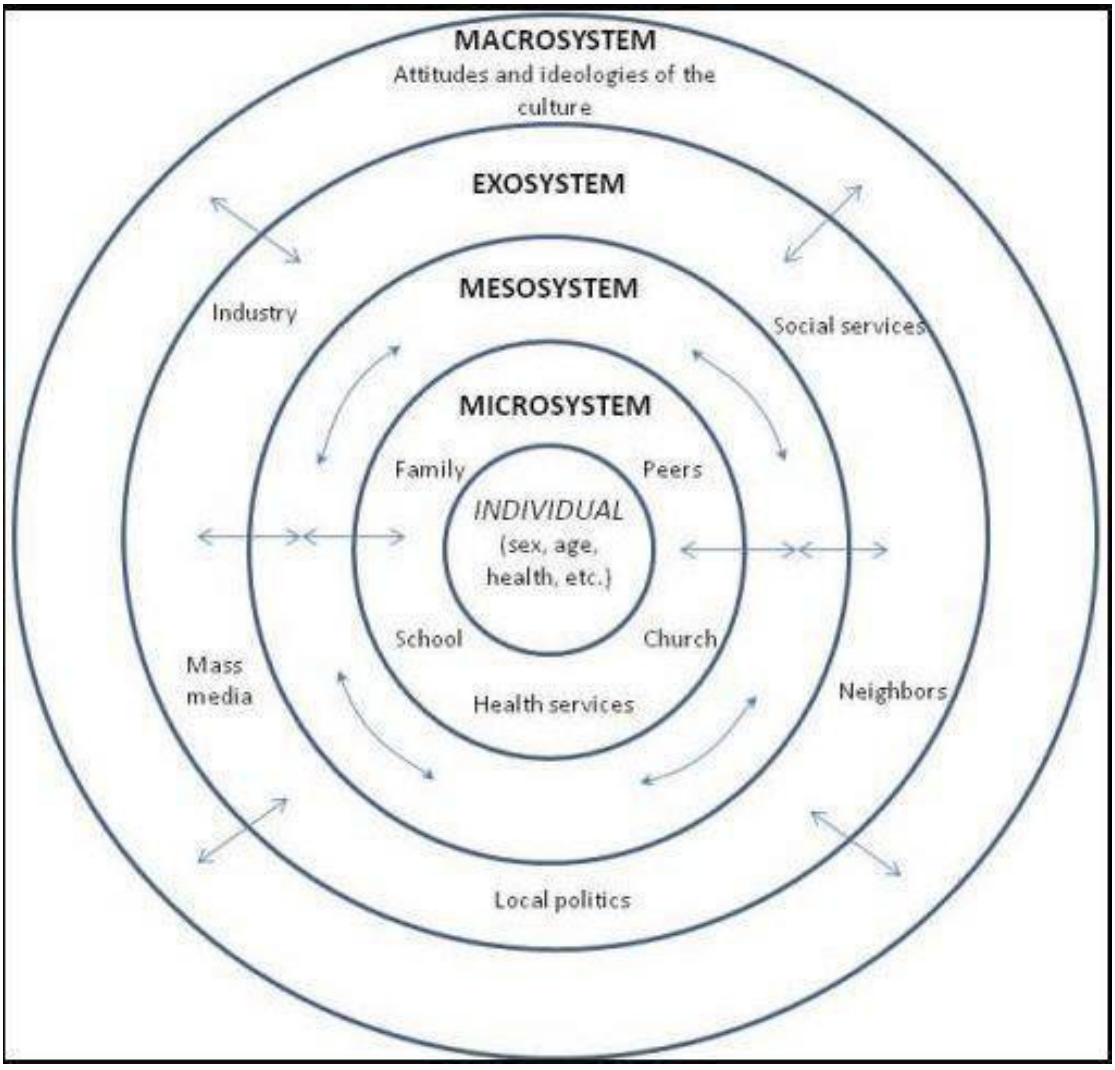
I want to follow up with you regarding some of the things we talked about in the first interview. Last time we spoke, you shared with me your personal history. In the same interview, your thoughts, and experiences with hunger, followed by and more importantly, your experiences with food insecurity while being a community college student. Is there anything that you may have thought of that would help with this research study?

1. We spoke about hunger and your college experience. Did I miss any important information that you feel I should know?

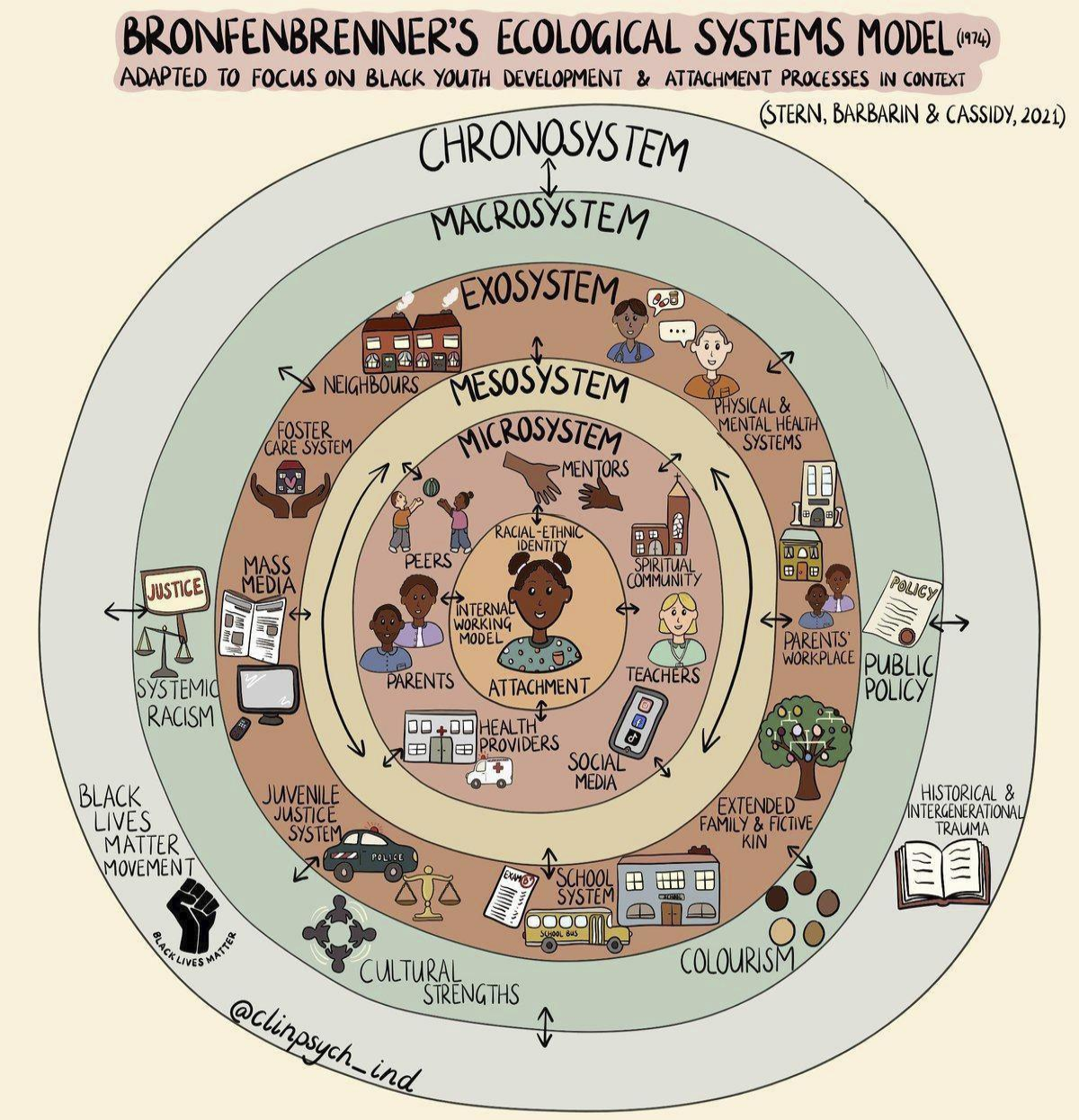
Thank you so much for your time. I will transcribe the record and send you a copy. If you want to add or change anything, just let me know.

Nanci Burt

Appendix C: Bronfenbrenner's Ecological Systems Theory

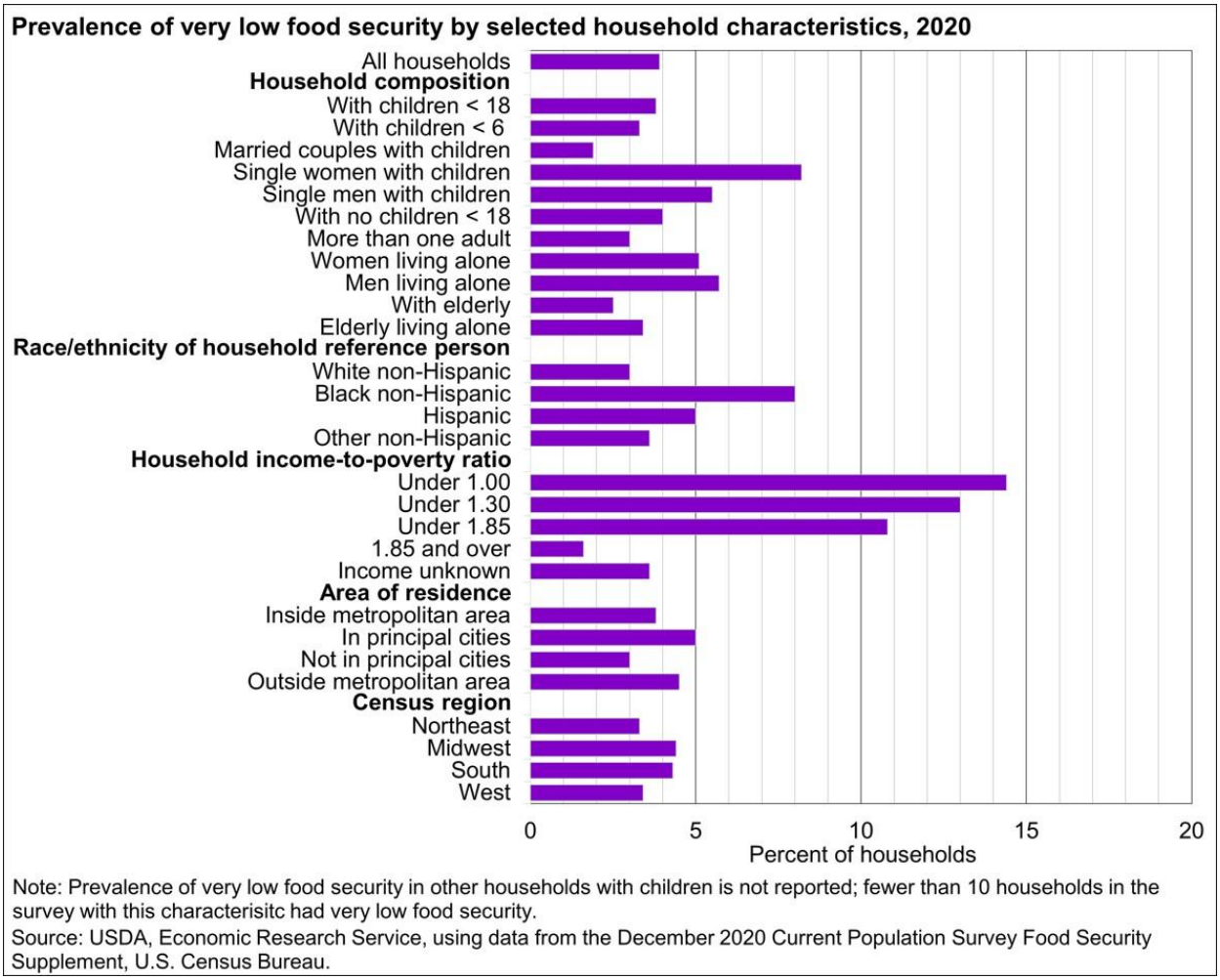


(File:Bronfenbrenner's Ecological Theory of Development (English).Jpg - Wikimedia Commons, 2012)



(Ind., 2021 and Stern et al., 20121)

Appendix D: Prevalence of Very Low Food Security by Household Characteristics



(Coleman-Jensen et al., 2022)

Appendix E: Sample Assessment: OneCare Vermont: Self-Sufficiency Outcomes Matrix

CHCS Center for Health Care Strategies, Inc.

OCTOBER 2017

OneCare Vermont:

Self-Sufficiency Outcomes Matrix[1]

Level Categories: 1 = In Crisis, 2 = Vulnerable, 3 = Safe, 4 = Building Capacity, 5 = Empowered/Thriving

1. Housing

1	2	3	4	5
eless or tened with eviction	n transitional, temporary, or substandard housing; and/or current mortgage payment is unaffordable.	In stable housing that is Household is safe, safe but only marginally adequate, subsidized adequate. housing.		Household is safe, adequate, unsubsidized housing.

2. Employment

1	2	3	4	5
No Job	Temporary, part-time, or seasonal; inadequate pay; no benefits.	Employed full-time; inadequate pay; few or no benefits.	Employed full-time with adequate pay and benefits.	Maintains permanent employment with adequate income and benefits.

3. Income

1	2	3	4	5
No Income	nadequate income and/or spontaneous or subsidy; spending.	Can meet basic needs with appropriate manage debt without spending. assistance.	Can meet basic needs and inappropriate	Income is sufficient, well managed; has discretionary income and is able to save.

l 1

2	3	4	5
Current outstanding tickets Current charges/trial warrants. pending; noncompliance with probation/parole.	Fully compliant with probation/parole terms. past12 months; no new justice involvement	Has successfully completed within and/or no active criminal in more charges filed.	No felony criminal history or than 12 months.

5. Mental Health

1	2	3	4	5
Danger to self or others; Recurrent mental health symptoms that may affect present but are transient; expected responses to life stressors; only slight difficulty in day-to-day life activities; no more than problems.	Mild symptoms may be only moderate difficulty in to self/others; persistent due to psychological	Minimal symptoms that are rare; good or superior functioning in wide range problems with functioning due to symptoms.	Symptoms are absent or experiencing severe impairment in functioning. of health problems. concerns.	behavior but not a danger everyday problems or

ABOUT THIS SOCIAL DETERMINANTS OF HEALTH ASSESSMENT TOOL

This resource is a companion to the Center for Health Care Strategies' brief, *Screening for Social Determinants of Health in Populations with Complex Needs: Implementation Considerations*. The brief examines how organizations participating in *Transforming Complex Care* (TCC), a multi-site national initiative funded by the Robert Wood Johnson Foundation, are assessing, and addressing social determinants of health for populations with complex needs. To download the brief and view additional assessment tools, visit **www.chcs.org/sdoh-screening/.**

Substance Abuse

1	2	3	4	5
eets criteria for severe abuse/dependence; resulting problems so severe that institutional ng or hospitalization physical may be necessary. use; no behaviors evident; use t of essential life persist for at least one	Meets criteria for dependence; preoccupation with use and/or obtaining drugs/alcohol; withdrawal or withdrawal avoidance behavior or housing problems); problems activities.	Use within last 6 months; Client has used during last 6 months but no evidence of persistent or recurrent social, occupational, emotional or physical problems related to use (such as disruptive problems related to dangerous use. month.	evidence of persistent or recurrent social, occupational, emotional, or results in avoidance or	ug use/ alcohol abuse in last 6 months.

7. Health Care Coverage

1	2	3	4	5
No health care coverage and there is an immediate need when needed. Some be in poor health.	No health care coverage and great difficulty accessing medical care when needed by	Some family members/individuals have health care coverage. may strain household their budget.	All family members/individuals can get health care coverage member/individuals may	All members/ individuals have affordable, adequate health care coverage.

8. Disability/Disabling Condition

1	2	3	4	5
Acute or chronic symptoms affecting housing, employment, social interactions, etc.	Sometimes or periodically has acute or chronic symptoms affecting housing, employment, etc.	Rarely has acute or chronic symptoms affecting social interactions,	Asymptomatic, condition controlled by services or medication.	No identified disability.

9. Community Involvement

1	2	3	4	5

No community involvement in "survival" mode. involved.	Socially isolated and/or no social skills and/or lacks motivation to become	s knowledge of ways to become involved.	Some involvement (advisory up, support group) but has barriers such as ation, child care issues.	communityively involved in community.

10. Parental Supports

1	2	3	4	5
engaged in mandatory support programs.	Engaged in mandatory support programs with service provider prompts.	ngaged in mandatory support programs.	ngaged in mandatory and additional program with prompts.	eeking and ccessing support programs.

11. Transportation

1	2	3	4	5
Lives outside public transportation area.	nsportation not accessible.	as ability but no funds for appointments public transportation. and needs through many providers and other sources independently.	Accesses appointments and needs through service sources with prompts.	Accesses

12. Health Care

1	2	3	4	5
Noncompliance in Accessing most medical appointments and scheduling with assistance.	Sometimes compliant in attending or scheduling appointments and scheduling with assistance.	Accessing some medical appointments and medical assistance.	Accessing most medical attending or scheduling appointments for medical scheduling without self or family.	appointments and appointments for self or family.

Appendix F: Sample Assessment: OneCare Vermont: Self-Sufficiency Outcomes Matrix

CHCS Center for Health Care Strategies, Inc. **OCTOBER 2017**

Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences (PRAPARE): Used by the Redwood Community Health Coalition[2]

PRAPARE is a national, standardized patient risk assessment protocol that allows providers to collect patient-level data on the social determinants of health. It was developed and is owned by the National Association of Community Health Centers, the Association of Asian Pacific Community Health Organizations, and the Oregon Primary Care Association. For more information and resources regarding PRAPARE, visit www.nachc.org/prapare.

Personal Characteristics

1. Are you Hispanic or Latino?

☐ Yes ☐ No ☐ I choose not to answer

2. Which race(s) are you? Check all that apply.

☐ Asian ☐ Native Hawaiian ☐ Pacific Islander ☐ Black/African American

☐ American Indian/Alaskan Native ☐ White ☐ Other (please write) ☐ I choose not to answer

3. At any point in the past 2 years, has seasonal or migrant farm work been your or your family's main source of income?

☐ Yes ☐ No ☐ I choose not to answer

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[2] PRAPARE was developed and is owned by the National Association of Community Health Centers, Inc. (NACHC) Association of Asian Pacific Community Health Organizations, and Oregon Primary Care Association. PRAPARE and its resources are proprietary information of NACHC and its partners. For more information about this tool, please visit www.nachc.org/prapare.

4. Have you been discharged from the armed forces of the United States?

□ Yes □ No □ I choose not to answer

5. What language are you most comfortable speaking?

□ English □ Language other than English (please write) □ I choose not to answer

ABOUT THIS RESOURCE

This resource is a companion to the Center for Health Care Strategies' brief, *Screening for Social Determinants of Health in Populations with Complex Needs: Implementation Considerations*. The brief examines how organizations participating in *Transforming Complex Care* (TCC), a multi-site national initiative funded by the Robert Wood Johnson Foundation, are assessing, and addressing social determinants of health for populations with complex needs. To download the brief and view additional assessment tools, visit **www.chcs.org/sdoh-screening/**

Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences (PRAPARE): Used by the Redwood Community Health Coalition

Family and Home

6. How many family members, including yourself, do you currently live with? _____

7. I choose not to answer

8. What is your housing situation today?

□ I do not have housing (staying with others;
□ I have housing □ I choose not to answer in a hotel, shelter, or car; or outside)

9. Are you worried about losing your housing?

□ Yes □ No □ I choose not to answer

Money and Resources

10.What is the highest level of school that you have finished?

□ Less than a high school □High school diploma or degree
□ More than high school □choose not to answer
degree GED

11.What is your current work situation?

□ Full time work □ Part time or □ Unemployed and □ Unemployed but □ I choose not to temporary work seeking work not seeking work answer

10a. OPTIONAL: Additional Response Choices

Work less than 20 hours □ Work 20-34 hours a □ Work 35-59 hours a week Work 60 hours or more a week

10b. OPTIONAL: Additional Question: How many jobs do you work?

□ 1 job □ 2 jobs □ 3 or more jobs □ I choose not to answer

12.What is your main insurance? *If patient is unable to answer this question, health center staff can fill out this question by pulling the information from the EHR or PMS.*

□ None/uninsured □ Medicaid □ CHIP Medicaid □ Medicare

□ Other public insurance □ Other Public Insurance (Not CHIP) □ Private insurance (CHIP)

11a. OPTIONAL: Do you have insurance through your job?

□ Yes □ No □ I choose not to answer

13. During the past year, what was the total combined income for you and your family members you live with? This information will help us determine if you are eligible for any benefits. _____

□ I choose not to answer

[NOTE: For organizations that already collect income for other purposes (sliding fee scale, insurance eligibility, other benefits), please map that data such that patients are not asked about their income multiple times. Please report percent of patients by Federal Poverty Level or FPL for PRAPARE reporting purposes.]

14. In the past year, have you or any family members you live with been unable to get any of the following when it was really needed? Check all that apply.

Food	□ Yes	□ No
Clothing	□ Yes	□ No
Utilities	□ Yes	□ No
Child Care	□ Yes	□ No
Medicine or any health care *(medical, dental, mental, vision)*	□ Yes	□ No
Phone	□ Yes	□ No
Other (please write)	□ Yes	□ No

□ I choose not to answer

15. Has lack of transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living?

□ Yes □ No □ I choose not to answer

Social and Emotional Health

16. How often do you see or talk to people that you care about and feel close to? (For example: talking to friends on the phone, visiting friends or family, going to church or club meetings)

□ Less than once a □ 1 or 2 times a □ 3 to 5 times a □ More than 5 □ I choose not to week times a week answer

17. Stress is when someone feels tense, nervous, anxious, or can't sleep at night because their mind is troubled. How stressed are you?

□ I choose not

□ Not at all □ Quite a bit □ A little bit □ Very much □ Somewhat to answer

16a. OPTIONAL: Ask the open-ended follow-up question "Who are the people or groups you usually see or talk to at these times?"

Optional Questions

18. In the past year have you spent more than 2 nights in a row in a jail, prison, detention center, or juvenile correctional facility?

□ Yes □ No □ I choose not to answer

17a. If yes, what was your release date?

19. Are you a refugee?

□ Yes □ No □ I choose not to answer

20. Do you feel physically and emotionally safe where you currently live?

□ Yes □ No □ I choose not to answer

21. In the past year, have you been afraid of your partner or ex-partner?

□ I have not had a □ I choose not to □ Yes □ No □ Unsure