

USING EXPERIENTIAL EDUCATION TO EXPLORE CHANGES IN STUDENTS'  
PERCEPTIONS TOWARD THOSE EXPERIENCING POVERTY  
AND FOOD INSECURITY

A DISSERTATION

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## DEDICATION

The test of our progress is not whether we add more to the abundance of those who have much it is whether we provide enough for those who have little. – Franklin D. Roosevelt

I am dedicating this dissertation to those who have felt they have no voice or believe it's not being heard. I want you to know that someone is listening and trying to mobilize others to do the same and take action. We as a nation need one another and can't make the world a better place until we are willing to help those of you who have been marginalized and pushed to the edges of society.

Next, I want to remember those who met our Heavenly Father before I finished my dissertation. I would have loved to have shared my results with each of you. To my Papa, your footprints are enormous to fill, and I am trying my best to make you proud. The earth isn't the same without you. To my Pawpaw, the time I spent with you allowed me to see a different side of the world. Thank you for unknowingly exposing me to my life's work. I always remember you telling me to "fight the good fight," I am trying to do just that. To grandmother Claude, I would do anything to sit and discuss my project with you. I would love to hear your opinion, as we all know you would have one. Lastly, to Honey, you were my rock and my foundation. You saw me through my wilderness, and I want you to know that I miss you more than words describe. I hope my work in life makes each of you proud, and I love you all so very much.

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## ABSTRACT

LAURA ROBINSON-DOYLE

### USING EXPERIENTIAL EDUCATION TO EXPLORE CHANGES IN STUDENTS' PERCEPTIONS TOWARD THOSE EXPERIENCING POVERTY AND FOOD INSECURITY

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The purpose of this exploratory study was to examine the impact of an undergraduate short-term experiential learning nutrition course on influencing students' perceptions toward individuals experiencing poverty and food insecurity (FI). The Undergraduate Perception of Poverty Tracking Survey (UPPTS) was the tool used to measure perception. Student reflection journals were also collected and used to assess themes. The secondary purpose of this research was to assess the overall undergraduate students' perceptions of poverty and the incidence of FI at a private elite university and further determine if there was a relationship between the UPPTS and demographics. Subjects included a convenience and snowball sampling during the 2022 academic school year. Three surveys were combined into one questionnaire for participants to complete: (a) UPPTS, (b) U.S. Department of Agriculture Household Food Security Survey Module (USDA HFSSM), and (c) self-identified demographics. A paired samples *t* test was performed to test pre-course perception scores to post-course perception scores following the short-term course. Results indicated that after taking an experiential learning nutrition course, students' scores on the UPPTS indicated a more favorable and empathetic view toward those experiencing poverty. Thematic analysis from student reflection journals indicated greater awareness of structural attributions toward poverty and increased empathy toward poverty. For the total undergraduate sample, UPPTS total scores were slightly higher compared to the instrument mean scores, thus indicating a more unfavorable perception toward those

experiencing poverty. In assessing food security, based on the frequency analysis of the total participants, roughly 23% of the undergraduate sample was considered food insecure. Lastly, a multiple regression analysis was used to assess the relationship between the UPPTS and demographics. Of the predictors, sex, race, and income were significant, as females and Black/AA were noted to view poverty more favorably compared to males and non-Black/AA, and households making less than \$80,000/year also noted a more favorable view of those experiencing poverty. This study offered insight to the impact of experiential learning on influencing perceptions towards poverty, and predictors that contribute to one's perception. Lastly, FI data were used inform private elite universities of the incidence of FI on campus.

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## ABBREVIATIONS

EE	experiential education
ELM	experiential learning module
FI	food insecurity
USDA HFSSM	U.S. Department of Agriculture Household Food Security Survey Module
UPPTS	Undergraduate Perceptions of Poverty Tracking Survey

# CHAPTER I

## INTRODUCTION

Addressing poverty has become increasingly concerning for the government and the general population. From economic downfalls to a global pandemic, the issue of poverty continues to resurface, appearing at the forefront of the public health agenda. Before the coronavirus disease 2019 (COVID-19), the national poverty rate was 10.5%; by the end of 2020, the rate had increased to 11.4%.<sup>1</sup> Prior to the pandemic, many U.S. households had less than \$1,000 in savings despite what was seemingly a strong economy.<sup>2</sup> Since the pandemic, that number has declined. Based on a recent survey, 40% of Americans have less than \$300 in savings,<sup>3</sup> with wage earners continuing to live paycheck to paycheck as income growth lags behind the cost of living. As of 2022, a family of 4 qualifies as being in poverty with an annual household income of \$27,750 or less.<sup>4</sup> Even by doubling their income, they would still struggle to meet their basic needs.<sup>5</sup>

Americans historically regarded poverty as a lack of knowledge, character, and ambition; however, poverty's cause is the absence of resources.<sup>5</sup> Privilege can insulate an individual from seeing others' daily struggles, resulting in misguided assumptions. Americans from more financially affluent households accept the damaging messages that blame individuals, often labeling the poor as lazy or inherently flawed.<sup>5,6</sup> Validating people's negative perceptions are U.S. policies restricting low-income individuals, constraining their ability to rise out of poverty. Consciously created barriers prevent those who are poor from meeting their basic needs.

The compounding experience of poverty is akin to sinking in quicksand.<sup>7</sup> Household members who experience poverty also commonly face food insecurity (FI). Poverty and FI

are interconnected, as poverty adversely impacts social determinants of health and creates unfavorable conditions, such as unreliable food access and inadequate resources to purchase food.<sup>8</sup> Despite the U.S. government's implementation of several food safety net programs, the COVID-19 pandemic increased the number of Americans who walk the tightrope of security, struggling with poverty, and FI. At the height of the pandemic, FI incidence peaked at around 40%, significantly higher than pre-pandemic rates.<sup>9</sup>

With crises like COVID-19, constrained food supply, and rising inflation, more people need help. Perceptions of individuals experiencing poverty often indicate a lack of knowledge, character, and ambition.<sup>7</sup> A long-standing presumption is that people experiencing poverty are uneducated. However, students currently enrolled in higher education are not immune to the FI struggle. Since the late 1980s, the number of young adults with full-time university enrollment has increased, as has the experience of poverty among them.<sup>10</sup> Comparing the U.S. population, poverty rates for individuals ages 18 to 24 are highest, with 1 in 5 young adults experiencing poverty and FI.<sup>10</sup> The average cost of college tuition also continues to rise, increasing on average 18% for the 2019–2020 academic year.<sup>11</sup> For some students, the sacrifice to attend school grows when they cannot afford food and do not qualify for food assistance.

Helping individuals escape poverty requires first addressing assumptions regarding why they are in poverty. When the focus shifts from judgment to helping individuals meet basic needs, the shortfall in trying to fix a broken individual appears, and the reality of the broken system surfaces.<sup>7</sup> Across the nation, successful programs addressing the basic needs of those experiencing poverty were plentiful before the pandemic and rising inflation. Many universities established food pantries on campus to supplement students' provisions. These

programs are helpful but often rely on volunteers to fulfill day-to-day operations, with students, classes, and groups donating their time through service. One example is the National Collegiate Athletic Association (NCAA), which requires 50% of all student-athletes to participate in community service.<sup>12</sup> Although well-intended, short-term community service is insufficient to eradicate poverty and FI. Long-term change requires educating individuals on the reality of poverty, making the situation more tangible. Education starts in the classroom as students understand their own perceptions of poverty and develop empathy toward those who are poor.<sup>6,13</sup>

Higher education leaders are uniquely positioned to guide students through exploring perceptions, increasing empathy, and further igniting the desire to assist and advocate for individuals who are poor. Many universities offer programs outside the traditional classroom, such as service learning and alternative breaks, which provide unique opportunities for students to explore social issues through immersive activities. Each of these allows a student to participate in service, examine their perceptions, and better understand individuals in poverty.<sup>14,15</sup> Some universities use experiential learning strategies to explore perceptions of poverty. With this method, the student experiences the poverty component of the course interwoven within the traditional classroom.<sup>13,16-19</sup> Each of these methods is effective in helping students assess their perceptions and develop significant changes in empathy toward those who experience poverty. However, studies have primarily focused on students who attend community colleges and 2- and 4-year public universities, leaving out private institutions.

Unlike private universities, attending a public university provides greater demographic variation within the classroom. Among minority students and those more



financially insecure, the rate of attending public universities is significantly higher than in private universities.<sup>20</sup> In public universities, staff and student perceptions of the poor tend to be more favorable.

Among private university students—specifically, private elite university students—perceptions of the poor and the incidence of FI on campus are largely unknown.<sup>21</sup> The lack of representation within this population could be due to various reasons: a lack of courses promoting experiential education, a reluctance to collect data based on the “elite” status of the student body, or the possible misconception that all basic needs are met.<sup>21</sup> Private elite universities are unique in that they are few in number and attract students who are more likely to become industry leaders, politicians, and Supreme Court justices.<sup>22</sup> Students from these institutions have a greater capacity to influence the lives of individuals and society as a whole. Advocating for and eradicating poverty could lie within the abilities of the elite. The university and faculty have an opportunity to expose students to a world unlike their own, bringing first-hand experience to students. However, for change to happen, university leaders must step outside the traditional walls and break down the separation between self and “other,” allowing students to see those in poverty.<sup>6</sup>

## **STATEMENT OF THE PURPOSE**

The purpose of this study was to (1) examine the impact of experiential learning as part of an undergraduate nutrition course on influencing students’ perceptions of individuals experiencing poverty and FI and (2) through a campus-wide survey, examine the overall undergraduate students’ perceptions of poverty.

## **RESEARCH QUESTIONS**

The guiding research questions for this study were:

1. What is the impact of a short-term experiential learning nutrition course on students' perception of poverty?
2. What is the general perception of poverty in undergraduate students?
3. What is the relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty?

## **HYPOTHESES**

The following null hypotheses underwent testing at the  $p = 0.05$  significance level:

1. Following a short-term experiential learning nutrition course, undergraduate students' perceptions of poverty will not change.
2. The general perception of poverty in undergraduate students is not favorable.
3. There will be no relationship between demographics, food security status, or the use of financial aid on undergraduate students' perceptions of poverty.

## **DELIMITATIONS**

The only experiential course used for the study was the undergraduate nutrition course offered during the intersession terms of January and May of 2022. Each class lasts 11 days. Students signed up for the course served as the participants for the pre-test/post-test design.

1. The study used a convenience sample of undergraduate students (18+ years of age) attending a private elite university in Texas. Therefore, the scope of the research was just 1 private university, with other private and public universities in the region not assessed.
2. Student instruments included the Undergraduate Perceptions of Poverty Tracking Survey (UPPTS; see Appendix A), the 6-item U.S. Department of Agriculture

(USDA) food security survey (see Appendix B), and self-identified demographic questionnaire (see Appendix C).

## **LIMITATIONS**

1. The study used only 1 experiential course offered on campus for the pre-test/post-test design. The course is a non-major elective course open to all campus students.
2. This study's primary investigator teaches the experiential learning nutrition course.
3. The experiential learning modules (poverty immersion) could have varied slightly from each intersession term due to location and weather.
4. The questionnaires were self-report measures, which can be inherently subject to reporting bias and error, thereby limiting external validity.
5. The study participants were a convenience sample at 1 private elite university in Texas. Therefore, the sample was not representative of other undergraduates, private university populations outside of Texas, or other population groups, thereby limiting external validity.
6. It is possible that only students interested in nutrition and poverty, in general, enrolled in the course, thus posing a threat to internal validity.

## **ASSUMPTIONS**

1. The study questionnaire measured what they were intended to measure.
2. Study participants could read, write, and comprehend the English language.
3. Study participants completed the questionnaire honestly and to the best of their ability.

4. Study participants used the reflection assignments and documented their experiences honestly.
5. This study occurred using sound research practices.
6. All study participants were undergraduate students within the selected private academic institution.
7. Participants had computer, internet, and email access, with the questionnaires shared via email to a secure, external survey administration website.

## **DEFINITION OF TERMS**

**Poverty:** Low socioeconomic status affecting the economic and sociological influences on living conditions and access to care, causing individuals to struggle to meet basic needs such as food, housing, transportation, hygiene, and water.<sup>23</sup>

The current definition of poverty in the United States does not include individuals experiencing homelessness, military personnel who do not reside with at least 1 civilian adult, individuals in prison, those in long-term hospitals and nursing homes, and college students living in dormitories.<sup>24</sup>

**Food Insecurity (FI):** “Households are, at times, unable to acquire adequate food for 1 or more household members due to insufficient funds or other resources for food.”<sup>25</sup> FI households fall into the categories of low food security or very low food security:

**Low food security:** “Households avoided substantial reductions or disruptions in food intake, in some cases by relying on a few basic foods and reducing variety in their diets.”<sup>25</sup>

Very low food security: Households with 1 or more members' eating patterns disrupted and their food intake reduced at some point during the year because of the inability to afford enough food or resources for food.<sup>25</sup>

Perception: The process by which individuals acquire knowledge and form awareness of the world around them.<sup>26</sup> For this dissertation, perception comprises the awareness of personal attitudes, beliefs, and empathy.

Experiential Education (EE): An instruction philosophy by which educators purposefully engage learners through embedded experience and focused reflection to increase awareness, develop skills, refine values, and expand students' capacity to contribute to their communities.<sup>27</sup> According to the 2022 Association for Experiential Education guidelines, EE principles of practice used in the present study are:

- Carefully chosen experiences receive support from reflection, critical analysis, and synthesis.
- Throughout the learning process, the student actively engages in posing questions, investigating, being curious, assuming responsibility, and constructing meaning.
- Students are engaged intellectually, emotionally, socially, and/or physically.
- The learning results are personal and form the basis for future experience and learning.
- Students develop and nurture relationships with themselves, others, and the world.
- The professor and student could find success, failure, adventure, risk-taking, and uncertainty because the experience's outcomes are not entirely predictable.
- Nurtured opportunities allow the student and professor to explore and examine held values.

- The professors' primary role includes providing relevant experiences, posing questions, setting boundaries, supporting students, ensuring physical and emotional safety, and facilitating learning.

## **IMPORTANCE OF STUDY**

COVID-19 increased awareness of a long-present issue: the need to help those in poverty who experience FI. Individuals have organized and participated in informal and formal outreach and food distributions across the country. University students are one group actively engaged in such outreach and distribution.

College is a time when young adults form beliefs and perceptions independent of their upbringing.<sup>15</sup> When students explore who they are, universities can introduce them to coursework and experiences that challenge their thinking. Experiences with poverty directly influence undergraduate students' attitudes, depth of understanding, and empathy toward the poor.<sup>15</sup> To date, EE research has focused on academic areas among students majoring in social work, clinical health, human services, hospitality, interior design, criminal justice, and counseling.<sup>16,28-33</sup> These studies have shown that students' attitudes and perceptions toward the poor change with purposeful and engaged interventions. However, in each of the studies reviewed, the participants were majors within the area of study with an invested interest in professions that engage with individuals in poverty. Additionally, the teaching of each EE course occurred at public universities. What is unknown is how EE impacts the perceptions of students in a non-major elective course who attend a private elite university. Using EE among this population can have a lasting impact on their empathy and willingness to help individuals living in poverty and experiencing FI. Accordingly, there could be greater hope in reducing poverty and FI.

This dissertation informed scholars about students' attitudes and empathy toward those experiencing poverty and the students' commitment to addressing poverty via direct action or support for programs or aid services. The study explored the impact of experiential learning as a part of an undergraduate non-major elective nutrition course in influencing private university students' perceptions (attitudes, beliefs, and empathy) toward individuals living in poverty.

## CHAPTER II

### REVIEW OF LITERATURE

An overview of Healthy People 2030 and its significance for addressing poverty and food insecurity will be reviewed in three sections and various subsections. Section 1 provides an overview of the state of poverty in the United States and incorporates FI, including FI among college students, and social assistance programs and the attitudes that have shaped them. Section 2 addresses the overall perceptions (attitude, belief, empathy) of those experiencing poverty and FI as well as undergraduate perceptions of poverty, with a subsection on the development of perception (family, peers, religion, socioeconomic status [SES], and media). Finally, section 3 presents the role of education in changing undergraduate perceptions. Subsections include Kolb's experiential learning model (ELM), experiential learning and poverty, experiential learning and changes in undergraduate perception, the use of Kolb's ELM for this research, and scales assessing undergraduate attitudes and perceptions toward poverty.

Multiple search engines were used to gather research articles for this literature review: EBSCOhost, PubMed, CINAHL complete, ERIC, Psychinfo, SocINDEX, Scopus, and ProQuest Databases. Various key terms were used in searches on the named databases: "poverty," "economically disadvantaged," "low- income," "social- disadvantaged," "food insecurity," "hunger," "low food secure," "marginally food secure," "food insufficiency," "food security," "perception," "attitude(s)," "belief(s)," "empathy," "social empathy," "activity learning," "hands on learning," "experiential education," "immersive education," "alternative breaks, community service learning," and "study abroad." These terms were searched in varying combinations. Inclusion criteria included the English language,



dissertations, peer-reviewed, government reports and websites, reputable websites, and textbook and book chapters. Searches for articles were initially constrained to be within the publication dates of January 1, 2010 - present. Articles published during earlier years were referenced if they were seminal works or if few or no recent articles were published within the scope of the search.

## **SECTION 1**

### **Poverty and Healthy People 2030**

Poverty is one of the most prevalent and pervasive social problems in the world today. In the United States, 1 out of every 10 citizens struggle with poverty.<sup>34</sup> In many households across the nation, families cannot afford basic necessities such as food, healthcare, and housing. Within the social determinants of health objective, a key goal of Healthy People 2030 is economic stability.<sup>35</sup> Progress toward this goal could provide individuals with greater opportunities and access to a steady income to meet their basic needs. When individuals experience poverty, they commonly experience FI.<sup>8</sup> Healthy People 2030 identified household FI and hunger as leading health indicators (LHI), classifying FI as a high priority for all ages. FI is a major cause of death and disease in the United States, leading to adverse health outcomes in children and adults.<sup>36</sup> With a focus on reducing FI, an individual might have greater awareness and access to services, such as food assistance programs and household benefits. Healthy People 2030 linked economic stability to household FI, indicating the necessity of addressing unemployment to reduce FI and hunger. FI is not a food problem; it is an income/resource problem.<sup>36</sup>

## **State of Poverty in the United States**

When lawmakers speak about lifting people out of poverty, they often refer to the official poverty measure established in the 1960s War on Poverty. The U.S. government needed a way to count impoverished individuals, allocate aid, and measure program and policy effectiveness.<sup>37</sup> The poverty measure also included a food condition based on the minimum amount of food needed to have a “fair” to “good” diet. This broad and unclear definition has seen little variability since its onset.<sup>37</sup> Today, there are 2 versions of the official poverty measure: the U.S. Census Bureau poverty thresholds and the Federal Poverty Guidelines set forth by the Department of Health and Human Services (HHS).<sup>38</sup> Poverty thresholds are the guidelines used to measure poverty and determine eligibility for social service programs. An individual’s age and family composition impact the thresholds, with poverty guidelines based solely on the number of individuals within the household. Individuals living in prisons, nursing homes, military barracks, unconventional housing, or college dorms do not factor into the poverty estimates.<sup>39</sup> Researchers and policymakers agree that the official poverty measure is flawed.<sup>38</sup> Based on pre-tax income, the guidelines do not include any additional non-cash benefits, such as housing subsidies, Supplemental Nutrition Assistance Program (SNAP), or other forms of assistance. Housing, clothing, transportation, or other expenses to meet basic needs are also not considered, and the measure does not account for cost-of-living variance across the contiguous 48 states.<sup>37</sup>

One challenge with poverty measures is timeliness. To make up-to-date and informed decisions, policymakers need current information. Poverty data lag behind other key economic measures, such as unemployment, inflation, stock market shifts, and consumer confidence indicators.<sup>37</sup> Official poverty measures and the current state of poverty

considering COVID-19 impacts were unavailable until September 2021, 18 months after the World Health Organization declared the pandemic a global emergency.<sup>1,37</sup> The federal government does not report estimates on the number of individuals living below HHS poverty guidelines; however, these numbers are necessary to identify individuals eligible for social service programs.<sup>37</sup>

Based on the official poverty thresholds, the U.S. Census (2021) estimated that 37.2 million individuals in the United States lived in poverty in 2020.<sup>1</sup> Poverty has been a prevalent issue in the United States and will likely remain one for years. After 5 years of decline, the poverty rate increased by 1 percentage point, from 10.5% in 2019 to 11.4% in 2020.<sup>1</sup> Poverty impacts certain subsets of the population differently.

In 2020, the distribution of poverty by race was greatest among Blacks (19%) and Hispanics (17%), which showed slight increases from the previous measure. The distributions for Whites and Asians were 8.2% and 8.1%, respectively, rates also not significantly different from the previous year. By gender, in 2020, women experienced poverty at higher rates than males, 11.5% and 9.4%, respectively.<sup>1</sup> The incidence of women experiencing poverty at higher rates can be attributed to lower working wages, less upward mobility in the workplace, and the impact of running a single-mother home.<sup>5</sup> Between 2019 and 2020, poverty rates increased in both single- and dual-income homes. For single-income homes where the female is the sole provider, poverty increased from 22.2% to 23.4%. In single-income homes with males as the sole provider, poverty stayed roughly the same at 11.4%. Homes with married couples slightly increased from 2019 to 2020, from 4.0% to 4.7%.<sup>1</sup>

Specific to age distribution, poverty rates are highest in children under 18, increasing to 16.1% in 2020 from 14.4% in 2019. Among the 1 in 10 children who live with a grandparent, poverty incidence significantly increased to 40%.<sup>35,40</sup> For individuals ages 18 to 64, poverty increased to 10.4%, up 1 percentage point from the previous year; however, poverty did not significantly increase for individuals 65 or older, staying at around 9%.<sup>35</sup> Interestingly, although the number of older adults living in poverty remained the same, the number living in low-income households has increased over the years,<sup>41</sup> a phenomenon likely tied to Baby Boomer retirements. Among the widowed population, the poverty rate for women is 14.5%, whereas 18.6% of older men who never married live in poverty.<sup>41</sup>

At some point over their lifetimes, many people will experience some aspect of poverty, such as job loss or financial adversity.<sup>42</sup> Rank and Hirschl (1999) found that approximately 33% of individuals will struggle and live with poverty before age 35, and the incidence of poverty rises with age.<sup>43</sup> Before 66 years of age, more than 50% of the population will have encountered a personal experience with poverty, and by 85, roughly 60% of Americans have personally struggled with and experienced poverty.<sup>43</sup> In 2020, the median household income decreased 2.9%, the first significant decline since 2011. With inflation growing by 7.5% over the last 12 months, people of most income brackets have struggled to meet their basic needs.<sup>44</sup> As of January 2022, 48% of Americans earning 6 figures reported living paycheck to paycheck, a figure 9 percentage points lower than in December 2021. Among individuals earning \$50,000 to \$100,000 a year, as of January 2022, 67% reported living paycheck to paycheck, up from 66% the previous year.<sup>44</sup>

An emergency expense can often be a major setback for individuals struggling to make ends meet and living paycheck to paycheck. Before COVID-19 and the corresponding

growing inflation, the cost of an emergency was mainly a concern for individuals earning low incomes. The share of Americans unable to pay for necessary goods and services has grown. In March 2022, 40% of Americans said they would struggle to pay for a \$400 emergency expense and would need to rely on credit cards or borrowing.<sup>45</sup> Although taking on additional debt is unfortunate, the impact of such expenses is more catastrophic among the middle- and low-income individuals comprising the economy's foundation.

### **Food Insecurity**

Household income and economic stability are related to FI.<sup>45,46</sup> Factors leading to FI include human capital, such as low financial literacy and education<sup>47,48</sup>; physical assets, such as homeownership and renting; and financial assets, such as a lack of access to credit and little to no savings.<sup>48</sup> Food becomes an expendable item when a family cannot meet its day-to-day needs. Poverty is about basic living standards and having needs met. Because having sufficient food is an essential basic need, food security status is an effective poverty measure. Food is one of the earliest and most direct measures of economic hardship in a home.<sup>49,50</sup> Generally, FI incidence is higher than the poverty rate in the United States.<sup>50,51</sup> Roughly one-third of families relying on food pantries do not qualify for social assistance and safety net programs.<sup>50</sup>

A leading cause of morbidity and mortality worldwide, FI is now recognized as a major health crisis, meaning that a household cannot provide enough food to maintain an active, healthy life.<sup>52</sup> FI is also a social and economic condition of limited access to food.<sup>52</sup> According to the U.S. Department of Agriculture, FI components include insufficient food intake, inability to access foods for dietary quality, worry and anxiety surrounding food supply, and the need to acquire food in socially undesirable ways.<sup>51-53</sup> Classifications of FI

are low food security and very low food security.<sup>25,45</sup> A household receives classification as low food secure if insufficient money and other resources disrupt 1 or more members' consumption and eating patterns. In the case of very low food security, 1 or more household members went without food or experienced hunger at some time in the year due to the inability to afford food.<sup>25,45</sup>

FI incidence in U.S. households has been a longstanding challenge, hindering the improvement of Americans' overall health.<sup>8,45</sup> The national cost of FI is approximately \$178.9 billion each year, with well-documented negative physical, mental, social, and emotional health impacts.<sup>8,53,54</sup> Studies have found FI in adults associated with poor self-reported health status and chronic disease risk factors, such as obesity, abnormal blood lipids, high blood pressure, increased rates of diabetes and its negative effects, poor dietary and sleep quality, and numerous other chronic diseases.<sup>46,55-61</sup> Among children, FI correlates with delayed development, decreased healthcare access, poor health outcomes, and mental and behavioral health problems.<sup>62-65</sup> Additionally, household FI is associated with increased levels of stress, depression, and anxiety among women.<sup>66</sup> Given the spectrum of adverse health outcomes associated with FI, the common perception is that FI is associated with rising national healthcare costs; however, this is not the case. The critical component of evaluating this association is understanding that FI households are less likely to have access to or be able to afford health insurance.<sup>46</sup> Tarasuk et al (2015) assessed healthcare costs among adults in Canada, finding that compared to their food-secure counterparts, individuals who were marginally FI had 23% higher healthcare costs.<sup>67</sup> Additionally, the costs were 49% higher for low-food-secure individuals and 121% higher for very-low-food-secure persons. These data support Berkowitz's (2017) findings that U.S. FI households face substantially

higher medical care costs than food-secure households.<sup>60</sup> Other adverse impacts of FI include barriers to access, such as a lack of education, distrust, transportation, and stigma, making individuals reluctant to seek care.<sup>68</sup>

Unlike the national poverty rate, the prevalence of FI did not change from 2019 to 2020. Roughly 89.5% of U.S. households are food secure. Despite this high percentage, 10.5% (38.9 million individuals) were considered FI in 2020, including 3.9% (5.1 million) of households classified as very-low-food secure.<sup>52</sup> In 2020, approximately 35% of households below the federal poverty line were classified as FI, a designation comprising low-food secure and very-low-food secure.<sup>51</sup> As a result of the COVID-19 pandemic, FI among these populations was closer to 44%.<sup>9,21</sup>

Like poverty, the distribution of FI is not even throughout the United States. Before the pandemic, single-parent households had substantially higher FI incidence. In 2020, 14.8% of homes with children were affected by FI.<sup>51</sup> Approximately 16% of households with single fathers experienced FI, with the percentage (28%) even greater among single-mother homes.<sup>25,51</sup> By race, Blacks (22%) and Hispanics (17.2%) encounter FI at significantly higher rates than their White (7%) counterparts.<sup>51</sup> Further, households with both children and minority status were 3 times more likely to experience FI than their White counterparts.<sup>25</sup> Parents will often shield their children from experiencing the full impact of FI. Of the 14.8% of affected households with children, 7.6% had both the child and parent encountering FI at some point.<sup>25,51</sup>

### **Food Insecurity Among College Students**

A common misunderstanding regarding college students is that once they are on campus, they are socioeconomically equal, having the same opportunities and resources;

instead, socioeconomic differences among campus college students are apparent and commonly create a clear divide within the classroom.<sup>22</sup> As a whole, college and university students face FI at significantly higher rates than the general population.<sup>69,70</sup> Students from working-class or low-income households or first-generation college students are at a greater risk of experiencing FI while in school than students from upper-class households and those whose parents attended higher education.<sup>21</sup>

Among university students, FI can mean running out of food between financial aid or employment checks, attending campus events that offer food as an incentive, using the campus food pantry, reducing food intake, purchasing processed or minimally nutritious food that is inexpensive, or skipping meals altogether.<sup>71,72</sup> Before COVID-19, 4 campus-based organizations—the College and University Food Bank Alliance, the National Student Campaign Against Hunger and Homelessness, the Student Government Resource Center, and the Student Public Interest Group—surveyed 3,765 students across 12 states. The findings showed that roughly 48% experienced FI over the past 30 days, including 22% classified as having very low food security.<sup>73</sup> Individuals attending 2-year community colleges experienced greater levels of FI (41%), which comprised 19% low food security and 28% very low food security. At 4-year schools, 44% of students surveyed reported experiencing FI in the last 12 months; of these, 18% were low food secure, and 24% were very low food secure.<sup>74</sup>

By gender, females experience FI slightly more often than males, at 47% versus 42%. FI is significantly greater among individuals identifying as transgender (57%) than those identifying as female, male, or not transgender (55%).<sup>69</sup> By race, Black students face FI more often (58%) than their Hispanic (50%) and non-Hispanic White counterparts (39%).<sup>72</sup> Fifty-



two percent of first-generation students experience FI compared to 51% who have a parent with some college experience. By sexual orientation, heterosexual or straight individuals experience FI at lower levels (44%) than their gay or lesbian (52%) and bisexual (54%) peers.<sup>69</sup>

Students who were enrolled full-time experienced FI at a slightly lower rate (45%) than part-time students (47%). FI risk increases with the time in school, which might be due to moving off-campus or not having a meal plan. Forty percent of first-year students experience FI, which increases to 46% among second-year students and 50% for students in school for more than 3 years.<sup>69</sup> Based on tax filing status, FI risk is significantly higher for independent versus students claimed as dependents, 50% versus 39%, respectively.<sup>70</sup> Foster care significantly impacts the likelihood of FI. Among undergraduates who had been in foster care, 66% struggled with FI over the past 12 months.<sup>69</sup> Finally, disability impacts an undergraduate's incidence of FI. Fifty-eight percent of students with a learning disability, attention-deficit/hyperactivity disorder, or a physical disability struggle with FI. In comparison, 56% of those with psychological disorders, such as depression and anxiety, experience FI, and 54% of students with chronic illnesses, such as asthma, diabetes, autoimmune disease, and cancer, struggle with FI.<sup>69</sup>

In assessing the outcomes of FI and COVID-19, Owens et al found FI estimates and incidence among subgroups similar to pre-pandemic FI numbers on university campuses, with 1 in 3 students classified as FI. Additionally, 46% of the respondents consumed less food due to the lack of resources, and roughly 21% reported experiencing hunger within the last 30 days.<sup>73</sup> Approximately 54% of the participants had their employment status affected by COVID-19, making them 6 times more likely to experience FI than their undergraduate

counterparts without wage or employment disruptions.<sup>73</sup> Additionally, 1 in 4 students reported their living arrangements became unstable due to the pandemic, making them 2.7 times more likely to experience FI. Owens et al prioritized familial support during turbulent times such as a pandemic to minimize adverse outcomes of living arrangement disruptions and loss of employment. Students with family support are more likely to have a safety net and less likely to experience FI.<sup>73</sup>

Most college student FI research focuses on public institutions, often leaving out private universities.<sup>21</sup> The exclusion might be due to the lack of recruiting students in FI research based on misconceptions that “privileged” and “elite” students do not lack food or other basic needs and often come from generational wealth.<sup>21</sup> However, this is not the case. In recent years, more marginalized students from low-income households are attending all university types, including private schools.<sup>22</sup>

Some researchers found that 37% of private university students experience FI, whereas others found FI rates significantly higher.<sup>21,72,74</sup> In a survey of private liberal arts university students, Keefe et al (2020) found that 83% of respondents reported income below the federal poverty guidelines, and roughly 50% of these experienced FI.<sup>21</sup> Students who display an exceptional need for financial aid assistance can be awarded a Pell grant.

Although qualifying, a student may continue to struggle, as awarded amounts vary from year to year. For the 2022–2023 academic year, the maximum award was \$6,895, barely touching the rising cost of tuition.<sup>75</sup> Since the program’s onset in 1972, when a student attending a 4-year public institution qualified for a Pell grant, it covered more than four-fifths of the costs; now, less than one-third of the cost of attending is covered. Students who receive a Pell grant are more likely to work and attend school concurrently, pushing graduation beyond 4 years.

Federal Pell grants are term-limited, a student receiving a Pell grant has 6 years to complete their degree.<sup>75</sup> Pell grant recipients were twice as likely to experience FI than non-recipients, as Pell funding is inadequate to prevent FI.<sup>76</sup> Keefe and colleagues found that Hispanic students were 4.5 times more likely to experience FI; although Black students had an elevated risk of experiencing FI, it was not significant compared to their White counterparts. Students who identified as genderqueer and transgender were 4.1 times more likely to experience FI than those identifying as female. Students who identified as male had 2.7 times higher rates of FI than their female peers.<sup>21</sup> These results are consistent with national research indicating that transgender individuals experience FI at greater rates due to employment and housing discrimination, making them three times more likely to experience homelessness and poverty.<sup>77</sup>

FI is not an isolated issue but one of the most profound indicators of poverty on a college campus.<sup>21</sup> When college students struggle to have adequate food in the home, they also have difficulty paying rent and utility bills. Fifty-six percent of college students reported being housing insecure in the last 12 months,<sup>70</sup> and 64% struggled with housing insecurity over the past year.<sup>72</sup> Unstable housing can result in homelessness. Roughly 17% of college students said they had been homeless within the past 12 months.<sup>71</sup> Struggles with poverty and FI hinder college students' education. Thirty-two percent of FI college students believe that hunger and housing concerns directly impact their academic performance.<sup>73</sup> Of this population, 55% reported issues affording textbooks, 53% reported missing classes because of unstable housing and food, and 25% said they had to drop a course due to their circumstances.<sup>7172</sup> In the first National Campus Pantry Report since 2018, 75% of university food pantries reported needing to provide additional social services referrals in the last 12

months. Despite food pantries' essential role on campus, their capacities and current approaches to serving the student population are poorly understood. Because 45% of university food pantries do not track student data to protect anonymity, FI estimates on campus are vague and underestimated.<sup>78</sup> Comparing public and private colleges, 51% of public institutions and only 23% of private schools have a food pantry on campus.<sup>72</sup>

To ensure adequate food among the student population, many colleges and universities require students to enroll in a meal plan program; however, enrollment does not eliminate on-campus FI incidence. Forty-three percent of students attending a 4-year university reported FI as an ongoing struggle.<sup>72</sup> Among students working at least 20 hours per week, 56% reported struggling with FI, and 3 in 4 students receiving financial aid (including more than 50% of Pell grant recipients) reported being FI in the past 12 months.<sup>73</sup>

In 2020, up to 75% of students nationwide experienced FI, with an average of 41%,<sup>72</sup> and rates are expected to rise through 2023. Due to the compounding issues of COVID-19, the food supply crisis, and inflation, the ability to obtain food has moved further out of reach for many Americans.<sup>72,74</sup> Between 2008 and 2017, funding for public universities decreased by \$9 billion, and in 2019, the Trump Administration proposed a further cut of \$7.1 billion. Since 2008, tuition has risen an average of 35%, and 60% in some states.<sup>71</sup>

Decreased higher education funding impacts not only the cost of tuition but the number of students needing to take out financial aid. In the United States, 65% of college students have roughly \$30,000 in student loan debt. Students from low-income families are at an increased risk of student loan debt, placing them further into poverty upon graduation.<sup>71</sup> Qualifying for assistance to ease the financial burden can be a challenge. According to the USDA, most able-bodied students 18 through 49 who are enrolled in college or other higher

education institutions at least half-time are not eligible for SNAP benefits.<sup>51</sup> One exception is if the student has paid employment of 20-plus hours per week.<sup>78</sup>

Policymakers and school leaders should also take action to lessen the burdens of poverty and FI among American households. Throughout the nation's history, programs have been in place to support the poor. Over time, however, support and advocacy for individuals needing assistance, from the average American to the college student, might encounter resistance, threatening efforts to eradicate poverty.

### **Social Assistance Programs**

In acknowledging the severe implications of poverty on the lives of many Americans, the U.S. has implemented various relief programs to try and reduce the burden of poverty on families and individuals. Eligibility for social service programs is based on poverty guidelines. In 2021, the HHS set the poverty guidelines for the 48 contiguous states at \$12,880 for a single-income household; in Alaska and Hawaii, the amounts were \$16,090 and \$14,820, respectively, based on the cost of living.<sup>36</sup> Although living costs and poverty rates vary by state, the guidelines and support remain the same.<sup>37</sup> The attitudes and personal beliefs of individuals not impoverished have guided the structure, guidance, and implementation of these programs.<sup>79,80</sup> Unfortunately, the programs often reflect traditions and ideologies outside the United States.<sup>81</sup> Many of the country's social assistance programs use tenets of the Poor Law, reflecting the attitude that poverty is an individual moral issue—in other words, people will not work if assistance is given to them.<sup>82</sup> The Poor Law also suggests that the rising costs of work-related expenses and childcare deplete income, eliminating the benefit of working.<sup>83</sup> The Poor Law and U.S. social service programs reflect a similar belief that individuals are responsible for providing for themselves and their

families and that any assistance would bring about laziness.<sup>84</sup> Arguments indicating dependency on welfare stem from the notion that obtaining full-time employment allows individuals to escape poverty, and poverty reduction is under their control. Similarly, welfare opponents often attribute poverty conditions to social misconduct. These slanted beliefs have long served as the guidepost for the nation's poverty-relief efforts.<sup>84</sup>

Established in the 1880s, the Mothers' Pension Plan provided aid for widows and orphans of deceased White working men. The non-governmental charitable program was the precursor to current cash transfer programs and was based on 2 key assumptions: poverty was not a moral failing or fault, and children would be cared for and nurtured by a devoted and available mother.<sup>85</sup> However, the Mothers' Pension Plan was designed exclusively for stay-at-home White women with children; women who met the restrictive criteria received monetary support without stigma.<sup>85,86</sup> A notable shift occurred during the Roosevelt Administration, when the 1935 New Deal broadened the guidelines to include all women who met specified income qualifications, including those who were not White or had never been married.<sup>86</sup> The New Deal also introduced the Social Security program, which has reduced poverty among older adults and homes with disabled children.<sup>87</sup> Even with the program's success, individuals viewed social assistance programs as giving benefits to individuals deemed unworthy and those having children out of wedlock.<sup>87</sup> "Welfare program" became a term used to describe government assistance programs. The U.S. HHS categorizes families and individuals who rely on welfare programs as "welfare dependent." These individuals receive more than 50% of their total household income from government social services, such as Temporary Assistance to Needy Families (TANF), SNAP, and Supplemental Security Income (SSI).<sup>88</sup>

Programs assisting those in poverty continued to advance, but attitudes toward the poor constrained their effectiveness. These attitudes—public, private, and political—impacted program development, funding allocations, individual eligibility, and service delivery. In the 1960s, with the national poverty rate at 19%, President Johnson declared a War on Poverty. Political and social turmoil shifted justice issues, including poverty, to the forefront of desired change and action in America.<sup>87</sup> As a result, the Johnson Administration reinforced programs that helped individuals improve their living situation, increased their economic opportunities and food assistance, and improved access to education.<sup>89</sup> One endeavor was the Higher Education Act of 1965 (HEA), legislation aimed to increase higher education student aid programs.<sup>90</sup> The Johnson Administration also created the Department of Housing and Urban Development (HUD), which offered several programs to address affordable housing issues for families, the homeless, and the elderly.<sup>90,91</sup> Services continued to evolve under President Nixon, with the most well-known housing program, Section 8, renamed the Housing Choice Voucher Program under the Housing Community Development Act of 1974.<sup>91,92</sup> Due to high demand, only 25% of households qualified for the voucher program; however, it effectively assisted minority single-mother households.<sup>93</sup>

In 1975, the Johnson Administration developed Medicaid as a part of the Social Security Act to assist low-income women, children, adults, and individuals with disabilities in receiving medical services. To address the negative impacts of poverty on children, the program included Women, Infants, and Children (WIC), which provided more services to households with young children.<sup>93</sup> An amendment to the Social Security Act established Medicare, which provided health coverage for individuals 65 years and older and those living with disabilities and terminal illnesses.<sup>94</sup> In the 1970s and 1980s, conditions were worse for

the poor than the years preceding the War on Poverty. Media outlets perpetuated negative perceptions and stereotypes, presenting images of the poor as majority African American.<sup>5,87</sup>

By Ronald Reagan's inauguration, childhood poverty in America was at an all-time low.<sup>7</sup> The administration cut school lunch programs by 40%, which increased the need for more Americans to seek help through social assistance.<sup>7</sup> In the 1980s and 1990s, under President Reagan and President George H. W. Bush, stricter eligibility requirements meant that many Americans lost entitlement to aid, such as Aid to Families with Dependent Children (AFDC), food stamps, and Medicaid.<sup>95</sup> It was a shift from government aid programs toward a reliance on nonprofit assistance programs, especially faith-based organizations. The reliance on volunteerism increased across the nation, as George H.W. Bush popularized the "thousand points of light" encouraging the American people volunteer in the local community.<sup>96</sup> Negative perceptions and attitudes toward the poor were common; as a result, newly enacted policies diminished help to the poor, labeling individuals as abusing government assistance and having children to receive more government support. President Reagan used the term "welfare queen" to represent such individuals.<sup>7,87</sup> The need for government assistance continued to rise after President Clinton vowed to "end welfare as we know it," which restricted access to direct cash aid.<sup>7</sup> In 1996, the Personal Responsibility and Work Opportunity Act replaced AFDC with TANF.<sup>97</sup> TANF benefits included a requirement for individuals to work and a 5-year limit. Due to partisan opposition, additional social support programs, such as SNAP (formerly known as food stamps), also met with disapproval and were cut by \$23 billion.<sup>7</sup> Developed in 1964, SNAP provides qualifying families with food, cash benefits, or both to offset the cost of food.<sup>98</sup> Public perceptions were



that aid programs were too expensive, encouraged program reliance, and perpetuated laziness.<sup>99</sup>

The Obama Administration based the Affordable Care Act (ACA; also known as Obamacare) on the idea that every individual in the United States should have the right to healthcare, even those who could not afford it. Implemented in 2013, the ACA received immediate criticism for its cost to the American people and companies, and repeal efforts are ongoing.<sup>99,100</sup> To support universities and the prevalence of FI on college campuses, Congress introduced the College Student Hunger Act in 2019, legislation that helps FI students and reduces barriers to accessing food assistance.<sup>101</sup>

The COVID-19 pandemic renewed the government's interest in poverty reduction and the role of social safety net programs. Following record-breaking economic instability and rising unemployment, the U.S. government allocated billions of dollars in aid through the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), the Consolidated Appropriation Act, and the American Rescue Plan and waived some federal taxes on unemployment benefits.<sup>37</sup> The Biden Administration proposed the Build Back Better Act, a \$1 trillion reconciliation bill that enabled support for children and families in need. Anti-eviction laws prevented landlords from evicting tenants unable to pay rent due to the pandemic's impacts.<sup>102</sup> The terms of each COVID relief program were ongoing topics of debate, and funding allocation depended on lawmakers' views and how they measured poverty.<sup>37</sup> Amid the country's dire need, the safety net programs received early bipartisan support; however, the cost and the messaging began to change over time. A shift in how Americans used the assistance dollars led to reinvigorated discussions about government

reliance. If perceptions of the poor do not change, the long-term implications of living in poverty will have a high cost to the United States and its citizens.

## **SECTION 2**

### **Understanding Perception**

By the 1970s, the word “attitude” began appearing extensively in social science and research. The fundamental assumption was that individuals’ attitudes were predictors of their behavior. This assumption was particularly true when attitudes have a high degree of stability and certainty, are accessible to the individual, and are shaped by direct experience.<sup>103</sup> Since then, the assumption has remained in the education and social science domains, albeit without consideration for attitudes and beliefs or an individual’s empathy and willingness to aid those in need.<sup>104</sup>

The literature shows numerous definitions of empathy.<sup>104</sup> A common theme is that empathy, separate from attitude, is the act of responding to the emotional state. Empathy also differs from compassion.<sup>104</sup> Compassion is a higher-order construct aligned with feelings of sympathy and pity.<sup>105</sup> Sympathy, pity, and compassion pertain to an individual’s feelings toward the other’s difficulty rather than experienced or shared emotion.<sup>104</sup> Lane (2001) emphasized the importance of empathy when assessing attitudes and beliefs toward individuals living in poverty. Higher empathy could mitigate negative stereotypes and attitudes. Empathy is essential in understanding poverty and merits assessment when evaluating attitudes toward the poor.<sup>106</sup> In this section, “perception” encompasses attitudes, beliefs, and empathy.

**Perceptions of poverty and those living in poverty.** Beliefs about the causes of poverty can significantly impact the level and longevity of support. Political, professional,

and public perceptions toward the poor and those experiencing poverty play a critical role in advancing policies, enacting legislation, and increasing social interaction within the population. Most individuals providing services to the impoverished have no experience of being poor or raised with an understanding of poverty and its long-term impact on families and society.<sup>7,107</sup> Exposure and increased empathy toward the poor impact the context and development of perception. Regardless of personal experience with poverty, Americans frequently perceive poor individuals negatively, blaming them for their misfortune.<sup>107</sup> The reasons individuals attribute to another's poverty directly relate to their attitudes and perceptions toward those who are poor.<sup>6,103,108</sup> Specific to social views on poverty, attributions can be either internal (individualism) or external (structuralism and fatalism).<sup>109</sup> Based on these views, anti-poverty campaigns and legislation have been developed and implemented over time.<sup>110</sup>

### **Types of Attribution**

**Individualistic attribution.** Many in the United States have internal attributions of poverty, also known as individualistic causes. People using individualistic attribution hold poor individuals accountable for their situations.<sup>110</sup> Examples of perceived individual failings or character flaws include laziness, low intelligence, poor judgment, welfare dependency and handouts, sexual immorality, substance abuse, mental health issues, and lack of human capital.<sup>42,109-111</sup> Many individuals with individualistic perspectives blame or fault those who are poor by accusing them of not working hard enough to improve their situation. Due to others' individualistic mentalities, people who are poor might internalize the negative experience, blame themselves, and develop more profound self-hatred.<sup>112</sup>

Weiss-Gal et al (2009) found European Americans, males, and the middle class more inclined to view poverty through an individualistic lens.<sup>113</sup> Additionally, a Pew Research Center survey showed a connection between political party and wealth to poverty attribution: Wealthy individuals tend to vote Republican, and those who are poor usually vote Democrat.<sup>114</sup> People with greater financial security hold individualistic attributions and perceptions toward the poor, believing they take it easy while receiving free government benefits.<sup>114</sup> This perception aligns with Blair et al's (2014) finding that individualistic mindsets toward the poor originate from longstanding beliefs that the United States is fair and people's personal choices can account for their success.<sup>6</sup> Accompanying misconceptions are that social mobility is accessible to all, financial stability is due to effort, and individuals achieve their abilities and achievements, not by birth or fortune.<sup>115</sup>

Individualistic stereotypes of the poor extend beyond the lack of personal experience and wealth to include other sources, such as the media and religion. Media misrepresentation and images of the poor perpetuate negative attributions and blaming. Media outlets and journalism often present a less-than-clear picture of poverty in America. Common reasons for media misrepresentation are the lack of reporting on the topic, the lack of objectivity, and journalists joining the profession with predetermined bias.<sup>7</sup> In assessing media portrayal and poverty, starting in the 1950s, Researchers found Black Americans were overrepresented and Whites were under-portrayed in stories of poverty and governmental social assistance.<sup>7,116</sup> This misconstrued message of race and poverty impacts and disseminates negative stereotypes and reinforces resistance to welfare and social services programs, especially among Whites. Whites often believe that the poorest individuals are people of color who

should be held responsible for their shortcomings. Whites with individualistic perceptions are less likely to support others in need and lack compassion and empathy.<sup>117</sup>

Religion also plays a role in perceptions of poverty. Assessing religion and beliefs toward the poor, Hunt (2002) found that organized religion is a source of support for the American individualistic ideology.<sup>118</sup> Those who identified as Protestant and Catholic held strong individualist and blaming ideologies; in comparison, followers of the Jewish faith and other religions had more structural ideologies. This research supports previous studies on religion and poverty perceptions, adding the differences between race, socioeconomic status, and religion on perceptions. Minorities, people of color, and low-income individuals who identified as Protestant or Catholic were more likely to perceive the poor through a structural and fatalistic lens than their White and wealthy counterparts.<sup>119</sup>

Despite the often-misguided individualist view of poverty, studies have found internal factors that contribute to one's poverty status. Laziness and an unwillingness to work have adverse impacts on household income. Since the implementation of a work requirement, there are noted increases in one's household income and a reduction in the incidence of poverty; however, this action fails to account for the rising cost of childcare and work-related expenses, often removing the benefits of working. The assumption that welfare benefits disincentivize a recipient from working is bolstered by the cost accrued for an individual to work.<sup>118</sup>

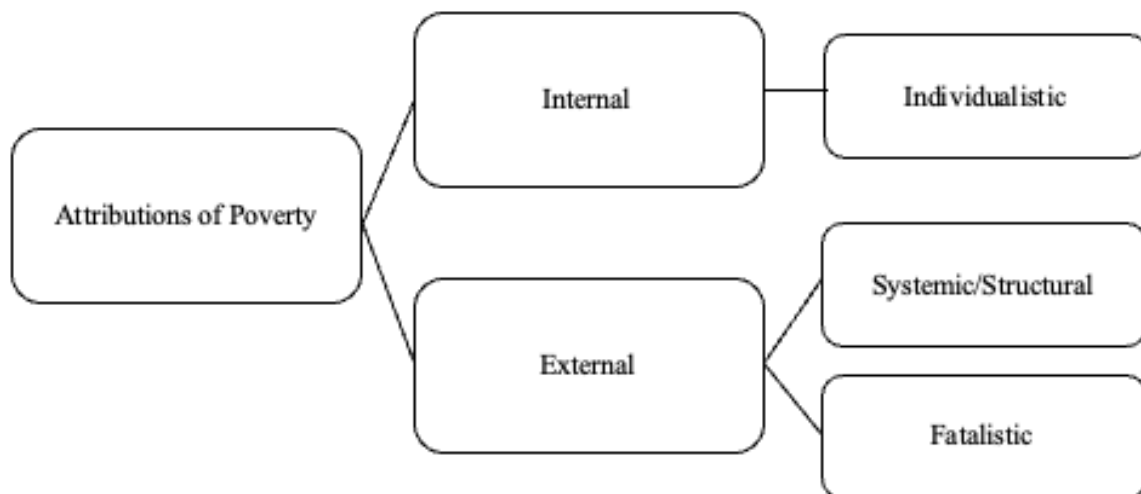
**Structural attribution.** Contrary to the individualistic view of poverty, structural attributions (systemic and fatalistic) offer additional explanations for poverty status. The structural view suggests that people experience poverty due to societal failings, not individual or personal failures.<sup>43</sup> Studies show individuals feel more empathy when they

view poverty as situational or structural rather than generational or chronic.<sup>5,6,103,106</sup> Systemic attributions, or interchangeably structural attributions, are factors beyond the individual's control. Those who view poverty with this mindset attribute it to economic, political, or social systems resulting in limited opportunity and resources.<sup>110</sup> Situations such as low-wage jobs, low education obtainment, single parenthood, lack of living wage, and rising costs of tuition and childcare have historically shown to be the major structural contributors to poverty.<sup>7,87,123</sup> The common thread in the literature is that capitalism creates conditions of poverty, regardless of an individual's effort. Further, the structure of some economies, such as the U.S., ensures that millions remain poor and that the poor fall behind regardless of competence.<sup>7,110</sup> Nickols and Neilson (2011) found that many poor individuals struggle to survive, not because they have no desire to work but because they lack adequate training to obtain work.<sup>122</sup> Studies supporting structural attributions found systemic inequality and market failures also contribute to poverty. These findings suggest that talent endowment is unequal within a market-based economic system, and individuals' skill and capital determine their propensity to experience poverty.<sup>123</sup>

**Fatalistic attributions.** Similar to structural attributions, fatalistic attributions also contribute to external views of poverty. A fatalistic attribution incorporates luck, destiny, illness, or unexpected events. When individuals view poverty through a fatalistic lens, they deem poverty and wealth the result of neither individual nor societal effects.<sup>103</sup> In the wake of COVID-19, which was perhaps the greatest structural failure, mass unemployment showed how structural or fatalistic attributions could limit success, and even threaten life.<sup>125</sup> The pandemic exposed the daily challenges faced by individuals in poverty. Since 2020, many Americans have adjusted their views of poverty, shifting blame to complex external factors

and understanding individualistic or personal failures based on struggles.<sup>126</sup> When poverty becomes personal, individuals become educated on the complexities of the problem. As Kreidl (2000) found, the perception that individual causes are to blame decreases as educational attainment increases.<sup>127</sup> For a visual representation of attributions of poverty, see Figure 1 below.

**Figure 1.** Attributions of Poverty



### **Undergraduate Perceptions of Poverty**

As individuals mature, start college, and think more independently, their perceptions shift. Because educational attainment impacts views of the poor, it makes sense that college students' perceptions interest researchers. Students often arrive at college with predetermined attitudes and perceptions toward poverty and various other issues. Although developed throughout the lifecycle, perceptions undergo influence from family and social circles, SES, and the media.

**Family and peer groups.** Societies reproduce through families. Parents are a child's first role model, sharing positive traits and inequalities.<sup>128</sup> Intergenerational attitudes, worldviews, and values within social status are transmitted from the parent to the child, specifically by the central family figure or the child's observations of the values and behaviors portrayed by the parents.<sup>129</sup> An individual's early teenage through college years are times of significant change and importance. Evaluating the transference of beliefs, values, attitudes, and behavioral patterns within a household toward poverty, Ron (2015) found that children who repeatedly heard their parents using structural attributions to explain poverty held more structural views of poverty into adulthood.<sup>130</sup> In a study of intergenerational attitudes toward volunteerism, Mustillo (2008) found a link between individuals' propensity to volunteer for a nonprofit and their parents' attitudes toward helping those in need. These findings support family SES, educational attainment, and social status as predictors of volunteerism. Among all social classes, a mother's attitude toward volunteerism was critical in intergenerational volunteerism.<sup>131</sup>

Similar to parental influence, peer groups also impact attitudes and perceptions. If adolescents' peer groups hold more prejudiced or racist views for accommodation and acceptance, they are more likely to adopt their peers' attitudes.<sup>132</sup> This accommodation was also apparent in the university population, where peers modeled and reinforced in-group attitudes to belong.<sup>133</sup> In conjunction with peer group, school type also influenced individual perceptions. Students who attended ethnic, homogenous schools were likier to assume prejudiced and closed attitudes toward others than their peers at more diverse schools. Campus and peer group diversity counteract negative attitudes and perceptions by creating a more inclusive environment and outgroup acceptance.<sup>134</sup>



**Socioeconomic status.** SES represents an individual's position within an economic and social hierarchy. Individuals objectively measure SES by household wealth, educational attainment, and occupational prestige; thus, SES can directly influence thoughts, feelings, and behaviors.<sup>135</sup> Although SES is negatively associated with support for reallocation, data consistently demonstrate the relationship between wealth and conservative political platforms (e.g., decreased support for welfare and government assistance programs).<sup>135</sup>

Undergraduate students arrive on campus with intergenerational values, morals, attitudes, and perceptions based on their home environment. However, wealth and privilege shape many campus cultures.<sup>22</sup> In the United States, students from high-resourced households arrive more academically, socially, and politically prepared.<sup>22</sup> Although most attitude and belief training comes from the home, high school social norms are additional influences. SES comprises objective material resources or capital and the subjective experiences of those resources;<sup>135</sup> therefore, students from wealthier households often attend private high schools or boarding schools.<sup>22</sup> Students at higher-privileged schools learn even more social class norms and the hidden rules of higher education, such as unspoken habits, cues, expectations, and rules of social learning.<sup>22,136</sup>

Common misconceptions are that universities are the land of opportunity and college campuses do not recognize class. However, low-income students enter college at a disadvantage, unaware of the rules without growing up in an environment where individuals discuss social class and rules.<sup>136</sup> Low-income students might believe they need only to study and find a social group to succeed. However, studying and finding social groups can be difficult, depending on the university.<sup>22</sup> Each social class (lower, middle, and upper) has a unique set of rules and norms.<sup>136</sup> More low-income students are applying and receiving

acceptance to private universities, intending to obtain a better education and enjoy an upper-class environment.<sup>22</sup> In moving from low-income to upper-class norms, students must develop social capital—in other words, relationships with others who are different in experience and wealth.<sup>136</sup> However, when the social class rules are hidden and unintentionally broken, judgment and offense result in a diminished relationship between the low-income and upper-class.<sup>136</sup> Students from lower-SES households at private universities often experience culture shock, describe feelings of isolation, and are uncomfortable talking about their families and home lives with their peers or in the classroom.<sup>22</sup> As Jack (2019) noted, low-income students lack the knowledge and skills necessary to play effectively in the academic arena.<sup>22</sup> Despite visible SES diversity across a college campus, without connections and shared experiences, individuals might not have their intergenerational norms challenged.<sup>22</sup>

**Media.** In addition to intergenerational beliefs from family, social groups, and SES, the media also play a significant role in developing a student's attitudes and perceptions.<sup>137</sup> Television, film, print, and social media have contributed to people's opinions regarding the poor.<sup>138</sup> Media outlets frequently show bias toward political values and hire journalists with similar mindsets, filtering out information contrary to the social in-group norm.<sup>7</sup> The media often overrepresent, mispresent, and stereotype minorities as the visual representation of poverty,<sup>139</sup> when White non-Hispanics comprise the largest poverty demographics.<sup>7</sup> Students' understanding of the poor can be incomplete depending on the news and social media outlets consumed, as many platforms do not undergo fact-checking.<sup>138</sup> In addition, Yamamoto and Kushin (2014) noted the attitudes, assumptions, and behaviors of well-known television hosts and social media influencers impacted viewers' perceptions.<sup>140</sup>

Although most students enter college with predetermined views, the university years remain a critical developmental time. The college years (ages 18 to 29) are a time of emerging adulthood as individuals seek self-ownership and develop identities outside their upbringing.<sup>15</sup> They are open to new ideas and information that might counter their previously held beliefs.<sup>15,141</sup> Exposure to the problems and outcomes of poverty and the concept of empathy during this time is beneficial in shaping future perceptions.

### **SECTION 3**

#### **The Role of Education in Changing Undergraduate Perception**

Attitudes, beliefs, and empathy toward the poor develop over the lifespan, beginning in childhood and changing with age. Younger children tend to be more benevolent. As individuals age, their views of poverty are influenced and driven by negative stereotypes that mitigate feelings of benevolence toward individuals who are poor.<sup>142</sup> Because attitudes and perceptions change over time, educators with courses deliberately focused on poverty and its outcomes have a distinct opportunity to impact students' ideals and ethical perspectives toward to poor.<sup>143</sup>

University students hold more negative, individualistic views of poverty overall.<sup>6</sup> A primary component of this view is an individual's perseverance mentality that coincides with acceptance into a university. Students from low- to middle-class households are more likely to attend public universities and hold more structural views of poverty than more-affluent private university students. Students from higher financial-resourced homes are also significantly more likely to hold conservative political worldviews, perceiving poverty with individualistic and blaming attributions.<sup>6</sup> Several studies addressing undergraduate perceptions of poverty found that after taking a full-term experiential course with exposure to

theatrical scenarios, clinical scenarios, or simulations, students at public and private universities reported more favorable attitudes toward poverty and shifting mindsets to more structural attributions to poverty and its causes.<sup>15-17,19</sup>

**Experiential education.** Introduced by John Dewey in the 1930s, gaining in popularity in the 1960s, and expanded upon in the 1980s, EE is a welcome component across U.S. college campuses. An umbrella term using common key principles, EE encompasses diverse educational theories and practices. EE is a systematic approach to applied learning brought on by embedded experiences within and outside the classroom to promote meaningful and deeper learning.<sup>143</sup>

Dewey introduced EE in his 1983 book *Experience and Education*. He discussed the importance of students receiving quality learning experiences to pique their interest in the content and promote worthwhile learning. Dewey noted the limitations of traditional education as potentially blocking a student's intellectual energy, thus minimizing curiosity for future content exploration.<sup>143</sup> Engaged learning experiences allow students to stretch their knowledge and perceptions and grow via proximal development. Also enhancing personal growth and exploration are student–instructor interactions and experiences outside the traditional classroom, where relationships are more authoritarian.<sup>143</sup>

Kolb expanded on Dewey's work in 1984, introducing the ELM. The ELM has received wide use in secondary and higher education and is the clearest expression of experiential learning to date.<sup>144</sup> Kolb presented a four-step process for EE to be effective: concrete experience (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE). Within this process, there are two ways of grasping the

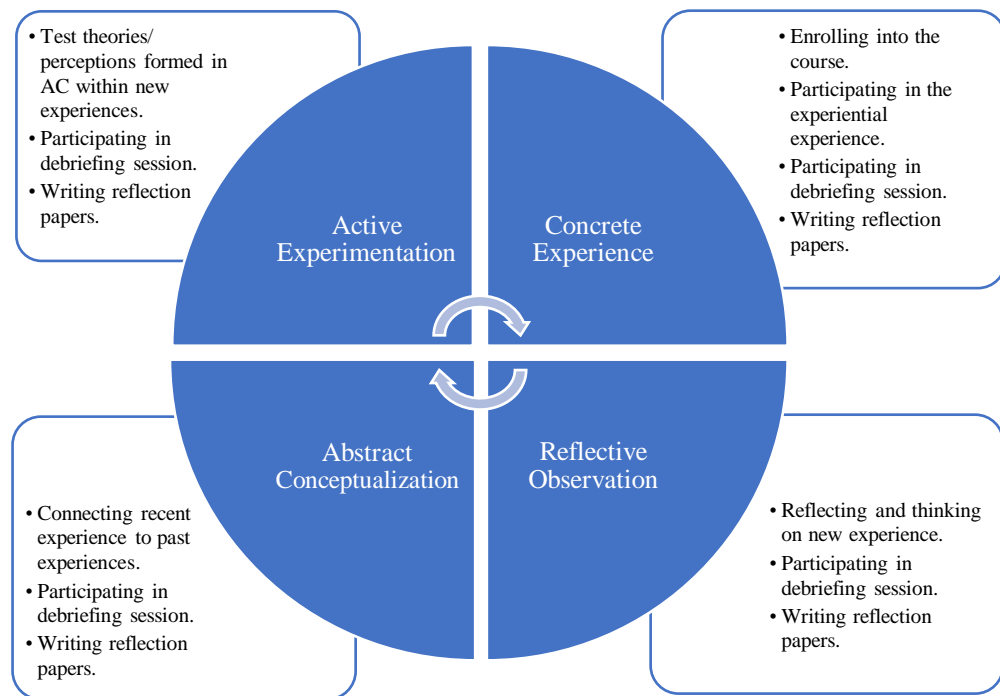
experience (CE, AC) and two ways of transforming the experience (RO, AE; see Figure 2).<sup>144,145</sup>

In the CE process, learners involve themselves in the hands-on experience or learning activity.<sup>146</sup> This involvement could mean volunteering with an organization or enrolling in a course or program where EE is part of the curriculum. During this time, the learner is introduced to various viewpoints and relearning occurs. RO happens when learners have the opportunity to reflect on their experiences and describe what occurred. RO is critical during the debriefing period, the time most proximal to the experience, and when students journal their reflection papers.<sup>146-148</sup> Steck et al (2011) identified RO as a time when individuals delve into their beliefs, challenge them, and modify their attitudes.<sup>149</sup> In AC, learners incorporate their experiences into logically sound theories.<sup>146</sup> Identified as the generalization stage, AC is also where learners compare their experience to what they know and establish new meanings and perspectives.<sup>146</sup> Specific to perceptions of poverty, the AC stage allows a student to engage in and reflect on the experience to evaluate if previously held beliefs and attributions toward poverty were accurate based on the new information. During AE, learners test new perspectives or personal theories formed in the AC phase. During reflection, learners apply general statements and concepts to their experiences and future actions. This phase is vital as it further informs the student about previously held beliefs and facilitates assertion for advocacy in the future.<sup>146-149</sup>

EE can take different forms, such as service learning, community events, simulations, online gaming, volunteering, and alternative breaks.<sup>13,14,17,32</sup> At the place where theory meets action in a real-world, authentic setting, EE bolsters student outcomes and increases engagement across campus and in the community. Facilitating opportunities for

undergraduate students to reach their potential requires exposure to various experiences in and out of the classroom environment. Students need to be challenged on every aspect of their perceptions: intellectually, creatively, innovatively, and politically.<sup>5</sup> The shift in students' personal views comes from interacting directly with a different environment than the one in which they are currently engaged. Therefore, experiential learning within undergraduate education is extremely valuable to increase empathy via exposure, explanation, and authentic experience.<sup>13</sup>

**Figure 2.** Kolb's (1984) Experiential Learning Model



### **Experiential Learning and Changes in Undergraduate Perception**

College students hold varying perceptions of poverty, with the primary view being individualistic attributions.<sup>6</sup> There is merit in implementing EE to shift their perceptions and attitudes to better understand structural influences on poverty.<sup>43</sup> Studies suggest that well-

designed courses and interventions can change undergraduates' perceptions of the poor. Because undergraduate students often develop beliefs independent of their parents, college is a critical time for exposure to various views through coursework, projects, and experiences that could promote growth and alter thinking.<sup>15</sup> When university students arrive on campus, their course of study determines the pathway of classes. Majors such as social work, human rights, hospitality services, and allied health commonly attract students desiring to work in industries where they will encounter individuals experiencing poverty. Among college students, a more structural mindset toward poverty can influence their course of study; students majoring in programs such as business, education, and hospitality tend to hold individualist views on poverty.<sup>6</sup> A university can offer an EE elective course to target perceptions about poverty among students whose majors do not emphasize social empathy and social justice. Often, students have courses geared toward their majors during the fall and spring terms and cannot incorporate a full-term experiential learning course. However, short-term courses, such as 1-week classes, have positively changed their perceptions of the poor.<sup>152</sup>

Frank (2017) used a full-term course, pre-test/post-test design, to assess sociology students' poverty attributions. First-year social work students noted significant changes in welfare attitudes toward the poor over the term. Students were likelier to hold an empathetic view toward those experiencing poverty and identify a lack of resources and opportunities due to structural barriers as the underlying contributors to poverty.<sup>13</sup> These results were similar to Weaver (2011), who assessed a full-semester EE course exposing first- and third-year social work students to fundamentals of social work practice and welfare through roleplay. The study showed that a curriculum focused on social justice and understanding

vulnerable populations strengthened students' structural attributions toward the poor over time with additional exposure and coursework.<sup>151</sup> To explore changes in student attitude, awareness, and understanding over an 8-week EE program, Thompson (2020) assessed undergraduate and graduate health profession (health sciences and social work) students on aspects contributing to attitudes and awareness regarding poverty. Using a survey, experiential poverty exercises (simulations), and reflections, the authors assessed the students in Week 2, with a follow-up in Week 8. The study's results suggested that students gained an enhanced understanding of health disparities and issues surrounding poverty as they received exposure to the topic and active mentorship.<sup>152</sup>

To evaluate perception changes toward the poor, Patterson and Hulton (2011) implemented a poverty simulation for senior undergraduate nursing students from a public university. The simulation occurred once at the semester's midpoint and accompanied a community health practicum course focused on caring for vulnerable populations. The results showed that a brief interactive program targeting poverty and issues related to poverty impacts students' attitudes toward poor individuals.<sup>153</sup> Using a service-learning EE model on freshman undergraduate students majoring in criminal justice, Terry and Lockwood (2020) involved students in the Burrito Project on Skid Row in Los Angeles, California, to assess the impact of poverty exposure on perceptions of poverty. As a part of the course, students made and served 950 burritos to homeless individuals, completing a perceptions-of-poverty survey before and after the service-learning activity. Additional data came from 4-year follow-up interviews. Results from the study suggested no significant changes from pre- to post-test; however, at the four-year follow-up, students noted significant long-term impacts



from the experience, such as empathy, awareness about the lack of resources, and the importance of fundamental rights.<sup>34</sup>

Researchers found similar results among private universities. Surveying 362 undergraduate students at Boston College, Seider et al (2010) noted shifts in personal views and attributions toward poverty among those who took a year-long philosophy course addressing personal and social responsibility while embedded into a social service agency. The results indicated a deeper understanding of circumstances and factors contributing to an individual's ability to escape poverty.<sup>15</sup> These findings were similar to Trozzolo et al (2008), who assessed Urban Plunge, a 1-credit experiential seminar course at the University of Notre Dame. Students were embedded in community service during the winter break and received content via lectures, speakers, and readings to augment the experiential portion of their learning. Although the outcomes were positive and students developed a greater understanding of poverty, the limited educational portion with reflection could have prevented a more significant result.<sup>150</sup> Using private university students in the Southeast, Davidson (2009) assessed the connection between service-learning participation and religion and an individual's views on poverty. The findings showed that religion and service learning were not significant in changing a student's perception; however, with exposure to poverty and continuing with the course over time, individualist attitudes of blaming the poor decreased. Attribution changes were also apparent using online simulations and gaming.<sup>154</sup> In a 2019 study at a mid-sized Catholic university, Hernandez found that students assigned to the experimental treatment group increased their belief in structural attributions, were more likely to donate to charity, and expressed greater support for policies benefiting the poor. Due to the scale used to assess attribution, Hernandez's simulation exercise did not assess changes

in the willingness to act. Thus, individuals in the experimental group were less likely to act and sign an online petition to support a higher minimum wage.<sup>155</sup>

## **THE USE OF KOLB’S EXPERIENTIAL LEARNING MODEL FOR THIS RESEARCH**

Kolb’s (1984) ELM established the foundational components of experiential learning as a framework for this study. The ELM process includes integrating (1) knowledge, which comprises concepts, facts, and information acquired through class readings, discussions, presenters, and documentaries; (2) activity, which is knowledge applied to a real-world setting—for this project, embedded poverty experiences; and (3) reflection, or the synthesis of knowledge to create new knowledge.<sup>156</sup> In this project, reflection entailed applying knowledge acquired from the course and poverty experiences to a social problem on the university campus.

The university students enrolled in and attended the elective non-major EE nutrition course (CE) focused on social problems surrounding poverty. Students came to the course with established perceptions and attributions toward poverty; however, the CE of classroom instruction and embedded poverty experiences allowed them to challenge preconceived thoughts and perceptions. RO occurred during the daily experience debriefing and post-reflection opportunities. This research relied on Kolb’s (1984) prompts, such as “reflect on your experience.” During the AC, students returned to the classroom to discuss their experience and process newfound attitudes or changes in perception. Discussions of taking action or making future decisions around poverty also happened in the AC stage, which incorporated active experimentation. Within the AE portion of the course, students selected a

poverty-based issue on campus, developed solutions, and presented their findings to the university administration.

## **SCALES ASSESSING UNDERGRADUATE ATTITUDES AND PERCEPTION TOWARD POVERTY**

Scales are a longstanding method to assess attitudes and perceptions. Atherton et al (1993) developed one of the first scales to measure university students' attitudes toward the poor, which has since benefited from more formative contributions.<sup>157,158</sup> Yun and Weaver (2010) refined the 37-item Atherton scale into a 21-item assessment. The Attitude Toward Poverty Short Form ( $\alpha = .87$ ) comprises 3 factors: personal deficiency ( $\alpha = .82$ ), which includes statements such as “poor people act differently,” stigma ( $\alpha = .75$ ), which incorporates statements such as “welfare makes people lazy,” and structural perspective ( $\alpha = .67$ ), with statements such as “society has the responsibility to do more.” Individuals scoring higher on the scale have more structural perspectives of poverty.<sup>158</sup>

Noting shortcomings in Yun and Weaver's and Atherton's scales, Blair et al (2014) devised the Undergraduate Perceptions of Poverty Tracking Survey (UPPTS), a 36-item scale, to incorporate missing factors, such as empathy. Originally validated on 301 undergraduate students at a Northeastern U.S. university, the UPPTS expanded the constructs of the previous scales, including empathy for individuals living in poverty, attitudes toward the poor, and commitment to direct action or addressing poverty (advocacy).<sup>7</sup> The survey's 6 factors are: (1) Welfare Attitude (WA; 12 items;  $\alpha = .84$ ); (2) Poor are Different (PD: 8 items;  $\alpha = .77$ ); (3) Do More (DM; 6 items;  $\alpha = .82$ ); (4) Equal Opportunity (EO; 6 items;  $\alpha = .72$ ); (5) Fundamental Rights (FR; 6 items;  $\alpha = .83$ ); and (6) Lack of Resources (LR; 3 items;

$\alpha = .71$ ).<sup>6</sup> Many of the researchers referenced in this literature review used the UPPTS.<sup>32,33,113</sup>

## CHAPTER III

### METHODOLOGY

This study addressed the following research questions:

1. What is the impact of a short-term experiential learning nutrition course on students' perceptions of poverty?
2. What is the general perception of poverty in undergraduate students attending a private elite university?
3. What is the relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty?

Chapter III presents the quantitative and qualitative approaches used in this exploratory study to examine the impact of experiential learning as part of an undergraduate nutrition course on influencing students' perceptions of individuals experiencing poverty and FI. The research was also an examination of the undergraduate students' overall perceptions of poverty at a private elite university in Texas. Students were asked to complete an electronic version of the UPPTS (see Appendix A), the USDA HFSSM (see Appendix B), and a self-identified demographic questionnaire (see Appendix C). Reflection journals from students enrolled in the course provided a means to assess themes among the sample population. A PsychData (State College, PA) internet link with the digital survey went out pre- and post-study to students enrolled in the short-term experiential nutrition course; all undergraduate students campus-wide received the internet link after the course. Recruitment occurred via convenience and snowball sampling. Each potential participant received detailed messaging explaining the purpose of the study; the informed consent explained the

procedures for data collection, confidentiality, participants' rights, and associated risks in participating (see Appendix D).

## **POPULATIONS AND SAMPLING**

This study occurred during the January and May 2022 11-day intersession terms. There were two intersession EE courses offered in 2 locations: January 2022 at the university's extension location in Taos, New Mexico, and May 2022 on the university's main campus in Dallas, Texas. Study participants were undergraduate students at Southern Methodist University (SMU), a private elite university in Dallas. According to tax filings and tuition records, there were 38 elite universities in the United States as of 2017, with SMU ranked 23rd. An elite university has a greater number of students from the top 1% of wage earners than from the bottom 60%.<sup>59</sup> Students and individuals not attending SMU or who were not undergraduates at SMU were ineligible to participate.

There were 7,056 undergraduate students at SMU in fall 2022. Within this population, White students made up the majority at roughly 61%; other breakdowns by race are Hispanic/Latino (14%), Asian (8%), and Black/African American (4%). SMU comprises 5 schools: Cox School of Business, Dedman College of Life Sciences, Lyle School of Engineering, Meadows School of the Arts, and Simmons School of Education and Human Development. SMU's acceptance rate is approximately 47%, with an average SAT score of 1435 (95th percentile) and an average ACT score of 32 (96% percentile). For the 2022–2023 school year, roughly one-third of incoming students were from underrepresented minority populations, with 32% of first-year and about 48% of transfer students from underrepresented households.

## **INSTITUTIONAL REVIEW BOARD AND PROTECTION OF HUMAN PARTICIPANTS**

The researcher obtained appropriate Institutional Review Board (IRB) certifications before data collection. Survey responses remained private in accordance with the Privacy Act of 1974.<sup>39</sup> A data management protocol was in place to store completed surveys in a separate file from any data containing individually identifiable information.

Two IRB approvals were necessary for this project, Texas Woman's University (TWU) and SMU. TWU's IRB approval is part of Ph.D. dissertation requirements (see Appendix E), and SMU approval was necessary to access undergraduate students and distribute surveys (see Appendix F). Upon receipt, TWU's IRB received a copy of SMU's IRB approval letter.

## **DATA COLLECTION PROCEDURES**

The two methods of data collection are discussed separately: the 11-day intersession course and the total undergraduate population. All participants completed the quantitative portion of this study anonymously, and the researcher subsequently reviewed the raw data. All data, both quantitative and qualitative, will remain stored for 3 years and then destroyed.

### **Quantitative Procedures**

The three questionnaires (UPPTS, HFSSM, and Demographics) were combined into 1 survey for ease of participant response. The survey was available on PsychData for electronic completion.

**The 11-day intersession EE nutrition course.** Students enrolled in the 11-day EE nutrition course received the survey link on the first day of the course (pre-) and the last day (post-). The link to the survey was available in an announcement on Canvas. There was no

requirement for students to complete the survey, and their level of participation did not have any bearing on their course grades.

**Total undergraduate population.** A campus-wide survey link went to all enrolled university students with active institutional email accounts in August 2022. The survey remained open for 1 week until achieving an adequate sample size. The average survey completion time was 7 minutes. The email included an overview of the study's purpose, the voluntary nature of participation, and the ability to withdraw from the study at any time without penalty. Because participants had connections to the university campus, internet access was readily available on computers in offices and labs or other electronic devices. The first page of the survey was a consent form, which participants signed digitally by clicking the "next" button. The last survey page provided a link to a separate site with an option to enter their name and email address for a prize drawing. Students in the 11-day immersive course were unable to enter the drawing.

A lottery was an enticement used to recruit participants to complete the survey. Lottery incentives can increase recruitment and participation and show appreciation for survey completion.<sup>160</sup> Participants who provided their email addresses entered a drawing for 1 of 20 \$50 electronic gift (e-gift) cards. After collecting all data, the researcher randomly selected 20 participants from a numbered electronic list of respondents and sent the e-gift cards to the recipients. Funding for the project incentives was received from the Moore-Khourie Grant in the amount of \$1,000 (see Appendix G).

### **Qualitative Procedures**

Students participating in the 11-day EE nutrition course completed a reflection journal after each immersive experience. During the course, students received a random



assignment to 1 of 3 immersive groups addressing basic needs, nutrition, and housing. Each group rotated to a different experience each day. At the end of each day, the students and the professor/researcher had time to debrief and discuss their experiences, and the professor/researcher ensured student safety and well-being. After the debrief, the students completed a voluntary reflection journal, responding to the following prompts:

- “After today’s experience, are you different than you were before this experience?”
- “If you have seen a change, discuss how your knowledge, opinions, thoughts, and/or feelings about this topic have changed.”
- “If you have not seen a change, discuss how your knowledge, opinions, thoughts and/or feelings about this topic have not changed.”

NVivo version 12 for Mac (QSR International, Burlington, MA) was the software used to identify students’ attributions, feelings, future action to volunteer or advocate, and increased awareness/understanding. Parent nodes were further delineated into more concise child nodes. Parent nodes were classified as the overarching theme, and child nodes as sub- or smaller themes within the larger theme. In preparation for the thematic analysis, multiple coders were used to ensure intercoder reliability, trustworthiness within the data, and cross-matching to certify an audit and rigor trail. Each student reflection went through the following steps by each of the 2 coders, first, reading and re-reading to ensure understanding of the document and to gain insight into students’ experiences with poverty. Second, the reflections were initially coded with broad themes. Third, each reflection was compared to other students’ reflections to establish common themes across all documents. Fourth, each theme was reviewed, further defining, naming, and clustering the themes. And fifth, once

themes were established by each coder, the themes were then compared and combined. All reflections were uploaded into NVivo software, where reflections were cross-referenced between coders to confirm parent themes and establish subthemes.

## **INSTRUMENTATION**

The two assessments used were the UPPTS (see Appendix A) and the six-item HFSSM (see Appendix B). Also included were the demographic variables of sex on birth certificate, gender identification, age, ethnicity/race, class status, school/college, financial aid status, type of high school, religion, and family household income (see Appendix C).

## **QUANTITATIVE INSTRUMENTS**

### **Undergraduate Perceptions of Poverty Tracking Survey**

The UPPTS (2014) is a tool to measure undergraduate students' perceptions of individuals living in poverty in three areas: (1) general attitudes to those experiencing poverty, including why someone might be poor; (2) understanding the level of empathy for those experiencing poverty; and (3) exploring the level of commitment to addressing poverty through advocacy or supporting programs/services that aid those who are poor.<sup>6</sup> The UPPTS has 39 questions and 6 factors that meet empirical standards for validity and reliability.<sup>6</sup>

1. Welfare Attitude (WA) relates directly to welfare programs, such as the SNAP.

WA is the largest factor in the UPPTS, with twelve questions explaining 21.54% of the variance.

2. Poor are Different (PD) includes eight questions, such as "Being poor is a choice" and "Most poor people are dirty." This factor is a means to determine if the respondent believes the poor are significantly different from others in society. The outcome of this factor also measures empathy toward those experiencing poverty.

3. Do More (DM) consists of six questions about the need for institutions and individuals to do more to provide assistance. The outcome of this factor also measures empathy toward those experiencing poverty.
4. Equal Opportunity (EO) comprises eight questions regarding if the poor have equal opportunities to get ahead, such as “Anyone can succeed if they try hard enough.”
5. Fundamental Rights (FR) has three questions to assess whether individuals have a basic right to food, shelter, and health care.
6. Lack of Resources (LR) addresses whether respondents believe the poor have the resources or access to the resources needed to change their situation.

On the UPPTS, individuals respond to a series of statements regarding people experiencing poverty and actions toward poverty using a Likert scale. The sum of the individual scores comprises the total score, which ranges from 39 to 195. A lower score on the UPPTS shows a more positive, empathic, and structural view of poverty; a higher score indicates lower regard, lower empathy, and a more individualistic view of poverty.<sup>6</sup>

### **U.S. Department of Agriculture Household Food Security Survey Module**

Assessing food security in the last 30 days occurred with the validated 2-item Food Sufficiency Screener and the 6-item USDA HFSSM, a condensed version of the 18-item USDA Household Food Security Survey Module, to identify FI households.<sup>161</sup> The National Center for Health Statistics found the 6-item scale reliable and valid. All participants received the 2-item screener question; if they responded “no” and “Enough of the kinds of food we want to eat,” they were considered food secure and could bypass the 6-item USDA HFSSM. Participants who did not pass the 2-item screener completed the 6-item USDA

HFSSM, with the sum of *agree* responses used to calculate a total raw score, determining their food security status. Individuals who were food secure scored 0–1, low food secure scored 2–4, and very low food secure scored 5–6.

### **Demographics Survey**

A researcher-created demographics survey followed the UPPTS and the USDA HFSSM. The digitally distributed survey asked participants to self-identify using the following demographic variables: sex recorded on birth certificate, identifying gender, age, ethnicity/race, class status at SMU, college/school, financial aid status, type of high school attended, religion, and family household income. Participants could provide only 1 answer for each demographic except for ethnicity/race, and they could decline to answer questions on sex, gender, ethnicity/race, class, financial aid status, and family household income.

## **DATA ANALYSIS**

### **Qualitative Analysis**

The researcher entered student reflections unbridged into NVivo version 12 for Mac, reviewing, coding, and organizing the data into overarching themes to assess student perceptions. Qualitative data underwent comparison to quantitative data, with triangulation used to help inform educators about future experiential courses and their impact on changing attitudes and perceptions toward poverty.

### **Quantitative Analysis**

Data analysis of the UPPTS, USDA HFSSM, and demographic variables occurred using SPSS version 28 for Mac.

1. RQ1: What is the impact of a short-term experiential learning nutrition course on students' perception of poverty? To achieve a power of .8, a paired samples *t* test was conducted with a medium effect size of .5 (Cohen's *d*),  $\alpha = .05$ , and  $N = 27$ .
2. RQ2: What is the general perception of poverty in undergraduate students attending a private elite university? To achieve a power of .8 with medium effect size of .0625 (*f*<sup>2</sup>),  $\alpha = .05$ , and  $N = 147$ , descriptive statistics were performed comparing the 6 subscales (WA, PD, DM, EO, FR, LR, and SE) and total score.
3. RQ3: What is the relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty? To achieve a power of .8, a medium effect size of .15 (*f*<sup>2</sup>),  $\alpha = .05$ , and  $N = 118$ , a multiple linear regression was performed.

Recruiting 30 participants was sufficient to answer RQ1, accounting for a 10% attrition rate. Answering RQ2 and RQ3 required a sample size of 163, accounting for a 10% attrition rate.

**Table 1.** Data Analysis by Research Question and Test

Question	Null Hypothesis	Independent Variables	Dependent Variables	Test
RQ1: What is the impact of a short-term experiential learning nutrition course on students' perception of poverty?	Following a short-term experiential learning nutrition course, undergraduate students' perceptions of poverty will not change.		Perception – Total score on all the questions of the UPPTS after some are reversed scored. Reflection Journals	Paired Samples T-Test (pre/post test design) Thematic Analysis
RQ2: What is the general perception of poverty in undergraduate students attending a private elite university?	The general perception of poverty in undergraduate students attending a private elite university is not favorable or is lacking regard.		6 Subscales: Welfare attitude, poor are different, do more, equal opportunity, fundamental rights, lack of resources, and Total Score	Descriptive Statistics
RQ3: What is the relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty?	There will be no relationship between demographics, food security status, or the use of financial aid on undergraduate students' perceptions of poverty.	Demographics Food Security Financial Aid Status	Perception	Multiple Linear Regression

## SUMMARY

This mixed methodology study was a means to assess the impact of a short-term 11-day EE nutrition course on undergraduate perceptions of poverty and perceptions of poverty in undergraduate students attending a private elite university. The USDA HFSM was the survey used to assess the incidence of food insecurity on a private elite university campus. Participants received links to the quantitative data collection tools via an online platform. Quantitative data from class participants' reflection logs underwent analysis to identify themes regarding attitudes, poverty attributions, empathy, and desire to advocate. This study could inform scholars about students' attitudes and empathy toward those experiencing poverty and their commitment to addressing poverty via direct action or support for programs and/or aid services. The results could show the impact of experiential learning as a part of an undergraduate non-major elective nutrition course in influencing private university students' perceptions (attitudes, beliefs, and empathy) toward individuals living in poverty.

## CHAPTER IV

### RESULTS

This exploratory mixed methods research was a study to examine the impact of experiential learning as part of an undergraduate nutrition course on influencing students' perceptions toward individuals experiencing poverty and FI. This study also addressed the overall undergraduate students' perceptions of poverty and the incidence of food insecurity at a private elite university in Texas. The purpose was to determine if there was a relationship between the perceptions of poverty survey and age, gender, ethnicity/race, class status, school/college, financial aid status, type of high school attended, religious affiliation, family household income, and food security status within the target population. A secondary goal was to inform the development of future experiential education courses on addressing perceptions and misconceptions regarding poverty attributions within the undergraduate population.

This chapter first presents the demographic data for the total undergraduate population, followed by the demographic data of the students who enrolled in the short-term experiential nutrition courses. There will be a discussion of the process of assessing the qualitative portion of the project. Finally, this chapter presents the results of data analysis to answer the following research questions:

1. What is the impact of a short-term experiential learning nutrition course on students' perception of poverty?
2. What is the general perception of poverty in undergraduate students attending a private elite university?

3. What is the relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty?

## **DEMOGRAPHICS**

### **Total Undergraduate Population**

Eight hundred and ninety undergraduate students completed the UPPTS, with 802 remaining after data cleaning. Participants' ages fell into the following categories: 18–19 (40%), 20–21 (47%), 22–23 (10%), and older than 23 (3%). Regarding self-identified gender, 66.1% of the participants identified as female, 41.9% as male, 1.3% as non-binary, and .6% as transgender. Self-identified race demographics were as follows, to include multiracial: White (68%), Hispanic/Latino (17%), Asian/Pacific Islander (14.5%), African American/Black (7.5%), and Native American (1.5%). Regarding class status, most of the participants were seniors (29.6%), followed by juniors (25.9%), freshmen (23.7%), and sophomores (20.9%). Relating to the students' school at the university there were 31.8% in the College of Humanities and Sciences, 30.2% in the School of Business, 14.1% in the School of Education and Human Development, 12.6% in the School of Engineering, and 11.3% in the School of the Arts. Comparing the type of high school, 54.9% had gone to a public high school (48.3% suburban, 6.6% rural), 40.3% attended a private high school (20.8% religious, 19.5% private/other), 1.6% were homeschooled, and 3.2% listed other (e.g., boarding school). For religion, 63.5% self-identified with Christianity, with the remaining responses of 3.2% Judaism, 3.1% Islam, 1.5% Hinduism 1.1% Buddhist, 5.2% Other Religious, and 22.3% religiously unaffiliated. Family household income represented the following categories: under \$15,000/year (1.5%), \$15,001–25,000 (1.6%), \$25,001–40,000 (5.2%), \$40,001–60,000 (7.1%), \$60,001–80,000 (5.5%), and \$80,001+ (48.6%);



30% of the participants reported either unsure or preferred not to answer. Among financial aid status, students not receiving financial aid made up the majority at 59.5%, compared to 40.5% receiving financial aid (see Table 2). Therefore, most participants were 20–21 years old (47%), female (55%), White, (68.2%), seniors (29.6%), from the School of Humanities and Sciences (31.8%), from a public suburban high school (48.3%), identifying as Christian (63.5%), from a household making greater than \$80,000 per year (48.6%), and not receiving financial aid (59.5%) to attend school.

**Table 2.** Frequencies and Percentages for Categorical Demographic Variables

<b>Categorical demographic variable</b>	<b>n</b>	<b>%</b>
<b>Race/Ethnicity</b>		
White	547	68.2
Hispanic/Latino	138	17.2
Asian/Pacific Island	116	14.5
AA/Black	60	7.5
Native American	12	1.5
Multiracial	71	8.8
<b>Class Status</b>		
Freshman	186	23.7
Sophomore	164	20.9
Junior	203	25.9
Senior	232	29.6
<b>School/College</b>		
School of Business	242	30.2

**Table 2.** continued

<b>Categorical demographic variable</b>	<b>n</b>	<b>%</b>
College of Humanities and Sciences	255	31.8
School of Engineering	101	12.6
School of the Arts	91	11.3
School of Education	113	14.1
<b>High School Attended</b>		
Public suburban	387	48.3
Public rural	53	6.6
Private religious	167	20.8
Private other	156	19.5
Homeschool	13	1.6
Other	26	3.2
<b>Religious Affiliation</b>		
Christianity	509	63.5
Judaism	26	3.2
Islam	25	3.1
Hinduism	12	1.5
Buddhism	9	1.1
Other Religious	42	5.2
Religiously unaffiliated	179	22.3
<b>Household Income</b>		
Under \$15,000	15	1.5
\$15,001–25,000	13	1.6

**Table 2.** continued

<b>Categorical demographic variable</b>	<b>n</b>	<b>%</b>
\$25,001–40,000	42	5.2
\$40,001–60,000	57	7.1
\$60,001–80,000	44	5.5
\$80,001+	390	48.6
Did not report	244	30.4
<b>Receiving Financial Aid</b>		
No	477	59.5
Yes	325	40.5

### **Experiential Education Nutrition Course**

Twenty undergraduate students in the experiential learning nutrition course completed the UPPTS. After data cleaning, all 20 participants remained in the data analysis. Participants' ages represented the following categories: 18–19 (15%), 20–21 (45%), and 22–23 (40%); no one identified as being older than 23. Regarding self-identified gender, 70% of the participants identified as female and 30% as male. Self-identified race demographics were as follows, to include multiracial: White (60%), Hispanic/Latino (25%), Asian/Pacific Islander (10%), and African American/Black (10%). Most participants' class statuses at the university were senior (40%), followed by junior (45%), sophomore (10%), and freshman (5%). Relating to the students' school/college, 40% were in the College of Humanities and Sciences, 35% were in the School of Education and Human Development, 15% belonged to the School of Business, 5% were in the School of Engineering, and 5% were in the School of

the Arts. Comparing the type of high school, 50% went to a public high school (45% suburban, 5% rural), 45% attended a private high school (35% religious, 10% private/other), and 5% were homeschooled. Specific to religion, 80% self-identified with Christianity, 15% as Other Religious, and 5% were religiously unaffiliated. Family household income represented the following categories: under \$15,000/year (5%), \$40,001–60,000 (10%), and 80,001+ (75%); 10% of the participants reported being unsure of household income. Among financial aid status, students not receiving financial aid made up the majority at 70%, compared to 30% receiving financial aid (see Table 3). Therefore, most participants in the short-term experiential nutrition course were 20–21 years old (45%), female (70%), White, (60%), juniors (45%), within the School of Humanities and Sciences (40%), from a public suburban high school (45%), identifying as Christian (80%), from a household making greater than \$80,000 per year (75%), and not receiving financial aid (70%) to attend school.

**Table 3.** Experiential Education Nutrition Course Frequency of Participant Age

<b>Categorical demographic variable</b>	<b>n</b>	<b>%</b>
<b>Age</b>		
18–19 years	3	15
20–21 years	9	45
22–23 years	8	40
<b>Gender</b>		
Male	6	30
Female	14	70

**Table 3.** continued

<b>Categorical demographic variable</b>	<b>n</b>	<b>%</b>
<b>Race/Ethnicity</b>		
White	12	60
Hispanic/Latino	5	25
Asian/Pacific Island	2	10
AA/Black	2	10
Multiracial	1	5
<b>Class Status</b>		
Freshman	1	5
Sophomore	2	10
Junior	9	45
Senior	8	40
<b>School/College</b>		
School of Business	3	15
College of Humanities and Sciences	8	40
School of Engineering	1	5
School of the Arts	1	5
School of Education	7	35
<b>High School Attended</b>		
Public suburban	9	45
Public rural	1	5
Private religious	7	35
Private other	2	10

**Table 3.** continued

<b>Categorical demographic variable</b>	<b>n</b>	<b>%</b>
Homeschooled	1	5
Religious Affiliation		
Christianity	16	80
Other Religious	3	15
Religiously unaffiliated	1	5
Household Income		
Under \$15,000	1	5
\$40,001–60,000	2	10
\$80,001+	15	75
Receiving Financial Aid		
No	14	70
Yes	6	30

## QUALITATIVE DATA AND THEMATIC ANALYSIS

Students enrolled in the 11-day experiential learning nutrition course completed a reflection log following each experiential day. Students were not required to complete the reflections, and the instructor emphasized that opting out of the reflection activity had no bearing on their course grades. Twenty students completed the course: 5 in the January term course at the university's satellite campus in Taos, New Mexico, and 15 in the May term course on the university's main campus in Dallas, Texas. Despite the courses occurring in 2 locations, the outreach (experiential learning) day themes were consistent. Daily themes were food, housing, and basic needs, and there were three experiential learning days and 1 final

course reflection. The reflection prompt remained constant throughout the course (see Figure 3). The instructors received 73 reflections over the January (n = 20) and May (n = 53) terms. In line with the instructor's request to withhold names or other identifying information, all students submitted deidentified reflections. After both courses, reflections were downloaded and labeled with their corresponding day (Day 1, Day 2, Day 3, final) and combined into 1 file. Reflection data did not undergo analysis for initial themes until after the conclusion of both courses. Table 4 provides a visual for enrollment in both courses, geographical location, and number of reflections submitted after each day.

**Figure 3.** Experiential Education Nutrition Course Open-Ended Reflection Prompt

Reflection Prompt
<ol style="list-style-type: none"><li>1. After today's experience, are you different than you were before this experience?<ol style="list-style-type: none"><li>a. If you have seen a change, discuss how your knowledge, opinions, thoughts, and/or feelings about this topic have changed.</li><li>b. If you have not seen a change, discuss how your knowledge, opinions, thoughts and/or feelings about this topic have not changed.</li></ol></li></ol>

**Table 4.** Experiential Education Nutrition Course Enrollment, Location, Submissions

	January 2022	May 2022
Location	Taos, NM	Dallas, TX
Student enrollment	5	15
Total submitted reflections	20	52
Day 1	5	15
Day 2	5	13
Day 3	5	12
Final reflection	5	13

## SUMMARY OF FINDINGS

### Research Question 1

What is the impact of a short-term experiential learning nutrition course on students' perception of poverty?

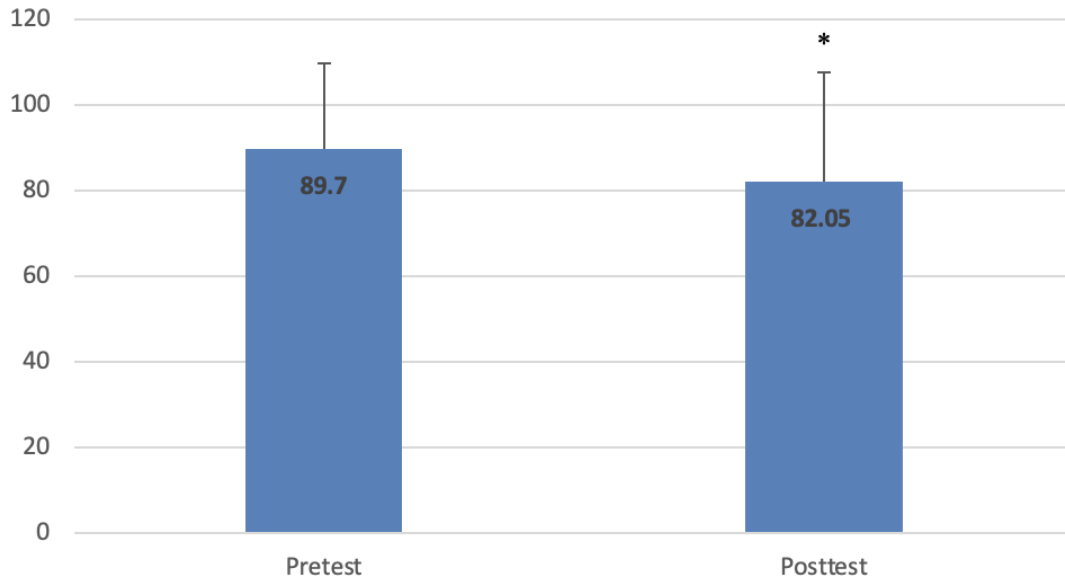
*Null hypothesis:* Following a short-term experiential learning nutrition course, undergraduate students' perceptions of poverty will not change.

**Quantitative data analysis.** A paired samples *t* test was performed to test the hypothesis that the pre-course ( $M = 89.70$ ,  $SD = 20.029$ ) to post-course means ( $M = 82.05$ ,  $SD = 25.420$ ) were equal on the UPPTS. Before the analysis, the assumption of normality distributed differences scored was examined, and the assumption was considered satisfied. Results of the analysis indicated that pre-test and post-test scores were positively correlated ( $r = .850$ ,  $p < .001$ ). In comparing pre-test perception scores to post-test perception scores, there was a significant difference in total scores ( $t_{19} = 2.536$ ,  $p = .020$ ) following the course,



leading to the rejection of the null hypothesis. On average, students' post-test perception scores were 7.65 points lower than their pre-test scores (95% CI [1.34,13.96]; see Figure 4). Based on the data analysis, the null hypothesis was rejected.

**Figure 4.** Pre-test/Post-test Comparison of Experiential Education Nutrition Course

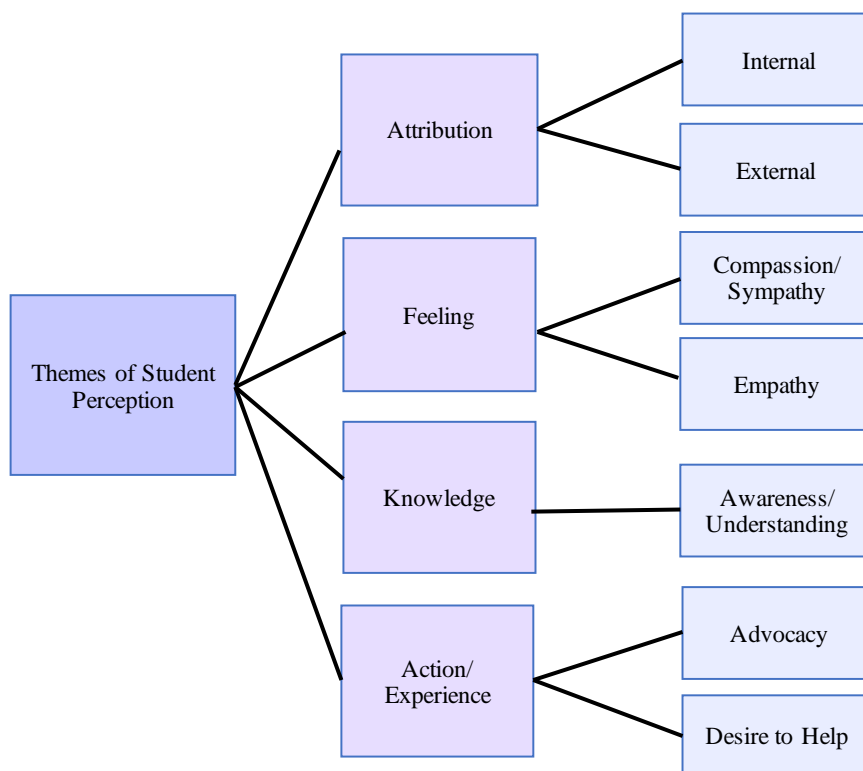


*Note.* \* $p < .05$

**Qualitative data analysis.** Two coders trained in qualitative methods separately identified and aggregated phrases according to the initially identified themes. Following the initial coding of each reflection document by each coder, all documents were uploaded using NVivo version 12 for Mac. Students' reflections were cross-referenced and recoded with the established themes from the initial review and checked for agreement. The initial codes underwent rereview and organization into parent nodes and subsequent nodes within the software, establishing the project's codebook. The principal investigator then reviewed and confirmed themes. For cases in which coders varied on code distinction, there was a

discussion regarding the meaning of the phrase and clarity of definition until an agreement was reached. In some cases, student phrases and quotes were attributed to multiple themes. The exploration of this portion of the research was to fill in any gaps of perception changes that the UPPTS could not detect. The goal was to determine whether students believed that taking a short-term experiential nutrition course focusing on poverty and food insecurity influenced their perceptions, and how their changes in perception would impact the willingness and desire to help or advocate for food-insecure and poverty-stricken people in the future.

**Figure 5.** Experiential Education Nutrition Course Visual Depiction of Qualitative Data



**Thematic analysis.** Attribution, what an individual attributes as the causes of poverty, showed a thematic transition as students progressed through the class. Many

students came into the course with viewpoints aligned with internal/individualistic attributions, believing those who are poor are different and unequal in society (see Table 5, quote 1). Students noted that being in poverty was due to poor generational decision-making, drug addiction, and a lack of work ethic (see Table 5, quotes 2–4). Students stated that individuals experiencing poverty and homelessness often become reliant on social services, such as food pantries (see Table 5, quote 5). Further, the students tended to think that the poor are dirty, have a mental illness, and lack awareness of their situation (see Table 5, quotes 6 and 7).

As the course progressed, many students' views moved from internal to external/structural, as they identified structural racism and stigma from the upper class as contributors to inadequate low-income housing (see Table 5, quote 8). Students identified the course's impacts on their perceptions of laziness (see Table 5, quote 9), with their previously held stigma "crushed" by their changed beliefs. An overarching and common shift was within circumstances and crises. Students' external views attributed factors such as illness and downturns, often out of low-income individuals' control, as contributors to poverty (see Table 5, quotes 10 and 11). Lastly, regarding financial status and fate, students attributed their blessings of financial security and the grace of God as key factors to their personal situation of being blessed (see Table 5, quote 12).

**Table 5.** Experiential Education Nutrition Course Internal and External Quotes by Theme

Internal	External
1. I've always ignored the homeless people around me because I didn't view them as equals to me"	8. "I think ideas surrounding minorities and low-income housing are deeply rooted in America's history of racism

**Table 5.** continued

Internal	External
	and I think this shows the influence that the wealthy class has on low-income people and their hopes for achieving a better life for themselves and their families.”
2. “I have the viewpoint of poverty that their circumstances are generational, they made bad choices, and have no escape.”	9. “One stigma that I have heard throughout my life is that homeless people don’t want to work because they are lazy. This stigma has been crushed... Now I know that there is true struggle in the world and there are so many factors to one’s situation that there is no room for judgment.”
3. “It’s the homeless person’s fault for not being able to get out of poverty...I was raised to think that they are all on drugs and that they should be able to work harder to get out of their current situation.”	10. “I now know how millions of Americans are just one bad day, one crisis, one illness away from falling into poverty, and I better understand how these conditions of poverty serve only to keep these people stuck in a cycle of poverty”
4. “I was scared to have any kind of interaction with homeless people this week. I had negative perceptions about these people and believed that they were in the situation that they are in because of lack of work ethic and making poor decisions.”	11. “One event leads to another and the unraveling of consequences, many out of their control, that can lead people into living in the streets. As a personal takeaway, I begin to see things from a broader perspective and try to keep from making judgements based on a person’s looks or situation.”
5. “I do think that some people become too reliant on food pantries and then do not want to find their own means of food, but I only think this is a small portion of the people going to the food pantries.”	12. “I was more wary before about giving money rather than food to the homeless, but my perspective has been altered- these people need it more than I do, they’re struggling to get by, and as an American who is blessed with financial security, it is the least I could do for them”

**Table 5.** continued

<b>Internal</b>	<b>External</b>
6. “I was also surprised at how clean a lot of them were and how most did not seem to have mental illness.”	13. “After today and this week it has totally come to my attention that it is purely by the grace of God that these are not the cards that I am dealt.”
7. “What also surprised me was how aware the homeless were of themselves and their situations.”	

For thematic coding, feeling was an emotional perception, which included the display of compassion/sympathy and empathy toward poverty. These were common themes throughout student reflections and therefore used as the parent nodes for analysis, with compassion/sympathy and empathy as subthemes. Compassion and sympathy were present throughout the course. Students noted compassion via the feeling of “hurt” and seeing firsthand the conditions of others who are less fortunate. They also expressed feelings of being “touched” by the happiness displayed by one receiving a cupcake, taking life for granted, and the desire to hear their life stories (see Table 6, quotes 1 and 2). Students reflected increased compassion, sympathy, and respect for those experiencing food insecurity. They noted the feeling of shame that can come with the daily struggle of securing food to provide for one’s family (see Table 6, quotes 3 and 4). Among the population of individuals in poverty, veterans and women had the most impact on compassion and sympathy. Students expressed a feeling of sadness for the lack of help to service members and the need for more opportunities for women to establish healthier hygiene (see Table 6, quotes 5–6). Lastly, regarding experiencing cities’ destruction of homeless encampments,

students stated the feeling of helplessness and being emotionally moved (see Table 6, quote 6).

Although sympathy and compassion were feelings noted throughout the course, students' reflections shifted to greater empathy, a deeper connection to the experiences, and sharing the feelings of others. Increased empathy was apparent as students could see themselves reflected in the focal population and shared feelings of lacking pride, concern, and increased gratitude (see Table 6, quotes 8–10). In some cases, students noted the feeling of empathetic dignity in the responsibility of selecting a new outfit for a person experiencing homelessness, mentioning the importance of looking good, unrelated to circumstance (see Table 6, quote 11). For some students, however, empathy was not apparent during the experiential experience and discovered only upon reflection (see Table 6, quote 12). Lastly, empathy was not just a theme that emerged toward the latter part of the class; many students came into the course with an empathetic view of those less fortunate than themselves. Those students reached a deeper level of empathy as the course progressed, stating a newfound desire to spread empathy to others (see Table 6, quote 13).

**Table 6.** Experiential Education Nutrition Course Feeling: Compassion/Sympathy/Empathy Quotes by Theme

Compassion/Sympathy	Empathy
1. I've always ignored the homeless people around me because I didn't view them as equals to me"	8. "I think ideas surrounding minorities and low-income housing are deeply rooted in America's history of racism and I think this shows the influence that the wealthy class has on low-income people and their hopes for achieving a better life for themselves and their families."

**Table 6.** continued

Compassion/Sympathy	Empathy
2. "I have the viewpoint of poverty that their circumstances are generational, they made bad choices, and have no escape."	9. "One stigma that I have heard throughout my life is that homeless people don't want to work because they are lazy. This stigma has been crushed... Now I know that there is true struggle in the world and there are so many factors to one's situation that there is no room for judgment."
3. "It's the homeless person's fault for not being able to get out of poverty...I was raised to think that they are all on drugs and that they should be able to work	10. "I now know how millions of Americans are just one bad day, one crisis, one illness away from falling into poverty, and I better understand how
4. "I was scared to have any kind of interaction with homeless people this week. I had negative perceptions about these people and believed that they were in the situation that they are in because of lack of work ethic and making poor decisions."	11. "One event leads to another and the unraveling of consequences, many out of their control, that can lead people into living in the streets. As a personal takeaway, I begin to see things from a broader perspective and try to keep from making judgements based on a person's looks or situation."
5. "I do think that some people become too reliant on food pantries and then do not want to find their own means of food, but I only think this is a small portion of the people going to the food pantries."	12. "I was more wary before about giving money rather than food to the homeless, but my perspective has been altered- these people need it more than I do, they're struggling to get by, and as an American who is blessed with financial security, it is the least I could do for them"
6. "I was also surprised at how clean a lot of them were and how most did not seem to have mental illness."	13. "After today and this week it has totally come to my attention that it is purely by the grace of God that these are not the cards that I am dealt."
7. "What also surprised me was how aware the homeless were of themselves and their situations."	

While cross-referencing the data, each coder used the terms *awareness* and *understanding* interchangeably. The term *knowledge* encompasses awareness and understanding; therefore, it served as the parent node within the analysis, with awareness/understanding (A/U) as a single subtheme. Students reported increased A/U regarding the political and structural issues surrounding poverty, and many identified policies, neighborhood environments, and socioeconomic status as hindrances to one's ability to escape the poverty stronghold. Additionally, students felt that nothing had changed in the unfair and complicated system, which continues to contribute to pain, suffering, and poverty status (see Table 7, quotes 1–5). Moving from the national to the community level, students expressed A/U on many poverty terms (e.g., food insecurity, housing insecurity) and had studied them in other classes. Before taking the course, they lacked awareness of the impact of poverty and its prevalence within the local community; however, the class made the term poverty tangible (see Table 7, quote 6). Several students reflected on the A/U gained regarding poverty on campus. Although they had volunteered many times within other communities, the campus bubble did not provide a view of reality. They expressed a desire to bring awareness of the issues to others, as the campus community had disregarded the idea of poverty. The students stated that everyone needed A/U; thus, they needed to be vocal about the issues (see Table 7, quote 7).

**Table 7.** Experiential Education Nutrition Course Knowledge: Awareness/Understanding Action/Experience Quotes by Theme

Awareness/Understanding	Action/Experience
1. “Given the racial makeup of the geographic areas where food deserts are,	8. “I think that there is more that we, as a society and a country can do for those in



**Table 7.** continued

Awareness/Understanding	Action/Experience
<p>many people are beginning to categorize some areas as food apartheid. This is the connotation that the food deserts are systematically purposeful, designed to hurt minorities and POC communities. I have never considered this before, and this is also something that I have never had to deal with before.”</p>	<p>poverty. Whether it be revamping and changing the welfare system in the United States, the healthcare system, Section 8 housing, or much more, we must not shy away.”</p>
<p>2. “I slowly realized that people do not fall into poverty willingly. Instead, it is the broken systems that contributes to people falling into poverty. An unfair, complicated system has caused people pain and suffering as it keeps the poor from moving up the socioeconomic scale.”</p>	<p>9. “The advancement of solving poverty can only happen if we all become unapologetic advocates for those in poverty. Each person can support those who are hungry by being the face and voice for those who cannot fight for themselves, to those in power. Having a willingness to sacrifice the status quo to bring others up will be the only way to help.”</p>
<p>3. “I leave this class with learning about the complexity of poverty and how crucial decisions can affect society’s most vulnerable population.”</p>	<p>10. “What I have learned through volunteering is that I want to do it more, and I must always imagine this experience whenever life seems to be getting me down because there are so many out there struggling with such pain.”</p>
<p>4. “One thing that stood out to me in today’s studies and service was how much policy matters in keeping people out of poverty... nothing has changed for poor Americans- policies remain stagnant, they face the same struggles, the same lack of resources, and battle against the perpetual (and perpetually worsening) cycle of poverty, every single day.”</p>	<p>11. “I realized that if I were to choose to be involved in student advocacy, the doors are open for me to connect with people who can actually implement change, and it is entirely up to me and whether I want to choose to be involved or not.”</p>

**Table 7.** continued

Awareness/Understanding	Action/Experience
<p>5. “Before this class, I had learned about food insecurity in previous classes, but it was much more impactful for me to see how it affects our community. This class took food insecurity, housing insecurity, poverty, etc. from terms that I knew the definitions to into much more tangible problems.”</p>	<p>12. “Once we change how we view poor people, we will, as a society, be able to help people, so they can hope to do more than simply survive. I think that it is important that we take on this issue as a society because of the growing divide between the rich and the poor.”</p>
<p>6. “I have volunteered in communities before and spent many weekends in high school at the Ronald McDonald House cooking for families, and each time, it reminds me how largely that the world I live in, such places like SMU and Highland Park, are so separated from these real experiences.”</p>	<p>13. “The information that I learned throughout this course will always be engraved in my brain, and should an opportunity come where I can make an effective change, I want to participate in it. For example, I would like to change the idea that zip code is determinant of a child’s future. I do not exactly know how I would start to bring about change, but it something I would like to change.”</p>
<p>7. “Now, that I know there is a problem I feel like I am now a different person because I am more aware of the issues that people are facing and not turning a blind eye, but instead being more empathetic and vocal about the issues that face SMU and the Dallas community.”</p>	<p>14. “My experience there makes me feel more compelled to give more of my time to others because I am more aware of how helpful I actually can be.”</p>
	<p>15. “I feel lucky to have ended up in a class that put me back in touch and plan to use these skills to help and advocate for change in the future.”</p>

*Advocacy* refers to actions toward a cause. However, individuals might not advocate if they have not had a transformational experience to spark their advocacy voice. For the

thematic analysis, advocacy was a parent node, and action/experience was the subtheme. The overarching theme of advocacy among students focused on the desire to do more for others, take action, and become unapologetic when doing so. The students reflected that others needed help and were in pain, and turning away was not an option (see Table 7, quotes 8–11). Students felt it was important to be the voice for those who did not have one. Because the students had more opportunities to make change happen, they felt responsible for taking action and choosing to be involved (see Table 7, quotes 9 and 11). Students noted the importance of changing societal perceptions, especially the divide between the rich and the poor (see Table 7, quote 12). Coding experience with the willingness to advocate showed that students saw the course’s impact on increasing their desire to advocate for others and make a difference. One student expressed a desire to address how Zip code impacts poverty status; some felt compelled to be available and give their time. Other students felt thankful and lucky to have taken the course, which put them in touch with reality, and desired to use their skills to help others (see Table 7, quotes 13–15).

**Summary.** Taken together, following a short-term experiential nutrition course, overall perceptions of poverty changed. Following the course, students total scores on the UPPTS were lower compared to pre-test scores. A lower score on the UPPTS indicates a more favorable and empathetic view toward individuals experiencing poverty. This result was further supported by students’ reflection submissions, which noted an increase in empathy and understanding toward poverty and poverty issues. As the course progressed, student also reflected the desire to advocate and support policies that would help those experiencing poverty.

## Research Question 2

What is the general perception of poverty in undergraduate students attending a private elite university?

*Null hypothesis:* The general perception of poverty in undergraduate students attending a private elite university is not favorable or is lacking regard.

Across the population ( $N = 802$ ), UPPTS scores ranged from 94 to 160. Higher scores indicate less-than-positive views of and a lack of empathy for the poor. A lower UPPTS score indicates a more positive and empathetic view of poverty. Total instrument scores range from 39 to 195. Compared to the standard mean score of the UPPTS instrument ( $M = 117$ ), the general perception of poverty in the sample of undergraduate students was slightly more unfavorable toward poverty ( $M = 119.52$ ,  $SD = 10.314$ ); therefore, the null hypothesis was accepted. Comparing the instrument standard to each of the 6 subscales, WA directly relates to one's attitude toward social assistance programs. WA is the largest factor among the subscales and accounts for 24% of the total variance within the instrument. The WA scores range from 60 to 12 ( $M = 36$ ). Students in the sample held a slightly more positive view of welfare programs ( $M = 34.3$ ,  $SD = 5.054$ ) than the instrument standard. The second factor, PD, reflects the respondent's belief that those who are poor are different from the rest of society. PD has also shown an association with one's level of empathy. PD scores range from 40 to 8 ( $M = 24$ ). Students in the sample scored lower ( $M = 18.31$ ,  $SD = 5.781$ ), meaning they were less likely to perceive the poor as different from themselves. Factor 3, DM, assesses one's belief that institutions and individuals should do more to help those in need. DM scores range from 30 to 6 ( $M = 18$ ). Among the sample population, students scored higher ( $M = 22.56$ ,  $SD = 3.977$ ), indicating they did not see the need to help and that the

social services currently provided were enough. DM is also linked to assessing one's empathy toward the poor. The fourth factor, EO, measures if one feels afflicted if the poor have equal opportunities for success. The total scores range from 30 to 6 ( $M = 18$ ). Students in the sample scored lower ( $M = 16.07$ ,  $SD = 4.908$ ) than the instrument mean. Thus, students indicated that people do not have equal opportunities to be successful and pull themselves out of poverty. Factor 5, FR, measures if students believe all individuals should have access to basic rights, such as housing, food, and healthcare. FR total scores ranged from 15 to 3 ( $M = 9$ ). Students within the sample scored higher ( $M = 12.42$ ,  $SD = 2.503$ ) than the instrument standard mean, indicating their belief that individuals should have to work and earn basic needs, which should not be provided freely. Lastly, factor 6, LR, is a respondent's belief about whether the poor have the access and resources needed to change their situation. Total scores range from 20 to 4 ( $M = 12$ ). Within the sample, students scored higher ( $M = 15.96$ ,  $SD = 2.868$ ) than the instrument mean. Thus, although the study population acknowledged that the poor face challenges, they felt people could find a way to get out of poverty if they chose to.

**Table 8.** Total Score, Subscales

UPPTS	Mean	SD
Total score	119.52	10.314
Welfare Attitude	34.2	5.054
Poor are Different	18.31	5.781
Do More	22.56	3.977
Equal Opportunity	16.07	4.908

**Table 8.** continued

UPPTS	Mean	SD
Fundamental Right	12.42	2.503
Lacking Resources	15.96	2.868

**Food security status.** In addition to the guiding research question, this study assessed the overall food security status at a private elite university. Based on a frequency analysis of the total participants (N = 802), 77% of the undergraduates are considered high food secure and 22.8% are considered food insecure, including 8.7% of the population that is very low food secure.

**Table 9.** Food Security Status of Total Undergraduate Sample

Food Security Status	n	Percent
High	619	77.2
Low	113	14.1
Very low	70	8.7

### Research Question 3

What is the relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty?

*Null hypothesis:* There will be no relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty.

A multiple regression analysis was used to identify how demographics (sex, age, ethnicity/race, class status, school/college, high school type), food security status, and

financial aid status predicted one's perceptions of poverty. Results indicated that the overall model was statistically significant,  $F(13, 538) = 2.80, p < .001, R^2 = .063$ , adjusted  $R^2 = .041$ . The overall null hypothesis for research question three was rejected. There was no significant relationship between age, class status, school/college, financial aid status, high school, religious affiliation, and food security status on perception of poverty. Of the predictors, sex, income, and race were significant (see Figure 3); therefore, the null hypothesis for those predictors was rejected (see Table 10). Based on the positive regression coefficient, females had a more favorable perception of poverty than males ( $\beta = -2.26, p = .013$ ). Participants reporting a household income greater than \$80,000/year had significantly higher total scores on the UPPTS and thus a more unfavorable perception of poverty than participants with a household income lower than \$80,000/year ( $\beta = 2.46, p = .040$ ). Within race, Black/African Americans reported having a more favorable perception of poverty ( $\beta = -4.42, p = .024$ ) than non-Black/African American.

**Table 10.** Summary of Multiple Regression Analysis Predicating UPPTS

Predictor	Unstandardized	Standardized			
	b	SE	$\beta$	<i>t</i>	<i>p</i>
Sex at Birth	-2.226	0.89	-0.107	-2.501	<b>0.013*</b>
Age	0.242	0.656	0.02	0.369	0.712
Ethnicity/Race:					
White	0.358	1.295	0.016	0.277	0.782
Black/African American	-4.424	1.949	-0.113	-2.27	<b>0.024*</b>
Asian/Pacific American	-0.227	1.5	-0.008	-1.52	0.88
Native American	2.462	3.589	0.029	0.686	0.493
Hispanic/Latino	2.549	1.322	0.093	1.929	0.054
Class Status	-0.831	0.511	0.092	1.625	0.105
School/College	-0.252	0.32	-0.034	-0.786	0.432
High School Type	1.349	0.841	0.07	1.603	0.11
Food Security Status	1.15	0.774	0.07	1.485	0.138
Financial Aid Status	-0.105	0.968	-0.05	-0.109	0.914
Household Income	2.46	1.196	0.11	2.058	<b>0.04*</b>

*Note.* The overall model:  $p < .001$ .  $F(13, 538) = 2.80$ ,  $p = <.001$ ,  $R^2 = .063$ , adjusted  $R^2 = 0.41$ . \*significant at  $p < .05$ .



## **SUMMARY**

This exploratory mixed methods study was an examination of the impact of experiential learning as part of an undergraduate nutrition course on influencing students' perceptions of individuals experiencing poverty and FI. The study also addressed the overall undergraduate student perceptions of poverty and further assessed the incidence of food insecurity at a private elite university in Dallas, Texas. Also explored was the relationship between the perceptions of poverty survey, age, sex, ethnicity/race, class status, school/college, financial aid status, type of high school attended, religious affiliation, family household income, and food security status among the target population.

RQ1 addressed the impact of an experiential learning nutrition course on students' perception of poverty. Following the 11-day intersessions course, there was a significant difference in post-test scores on the UPPTS, meaning students' perceptions of poverty became more favorable after completing the course. In addition, through thematic analysis, students noted shifts from internal/individualistic views to external/structural views of poverty. Additional noted themes were increased compassion and empathy, enhanced awareness and understanding of issues surrounding poverty, and increased desire to advocate and do more for others who are facing poverty.

RQ2 assessed the overall perception of poverty in undergraduate students at a private elite university. After comparing total mean scores to the instrument mean score, students attending the target university had a higher mean score, thus having a more unfavorable view of poverty. Additionally, the incidence of food insecurity was 22.8% for the total sample of 802 students.

RQ3 assessed the relationship between one's perceptions of poverty, including age, sex, ethnicity/race, class status, school/college, financial aid status, type of high school attended, religious affiliation, family household income, and food security status within the target population. There was no significant relationship between age, class status, school/college, financial aid status, high school, religious affiliation, and food security status on perception of poverty. There was a significant relationship between sex, income, and race/ethnicity. Females reported a more favorable and structural view of poverty compared to males. Regarding income, students reporting a household income of \$80,000+/year had an unfavorable perception of poverty compared to those earning less than \$80,000/year. Lastly, when assessing perception by race, African Americans/Blacks had a significantly more favorable view of poverty than other races. These results will inform the development of future experiential education courses on addressing perceptions and misconceptions regarding poverty, as further discussed in Chapter V.

**Table 11.** Summary of Findings

<b>RQ 1:</b>	<b>Null Hypothesis</b>	<b>Result</b>
What is the impact of a short-term experiential learning nutrition course on students' perception of poverty?	Following a short-term experiential learning nutrition course undergraduate students perceptions of poverty will not change.	Reject
<b>RQ 2:</b>		
What is the general perception of poverty in undergraduate students attending a private elite university?	The general perception of poverty in UG students attending a private elite university is not favorable.	Accept
<b>RQ 3:</b>		
What is the relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty?	There will be no relationship between demographics, food security status, or financial aid on UG perceptions of poverty	Age - Accept Sex - <b>Reject</b> Race/Ethnicity - <b>Reject</b> Class status - Accept School/College - Accept Financial aid status - Accept Highschool - Accept Religious affiliation - Accept Family household income - <b>Reject</b> Food security status - Accept

## CHAPTER V

### DISCUSSION

Chapter V presents a summary of the study. Discussions include the findings of each null hypothesis in correlation with the educational framework and previously published literature addressing the topics of poverty, perception, and undergraduates. Also included are the findings' implications on higher education for both students and faculty members. Finally, chapter V presents the limitations of the study and recommendations for future research.

### **SUMMARY OF THE STUDY**

This exploratory research study used a mixed methodology to examine the impact of experiential learning as part of an undergraduate nutrition course on influencing students' perceptions toward individuals experiencing poverty and FI. There was an exploration of the overall undergraduate students' perceptions of poverty and an assessment of FI incidence at a private elite university in Texas. The study was a means to determine if there was a relationship between the UPPTS and demographics (age, sex, ethnicity/race, class status, school/college, financial aid status, type of high school attended, religious affiliation, family household income, and food security status) within the target population. The UPPTS, a 39-item Likert-scale survey instrument with 6 subscales, was the tool used to measure perception toward poverty among the participants. The UPPTS consists of 3 constructs: (1) one's general attitude toward those living in poverty, (2) empathy for those living in poverty, and (3) one's commitment to addressing poverty by either taking action or supporting programs and services that aid the poor. General attitude toward those experiencing poverty exists on a continuum rather than a fixed state, with the underpinning beliefs as to the causes

of poverty (character flaw vs. unequal societal system) at either end.<sup>6</sup> Data from the survey were imported from the PsychData platform into SPSS version 28 for Mac for analysis. Students participating in the experiential education nutrition course completed the UPPTS survey pre- and post-course and submitted the 4 requested reflection papers during the course. Reflections were imported into NVivo version 12 for Mac. From the data gathered, parent nodes and subthemes were established and assigned to associated comments from the student reflections. Two coders were used for the thematic analysis to ensure intercoder reliability, trustworthiness within the data, and cross-matching to certify a rigorous audit trail. The quantitative and qualitative data of this research supplement each other to better provide a greater understanding of the development of future EE courses on addressing perceptions and misconceptions regarding poverty attributions within the undergraduate population.

## **DISCUSSION OF RESULTS**

### **Research Question 1**

What is the impact of a short-term experiential learning nutrition course on students' perception of poverty?

*Null hypothesis:* Following a short-term experiential learning nutrition course, undergraduate students' perceptions of poverty will not change.

The UPPTS, developed by Blair et al (2014), is a tool used to assess undergraduate perceptions of poverty.<sup>6</sup> Lower UPPTS scores indicate a more positive and empathetic view of poverty, meaning the undergraduate attributes poverty more to structural causes out of the individual's control. In contrast, higher scores on the UPPTS are negative and individualistic. Higher-scoring people attribute the causes of poverty to personal failings, therefore blaming

the individual for their circumstances.<sup>6</sup> Students completed the UPPTS survey twice during the short-term intersession course, on the first day of arrival to class and the last day of the course before exiting the classroom. A paired samples *t* test was used to compare the group pre-test mean to the group post-test mean. Results of the analysis indicated that pre-test and post-test scores were positively correlated ( $r = .850, p < .001$ ), and there was a statistically significant difference in total scores ( $p = .020$ ) pre- to post-test. UPPTS pre-test scores ranged from 131 to 63, with a mean of 89.70; post-test scores ranged from 130 to 46, with a mean of 82.05. The increased mean score indicates a positive shift in perception toward poverty following the experiential learning nutrition course. The findings related to the first null hypothesis reinforce previous work showing improved perceptions and attitudes toward poverty among undergraduates after taking an experiential learning course.<sup>13,18,91,150</sup>

Because the focus of this research was to assess perceptions of poverty, students enrolled in the course were also asked to complete a written reflection after each experiential learning day. The 11-day course consisted of class readings, discussions, documentaries, and 3 outreach days, each with an overarching theme: FI, housing insecurity, and basic needs, including hygiene. The purpose of the satellite campus is to allow students to step outside the classroom and engage the community. Students enroll in the course knowing the classroom environment will be different from the main campus's traditional classroom setting. Due to the COVID-19 pandemic, the school administration reduced the capacity of the January term course in Taos, New Mexico, to protect against the virus's spread. Five students enrolled in the January 2022 term. Because of the small class size, all students participated in each experiential theme, which differed from the May 2022 term. The main-campus May course had 15 enrolled students randomly divided into three 5-person experiential groups. During

the three experiential days of the May term course, the groups rotated between themes (see Table 12).

**Table 12.** May Term Experiential Theme Rotation

<b>Group</b>	<b>n</b>	<b>Food Insecurity</b>	<b>Housing Insecurity</b>	<b>Basic Needs</b>
Group 1	15	Day 1	Day 2	Day 3
Group 2	15	Day 2	Day 3	Day 1
Group 3	15	Day 3	Day 1	Day 2

Based on Kolb’s ELM framework, effective EE courses must integrate knowledge (readings, discussions, etc.), real-world activity, and reflection.<sup>146</sup> For this research, students had an opportunity to debrief as a class following each experiential day, allowing them to process newfound experiences and attitudes, which aligned with Kolb’s ELM of RO and AC.<sup>146</sup> After the debriefing session, students were asked to reflect on their experiences. The reflection prompt, “After today’s experience, are you different than you were before this experience?” was the same throughout the course. This exercise allowed space for students to delve into their beliefs, challenge potential misunderstandings, and create new or modified perceptions. Reflections were completely voluntary and had no bearing on their grades. Based on their responses, students were to further reflect on the differences noted. Between the 2 courses, 20 students submitted 72 reflections. Students deidentified their reflections by not placing their names within the document. Following each course, all documents were uploaded into 1 file for thematic analysis. Key themes emerged from the reflections and thematic analysis: attribution, feelings, knowledge, and action/experience.

**Attribution.** During the debriefing and classroom sessions, many students stated they had never been taught about poverty and had limited knowledge of issues surrounding poverty. Students reported having heard their parents talk about the poor and shared information about what the media said regarding poverty. It appeared that students kept poverty at a distance and had not had the opportunity to explore what they understood about poverty before the course. Students asserted they had volunteered with various groups to help those in need but never thought about the person or situation leading to the poverty outcome. During the reflections, students were more open about vocalizing or grappling with their previously held beliefs. Students often defaulted to negative societal beliefs of individuals relying too much on the government and believing the homeless and the poor are lazy. In addition, several students identified addiction and mental illness as the primary issues afflicting those in poverty.

As the course progressed, students asserted a notable shift in perception. The prominent shift was around government policy and racial discrimination, primarily regarding food and housing access. Students viewed society's upper class as contributing to and aiding the inadequate government services to those who are poor. This mindset aligns with Delavega (2017), who assessed the outcome of an experiential welfare policy course on blaming the poor. Students who completed the course showed a significant decline in their assessment between pre-test/post-test scores in the adequacy of government services and benefits, with the most significant decline among White students.<sup>121</sup> Non-White students did not note a significant change in assessing government services as they are likelier to have experienced poverty, noting the outcome among Whites as a potential means to capture White students' privilege and acknowledgment of their privilege. The students in this study



further supported the sentiment in recognizing their privilege, knowing they will likely never struggle with housing or FI due to their financial security.

**Feeling.** In this study, the term *feeling* encompassed the written display of compassion and sympathy for those experiencing poverty. A second distinct theme was the feeling of empathy, or the ability to put oneself in another's shoes. Students distinguished between compassion/sympathy and empathy. There were more codings of compassion and sympathy at course onset; however, empathy became a more apparent theme over time. Initially, students' responses focused on the feelings of sadness and hurt when speaking about poverty and seeing others' conditions firsthand. Through this response, students were attempting to assess their honest feelings, but these feelings stopped short of deeper meaning and empathy.

Students' responses conveyed a negative view of poverty as they maintained a distance between themselves and the poor. Students stated that before enrolling in the course, they held similar beliefs to their parents and peers regarding poverty as more of a distant occurrence, one seen on the roadside or on the news. This mindset is similar to previously established thoughts on stigma and perceptions of the poor shaped by one's experience and how apparent the "mark," or visual view of poverty is. For example, people experiencing homelessness are familiar sights on the street. They are more visible and perceived as disruptive forms of poverty; therefore, they catch the eye of the media and the gaze of others. This discernable image directly impacts one's thoughts toward this population and those in poverty.<sup>162</sup> At first, many students felt nervous about volunteering, noting they had never experienced embedded volunteerism; to that point, they had only distributed food boxes or placed them in car trunks. Also, most had not volunteered without their parents or a religious

group, and none had volunteered with a class. Over time and through class discussions, students identified the connection between themselves and those they were serving. During the debriefing sessions, students discussed being surprised the poor were just like them. Poor individuals also had likes, dislikes, and preferences. As students vocalized this feeling, several others expressed the same comments, stating a shift in their proximity to those in poverty. This shift was also apparent to Frank et al (2020), who indicated that students' previously held negative beliefs about the poor prevented them from understanding and empathizing. As one sees the structural barriers and issues surrounding poverty, empathy increases.<sup>13</sup>

Although compassion was present throughout the course, the development of empathy was the most important change. Students began to understand the complexities of poverty and how difficult life could be for those living in poverty and experiencing homelessness. As students shifted from compassion and sympathy to greater empathy, they noted the connection of feelings between themselves and those in poverty. Empathy was felt in both positive and negative emotions. Stating the shared excitement with a woman that received a cupcake for dessert and the feeling of joy because they, too, were excited with her. Students also noted the shared feeling of shame. Observing a gentleman needing to use a food pantry for his family, one student noted, "As the head of the household, struggling to provide for your family can be so difficult, you want to do your best for them." This feeling of shame is valid, as the stigma of poverty often results in the perception of not measuring up or personal failure.<sup>163</sup>

**Knowledge.** Students reflected on their knowledge using the terms *awareness* and *understanding* when discussing poverty. Observations of class discussions and experiences

during the first 5 days of the course supported the students' reflections of having minimal knowledge of poverty or about those experiencing poverty. One example came during a discussion of government assistance and funding allocation for social service programs explicitly aimed toward poverty. Students thought there was more government spending on these programs, particularly those addressing poverty and food assistance. Students estimated spending on economic security programs to be 25% to 40% of the federal budget, a significantly higher number than the actual 11% in 2022.<sup>164</sup> The misinformation and overestimation of government spending contribute to the negative perceptions of those experiencing poverty, whom society perceives as using public resources with minimal contribution.<sup>109,151</sup> This mindset also suggests that individuals misuse government benefits.<sup>33</sup> Many argue that opinions of the poor stem primarily from the lack of knowledge and understanding due to direct experience with poor individuals and exposure to poverty-related issues.<sup>6</sup> Undergraduate students enter the university with preexisting notions of poverty attributions, which could be why they are hesitant to speak out in class on poverty issues. Most students believe they live in a fair and just economy; thus, those experiencing poverty fail to take advantage of the opportunities. This perception is mainly due to media portrayals of poverty through fictionalized storylines and inaccurate news reports.<sup>7,165</sup>

At the course onset, students were hesitant to discuss their views on poverty, and questions posed by the instructor were often met with silence. Some students were more vocal than others, seemingly more comfortable with the topic; however, their openness shifted to discomfort and nervousness when discussing the course's experiential days. This observation aligned with Blair (2014), who found individuals with strongly held beliefs expressed the least desire to learn to participate in direct experience with the poor.<sup>6</sup> Whether

their beliefs were positive or negative, students were concerned if the direct experiences would undermine their assertions toward the poor. Terry and Lockwood (2020) found that criminal justice students saw the poor as different from themselves. However, upon greater understanding and awareness of poverty in conjunction with experiencing those who are poor, the students noted a qualitative shift, stating similarities between themselves and the poor and an increased empathy view of poverty.<sup>33</sup>

**Action/experience.** Although advocacy is about one's actions toward a cause, one might not advocate without a catalyst, such as exposure or experience. Individuals' perceptions toward poverty are commonly not based on facts, as they generally lack careful consideration of the truth and firsthand experiences.<sup>166</sup> Attributions toward the poor impact individuals' direct interaction with those experiencing poverty and their advocacy efforts toward the population. Lack of experience can impact how people contribute and advocate politically, especially regarding poverty issues and the support of services and policies.<sup>167,168</sup> Most students identified their experiences in the course as impactful, and many wanted to continue working with the host organization or start their own project addressing basic needs on the university campus. Each student felt prompted to do more.

Experiential education is an effective method used to expose undergraduates to poverty to change their perceptions and increase their awareness of the issue.<sup>33,152-155</sup> Engler et al (2019) assessed the impact of poverty simulation on undergraduate students and social service providers.<sup>166</sup> The researchers showed the direct impact of changes in attribution toward poverty on one's desire to help and advocate for those who are poor. They examined how addressing perception via EE affects one's desire to advocate. Participation in poverty

experiences is an effective means to develop and strengthen a structural attribution toward poverty and further translate the experience into informed advocacy efforts.

Experiential education is vital within the sample population, as attending a private elite university has a cost. Across the United States, elite universities are few, and private elite schools are even scarcer. However, their potential impact and influence on the lives of individuals and society are substantial.<sup>22</sup> Students attending an elite or private elite university not only have higher graduation rates, but the economic payoff is more significant than non-elite universities.<sup>169</sup> Influential individuals, from Supreme Court justices to industry executive leaders, are more likely to have attended an elite university. Students from elite universities have an advantage when pursuing fields in management, law, and investment banking.<sup>22</sup> This advantage can come in several forms, such as social capital and connections, as there is a privilege associated with affluence.

As students went through the course, they noted newfound knowledge and the need for changing government policies to eradicate poverty. They expressed a desire to help and take action locally or nationally. During in-class discussions, students recognized their privilege when discussing low-income individuals' barriers to self-advocating. The students recognized that advocacy was not cheap, and the likelihood of an individual in poverty running for office to effect political change was almost nonexistent. This sentiment was similar to other findings that interactions with the law by those who are marginalized or poor are often negative and fear-ridden, creating the perception that the government is there not to protect but to penalize.<sup>6</sup> Students attending elite and private elite universities are like most individuals: They have preconceived views of poverty. Education about and exposure to

poverty are necessary, as elite students are more likely to serve a marginalized community at the local, state, or national level at some point in their careers.

## **Research Question 2**

What is the general perception of poverty in undergraduate students attending a private elite university?

*Null hypothesis:* The general perception of poverty in undergraduate students attending a private elite university is not favorable or is lacking regard.

All undergraduate students, including transfers, received emailed invitations to complete the UPPTS survey. The response rate of 12.6% was somewhat representative of the overall undergraduate population. Campus gender ratios are approximately 1:1, which differed from the 3:2 females to males in the sample. Race representation across the university is 61% White versus 68% reporting as White in the study. Across campus, 22% of students belong to the School of Business, the highest college affiliation percentage. Among study participants, 30% were in the School of Business and 32% in the School of Life Sciences. Scores on the UPPTS range from 94 to 160. A higher score indicates a less-than-positive view of and a lack of empathy toward the poor; a lower score indicates a more positive and empathetic view of poverty. Comparing the standard mean score of the UPPTS instrument, the general perception of poverty in the sample of undergraduate students attending a private elite university was slightly more unfavorable toward poverty; therefore, we fail to reject the null hypothesis. This result is similar to other studies assessing undergraduate perceptions of poverty, noting undergraduate students often view the poor negatively due to a lack of empathy and social distancing.<sup>6</sup> Higher scores on the UPPTS indicate a more individualistic view of poverty.<sup>6</sup>

An assessment of the 6 subscales showed that students in the sample had a more positive view of welfare programs (WA). They believed most individuals who face poverty use welfare benefits appropriately, and government assistance programs are necessary to help those in need. This particular subscale relates directly to food assistance programs, such as SNAP. For example, a question within this subscale is “Poor people use food stamps wisely.”

For the second subscale, PD, students identify poor people as “other” or significantly different from the rest of society. This factor directly relates to the level of empathy toward those experiencing poverty. The undergraduate students in this study indicated higher empathy toward the poor and a lower tendency to perceive the poor as different. This outcome differs from other studies of undergraduates. Researchers found students had a lower level of empathy and negative associations toward the poor, seeing them as different, which impacted their view toward poverty.<sup>170,171</sup>

In subscale 3, DM, students identified a need to provide more assistance to individuals in need. This subscale is also directly linked to the level of empathy toward the poor. Individuals with higher DM scores believe the government services available are enough to assist those in need, leaving the remaining responsibility to the poor.<sup>6</sup> Higher DM scores indicate the assumption that if the poor worked harder, they would be able to help themselves.<sup>6</sup> Students in this study had subscale outcomes similar to other undergraduates,<sup>6</sup> perhaps partly due to the lack of education surrounding government services and federal funding allocation. The results of RQ1 supported this finding: As students increased their awareness and knowledge of structural barriers in conjunction with federal spending, they noted a positive shift in perception via reflection papers.

Subscale 4, EO, required students to assess if they believe that poor individuals have an equal opportunity to get ahead. Students in the study indicated that not everyone has equal opportunities, perhaps suggesting they recognize their privilege. The current study's results align with other authors' findings: Undergraduate students want to believe everyone can get ahead and succeed if they work hard enough, but they acknowledge the poor have inadequate access to resources and social capital.<sup>6,33</sup>

FR, the fifth subscale, assesses students' opinions about the right to food, housing, and healthcare. Based on Blair (2014), undergraduate students tend to hold negative views toward the basic rights of food, housing, and healthcare, believing individuals should have to work for these rights.<sup>6</sup> This finding is in line with the current study, as students noted a negative view toward others receiving food, housing, and healthcare as a human right. The FR mentality aligns with individualistic views of poverty, indicating that people should be able to meet their minimum basic needs without assistance and supported by a higher overall UPPTS score.

The final UPPTS subscale is LR, which indicates if the respondents believe the poor have access to the resources needed or lack the ability to secure resources to change their situations. The students in this study had a higher mean score than the standard, meaning they believe the poor have the access and ability to change their situation if they desire. This result was similar to other studies, which found that students believe the poor have limited resources and might struggle to access help in the face of a challenge. Ultimately, students believe those who want to make a change can and will.

**Food insecurity.** College operates under a different economy than in decades prior. In the past, students who worked hard stood a good chance of graduating. This no longer



holds today, as hard work and dedication do not guarantee college success. The high cost of higher education has changed what it means to attend college. Unfortunately, many students enroll with the intent to work, study, and borrow to find their allotted funds falling short. The additional costs of college, such as books, housing, transportation, and food, have risen at public and private universities. Many college students do not have their basic needs met and experience situational poverty for the first time upon entering college.<sup>172</sup>

FI is an issue many students face. In the current study, nearly 23% reported being FI, including almost 9% being very low food secure. This number aligns with other studies showing that FI is greater among college students than the general population.<sup>71,72</sup> Although this study did not assess demographic information with FI, factors such as gender, race, and enrollment status can be predictors for FI incidence on a college campus.<sup>72</sup>

Most research on FI on college campuses has been on public universities. Among the limited studies of FI among private universities, FI rates were 37% and, in some cases, higher.<sup>21,74,76</sup> To the researcher's knowledge, this is the first study of FI at a private elite university. At private universities—in particular, private elite universities—issues surrounding basic needs are hidden or pushed to the margins.<sup>22</sup> These universities have multi-million/billion-dollar endowments and a cost of attendance exceeding \$60,000 a year. Despite these funds, private elite universities often suspend all meal services during school breaks, as most students leave campus, and the number of those who stay is insufficient to sustain food services.<sup>22</sup> As a result, FI students must rely on the insufficient and underfunded campus food pantry. Over recent decades, elite universities have implemented recruitment programs targeting first-generation and academically talented students from underserved communities, all of whom are at a greater risk of FI before college.<sup>22,72,74,78</sup> Thus, by ceasing

food services and the minimal campus food support, universities directly impact and distress the students they worked so hard to recruit, further reminding the students of their disadvantage.<sup>22</sup> FI is not an isolated issue. When a student struggles to get adequate food, they likely struggle elsewhere, as FI is a key indicator of poverty within the student population.<sup>22</sup>

### **Research Question 3**

What is the relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty?

*Null hypothesis:* There will be no relationship between demographics, food security status, and the use of financial aid on undergraduate students' perceptions of poverty.

A multiple regression analysis was the means to determine if demographics (sex on birth certificate, age, ethnicity/race, class status, school/college, high school type), food security status, and financial aid status predicted an undergraduate's perception toward poverty. Results indicated that the overall model was statistically significant. However, there was no significant relationship between age, class status, school/college of the student's academic program, financial aid status, type of high school attended, religious affiliation, and food security status on one's perception of poverty. Therefore, the aforementioned demographics did not affect perceptions of poverty. However, the data analysis regarding sex on birth certificate, race, and household income (see Table 10) did show a significant relationship, and therefore impacted one's perception. As a result, the researcher rejects the null hypothesis for those predictors.

Based on the positive regression coefficient, females had a more favorable perception of poverty than males. Participants reporting a household income greater than \$80,000/year

also had significantly higher total scores on the UPPTS and, therefore, a more unfavorable perception toward poverty than participants with a household income lower than \$80,000/year. Notably, Hispanics and Latinos also had a positive regression coefficient, falling just outside of significance. Perception scores tended toward significance, as Hispanic/Latino students scored 2.5 points higher on average compared to other races. Blacks/African Americans reported having a more favorable perception of poverty than non-Hispanic and Latinos. Results indicate that overall perception scores decreased by roughly 4 points for African Americans and Blacks compared to all other races. These data align with Blair (2014), who found that religion, class year, and type of high school were unreliable predictors of undergraduate perceptions of poverty scores using the UPPTS.<sup>6</sup> In other words, religious affiliation, year in college (freshman, sophomore, junior, senior), and type of high school (public, private, homeschooled) showed no effect on an individual's perception of those in poverty. Unlike the current study, Blair found that race/ethnicity was not a predictor of one's perception; however, gender and income impacted one's view on poverty in both studies.<sup>6</sup>

## **IMPLICATIONS**

To the researcher's knowledge, this is the first study assessing undergraduate perceptions toward poverty following a short-term experiential learning nutrition course using a private elite university sample. The results of this study have potentially positive implications for private elite higher education institutions, where core curriculum requirements promote double-majoring and civic responsibility. This dissertation was an assessment of a short-term experiential learning elective nutrition course as a catalyst for perception change toward poverty in undergraduates.

When students enroll in a course, they usually do so to fulfill a curriculum requirement, and they likely expect to sit in a seat for lectures the entire term. This traditional form of education is in need of change. If undergraduate students are future world changers, as the university states, then we, as faculty and administration, need to provide the means for them to change. There are numerous ways instructors can enhance the classroom to empower the depths of student learning. The outcome measure of education at the undergraduate level should not solely rely on a midterm or final exam. Facilitating growth opportunities among university students requires equipping and exposing them to various experiences, both in and out of the traditional classroom. Students need to be challenged, both intellectually and creatively.<sup>17</sup> Students come to campus with views on poverty informed by various factors, and their views are commonly negative.<sup>6</sup> When discussions of poverty arise at a university, they are often in the context of race, addiction, and mental illness, which further misinforms the student and perpetuates the negative perceptions of those in poverty.<sup>137</sup> Creating a foundation on the social issues around poverty is necessary for undergraduates, especially those with a higher propensity to serve this population through their line of work and within their lifetime.<sup>22,137</sup> If a person perceives the poor as having character flaws or blames them for their shortcomings and failings, the individual is more likely to avoid working with or advocating for them in the future.<sup>121,166</sup>

EE is useful for filling in curricular deficits, excelling student performance outcomes, and developing empathy toward those in poverty.<sup>13,121</sup> Experiential learning is an active process requiring the student to be fully present in the classroom and during the embedded experience.<sup>13</sup> Kolb identified the key concepts of experiential learning as: (1) student learning is a process and not an outcome, (2) learning must be ongoing and continuous, (3)

learning requires a tug-of-war of the mind, coming to terms with old concepts with new learning, (4) one's adaptation of the world needs to be holistic and informed, and (5) embedded authentic experience is necessary to make a fundamental change.<sup>137</sup>

By incorporating EE courses into the undergraduate curriculum, universities can better prepare students with an informed awareness of poverty. EE courses allow space for students to challenge their previously held worldviews, reckon with them, and explore a different and more empathetic perception of poverty.

## **ISSUES SURROUNDING THE IMPLEMENTATION OF EXPERIENTIAL EDUCATION**

The university working environment is reliant primarily on collegial support. Academics collaborate on research, validate and support their colleagues' courses, serve as guest lecturers, and serve on the occasional university committee.<sup>17</sup> They are required to participate in the promotion and tenure processes and hiring committees, and it is often a requirement to publish, even if they are not tenure-track. A challenge to the burgeoning academic use of EE could come from non-supportive administrators who feel experiential learning is not a scholarly measure for promotion.<sup>17</sup> With the push of academic curricula focusing on the traditional career path, young, freshly minted, and unestablished academics work to establish their name and become recognized within the field to secure tenure and external funding. An issue arises when the funding becomes the focus and not the student they are serving: the customer. When the career push does not align with one's teaching philosophy, and when the act of teaching well is no longer the incentive, academics often have to make a choice that will impact their career or balance the needs of both student and the university.<sup>17</sup>

## LIMITATIONS

There were several limitations associated with the current study. A primary limitation was that the primary investigator was the instructor of record for the course. Despite attempts to withhold personal biases, there is no guarantee that unintended personal biases were not present, which might have impacted students' perceptions or made them uncomfortable having opposing views. Additionally, the sample size of the EE course was small and from a small private elite University. Although the undergraduate students are likely to resemble those at similar universities, a larger sample size of undergraduates from larger private and public universities will likely have varying perceptions.

There were limitations with regard to demographics. Some categories were too broad—for example, the income cap was \$80,000/year, which was too low. Even though many undergraduates did not know their family household income, others might have provided a more precise answer if given the option, thus enabling an evaluation of household income's impact on perceptions. Measuring additional demographics, such as political affiliation and student-athlete status, could have given a more thorough understanding of perception and FI on campus.

Students who chose to take the EE nutrition course might have had higher empathy levels than the total undergraduate population. Course enrollment is commonly on a waitlist during the short-term semester. Even without knowing the course section description, students often tell their academic advisors they have heard of the class and want to take it. Therefore, it could be that students who were interested in the content and the outreach experiences enrolled in the intersession course.

Another limitation pertained to coding the reflection journals. The primary and secondary coders are trained counselors, so they might have had an implicit bias toward noticing empathy, resulting in more empathic student outcomes. Overall, the generalizability of this study's findings is limited to the course setting and the university.

## **RECOMMENDATIONS FOR FUTURE RESEARCH**

A key recommendation for future research is to increase the sample size; although the sample was sufficient to conduct the appropriate analysis, a replication study using a larger sample size may provide value in understanding misconceptions and overall undergraduates' perceptions of poverty. Additionally, future research is needed to assess if any experiential days (food, housing, basic needs) had a greater impact on student perceptions than the others. Student reflections suggested that each day had an impact, with all 3 experiences mentioned as increasing awareness and empathy. However, differentiating days might allow for placing greater focus on specific days to have a long-term impact. In addressing long-term impact, researchers have found that attributions toward poverty can predict financial allocations to welfare programs.<sup>167</sup> This was a short-term (11-day) course, and the long-term effect on changes to attribution and increased empathy is unknown. Future research should evaluate the effect of a short-term EE course on lasting perception changes, possibly as a follow-up to the current study.

Additionally, students who enrolled in the EE nutrition course had pre-test scores well below the instrument mean; in other words, students came into the course with a more favorable and empathetic view compared to the average undergraduate. Following the EE course, students' post-test scores demonstrated greater empathy than their pre-test scores. The statically significant outcome of the EE course reveals the vast opportunity for empathy

growth, not only among those with higher levels of empathy but especially among students with more negative views of poverty. An additional recommendation for future research is to assess in more detail the impact of an EE course on perception changes within subsets of the population. In particular, among groups with a more unfavorable perception of poverty, such as males and those attending a business school.<sup>6</sup>

Another recommendation is assessing elite college campuses' basic needs, including FI and housing insecurity. To the researcher's knowledge, this was the first study to assess FI at a private elite university. Future research on FI is necessary across the campus as a whole and within university athletics. Although FI ramifications for a college student are immense, they are greater for a college athlete. Poor student-athlete outcomes can include reduced Grade Point Average (GPA), athletic performance, and overall physiological and psychological health and well-being.<sup>173</sup>



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## APPENDIX A

### UNDERGRADUATE PERCEPTIONS OF POVERTY TRACKING SURVEY (UPPTS)

**Instructions:**

**Circle the answer that best matches the extent to which you agree or disagree with each statement.**

	5	4	3	2	1
1. There is a lot of fraud among welfare recipients	SA	A	N	D	SD
2. Welfare makes people lazy	SA	A	N	D	SD
3. Poor people use food stamps wisely*	SA	A	N	D	SD
4. The government spends too much money on poverty programs	SA	A	N	D	SD
5. Benefits for poor people consume a major part of the federal budget	SA	A	N	D	SD
6. Welfare mothers have babies to get more money	SA	A	N	D	SD
7. Welfare recipients should be able to spend their money as they choose (r).	SA	A	N	D	SD
8. I would support a program that would result in higher taxes to support programs for poor people *	SA	A	N	D	SD
9. People in welfare should be made to work for their benefits	SA	A	N	D	SD
10. A person receiving welfare should not have a nicer car than I do	SA	A	N	D	SD
11. Some poor people live better than I do considering all their benefits	SA	A	N	D	SD
12. An abled-bodied person using food stamps is ripping off the system	SA	A	N	D	SD
13. Poor people act differently	SA	A	N	D	SD
14. I believe poor people have a different set of values than do other people	SA	A	N	D	SD
15. Poor people are different from the rest of society	SA	A	N	D	SD
16. Poor people generally have lower intelligence than nonpoor people	SA	A	N	D	SD
17. Most poor people are dirty	SA	A	N	D	SD
18. Most people who are poor waste a lot of their time	SA	A	N	D	SD
19. Being poor is a choice	SA	A	N	D	SD
20. I believe poor people create their own difficulties	SA	A	N	D	SD
21. Individuals should do more to help the poor*	SA	A	N	D	SD
22. Businesses should do more to help the poor*	SA	A	N	D	SD
23. Society has the responsibility to help poor people*	SA	A	N	D	SD
24. Charities should do more to help the poor*	SA	A	N	D	SD
25. I feel that I could personally make a difference in the lives of the poor*	SA	A	N	D	SD
26. It upsets me to know that people are poor*	SA	A	N	D	SD
27. The poor have the same opportunities for success as everyone else	SA	A	N	D	SD
28. If poor people worked harder they could escape poverty	SA	A	N	D	SD
29. Any person can get ahead in this country	SA	A	N	D	SD
30. The poor face challenges that are the same as everyone else	SA	A	N	D	SD
31. Unemployed poor people could find jobs if they tried harder.	SA	A	N	D	SD
32. Poor people are satisfied receiving welfare	SA	A	N	D	SD
33. Everyone regardless of circumstances should have a place to live*	SA	A	N	D	SD
34. Everyone regardless of circumstances should have health care*	SA	A	N	D	SD
35. Everyone regardless of circumstances should have enough food to eat*	SA	A	N	D	SD
36. Lack of social support is a major challenge for the poor*	SA	A	N	D	SD
37. Lack of Child Care is a major challenge for the poor*	SA	A	N	D	SD
38. Lack of education is a major challenge for the poor*	SA	A	N	D	SD
39. Lack of Transportation is a major challenge for the poor*	SA	A	N	D	SD

## APPENDIX B

### SIX-ITEM USDA HOUSEHOLD FOOD SECURITY SHORT-FORM MODULE (HFSSM)

**These next questions are about the food eaten in your household in the last 12 months, since (May or August 2021) of last year and whether you were able to afford the food you need.**

- 1) The food that I/we bought just did not last, and I/we did not have enough money to get more
  - Often true
  - Sometimes true
  - Never true
  - Do not know
  - Decline to answer
- 2) I/we could not afford to eat balanced meals.
  - Often true
  - Sometimes true
  - Never true
  - Do not know
  - Decline to answer
- 3) Did you ever reduce the size of your meals or skip meals because there was not enough money for food?
  - Yes
  - No
  - Do not know
  - Decline to answer
- 4) If you answered Yes above, how often did you reduce the size of your meals or skip meals because there was not enough money for food?
  - Almost every month
  - Some months but not every month
  - Only 1 or 2 months
  - Decline to answer
  - Not applicable
- 5) Did you ever run short of money and try to make your food, or your food money go further?
  - Yes
  - No
  - Decline to answer
- 6) Did you ever reduce the size of your meals or skip meals because there was not enough money for food?
  - Yes
  - No
  - Do not know
  - Decline to answer
- 7) Did you experience hunger and did not eat because there was not enough money for food?
  - Yes
  - No
  - Do not know
  - Decline to answer

## APPENDIX C

### DEMOGRAPHIC QUESTIONNAIRE

What was the Sex recorded on your birth certificate

- ☐ Male
- ☐ Female
- ☐ Other (please specify)
- ☐ Decline to answer

What Gender do you most closely identify with?

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Non-binary
- ☐ Other (please specify)
- ☐ Prefer not to answer

What is your age?

- ☐ 18-19
- ☐ 20-21
- ☐ 22-23
- ☐ 23+

What is your Ethnicity/Race? Check all that apply.

- ☐ White
- ☐ Black/African American
- ☐ Asian/Pacific Island
- ☐ Native American
- ☐ Hispanic/Latino
- ☐ Prefer not to answer
- ☐ Other (please specify)

What is your class status at SMU?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Prefer not to answer

What School/College does your academic program belong to?

- ☐ School of Business
- ☐ College of Humanities and Sciences
- ☐ School of Engineering
- ☐ School of the Arts

- School of Education and Human Development

Are you receiving Financial Aid?

- Yes
- No
- Prefer not to answer
- Other (please specify)

What type of high school did you attend?

- Public Suburban
- Public rural
- Private Religious
- Private other
- Homeschooled
- Other (please specify)

What religion do you identify with?

- Christianity
- Judaism
- Islam
- Buddhism
- Hinduism
- Other Religious
- Religiously Unaffiliated

Family household income:

- under 15,000
- 15,001 - 25,000
- 25,001 - 40,000
- 40,001 - 60,000
- 60,001 - 80,000
- 80,000 +
- Not Sure
- Prefer not to answer

## APPENDIX D

### CONSENT TO PARTICIPATE

The purpose of this study is to examine the relationship between demographics/financial aid/food security status and undergraduate perceptions toward those experiencing poverty. This survey will help to assess the above relationships and the magnitude of food insecurity among undergraduate students.

This research study consists of one (1) survey that will take **no more than 7 minutes to complete**. The first portion of the survey will ask questions about your general attitudes toward those experiencing poverty, your empathy for those experiencing poverty, and your commitment to addressing poverty via direct action or support for programs/services that aid those experiencing poverty. The second portion of the questions will ask you about your ability to purchase enough food during the last year to ensure that you were not hungry and finishes with some basic demographic questions. Again, it will take no more than 7 minutes to complete

At the end of the survey hit the **SUBMIT** button. Please note, you will be asked to follow an external link which will take you to a separate form to submit your SMU email address. Upon completion of survey, your email address will be placed in a drawing for a \$50 e-gift card, which will be emailed to you after the closing of the survey. A total of twenty (20) \$50 e-gift cards will be distributed.

Only undergraduate SMU students may participate in this study. Participation in this study is voluntary and you may decline participation at any time. Declining participation will not affect your student status or grades in any way.

Your participation in the study will be kept confidential and your responses will be non-identifiable. You will not be asked to provide your name at any time. Your SMU email address will be collected separate from your responses and will only be used for the selection of the \$50 e-gift card for the completion of the survey.

There is a potential risk of loss of confidentiality in all email, downloading, electronic meetings, and internet transactions. Any identifiable information will be stored in a separate database from other research data; this information will be destroyed three (3) years from the end of the research study. All information will be de-identified and confidentiality will be protected to the extent that is allowed by the law.

Due to the sensitive nature of survey questions, participants may feel embarrassed, stressed, sad, angry, or anxious when completing the survey. To minimize the risk of psychological distress the participants counselors are available via University Counseling Services (214) 768-2277.



Some of the items in the survey will require an answer before moving on; if you are uncomfortable with a required question and do not want to answer it, you may discontinue the survey and withdraw from the study at any time without penalty.

For any further questions about the study, email the study Principal Investigator Laura Robinson-Doyle (email below).

Study Principal Investigator: Laura Robinson-Doyle, PhD(c); Department of Applied Physiology and Sport Management, Southern Methodist University, [laurar@smu.edu](mailto:laurar@smu.edu) or [lrobinson@twu.edu](mailto:lrobinson@twu.edu)

When you click CONTINUE below, completing the online survey constitutes your informed consent to act as a participant in this research.

## APPENDIX E

### TEXAS WOMAN'S UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



Laura Robinson-Doyle <lrobinson@twu.edu>

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#### IRB-FY2022-335 - Initial: Exempt Letter

2 messages

**do-not-reply@cayuse.com** <do-not-reply@cayuse.com>  
To: cmoore8@twu.edu, lrobinson@twu.edu

Thu, May 26, 2022 at 9:58 AM



#### Texas Woman's University Institutional Review Board (IRB)

[irb@twu.edu](mailto:irb@twu.edu)

<https://www.twu.edu/institutional-review-board-irb/>

May 26, 2022

Laura Robinson-Doyle  
Nutrition - Houston

Re: Exempt - IRB-FY2022-335 Undergraduate Perceptions on Poverty

Dear Laura Robinson-Doyle,

The above referenced study has been reviewed by the TWU IRB - Houston operating under FWA00000178 and was determined to be exempt on May 25, 2022.

Note that any modifications to this study must be submitted for IRB review prior to their implementation, including the submission of any agency approval letters, changes in research personnel, and any changes in study procedures or instruments. Additionally, the IRB must be notified immediately of any adverse events or unanticipated problems. All modification requests, incident reports, and requests to close the file must be submitted through Cayuse.

On June 30, 2023, this approval will expire and the study must be renewed or closed. A reminder will be sent 45 days prior to this date.

If you have any questions or need additional information, please email your IRB analyst at [irb@twu.edu](mailto:irb@twu.edu) or refer to the [IRB website](#).

Sincerely,

TWU IRB - Houston

## APPENDIX F

### SOUTHERN METHODIST UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

**Attachments:**

- 22-067 Exemption Notification.pdf



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To: Laura Robinson  
From: IRB Committee  
Subject: 22-067 Undergraduate Perceptions on Poverty  
Date: 05/23/2022

The protocol **22-067 Undergraduate Perceptions on Poverty** has been verified by the SMU IRB on 05/23/2022 as **Exempt** according to the following category/ies under 45 CFR 46.104.d:

- (2) Tests, Surveys, Interviews

You may begin your research immediately. When this project is complete, please return to Mentor and terminate the protocol in the system.

The following files were reviewed and approved with this submission:

<b>Recruitment Materials</b>	05/14/2022 Flyer for UG Perceptions of Poverty .pdf 05/14/2022 Psychdata Script for Preceptions Research .docx
<b>Data Collection Instruments</b>	05/14/2022 Google form for UG Survey.pdf 05/14/2022 Undergraduate Perception Survey.pdf
<b>PI Permission</b>	05/19/2022 LRD Letter of approval.pdf
<b>Approved Consent Form</b>	05/23/2022 Psychdata Script for Preceptions Research .docx

**Amendments**

Most proposed changes to the protocol must be submitted to the IRB prior to implementation. Guidance about the types of changes to Exempt protocols that require IRB approval may be found in the [Research Handbook](#). Please note that some changes to the protocol might affect its Exempt status.

**Expiration**

This protocol can remain open for a maximum of 5 years, at which point it will be administratively closed. This protocol will expire on 05/23/2027. If you wish to continue the research after the expiration date, you must create a new protocol at that time.

Thank you,

IRB Committee

---

Office of Research  
ResearchCompliance@smu.edu  
214-768-2033 | smu.edu/provost/research  
Exemption Notification

## APPENDIX G

### AWARD LETTER – MOORE- KHOURIE GRANT



October 4, 2022

Dear Mrs. Doyle:

I am pleased to inform you that you are a recipient of a Moore-Khourie Award from the Department of Nutrition and Food Sciences for the period of October 4, 2022 – August 31, 2023. You have been supported at the level of \$1,000 for the year. It is intended that the funds will be used as follows:

#### Gift Cards

Please work with Dr. Moore and Estee Easley if you have any questions regarding the utilization of the support. The Office of Research and Sponsored Programs is also being notified of your receipt. Please work with these two offices so they can determine how best to provide your support. Should you have any questions regarding the intended distribution of the support, please contact my office if I can be of assistance.

As an obligation of receipt of this support, we expect an identification of how the support was used and research progress at the end of each semester for which support is received, i.e. May 15 for Spring and August 15 for Summer support.

Again, congratulations on your success, I look forward to seeing reports of your progress and the outcome of this support.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K. Shane Broughton'.

**Dr. K Shane Broughton, PhD**

Professor and Chair

Nutrition and Food Sciences

P: 940 898 3715 | F: 940 898 2634

