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FINANCIAL SOCIALIZATION AND ITS EFFECTS
ON FOOD INSECURITY AMONG COLLEGE STUDENTS

By

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FINANCIAL SOCIALIZATION AND ITS EFFECTS
ON FOOD INSECURITY AMONG COLLEGE STUDENTS

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University of Nebraska, 2019

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College students are not a population the general public would consider food insecure; however, food insecurity while in college can have lasting effects that impact society as a whole. This study examines the effects of financial socialization on college students' ability to cope with, or mitigate, food insecurity while they are pursuing their education. The methods employed to study this relationship includes a survey and simulation of real-life situations to measure how a student prioritizes their social life, finances and food, as well as how the students were financially socialized and their previous and current food insecurity status. The results of this study provide support for a relationship between financial socialization and food insecurity among college students. Steps should be taken to require financial literacy courses are required for high school graduation in the state of Nebraska.

The United States Department of Agriculture measures food insecurity by the number of times someone has worried about where their next meal was coming from and by the number of times food intake was disrupted in a year (Coleman-Jensen et al., 2018). In 2017, 11.8 percent of households in the United States were considered food insecure (Coleman-Jensen et al., 2018). Despite the widespread nature of the problem, there has not been much research on the exact causes of food insecurity in the United States (Gundersen & Ziliak, 2014). Food insecurity has significant mental and physical health consequences that follow a person throughout their lives, including some birth defects, anemia, low nutrient levels, cognitive problems, aggression, anxiety, depression, and diabetes (Seligman, Laraia & Kushel, 2010; Gundersen & Ziliak, 2015). Although food insecurity is typically thought to be a problem in developing countries, over 40 million Americans are food insecure in the United States (Gundersen & Ziliak, 2014).

Within that 40 million are a large percentage of college students across the country. The number of food pantries on college campuses has increased significantly over the last six years as more and more campuses recognize the extent of their food insecurity problem. When students are living off-campus, they are more likely to be food insecure than those living on-campus or at home (Gallegos et al., 2014). When college students are food insecure, they are more likely to be housing insecure, meaning they struggle to pay their rent, utilities and other bills (Dubick et al., 2016).

Financial socialization has shown to play a role in how young adults manage money and resources, especially when they come from a lower socioeconomic status. Some college students seem to have a better understanding of how to make ends meet with very limited financial resources, while others face significant struggles with roughly

the same amount of resources. Parents have the biggest influence, positively or negatively, on how young adults are socialized financially (Jorgensen & Savla, 2010). How a young adult is socialized may influence how they manage money under very limited financial resources and when they do not have their parents to fall back on for financial support.

My research question is: How does financial socialization affect college students' ability to prevent, or cope with, being food insecure in college? I will test my research question by introducing a simulator that asks students to make food, financial and social trade-offs with a limited budget.

The goal of this research is to have a better understanding of how college students manage their financial resources in order to prevent, or cope with, being food insecure. I argue that how students were socialized financially can make the difference between having enough food to eat until their next paycheck and being food insecure. Understanding how that socialization affects buying decisions when students are forced to make trade-offs is the first step in determining what can be done to socialize students, so they know how to cope with being on a limited budget.

My results indicate that, as suggested in previous literature, parents and formal education are the biggest factors of financial socialization. Financial socialization is related to the student's ability to maintain a relatively nutritious diet compared to other students, and how they prioritize their social lives, finances and food. Childhood food insecurity is linked to current food insecurity among college students.

In the following sections of this paper, I will demonstrate where this research fits into existing literature. I then outline my hypotheses and methodology before exploring

the results of my food insecurity simulator. I will conclude by describing the implications of my results for the University of Nebraska- Lincoln campus and other campuses around the country.

Literature Review:

This literature review consists of five parts starting with defining food insecurity followed by the consequences of being food insecure. This part of the literature review demonstrates why food insecurity is a problem and the lasting effects it has on society. The third section is focused on the known causal agents of food insecurity in the United States. The fourth section of this literature review is about financial socialization, which is the new causal agent I propose to add to the food insecurity literature. The final section is on food insecurity among college students.

Defining Food Insecurity

The United States Department of Agriculture (USDA) is the federal agency in charge of measuring food insecurity domestically. The USDA collects these data by adding a supplement to the annual census survey, and based on their answers in the supplement, participant households are placed into one of four categories: 1) high food security, “no reported indications of food-access problems or limitations”; 2) marginal food security, “one or two reported indications, typically of anxiety over food sufficiency or shortage of food in the house with little or no indication of changes in food intake”; 3) low food security, “reports of reduces quality, variety or desirability of diet with little or no indication of reduced food intake”; and 4) very low food security, “reports of multiple

indications of disrupted eating patterns and reduced food intake” (Overview, n.d.).

Students who to have high food security or marginal food security are considered to be food secure and students who are in the low food security and very low food security category are considered food insecure.

Consequences of Food Insecurity

The biggest body of research pertaining to food insecurity in the United States is on the consequences of being food insecure. Most of this research is focused on health outcomes for adults and children as well as educational outcomes for children and college students. This research demonstrates how big of a problem food insecurity is and how deeply it reaches into people’s lives.

Food insecurity has been associated with chronic health issues, and while some stem from childhood food insecurity, others can be developed from food insecurity as adults. Among children, food insecurity is associated with some birth defects, anemia, lower nutrient intakes, cognitive problems, aggression and anxiety (Gundersen & Ziliak, 2015, pg 1832).

Several studies have shown that children who have a lower socioeconomic status, and/or are exposed to food insecurity, from infancy to around age five have developmental issues in school and lag behind their peers until they graduate from high school (Gundersen & Ziliak, 2015; Shankar et al., 2017). As children get older, these issues are associated with increased teen birth rates and poverty rates (Berliner, 2016), making them and their children more likely to be reliant on welfare programs to survive through adulthood. Some researchers argue that “improving food security requires an

understanding not just of who is food insecure today and why they are so, but also of who is likely to be food insecure in the future and why” (Lovendal, Knowles, 2006).

Among adults, diabetes, and the inability to control it, has been shown to be a consequence of being food insecure (Seligman, Laraia & Kushel, 2010). Decreased nutrient intake, increased mental health problems and depression, hypertension, hyperlipidemia, worse outcomes on health exams, poor sleep outcomes and obesity are also adverse health effects of being food insecure (Larson & Story, 2011; Levine, 2011; Ghosh-Dastidar et al., 2014; Gundersen & Ziliak, 2015, pg 1834; Hill et al., 2016; Nettle et al., 2017).

Food insecurity is also associated with cost-related medication underuse, which only further exacerbates health issues. This means that the people did not fill a prescription because of cost; took less than the recommended dosage; or skipped doses to save money (Berkowitz et al., 2014).

Food insecurity in pregnant women is of great concern because the lack of proper nutrients can interfere with the development of the baby and has the potential to increase the risk of obesity for the child (Larson & Story, 2011).

A group that sees high food insecurity rates that may surprise some, are college students. When students live off campus they are two to three times more likely to experience food insecurity than those who live at home (Gallegos et al., 2014). College students who are food insecure are also more likely to experience housing insecurity, which includes difficulty paying rent and other bills (Dubick et al., 2016).

The outcomes of being food insecure while in college can have consequences that follow the student throughout their lives. Food insecure college students are often

employed over 20 hours per week, which has a negative effect on academic performance (Cady, 2014). Compared to food secure college students, food insecure college students have low academic performance and poor health outcomes (Patton-Lopez et al., 2014), which affects their ability to finish their degree and also affects their ability to contribute to society at their fullest potential. Researchers have made suggestions on how to mitigate the effects of food insecurity, but without more comprehensive research on the causes of the problem, any changes likely will not be as effective as they could be.

Known Causal Agents of Food Insecurity in the United States of America

The majority of the research on the casual agents of food insecurity in the United States at the national level has focused on the lack of two main resources: income and access (food deserts) (Gundersen & Ziliak, 2014; Ghosh-Dastidar et al., 2014).

Although poverty is a significant indicator of food insecurity, national data indicate that 57 percent of people who fall into a food insecure category earn incomes above the poverty rate (Gundersen et al., 2017). According to Feeding America, their clients that have at least one income earner in their household actually experience higher rates of food insecurity than those who do not have an income earner in the household (Babic et al., 2014). Even at income levels of two or three times the national poverty rate, food insecurity is still high and there are data that suggest that food insecurity is also influenced by state-level characteristics, like economic conditions (Coleman-Jensen et al., 2018; Ghosh-Dastidar et al., 2014). The Hunger in America 2010 report indicated that 24 percent of people that visited food pantries were classified as food secure by the current USDA standards (Echevarria et al., 2010). The Hunger in America 2014 report goes on to

suggest that decision makers should look at improving access to food for those households that do not qualify for government assistance programs but still struggle with food insecurity (Babic et al., 2014).

The term food desert is increasingly being used to describe areas where people do not have easy access to healthful foods, whether that be in populated urban areas or in rural areas (Cummins & Macintyre, 2002). In the 1990s in the United Kingdom, people that lived in poorer communities said the main reason they could not eat healthful food was because there were not any grocery stores in their areas, so the major retailers were blamed for the emergence of food deserts (Cummins & Macintyre, 2002).

When it comes to rural and urban areas, food insecurity is more predominant in rural areas than in urban areas and suburbs, with 15 percent of the population in rural areas classified as food insecure, compared to the 14.2 percent in urban areas and 9.5 percent in the suburbs (Coleman-Jensen et al., 2018). In rural areas, people must travel farther to get their food.

The effects of a lack of local grocery stores and transportation vary across demographic groups. One group that is of particular concern is the elderly, as they are becoming more and more dependent on non-local food sources that require them to find transportation or drive because the younger generations who used to help them are leaving rural communities (Bailey, 2010).

If college students live off-campus, are not living with their parents, and are food insecure, we also know that they are more likely to be housing insecure, which means that they also struggle to pay their rent and utilities, or they will prioritize those bills over school and food expenses (Lovendal, Knowles, 2006; Dubick et al., 2016). Basic needs

assessments show that insecurities are disproportionately affecting marginalized students and are associated with long work hours and higher risks of unemployment (Goldrick-Rab et al., 2018). College students are only eligible for welfare benefits, like the Supplemental Nutrition Assistance Program (SNAP), under certain circumstances but often time university officials do not know the regulations surrounding student eligibility (Stabenow et al., 2018) putting students at an even greater disadvantage.

Financial Socialization

A concept that has not been previously introduced to the food insecurity literature is financial socialization. Financial socialization is informal, inferential learning about money and asset management behaviors and attitudes. Past research on financial socialization establishes that parental income, and experience with the management of finances during childhood is linked to financial attitudes and behaviors in young adulthood (Shim et al., 2010). Observing parents cope with being food insecure may influence financial attitudes and behaviors of children later in life (Cude et al., 2006). Parents are the primary force of socialization and parental income is also a key factor in the financial socialization process (Jorgensen & Savia, 2010).

Negative financial socialization refers to learned, problematic financial behaviors and attitudes. There are two potential outcomes of negative financial socialization: people observe negative or unhealthy behaviors and learn what not to do and are able to do the opposite successfully, or they follow their parents' or guardians bad or negative habits (Gudmunson & Danes, 2011).

It is also possible that college students can grow up in a food insecure household and be positively financially socialized. When children grow up in a financially conservative, or prudent, household, they tend not to have financial stress when they transition into supporting themselves and transitioning into adulthood (Hibbert et al., 2004). Positive financial socialization is positively associated with a lack of financial anxiety and an increased ability to manage finances (Kim & Chatterjee, 2013). By decreasing anxiety associated with finances in college, students may be able to focus more on classwork, finish with a higher grade point average, and get a better paying job.

Financial socialization is most often measured through surveys, and while my measurement includes a survey portion, my main instrument is a simulation, which gives participants situations that ask them to make tradeoffs as they would in their everyday lives to get a better understanding of their financial attitudes. To my knowledge this approach is also new to the financial socialization literature.

Theory

I expect that if the student was positively socialized financially, they will be more likely to possess the skills to deal with financial stresses that come with being on a limited budget while in college. Positive financial socialization leads students to save more, live within their means and to only spend the money they have. If students were food insecure in the past and they learned how to make the most out of less food, or they grew up in a frugal household, they will likely know how to mitigate food insecurity. However, if students were negatively socialized, they will not be as equipped mentally to adjust to the financial challenges that are faced by many college students.

Negative financial socialization means that the students are spending all of the money they make or receive rather than saving. They do not live within their means and they are spending more money than they are bringing in. If students were food insecure previously and they learned negative financial behaviors, or they grew up in a household where they did not think about how they were spending their money, they will likely not be able to deal with financial challenges (Griskevicius et al., 2013). By the latter, I mean both long term income shortfalls, but especially short-term health problems such as health emergencies or car repairs. Both represent situations that pose immediate food insecurity challenges, and some students will be more adept at avoiding food insecurity than others.

Hypotheses

Research Hypothesis 1: When students have had experiences with food insecurity in their childhood, they will more likely be able to mitigate, or prevent, being food insecure while on a limited budget as a college student.

Research Hypothesis 2: Students who are socialized to make limited financial resources last until the next paycheck will prioritize their finances over social activities.

Research Hypotheses 3: When asked to grocery shop, those who have been positively socialized will be able to ensure food availability with a limited budget better than participants who have been negatively socialized.

I anticipate affirmation of all of the research hypothesis. Those who grew up in a food insecure household will be more likely to cope with, or mitigate, being food insecure, such as being more able to select more nutritious foods at lower cost (making groceries last longer on a limited budget). Students who grew up in frugal households, whether that frugality was a choice or not, will prioritize food over social activities when faced with financial challenges. I anticipate that they will also be able to make a limited budget stretch further to maximize food availability until the next paycheck.

I further expect that those who grew up in a household with few financial concerns and those who grew up in a household that was not financially stable with negative financial socialization, are more likely to prioritize socializing over food. I also anticipate that the former will not be able to make a limited budget stretch to maximize food availability until the next paycheck.

Methods

I test my research hypotheses using an original simulation and survey, both of which can be found in the appendix. The sample for this study is made up of undergraduate students enrolled in introductory political science courses at the University of Nebraska-Lincoln in spring 2019. The students are required to complete a total of five research credits and have the choice of the studies they participate in to complete these credits. There was a total of 115 participants in the simulation and survey.

The simulation portion of the survey consists of a series of social, financial and food buying decisions that occur under a set of hypothetical financial conditions. Participants are first be asked to go grocery shopping as they normally would, with a list

of groceries provided in the simulator (question 1). The grocery list is used to get an indication of how much food is a priority for the participant and we will use the macronutrient content of the foods to gauge how well the participant gets balanced meals in their diets.

The participants will then go through a simulation that is designed to ask them to make trade-offs among food, their finances and their social life. The simulation is designed to mimic situations that someone may face in college when they are living off-campus and out of their parent's household. For example, the students will have to deal with fluctuating utility bills because of seasonal changes. If the student drives a car, they will have to deal with unexpected expenses for repairs. Under conditions of financial stress generated by higher utility bills and unexpected car repairs, students will have to decide if they are going to out for their friend's birthday and how much money they are willing to spend on their friends with a limited budget.

Examples of the food buying decisions include eating off of the dollar menu until the next paycheck or going to the campus food pantry for extra food to make what is left of their paychecks last until they are paid again.

In every scenario in the simulation, the student has the option to ask their parents for additional financial help. I included this as an option because I recognize that there are students who are reliant on their parents to supplement a majority, if not all, of their income.

The next part of the simulation asked students to go grocery shopping with a \$25 budget and the goal of buying enough food for a week. The students are given a list of items that are available to purchase from the grocery store with the price and volume of

individual items, just as they were in the first grocery list (see Question 16 in the appendix). With the second grocery shopping exercise I am looking at whether or not they change their shopping behavior to reflect the restricted budget to 25 dollars for a week's worth of food. This question helps to measure how financially adept students are. More financially savvy students will be able to buy nutrient dense foods that will last for one week and stay within the 25-dollar budget. Less adept students will not be able to stick with the 25-dollar budget or have enough nutritious food for an entire week.

The participants will then be asked a variety of questions pertaining to their background, their personal finances and what they remember observing about their parent or guardians' finances and spending behaviors growing up (questions 17-39).

Independent Variable

The independent variable used to test the first hypothesis is childhood food security status. This is measured using the USDA's childhood food security supplement to the annual census survey and the suggested scoring that comes with it. The survey questions pertain to a variety of questions about how often the student missed meals during their childhood, if they are worried about food as a child and how often the student was hungry because their family could not afford food. The survey supplement measures the number of affirmative answers and then uses those affirmatives to place each student into a food security category. If the student does not give any affirmative answers (i.e. no worries about food as a child; no recollection of being hungry; etc), the student is placed into the high food security category. Students who gave one affirmative answer were placed into the marginal food security category. Students that gave two to

five affirmative answers are in the low food security category and those who give six to nine affirmative answers are in the very low food security category.

The independent variable used to test the second and third hypotheses is how the student was socialized financially. Financial socialization is a combination of different factors. In this study we measured financial socialization with (1) what socioeconomic class the students perceived themselves to grow up in (poor, middle class, upper middle class and upper class) (2) how often they observed their parents/guardians struggle with money (3) the parent's/guardian's current willingness to help the student financially (4) the parent's/guardian's ability to help the student financially (5) whether or not the student took a personal finance or financial literacy course before they graduated from high school (6) the student's perception of their parent's/guardian's ability to manage money (7) how often the student's parents/guardians taught the student about money management (8) the socioeconomic class the student thinks they grew up in. The options given to the students to answer these questions that were associated with positive financial socialization were given higher values and the options that were associated with negative financial socialization were given lower values. These eight variables allow us to get a better measurement of the things that influence the students inferential learning of attitudes and behaviors when it comes to their finances, as there is not one thing that goes into financial socialization.

Dependent Variables

The dependent variable used to test the first hypothesis is current food insecurity. This is measured using the USDA's adult food security supplement survey. This survey

asks a variety of questions pertaining to skipping meals, anxiety around food and quality of meals. The adult food security supplement places students into four categories that are determined by the number of affirmative answers to the survey questions. Students who have zero affirmative answers are placed into the very high food security category. Those students with one or two affirmatives are placed into the marginal food security category. Those students with three to five affirmatives are placed into the low food security category, and those with six to ten affirmatives are placed into the very low food security category. Those in the high and marginal food security categories are considered to be food secure and those in the low and very low food security categories are considered food insecure.

The dependent variable used to measure the second hypothesis is how the students prioritize their social lives in comparison to their finances. Each participant will be given the option to make one of three different kinds of tradeoffs in different situations provided in the simulation. Students will be given fifteen different situations in which they have to choose among food, their finances and their social life. The priority of tradeoffs was calculated by giving behaviors that indicate that the specific category of tradeoff was a priority the higher scores, and the behaviors that indicate that category is not a priority a lower score. The scores for the choices made in each category were then summed. For example, when students are given the social trade-off to go out, study or leave the social gathering early to study, the option to go out without adjusting your schedule will be ranked highest; the option to go but leave early is second highest; and then the option to not go at all is the lowest ranked option. I summed the students answers across all three categories creating one value for each category and then created an

additional dichotomous variable for those who prioritized food and finances over their social life. This variable is dichotomous where 1 indicates a low prioritization of social activities compared to their finances and 0 indicates a high prioritization of social activities compared to their finances. If the social sum was higher than the financial sum, the student was given a 0 and if the financial sum was higher than the social sum, the student was given a 1.

The dependent variables used to test the third hypothesis are the participant's choices when grocery shopping without any imposed budget restrictions and the difference in nutrient value of the items selected when there is not an imposed budget restriction and when the students must shop with a \$25 budget. As mentioned above, the participants are first asked to grocery shop how they normally would on their budgets. Then the students are given a budget of \$25 for a week and a list of grocery items with the quantity and prices for each. The participants will need to buy enough food one week and stay on budget to the best of their ability. Each food item has a numerical grade with foods that are more nutritious having higher grades and those with lower nutritional content having lower grades. For example, Oreos are given a score of a 12 and tomatoes are given a score of 181 (Fuhrman, 2017). The overall performance will be determined by the sum total of the individual nutrient grades of the foods selected for each list. The nutritional differential is measured by the difference between the total nutrient grades of the first grocery list and the limited budget list. The smaller the difference, the higher ability if students to maintain a nutritional diet on a limited budget.

Control Variables

In this study, there are multiple control variables collected including, but not limited to, the students monthly food budget, where they live, and their current self-reported financial behaviors. I choose to control for perceived socioeconomic class when examining the relationship between childhood and current food insecurity, even though it is also a financial socialization variable. In studies examining the demographics of food insecure populations, the data is indicating that areas with the fastest growing food insecurity rates is the suburbs and in middle class families. By asking which socioeconomic class the student thinks they grew up in, it allows me to see if the students who were food insecure as children, were from the stereotypical classes or if they were from other socioeconomic classes.

I controlled for how often the student had difficulties managing their finances, which was self-reported. When examining how students prioritize their social lives, the frequency with which students struggle with their finances allowed me to see if they were very stable financially and thus felt comfortable enjoying social activities or if the students were prioritizing their social lives over their financial health.

I controlled for the student's monthly food budget for the grocery shopping exercises. This gave me a better idea of how much the students were being pushed when they were given the budget restriction and how focused the students were on nutrition during the initial grocery shopping exercise.

Table 1					
Summary Statistics					
	N	Minimum	Maximum	Mean	Standard Deviation
Social Score	115	5	13	9.26	1.623

Financial Score	115	6	18	13.43	2.988
Food Score	115	10	21	14.67	2.519
Low Priority Social Life	115	0	1	.20	.404
Parents Willing to Help	115	1	5	3.82	1.189
Parents Able to Help	115	1	5	3.73	1.15
Perceived Class	115	1	4	2.53	.692
Parent Money Management Skill	115	2	7	5.97	1.367
Parent Teach Money Manage	115	0	3	2.27	.753
Observe Struggles	115	1	5	2.5	1.32
Discuss Struggles	115	1	5	2.52	1.372
Personal Finance Course	115	0	1	.56	.499
Living Situation	115	1	5	2.139	1.35
Initial Grocery Exercise	115	5	13	9.26	1.623
Nutrition Differential	115	6	18	13.43	2.988
Childhood Food Insecurity	115	1	4	2.53	.692
Current Food Insecurity	115	1	4	1.70	.991
Class	115	1	4	1.48	.872
<i>The maximums are associated with more positive behaviors and are coded answers to the survey that can be found in the appendix. The minimums are associated with more negative behaviors that are derived from the survey that can be found in the appendix.</i>					

Results

The first hypothesis is: *When students have had experiences with food insecurity in their childhood, they will more likely be able to mitigate, or prevent, being food insecure while on a limited budget as a college student.* This hypothesis is consistent with previous literature pertaining to generational poverty, and other related predicaments. Childhood food insecurity and current food insecurity were measured using the USDA

food security supplements and recommended scoring instructions. Food security is measured based on the number of affirmations to a variety of questions pertaining to food consumption and anxiety over food.

Table 2 presents the results from a model evaluating hypothesis 1 (one). The dependent variable is childhood food insecurity and I estimated a model for the independent variable, current food insecurity in the table below. The estimate provides full support for hypothesis one. The coefficient is in the expected direction and is significant. Childhood food insecurity has a positive significant relationship with current food insecurity, with a p-value less than .001 and a positive coefficient.

Table 2	
Current Food Insecurity	
Childhood Food Insecurity	0.333*** (0.077)
Constant	0.911*** (0.151)
Observations	115
R-squared	0.143

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Entries are coefficients (with standard errors below) from a regression model with current food insecurity as the dependent variable.

Table 3 adds in a control for the socioeconomic class the students think they grew up in. The estimate provides full support for hypothesis one. The childhood food insecurity coefficient is in the expected direction and is significant, which means that when the student is food insecure as a child, they are more likely to be food insecure as adults. When running the model while controlling for perceived socioeconomic class, we find that there is a positive, significant relationship between childhood food insecurity and current food insecurity with a p-value that is less than .001, as with the last model,

this means that when the students are food insecure as children, they are more likely to be food insecure as adults.

Table 3

Current Food Insecurity		
Childhood Food Insecurity	0.333*** (0.077)	0.368*** (0.085)
Perceived Socioeconomic Class		0.116 (0.122)
Constant	0.911*** (0.151)	0.558 (0.401)
Observations	115	115
R-squared	0.143	0.150

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Entries are coefficients (with standard errors below) from a regression model with current food insecurity as the dependent variable.

These results fully support the first hypothesis. Considering the population of this study is college students, this finding, though expected, is concerning. If students are food insecure as children and are significantly more likely to be food insecure in college, it begs the question of can they decrease their chances of being food insecure by improving their lives, or is it the case that once you are food insecure as a child, you will be more likely to be food insecure for your entire life? Now that we have established confirmation that the data pertaining to this hypothesis is in alignment with previous literature, we move on to testing the novel hypotheses in this study.

The second hypothesis is: *students who are socialized to make limited financial resources last until their next paycheck, will prioritize their finances over social activities*. Table 4 presents the results from the model evaluating Hypothesis 2 (two). The dependent variable is social life is a low priority, and I estimated a multiple regression model containing each of the independent variables that make up financial socialization

(reported separately in the table below). The estimate provides partial support for Hypothesis two. The overall model is significant, indicating that is a good model to test the relationship between financial socialization and whether or not students prioritize their social lives over their finances. However, the direction of a majority of the coefficients for the independent variables are not in the expected direction, providing partial support for the hypothesis.

Dependent Variable	Social Prioritization (1)
Constant	.966*** (.310)
Parent's Willingness to Help	.061 (.048)
Parent's Ability to Help	-.076 (.057)
Perceived Socioeconomic Class	-.128* (.077)
Student Perceptions of Parent's Money Management Skills	.002 (.036)
Parents Teach Student Money Management Skills	-.068 (.056)
Financial Struggles Discussed Directly with the Student	-.047 (.044)
Student Observed Parents Financial Struggles	.006 (.052)
Financial Course Taken Before High School Graduation	-.178** (.084)
Observations	115
R ²	.135
F	2.066

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1
 Entries are coefficients (standard errors below in parentheses) from a logit model with low priority social life as the dependent variable (1= low priority social life; 0= high priority social life).

Table 4 explores the relationship between each of the financial socialization independent variables and the prioritization of the student's social life within the model. Three of the coefficients are in the expected direction, and two were statistically

significant. The social life variable was coded so that 0 indicated a high prioritization of social activities and 1 indicated a low prioritization of social activities. The significance of the model, with a p-value of .046, in combination with five of the eight independent variables that make up financial socialization are in the negative directions indicates that there is a negative relationship between financial socialization and how the student's social lives are prioritized. Based on this model, when students are positively financially socialized, they make their social lives more of a priority, which is the opposite of what was expected. There were two significant independent variables in this model. The socioeconomic class the student perceived themselves to grow up in has a negative relationship with how they prioritized social activities with a significance less than .10. Whether or not the student took a personal finance course before they graduated from high school has a negative relationship with how they prioritize their social lives with a significance less than .05. The three coefficients that were in the expected direction, though not significant, were how willing the parents are to help the student financially, how well the students think their parents manage money and how often the student observed their parents struggle with finances. This means that

The overall significance of the model indicates that this is a good measure of the relationship between financial socialization and how the students prioritize their social lives. The direction of the coefficients indicated that the relationship between financial socialization and the prioritization of social activities is in an unanticipated direction, providing no support for the hypothesis. This model indicates that the more positively students are socialized financially, the more value they place in social activities. This

relationship would need to be flushed out in a follow up study that explores student's confidence in their ability to manage their money.

Table 5 presents the results of the model controlling for how often the students have difficulties managing their finances. To use the variable of how often student experiences difficulties, 5 indicates they always have little or no difficulty managing money and 1 indicates that they never have little or no difficulty managing their money. The overall model is significant at the .1 level.

Dependent Variable	Social Prioritization (1)
Constant	.871** (.322)
Parent's Willingness to Help	.061 (.048)
Parent's Ability to Help	-.070 (.057)
Perceived Socioeconomic Class	-.131* (.077)
Student Perceptions of Parent's Money Management Skills	.002 (.036)
Parents Teach Student Money Management Skills	-.097 (.063)
Financial Struggles Discussed Directly with the Student	-.054 (.044)
Student Observed Parents Financial Struggles	.008 (.052)
Financial Course Taken Before High School Graduation	-.182** (.084)
Frequency Students have Difficulty Managing Money	.043 (.040)
Observations	115
R ²	.144
F	1.962

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1
 Entries are coefficients (standard errors below in parentheses) from a multiple regression model with *low priority social life* as the dependent variable (1= low priority social life; 0= high priority social life) with control for how often students struggle to manage their money

Table 5 explores the relationship between each of the financial socialization independent variables and the prioritization of the student's social life within the model controlling for how often the student has difficulties managing their finances. Four of the coefficients are in the expected direction, and two were statistically significant. The significance of the model, with a p-value of .051, in combination with five of the eight independent variables that make up financial socialization are in the negative directions indicates that there is a negative relationship between financial socialization and how the student's social lives are prioritized when controlling for how often they have difficulties managing their finances. Based on this model, when students are positively financially socialized, they make their social lives more of a priority, which is the opposite of what was expected. There were two significant independent variables in this model. The socioeconomic class the student perceived themselves to grow up in has a negative relationship with how they prioritized social activities with a significance less than .10. Whether or not the student took a personal finance course before they graduated from high school has a negative relationship with how they prioritize their social lives with a significance less than .05. The four coefficients that were in the expected direction, though not significant, were the willingness of the parents of the student to help them financially, how often financial struggles were directly discussed with the student, how well the students think their parents manage money, how often the student observed financial struggles and how often the students have difficulties managing their money. Considering both models were significant and they both indicated the relationship between financial socialization and how student prioritize their social lives was in the opposite direction of what was expected, there is partial support for hypothesis two.

There needs to be a follow up study that explores why those who are financially socialized more positively, are not putting as much of a focus on their finances as they are their social lives. Are they confident in their money management skills? Do they know their parents are willing to give them more money if they run out? Why are students who should know how to manage money, not focusing on their finances?

The third hypothesis is: *when asked to grocery shop, those who have been positively socialized will be able to ensure food availability with a limited budget better than participants who have been negatively socialized.* We first examined how students normally shopped when they did not have an imposed budget restriction. Then we calculated the differential between the scores of the two lists to see how their habits changed with an imposed budget restriction. The scores of both the initial grocery shopping experience and the experience with a limit budget had an outlier, once those outliers were removed, the data had a relatively normal distribution.

Dependent Variable	Initial Grocery Exercise (1)
Constant	2778.952** (1252.587)
Parent's Willingness to Help	-278.641 (194.629)
Parent's Ability to Help	32.531 (230.394)
Perceived Socioeconomic Class	82.555 (310.505)
Student Perceptions of Parent's Money Management Skills	-25.220 (143.879)
Parents Teach Student Money Management Skills	-144.136 (227.977)
Financial Struggles Discussed Directly with the Student	189.651 (176.836)

Student Observed Parents Financial Struggles	-31.684 (211.025)
Financial Course Taken Before High School Graduation	-2.812 (340.758)
Observations	115
R ²	.065
F	.918
Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1	
Entries are coefficients (standard errors below in parentheses) from a multiple regression model with <i>nutritional score from the initial grocery shopping exercise</i> as the dependent variable.	

Table 6 presents the results from a model evaluating Hypothesis three. The dependent variable is the nutritional score from the initial grocery exercise, and I estimated one model containing each of the independent variables that make up financial socialization. The estimate provides no support for hypothesis three. The overall model is not significant, and thus not a good model to test the relationship between financial socialization and the initial grocery shopping exercise.

Table 6 explores the relationship between each of the financial socialization independent variables and the nutritional value of the food students are buying with no budgetary interventions. Three of the coefficients are in the expected direction, and none were statistically significant. The significance of the model, with a p-value of .505, in combination with five of the eight independent variables that make up financial socialization are in the negative directions indicates that there is not a significant relationship between financial socialization and the nutritional value of the foods they buy, which is the opposite of what was expected. The results of this model also indicate there needs to be a follow up study exploring the relationship found in this model. The two coefficients that were in the expected direction, though not significant, were how

often financial struggles were directly discussed with the student and how often the student observed financial struggles.

When the model is estimated with a control for the student's monthly food budget, the results are consistent with the previous model. These results are displayed in Table 7, which presents the results from a model evaluating hypothesis two. The dependent variable is the nutritional score from the initial grocery shopping exercise while controlling for monthly food budget and I estimated one model containing each of the independent variables that constitute financial socialization (reported separately in the table). Once again, the estimate provides no support for hypothesis two. Three of the coefficients are in the expected direction, and one significant.

Table 7	
Dependent Variable	Initial Grocery Exercise (1)
Constant	2665.548** (1253.0)
Parent's Willingness to Help	-410.972** (194.687)
Parent's Ability to Help	170.310 (235.861)
Perceived Socioeconomic Class	-27.346 (324.409)
Student Perceptions of Parent's Money Management Skills	.052 (144.550)
Parents Teach Student Money Management Skills	-222.880 (232.881)
Financial Struggles Discussed Directly with the Student	132.961 (180.134)
Student Observed Parents Financial Struggles	60.97 (214.383)
Financial Course Taken Before High School Graduation	119.412 (347.615)
Food Budget	.854 (1.209)
Observations	115
R ²	.115
F	1.333

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Entries are coefficients (standard errors below in parentheses) from a multiple regression model with *nutritional score from the initial grocery shopping exercise* as the dependent variable with the students budget as the control variable.

Table 7 explores the relationship between each of the financial socialization independent variables and the nutrition scores from the initial grocery shopping exercise while controlling for the student's food budget. Six of the coefficients are in the expected direction, and none was statistically significant. The significance of the model, with a p-value of .231 indicates that there is a partial relationship between financial socialization and the nutritional score of the initial grocery shopping exercise. Based on this model, when students are positively financially socialized, it has a slight effect on how they grocery shop with no budgetary interference, which only provides partial support for the hypothesis. There was not a significant independent variable in this model. The six coefficients that were in the expected direction, though not significant, were the parents ability to help the student financially, how well the students think their parents manage money, how often financial struggles were directly discussed with the student, how often the student observed financial struggles and the student's food budget, whether or not the student took a financial literacy course before graduating from high school and the students food budget. Seeing as how the model is not significant, it raises of the question of is this an error, are the selected financial socialization variables not a good indication of future money management behaviors or do the students now know what foods provide more nutritional values compared to others?

The main variable of focus to test this hypothesis is how well students are able to maintain the nutritional value of their food when their grocery budget has been dramatically cut, which is the differential between the initial grocery shopping exercise and the exercise after the simulation.

Table 8 presents the results from a model evaluating hypothesis two. The dependent variable is the nutritional differential between the first grocery shopping exercise and the second one and I estimated the model to include each of the independent variables that constitute financial socialization. The estimate provides no support for hypothesis two. Two of the coefficients are in the expected direction, and none are statistically significant. The significance of the overall model is .69, which means the model is not a good measurement of the relationship between financial socialization and the nutritional score differential between the initial and second grocery shopping exercise.

Table 8	
Dependent Variable	Nutritional Differential (1)
Constant	34338.493*** (2396.448)
Parent's Willingness to Help	-129.177 (372.364)
Parent's Ability to Help	-372.221 (440.790)
Perceived Socioeconomic Class	41.303 (594.057)
Student Perceptions of Parent's Money Management Skills	-196.267 (275.27)
Parents Teach Student Money Management Skills	-233.285 (436.165)
Financial Struggles Discussed Directly with the Student	99.155 (338.323)
Student Observed Parents Financial Struggles	-515.156 (403.734)
Financial Course Taken Before High School Graduation	-562.075 (651.939)
Observations	115
R ²	.050
F	.701

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Entries are coefficients (standard errors below in parentheses) from a regression model with *Difference between initial grocery shopping exercise and the second grocery shopping exercise* as the dependent variable.

Table 8 explores the relationship between each of the financial socialization independent variables and the nutritional differential. Two of the coefficients are in the expected direction, and none were statistically significant. Based on this model, when students are positively financially socialized, it has no effect on how they grocery shop when there is budgetary interference, which is the opposite of what was expected.

Table 9 presents the results from a model evaluating hypothesis three. The dependent variable is the nutritional difference between the two grocery shopping exercises while controlling for the student's self-reported monthly food budget, and I estimated one model containing each of the independent variables that constitute financial socialization. The estimates provide no support for hypothesis two as the model has a significance of .62.

Table 9	
Dependent Variable	Initial Grocery Exercise (1)
Constant	234564.811*** (2606.17)
Parent's Willingness to Help	-275.196 (404.937)
Parent's Ability to Help	-258.647 (490.577)
Perceived Socioeconomic Class	-55.420 (674.752)
Student Perceptions of Parent's Money Management Skills	-216.435 (300.655)
Parents Teach Student Money Management Skills	-241.806 (484.379)
Financial Struggles Discussed Directly with the Student	34.099 (374.668)
Student Observed Parents Financial Struggles	-546.853 (445.904)
Financial Course Taken Before High School Graduation	-692.454 (723.020)
Food Budget	.2.937 (2.515)
Observations	115

R ²	.072
F	.797

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1
 Entries are coefficients (standard errors below in parentheses) from a regression model with *Difference between initial grocery shopping exercise and the second grocery shopping exercise* as the dependent variable with the students budget as the control variable.

Table 9 explores the relationship between each of the financial socialization independent variables and the nutritional differential from the initial and second grocery shopping exercise while controlling for the student's food budget. Two of the coefficients are in the expected direction, and none were statistically significant. The significance of the model, with a p-value of .620 indicates that there is not a relationship between financial socialization and the nutritional differential between the two grocery shopping exercises. Based on this model, when students are positively financially socialized, it has no effect on how they grocery shop with when they are on a limited budget, which is the opposite of what was expected. Again, this model is not a good test of the hypothesized relationship and that raises questions that need to be examined in a follow up study.

These results provide no support for the third hypothesis. According to previous literature on financial socialization, it effects attitudes and behaviors toward finances. The lack of support for these models however demonstrates that it either does not influence food buying behaviors, the financial socialization factors may not be the best predictors of future behaviors or students do not know which foods have more nutritional value compared to others. This is a deviation from the literature that needs to be explored in follow up studies to determine what exactly is the cause of the insignificant model.

Conclusion

Parents and formal education play a role in financial socialization, as the previous literature suggested but this study also found that financial socialization did not have a relationship with food buying decisions. We find that students who have less parental support value food and finances over their social lives and that is a line of research that needs to be explored. These results suggest that behaviors associated with learning from negative financial socialization are helping students make better money management decisions, but this study is not equipped to explore that relationship further. If someone was food insecure when they were growing up and are currently in college, they learned from the previous experiences and are attempting to make a better life for themselves. Follow up studies would need to be conducted with the general public, not just the college student population to get the full influences of negative financial socialization on experiential learning.

At the same time, some results were unexpected. For example, we found that some students who had taken a personal finance or financial literacy course placed their social lives above their finances or food, but then would have indications of low food security. This finding may suggest that students are over confident in their ability to manage money on their own and then get in over their heads or fail to ensure they are receiving the proper nutrition before they spend time in social settings. The results showing that those who were negatively socialized prioritized their finances and food over their social lives may be an indication of those students learning what not to do from their parents and are trying to provide a better life for themselves. Because they are in this situation, they may not be comfortable spending money on social things because they are afraid of being in a food insecure situation, because they experienced that before.

We also find, in congruence with previous literature, that childhood food insecurity is closely related to current food insecurity.

This study is not without its limitations, despite every attempt by the researchers, not all students completed the grocery shopping exercises the same way, meaning some responses had to be excluded and it opened up the possibility of their being some internal validity issues with those variables. We also had a sample size of 115, so we were not seeing as much variance on some variables as we were expecting. There are plenty of areas for improvement when conducting follow up experiments to further explore the unexpected relationships we found in this study.

Implications

Because this study provides partial support for the relationship between financial socialization and food insecurity among college students at the University of Nebraska-Lincoln, I would suggest the State of Nebraska make financial literacy courses a requirement to graduate from high school. This would allow those students who grew up in low-income areas or school districts that do not teach this material currently, to have a better understanding of money when they graduate from high school.

By ensuring that every Nebraska teenager has the basic education on how to manage their money, we can see more positive spending behaviors in young adults throughout the state and lower rates of food insecurity. By teaching teenagers how to manage their money more effectively, when they graduate and go to college or go into the work force, they will be able to make better decisions to make the most out of limited budgets to create solid financial foundations. When they do this, it will affect them for

the remainder of their lives and their children. If we can instill positive financial management behaviors into children, we can decrease the childhood and adult food insecurity rates over generations.

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Appendix:

Food Insecurity Simulator

In this section of the survey, you will be given a variety of different situations and scenarios, then based on these, asked to make choices.

There is no right or wrong answer, just select the choice that most closely aligns with what you normally would in your everyday life.

When the question or answer talks about parents, please consider your parents in the situations.

What is an approximate overall budget you are working with every month?

You will now be asked to pick items from a grocery list to make meals for 7 days. Please select the item you would typically choose, if those items are not listed, please select the most similar item that is listed. The item is listed with the quantity of the package and the price per individual item. In the box to the right, please type in the price of the total items you want to buy. If you do not want to buy that item, please a 0 in the box to the right.

For example, if you want to buy 8 packages of Ramen Noodles at \$.25, please type 2.00 in the box on the right.

Grains :

Rice 5 lb bag for \$2.29 : _____
 Pasta 1 lb box for \$1.00 : _____
 Cereal for \$2.50 per box : _____
 Pancake and Waffle Mix 2 lb box for \$2.30 : _____
 Macaroni and Cheese for \$1.00 per box : _____
 Loaf of bread for \$2.50 : _____
 Frozen waffles 10 ct for \$2.50 : _____
 Muffin Mix 7.5 oz box for \$1.50 : _____
 Ramen Noodle Soup for \$.25 each : _____

Vegetables :

Tomatoes for \$1.29 per pound : _____
 Sweet Potatoes for \$.99 per pound : _____
 Frozen vegetables for \$1.00 per bag : _____
 Boxed mashed potatoes for \$1.50 per box : _____
 Canned vegetables for \$1.00 per can : _____
 Canned beans \$1.00 per can : _____

Fruits :

Apples for \$.50 each : _____
 Bananas for \$.49 per pound : _____
 3 pound bag of clementines for \$5.00 : _____
 Bag of grapes for \$4.00 : _____
 Canned fruits for \$1.00 per can : _____

Frozen Fruits \$1.00 per bag : _____

Dairy :

Cottage Cheese for \$2.00 : _____

Gallon of Milk \$2.00 : _____

Large Eggs 12 count for \$2.99 : _____

Cheese sticks \$3.00 : _____

Cheese slices for \$2.50 : _____

Meat :

Bacon 12 oz for \$2.99 : _____

Ground Beef 1 lb for \$3.50 : _____

Hotdogs, 12 ct for \$1.00 : _____

Bologna, 16 oz package for \$2.00 : _____

Chicken breasts, 2-3 per package for \$7.75 : _____

Deli Meats, 9 oz for \$3.00 : _____

Others :

Tofu 15.5 oz for \$1.79 : _____

24 oz jar of pasta sauce for \$1.99 : _____

Hamburger Helper box for \$1.50 : _____

Pop-Tarts for \$1.99 : _____

24 cans of soda for \$6.99 : _____

Oreos for \$2.50 : _____

Lunchable \$1.80 : _____

Total : _____

January

Its time to come back to school from winter break. You were able to work your regular 20 hours on campus and you were able to find a babysitting job in town so you have an extra \$500 in savings.

You owe a balance after your student loans were dispersed, are you going to drop one of your 5 classes that are all required courses for your degree, or are you going to pay the university \$750 to make sure you stay on track to graduate on time?

- Drop one class but you have to make this class up somewhere
- Pay the bill
- Ask your parents for help you and split the cost with them
- Your parents will pay the remaining balance for you

Now that you and your friends are all back at school, they want have a night out. Between dinner and drinks you will spend approximately \$40. Are you going to go out or are you going to stay in and go another time?

- Go out
- Wait and go another time
- Go out but you don't drink as much and you choose less expensive options on the menu

It is getting close to the end of the month and you are running on low on cash but you need to go grocery shopping. What are you going to do?

- Ask your parents for help
- Make sure your other bills are paid and then eat fewer meals until your next paycheck
- Buy something off of the dollar menu if I get hungry
- Visit the campus food pantry and buy other items at the grocery store
- Put the extra expenses on my credit card and eat like I normally would

February

You have your first round of tests coming up next week and you need to have a B or better in your classes this semester in order to take the more advanced classes in your degree program.

Your friends want to have a game night Friday, are you going to go or are you going to stay home and study?

- You don't go because you have a test to study for
- You go but you leave at a reasonable hour so you can get up early and study for the rest of the weekend
- You go out

Your car is making a noise and it won't shift passed 2nd gear on your way home from campus today. It turns out, you have a bad sensor. With labor and ordering the new part, it will cost you \$300 to fix. Are you going to fix it, or go without a car until you can afford the new sensor.

- Fix it now
- Ride the bus until I can afford it
- Sell the car for parts and just ride the bus regularly
- Ask your parents to pay for it
- Put it on my credit card

It has been a very stressful month with staying on top of school work and your car troubles. Your favorite food when you are stressed in the Magnum Raspberry Ice Cream bars dipped in chocolate. You really want them but you only have enough money in your account to buy a box and nothing else. What do you do?

- Ask your parents to transfer more money into your account before you go to the store
- Get something off of the dollar menu instead
- Don't eat

- Go to the campus food pantry and treat yourself after you get paid
-

March

Spring break is almost here and you have your second round of tests right before you leave. You did not do so great on your first tests and now you need to get a 90% or better on this round. Your friends are not worried about their test grades and want to go out. Do you go with them or do you stay home and study?

- Study
- Go out but come home at a reasonable hour so you can get up early the next day and study
- Stay home

Your friends want to take a trip for spring break. You have three options: go on vacation, stay at school to babysit and make some extra money, or you can go home and spend time with your family. What are you going to do?

- Vacation, your parents will pay for it
- Stay at school and babysit, you need to make as much money while you can
- Go home and spend time with your family, you have worked enough and deserve a break

For your last day of class before break, one of your classes is celebrating with a food day. You are all asked to bring in an appetizer or desert for the entire class. What do you bring?

- Vegetable tray \$20
 - Cookie tray \$10
 - You make cheese dip and bring in chips \$15
 - You call your mom and she orders a desert tray from a local bakery for you
-

April

It is your roommate's birthday and you and the rest of your roommates are all taking them out for their birthday, you agree to cover your drinks and split your roommate's tabs among the remaining four of you. The birthday night out will likely cost you \$50. Are you going to go out for the birthday celebration?

- Go to the birthday celebration
- Go out but only get things that are less expensive on the menu
- Stay home and get them a gift later

You know you have finals coming up and you are not going to be able to work your regular hours because your supervisor only allows you to work 10 hours that week, how are you going to spend your time in preparation?

- Babysit as much as you can to make up for the fewer hours and then study as much as possible during finals week
- Ask your parents for more money to make up for fewer hours so you can study
- Take the extra time you have been given to study for your finals

There is a student organization on campus that runs a mobile food pantry. They have a variety of necessities and it's first come, first served with no questions asked and your income. You can finally make one this month, do you go?

- Yes, this way I can save my money in case of an emergency
- Yes, if they aren't going to ask for proof of income, you may as well
- No, my parents will give me money for anything I need
- No, if I am careful with my money, I should be able to make the food I have last until my next paycheck
- No, I will put any extra living expenses on my credit card

May

It is starting to warm up and you have had to turn on your AC a few times. You see a \$20 increase in your electric bill this month. Where does this money come from?

- My parents will give it to me
- It will have to come from my budget for food
- I can work and make it up, not a problem
- Put the bill on my credit card and pay off what I can afford

You were asked if you could babysit on the night of your friend's graduation party. Are you going to work and spend time with your friend before they leave town or are you going to go to the party?

- Work and spend time with them later
- Work but try to go to the tail end of the party when you get off
- Go to the party

Your favorite vegetables are in season. They are cheaper than they are other times of the year, but they do not last as long as other vegetables. Do you buy them?

- Buy your favorite vegetables
- Buy other vegetables that last longer
- Buy frozen vegetables
- Ask your parents to give you extra money to buy more of your favorite vegetables
- Don't buy any vegetables

You will now be asked again to pick items from a grocery list to make meals for 7 days. This time you only have a budget of \$30. Please select the item you would typically choose, if those items are not listed, please select the most similar item that is listed. The item is listed with the quantity of the package and the price per individual item. In the box to the right, please type in the price of the total items you want to buy. If you do not want to buy that item, please a 0 in the box to the right.

For example, if you want to buy 8 packages of Ramen Noodles at \$.25, please type 2.00 in the box on the right.

Grains :

Rice 5 lb bag for \$2.29 : _____
Pasta 1 lb box for \$1.00 : _____
Cereal for \$2.50 per box : _____
Pancake and Waffle Mix 2 lb box for \$2.30 : _____
Macaroni and Cheese for \$1.00 per box : _____
Loaf of bread for \$2.50 : _____
Frozen waffles 10 ct for \$2.50 : _____
Muffin Mix 7.5 oz box for \$1.50 : _____
Ramen Noodle Soup for \$.25 each : _____

Vegetables :

Tomatoes for \$1.29 per pound : _____
Sweet Potatoes for \$.99 per pound : _____
Frozen vegetables for \$1.00 per bag : _____
Boxed mashed potatoes for \$1.50 per box : _____
Canned vegetables for \$1.00 per can : _____
Canned beans for \$1.00 per can : _____

Fruits :

Apples for \$.50 each : _____
Bananas for \$.49 per pound : _____
3 pound bag of clementines for \$5.00 : _____
Bag of grapes for \$4.00 : _____
Canned fruits for \$1.00 per can : _____
Frozen Fruits \$1.00 per bag : _____

Dairy :

Cottage Cheese for \$2.00 : _____
Gallon of Milk \$2.00 : _____
Large Eggs 12 count for \$2.99 : _____
Cheese sticks \$3.00 : _____
Cheese slices for \$2.50 : _____

Meat :

Bacon 12 oz for \$2.99 : _____
Ground Beef 1 lb for \$3.50 : _____
Hotdogs, 12 ct for \$1.00 : _____

Bologna, 16 oz ackage for \$2.00 : _____
 Chicken breasts, 2-3 per package for \$7.75 : _____
 Deli Meats, 9 oz for \$3.00 : _____

Others :

Tofu 15.5 oz for \$1.79 : _____
 24 oz jar of pasta sauce for \$1.99 : _____
 Hamburger Helper box for \$1.50 : _____
 Pop-Tarts for \$1.99 : _____
 24 cans of soda for \$6.99 : _____
 Oreos for \$2.50 : _____
 Lunchable \$1.80 : _____

Total : _____

Where do you currently live?

- On-campus
- Off-campus alone
- Off-campus with dependents
- Off-campus with roommates (this can include your spouse or significant other)
- Off-campus with your parents
- Not applicable

Do you currently have a meal plan?

- Yes
- No
- Refuse to answer

Which meal plan do you have?

- All-Access Meal Plan
- Red 440 Meal Pack
- White 250 Meal Pack

What range does your overall grade point average (GPA) fall into?

- 4.0-3.5
- 3.0-3.49
- 2.5-2.99
- 2.0-2.49
- Lower than 2.0

- Not sure

Do you currently receive financial aid? This includes scholarships, private or federal loans and grants.

- Yes
- No
- Not sure

Besides being a student, do you have a job?

- Yes
- No

How many jobs do you have?

- 1-2
- 3-4
- More than 4

How many hours per week do you work?

- Less than 15 hours
- 15-20 hours
- 21-25 hours
- 26-30 hours
- More than 30 hours

Does the majority of your income come from your job, your parents or another source?

- Job
- Parents
- Other

Do you have credit cards?

- None
- 1-2
- 3-4
- More than 4

Are you enrolled full-time or part-time? (Full-time is more than 12 credit hours for undergraduates and 9 for graduate students, less than these is part-time)

- Full-time
- Part-time
- Not sure

What is your ethnicity?

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Other

When you graduate what is your anticipated annual income?

Please answer the following questions to the best of your knowledge and to the best of your memory.

What is your parents' marital status?

- Married
- Divorced
- Separated
- Never married
- Single
- Not sure

What is your father's highest education level?

- Less than high school
- High school graduate
- Some college
- 2 year degree
- 4 year degree
- Professional degree
- Doctorate

What was your mother's highest education level?

- Less than high school
- High school graduate
- Some college

- 2 year degree
- 4 year degree
- Professional degree
- Doctorate

How willing are your parents to help you pay expenses while you are in college?

- Not at all willing
- Willing if there is an emergency
- Somewhat willing
- Moderately willing
- Very willing

Despite how willing are your parents to help, how able are your parents to help you pay expenses while you are in college?

- Not at all able
- Able to help some if there is an emergency
- Somewhat able
- Moderately able
- Very able

By your best estimate, what socioeconomic category would you say you grew up in?

- Lower class
- Working/ middle class
- Upper middle class
- Upper class
- Not sure

Based on what you can remember, would you say your parents/guardians were good at managing money when you were growing up?

- Extremely good
- Moderately good
- Slightly good
- Neither good nor bad
- Slightly bad
- Moderately bad
- Extremely bad

Based on what you can remember, would you say your parents/guardians made sure to teach you about how to manage your money?

- They discussed money management often
- They discussed money management sometimes

- They never discussed money management
- I do not remember

Based on what you can remember, were your parent's financial struggles ever shared with you growing up?

- Always
- Most of the time
- About half the time
- Sometimes
- Never

Based on what you can remember, did you ever observe your parents/guardians struggle with money, no matter if it was talked about or not?

- Always
- Most of the time
- About half the time
- Sometimes
- Never

Do you have any dependents?

- Yes
- No

Did you take a general finance class or money management course while you were in high school?

- Yes
- No
- I do not remember

Would you say your parents, education or something else influences how you manage your finances?

- Parents
- Education
- Both
- Other

Please tell us what influences how you manage your money

Please choose your level of agreement with the following statements:

I pay my rent/mortgage and other living expenses (i.e. phone, internet and utilities) on time every month.

- Always
- Most of the time
- About half the time
- Sometimes
- Never

I pay my credit card bills on time each month

- Always
- Most of the time
- About half the time
- Sometimes
- Never

I avoid maxing out or going over the limit on my credit cards

- Always
- Most of the time
- About half the time
- Sometimes
- Never

I avoid spending more money than I have

- Always
- Most of the time
- About half the time
- Sometimes
- Never

I have little or no difficulty managing my money

- Always
- Most of the time
- About half the time
- Sometimes
- Never

I pay my credit card bills in full each month to avoid interest charges

- Always

- Most of the time
- About half the time
- Sometimes
- Never

I have a weekly or monthly budget that I follow

- Always
- Most of the time
- About half the time
- Sometimes
- Never

I regularly set aside money each month for savings

- Always
- Most of the time
- About half the time
- Sometimes
- Never

In the following section, please answer the questions based on what you can remember from your childhood.

Did you worry that food at home would run out before your family got money to get more?

- A lot
- Sometimes
- Never

Did the food that your family bought run out, and you didn't have money to get more?

- A lot
- Sometimes
- Never

Did your meals only include a few kinds of cheap foods because your family was running out of money to buy food?

- A lot
- Sometimes
- Never

How often were you not able to eat a balanced meal because your family did not have enough money?

- A lot
- Sometimes
- Never

Did you have to eat less because your family didn't have enough money to buy food?

- A lot
- Sometimes
- Never

Has the size of your meals been cut because your family didn't have enough money for food?

- A lot
- Sometimes
- Never

Did you have to skip a meal because your family didn't have enough money for food?

- A lot
- Sometimes
- Never

Were you hungry but didn't eat because your family didn't have enough food?

- A lot
- Sometimes
- Never

Did you not eat for a whole day because your family didn't have enough money for food?

- A lot
- Sometimes
- Never

Please select the images you think are a balanced meal:





Please answer the following questions with your current situation in mind.

In the last 12 months, I worried whether my food would run out before I got money to buy more.

- Often true
- Sometimes true
- Never true
- I don't know
- Refuse to answer

In the last 12 months, the food that I bought just didn't last and I didn't have money to get more.

- Often true
- Sometimes true
- Never true
- I don't know
- Refuse to answer

In the last 12 months, I could not afford to eat a balanced meal.

- Often true
- Sometimes true
- Never true
- I don't know
- Refuse to answer

In the last 12 months, did you ever cut the size of your meals or skip meals because there wasn't enough money for food?

- Yes
- No
- I don't know
- Refuse to answer

How often did this happen?

- Almost every month

- Some months but not every month
- Only 1 or 2 months
- I don't know
- Refuse to answer

In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?

- Yes
- No
- I don't know
- Refuse to answer

In the last 12 months, were you ever hungry but you didn't eat because there wasn't enough money for food?

- Yes
- No
- I don't know
- Refuse to answer

In the last 12 months, did you lose weight because there wasn't enough money for food?

- Yes
- No
- I don't know
- Refuse to answer

In the last 12 months, did you ever not eat for a whole day because there wasn't enough money for food?

- Yes
- No
- I don't know

- Refuse to answer

How often did this happen?

- Almost every month
- Some months but not every month
- Only 1 or 2 months
- I don't know
- Refuse to answer

END SURVEY

Food	Volume	Price	Servings	Proteins	Carbs	Calories	Comp. Grade
Grains							
Rice	5 lb bag	2.29	11.63 cp	13 g	155g	702	28
Pasta	1 lb	1.00	4.98 cp	12 g	68 g	338	11
Cereal	1 box	2.50	12	3 g	25 g	325	7
Pancake & waffle mix	2 lb	2.30	193.60	7.8 g	29 g	218	9
Macaroni & Cheese	1 box	1.00	3	9 g	47 g	350	11
Loaf of white bread		2.50	22	2 g	13 g	70	9
Frozen waffles	10 ct	2.50	10	2.3g	15 g	100	9
Muffin Mix	7.5 oz	1.50	7.5	1 g	17 g	83	9
Ramen Noodle soup	1 pkg	.25	1	8.3 g	49 g	356	1
Vegetables							
Tomatoes	1 lb	1.29	4.08	1.3 g	3.5 g	18	186
Sweet Potatoes	1 lb	1.29	3.5	2 g	26g	112	181
Frozen vegetables	1 bag	1.00	3	3.2 g	13 g	68	300
Boxed mashed potatoes	1 box	1.50	3	4.5g	30 g	243	181
Canned vegetables	1 can	1.00	1	4.2 g	15 g	80	180
Canned beans	1 can	1.00	1	20 g	54 g	296	64
Fruits							
Apples	1 ct	.50	1	.4 g	21 g	77	53
Bananas	1 lb	.49	3.8	1.3 g	27 g	105	30
Clementine	3 lb	5.00	18.40	.9 g	12 g	47	98
Grapes	1 bag	4.00	3	.6 g	16 g	62	119
Canned Fruits	1 can	1.00	1	1.2 g	41 g	222	54

Frozen fruits	1 bag	1.00	3	1.6 g	60 g	235	56
Diary							
Cottage Cheese	16 oz	2.00	4	12 g	5.4 g	92	28
Milk	1 gallon	2.00	16	7.7 g	12 g	149	31
Large Eggs	12 ct	2.99	12	6.3 g	.4 g	72	31
Cheese sticks	12	3.00	3.7 g	3.7 g	7.4 g	87	11
Cheese slices	15	2.50	15	5.1 g	.5 g	86	11
Meat							
Bacon	12 oz	2.99	12	10 g	.4 g	155	12
Ground Beef	1 lb	3.50	4	24 g	0	172	21
Bologna	16 oz	2.00	16	4.3 g	.2 g	69	12
Chicken breasts	2-3 /pkg	7.75	2-3	61 g	0 g	326	24
Deli Meats	9 oz	3.00	5.32	6.5 g	3.7 g	54	14
Others							
Tofu	15.5 oz	1.79	3.875	13 g	4.4 g	145	82
Jar of pasta sauce	24 oz	1.99	3	5.3 g	34 g	167	100
Hamburger Helper	1 box	1.50	5	3 g	24 g	320	11
Pop-Tarts	1 box	1.99	8	2.4 g	37 g	203	1
Soda	24 cans	6.99	24	0 g	42 g	160	1
Oreos	1 pkg	2.50	10	.5 g	7.7 g	52	1
Lunchable	1	1.80	1	10 g	37 g	330	11