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Determining the Physical and Social Barriers that Prevent Food-Insecure Students at the University of Arkansas from Using the Jane B. Gearhart Full Circle Campus Food Pantry

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Determining the Physical and Social Barriers that Prevent Food-Insecure Students at the University of Arkansas from Using the Jane B. Gearhart Full Circle Campus Food Pantry

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Abstract

The purpose of this descriptive study was to determine the reasons why 38% of the students at the University of Arkansas experience food insecurity, yet only 1% of students have used the Jane B. Gearhart Full Circle Campus Food Pantry, in hopes to provide a guide to the Center for Community Engagement in their endeavors to reduce food insecurity on campus (Lisnic, 2016). An online survey was created using Qualtrics software, was submitted to and approved by the University of Arkansas Institutional Review Board, and was distributed to undergraduate and graduate students at the University of Arkansas. The sample size was 349 students. The survey was composed of a combination of multiple choice and Likert scale-type questions that collected demographic data, assessed food insecurity, and asked the participants to identify barriers that would or do deter them from using the campus food pantry. All answers were recorded anonymously and frequency of responses were statistically analyzed through Qualtrics and IBM SPSS Statistical Analysis Software. The majority of food-insecure participants indicated that they have not used the food pantry because they were unaware of its existence and/or its location. The majority of food-insecure participants who have used the campus food pantry indicated that they hesitated before using the pantry because of perceived negative stigma surrounding the use of emergency food-aid resources. The majority of participants were white, female undergraduate students and indicated that they were unaware of the pantry's existence before taking this survey. Overall, indicated barriers toward the utilization of the food pantry were unawareness of pantry existence, unawareness of pantry location, and perceived negative stigma.

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Introduction

Hunger is defined by the Committee on National Statistics as “a potential consequence of food insecurity that, because of prolonged, involuntary lack of food, results in discomfort, illness, weakness, or pain that goes beyond the usual uneasy sensation” (Coleman-Jensen, Gregory & Rabbits, 2017). The World Health Organization estimates that for the entire world population, one in nine people are suffering from hunger (2016 World Hunger and Poverty Facts and Statistics, 2016). Although the efforts of one researcher cannot end world hunger, efforts can be made to make a dent in the rates of food insecurity on a local level so that, bit by bit, the prevalence of world hunger may be diminished. Food insecurity is defined as a state in which “people do not have the economic, social, and physical resources to shop, cook, and eat in order to ensure a sufficient supply of nutritionally appropriate food” (Purdam, Garratt & Esmail, 2016, p. 1073). With 19.2% of citizens experiencing food insecurity, Arkansas sits at second place for the state with the highest rates of food insecurity in the United States. This study ultimately aims to reduce food insecurity at the University of Arkansas so that food insecurity may also be reduced at the state level and beyond.

Insight into the needs of individuals who are food-insecure is critical to reducing food insecurity rates. At the University of Arkansas, 38% of students experience food insecurity, yet the food-assistance resource that is provided by the university, the Full Circle Campus Food Pantry (FCCFP), is seldom used (Lisnic, 2016). In order to reduce the rate of food insecurity among students, research must be conducted to determine the reasons why the resource is not used, so that it may be adjusted to meet the needs of those students. The FCCFP was opened in 2011 and in 2016, 54% of students were aware that there is a food pantry on campus, yet only 1% of the student population used the pantry (Lisnic, 2016).

The purpose of this study is twofold; to determine both the physical and social barriers which cause low use rates of the pantry. The primary intent of this data is to provide the Center for Community Engagement (CCE) at the University of Arkansas insight into reasons why the food pantry is not being used to its full potential. The CCE runs the food pantry, and therefore is in charge of making any adjustments to the food pantry. The data collected in this study can be used by the CCE to help make any needed adjustments to the pantry; therefore, increasing the use of this important community resource, and theoretically decreasing the rate of food insecurity on campus. The secondary intent of this data is to provide insight to other universities and organizations who are seeking to increase the utilization of their food-assistance resource(s).

Some physical barriers that are predicted to be reasons that some students are not utilizing the food pantry include but are not limited to: a) unawareness of the pantry's existence and/or location b) lack of the physical means to get to the pantry and c) inability to come to the food pantry during the hours that it is open. Some social barriers that are predicted to be reasons that some students are not utilizing the food pantry include but are not limited to: a) those in need may feel that there is a negative stigma that is accompanied by the concept of going to a food pantry b) the fear of being seen by someone that they know while using the food pantry 3) denial of the fact that they are experiencing food insecurity and c) the pantry does not offer a sufficient number of culturally appropriate food choices.

The issue of food insecurity on campus must be researched because food insecurity can pose adverse and sometimes fatal social and health-related consequences. Lee and colleagues (2012) suggest that there is a direct role that food insecurity plays in the onset of the "accumulation of visceral fat and weight gain," chronic disease, and difficulties following a diabetic diet, and that "food insecurity during pregnancy is associated with higher levels of

stress, anxiety, depression, and gestational weight gain and diabetes.” Research shows that some health consequences for children who experience food insecurity are: increased chance of being hospitalized by one-third; an array of nutritional deficiencies that can lead to more severe health implications; increased chances of developing anemia and high cholesterol levels; decreased standardized test performance; a decline in learning abilities in kindergartners; increased number of days missed of school; significant difficulty with participating in the learning process; and increased aggressive, stressed, anxious, withdrawn, and depressed behaviors (Ashabi & O’Neal p.71-77). Health-related and behavioral consequences for adults include but are not limited to: blood pressure levels outside of the normal range among pregnant women, difficulty falling asleep and decreased quality of sleep; significantly decreased Health-Related Quality of Life (HRQoL) scores in older adults, poor cardiovascular health, and significant adult stress which is correlated with parental mental health problems and difficulties raising children (Gundersen, 2015; Morales, et al., 2016; Saiz, et al., 2016; Russel, et al., 2016).

Because of the social and health implications that food insecurity imposes across the life span, and because of the prevalence of food insecurity at the University of Arkansas, measures must be taken to reduce the percentage of students who experience food insecurity. Since only 2% of the student population have used the pantry for assistance, the data to be collected in this study are necessary for the CCE staff to adjust the food pantry to more effectively meet the needs of the food-insecure population.

Literature Review

Preliminary research utilizing agricultural, nutritional, sociological, psychological, and general scientific databases yielded a limited number of studies that research willingness to use food pantries. Therefore, it is evident that new research regarding this topic is necessary. Since

previous research regarding this topic is lacking, this literature review focuses on studies that have researched the quality of life and physical and mental health implications of food insecurity, thus supporting the claim that food insecurity is an issue that must be reduced, and will conclude with examining the results of the research that studies willingness to utilize food programs.

Physiological effects on adults

Although there is little to no research regarding willingness factors to use food pantries, there is a large selection of research that reports the adverse physiological effects of food insecurity on adults. One of the major physiological effects of food insecurity is weight gain (Lee, Gundersen, Cook, Laraia & Johnson; 2012, Morales, Epstein, Marable, Oo & Berkowitz, 2013, Saiz et al., 2016). According to the research, the weight gain that is associated with food insecurity is significant enough to lead to obesity, because “stress conditions and...the presence of high-fat, high-sugar foods secrete stress hormones and insulin, which lead to visceral adiposity and weight gain” (Lee et al, 2012, p. 745, Morales et al., 2013). In turn, obesity is a risk factor for poor cardiovascular health, as are hypertension, diabetes, and dyslipidemia, which have also proven to be significantly associated with food insecurity (Saiz et al., 2016, Morales et al., 2013).

Other potential adverse physiological effects of food insecurity include difficulty in managing diabetes, increased prevalence of smoking, chronic kidney disease, acute infection, and anemia (Lee et al., 2012, Saiz et al., 2016). In addition, when compared to food-secure pregnant women, food-insecure pregnant women are reported to have “higher levels of stress, anxiety, and depression,” increased risk for gestational weight gain, and “over twice the risk of developing gestational diabetes” (Lee et al., 2012, p. 745, Morales et al., 2013). Not only are

these conditions dangerous for the mother, but the present research suggests that these effects may directly influence the onset of chronic disease in the following generations and increase risk of “poor birth outcomes” (Lee et al., 2012, Morales et al., 2013, p. 4).

Physiological effects on children

According to Ashiabi (2008), “severe hunger was predictive of chronic illness for school-aged children.” It is highly reported that children experiencing food insufficiency have “significantly lower intakes” of both carbohydrates (the body’s main source of energy) and essential vitamins (Ashiabi & O’Neal, 2008, para. 15). They are also two times more likely than food-sufficient children to develop iron deficiency anemia (Ashiabi & O’Neal, 2008). In all, “food insecure children were twice as likely to be in fair or poor health, and their odds of being hospitalized increased by a third” (Ashiabi & O’Neal, 2008, para. 15).

Adverse effects on mental health of children and adults

One study summarizes the associations between food insecurity and mental health as “declining physical and mental health was associated with worsening food insecurity status,” and also stated that their findings were “consistent with previous studies conducted in North America” (Russel, Flood, Yeatman, Wang & Mitchell, 2016, p. 55). Research in this area has found correlations between food-insecure and undernourished children and increased “aggressive, destructive...distressed...apathetic...and unresponsive behaviors” (Ashiabi & O’Neal, 2008, para. 19). These children were also less likely to express motivation, and were more likely to report anxiety (Ashiabi & O’Neal, 2008). It is important to address these psychological conditions because they may negatively impact cognitive and academic outcomes in children, due to the fact that they can cause the child to “miss more school” or “find it difficult to participate in the learning process” (Ashiabi & O’Neal, 2008, para. 18). Consequently,

children experiencing food insecurity perform more poorly on academic tests, and kindergarteners nationwide have been recorded to experience a decline in learning as their food-insecurity increases (Ashiabi & O'Neal, 2008).

Additionally, adults who are food-insecure are more likely to experience poor sleeping patterns (Gundersen, 2015). Specifically, food-insecure women sleep for a shorter amount of time than food-secure women do (Gundersen, 2015). Likewise, men who are food-secure report falling asleep quicker than men who are food-insecure (Gundersen, 2015).

Food insecurity and quality of life

Food insecurity is associated with low Quality of Life (QoL) and Health-Related Quality of Life (HRQoL; Russel et al., 2016). In one cohort study of “older adults...both men and women who reported running out of food were significantly more likely to report poor self-rated health than excellent self-rated health” (Russel et al., 2016). Moreover, the participants in this study who were food-insufficient were 2.33 times more likely to self-report their health as poor or fair than those adults who were not food-insufficient (Russel et al., 2016).

Willingness to participate in food programs

Evidently, extensive searches across multiple fields of studies yielded limited research on reasons why people do or do not utilize food pantries and other food programs such as food banks and public school food programs. However, the research that is available supported common yet unfortunate findings: Both surveys and focus groups conducted by Purdam, Garratt and Esmail (2016) and Edwards and Evers (2001) reported that the primary reasons that people do not, or are hesitant to, participate in food programs is embarrassment and shame. Purdam, Garratt and Esmail (2016) even stated that “all [of] the interviewees suggested that they had hesitated before coming to the food bank and most had felt a sense of embarrassment” (p. 1079).

In the study conducted by Edwards and Evers (2001), “adult participants identified parents’ pride as the main barrier to participation in the programs” and explained that “the parents who have more money see the [food] program as ‘not for us but more for those who are underprivileged.’ And the underprivileged ones, because of their pride, they would say: ‘I won’t go into the [food] program. I don’t need my kid to be identified as being underprivileged’” (p. 79). Additionally, one father who participated in the Purdam, Garratt and Esmail (2016) study “commented on how uncomfortable he felt [going to the food bank]: ‘I was nervous coming here, I thought I had done something wrong... having to ask for food your ego takes a battering’” (p. 1079). Participants in both studies reported feelings of “shame and embarrassment,” and feeling that they were being seen as “underprivileged,” “not being able to provide for their families... a failure... [or] a scrounger.” Therefore, the survey conducted in this study will focus primarily on determining the extent to which the participants feel that there is a “stigma associated with receiving food,” and whether or not the perception of that association deters them from utilizing the food pantry on campus (Purdam, Garratt & Esmail, 2016, p. 1079, Edwards & Evers, 2001, p. 79).

Additional deterrents “included insufficient publicity about the programs, multicultural issues, and inadequate program resources” (Edwards & Evers (2001), p. 79). Multicultural issues included a “shortage of translators, cultural food restrictions... unfamiliar foods... ‘not knowing what to do with certain foods...’ and inconvenience” (Edwards & Evers, p. 76,79). Although these barriers were not discussed by the participants as frequently as was the stigma, they may be preventing students in need from utilizing the pantry. Additionally, these barriers require solutions that are more direct and concrete than the solutions needed to reduce or remove the stigma associated with receiving charitable food. Therefore, another major focus of the survey

used in this study will be to analyze the extent to which these secondary issues deter students from utilizing the campus food pantry.

Included in the ultimate goals of these studies were: “to gain insights into...perceived barriers to participation” in food programs, and determine the “concerns [that] food bank users have when visiting a food bank” (Edwards & Evers, 2001, p. 77, Purdam, Garratt & Esmail, 2016, p. 1075). Although the average age of participants in the Purdam, Garratt and Esmail (2016) study was 51 years old, and the participants in the Edwards and Evers (2001) study included parents, teachers, staff, and children, the results from these studies will guide the foci of the survey used in this study (p. 1076, p. 76). Because results were similar across the populations listed above, and because “recent research in the Netherlands has also highlighted how food bank users reported feelings of shame, fear, and being blamed (Horst et al., 2014),” it is appropriate to use the studies analyzed in this literature review to determine which barriers to analyze for the college-student population included in this study (Purdam, Garratt & Esmail, 2016, p. 1083).

Purpose and Objectives

The purpose of this study was to determine the reasons why food-insecure students at the University of Arkansas do or do not utilize the FCCFP. The answer to this question was determined using the following objectives:

- Determine the physical barriers that deter food-insecure students from utilizing the campus food pantry.
- Determine the social barriers that deter food-insecure students from utilizing the campus food pantry.
- Assess food insecurity rates among students at the University of Arkansas.

Study Design

This was a descriptive study. Surveys were sent out to a diverse sample of students from four of the eight colleges within the University of Arkansas via email. Students who responded answered a series of questions which were quantitatively analyzed via Qualtrics, SPSS, and Microsoft Excel and then further interpreted by the researcher to determine the various reasons why students do or do not use the food pantry on campus.

Methods

Participants

Participants consisted solely of undergraduate and graduate students at the University of Arkansas. The participants included Freshmen, Sophomores, Juniors, Seniors, and graduate students from four of the eight colleges within the University of Arkansas.

Sampling

Surveys were sent to a representative of each college within the University of Arkansas who used a ListServe of student emails to forward the survey to every student's email within that college. The actual sample size for this study depended on how many students responded to the survey. The number of survey participants was 349. Therefore, the sample size was 349 students from the University of Arkansas.

Instruments

The instrument used to collect data was an electronic survey that was constructed through Qualtrics.

The survey consisted of 1 consent question, 9 demographic questions (8 multiple choice questions and 1 Likert scale-type question), 6 questions based on determining food insecurity (U.S. Household Food Security Survey Module: Six-Item Short Form:

<https://www.ers.usda.gov/media/8282/short2012.pdf>, all multiple choice questions), 5 questions

that assess the physical barriers to utilizing the food pantry (awareness (1), location (2), accessibility (2), all multiple choice questions), 3 questions that assess the social barriers to utilizing the food pantry (all Likert scale-type questions), and 2 open-ended questions.

Each question was presented on a different page, and each question was of multiple-choice or Likert scale design.

Data Collection

After approval of the University of Arkansas Institutional Review Board (IRB), an email was sent to the dean or an assistant to the dean of each of the eight colleges within the University of Arkansas asking for their permission to send surveys to each of their students. If permission was granted to send the survey, the survey was sent via Qualtrics to a representative of each college who then used a ListServe account to pilot the survey out to each student's university email.

The survey was distributed to the Graduate School and School of International Education on October 7th, to the College of Education and Health Professions on October 9th, to the Dale Bumpers College of Agricultural, Food and Life Sciences on October 10th, and to the Fay Jones School of Architecture and Design on October 25th. The survey was redistributed to the Dale Bumpers College of Agricultural, Food and Life Sciences and to the graduate school on October 26th, and to the College of Education and Health Professions on October 30th. The survey was closed on December 21st. Therefore, the survey was open for 74 days from initial distribution to close. Completed surveys were submitted directly to Qualtrics via a "submit" link that was presented at the end of each survey.

The Walton College of Business and the J. William Fulbright College of Arts and Sciences were unable to distribute the survey to their students due to restrictive policies; the

survey was unable to be distributed to the College of Engineering or the School of Law due to communication barriers.

Data Analysis

When survey responses were submitted, the results were recorded, organized, and quantitatively analyzed via Qualtrics, as this was a one-sample descriptive study. Further quantitative analysis was computed via SPSS Statistical Software and Microsoft Excel. For the two open-response questions, responses were manually assigned a category (as described in Tables 20 and 21) and analysis was carried out as in the previous survey questions.

Results

Raw Data and Data Description

The questions asked in the survey and all responses are illustrated in appendices B, C, and D. The first data-collecting question in this survey was a demographic question and was statistically analyzed in IBM SPSS Statistical Analysis Software using the chi-square goodness-of-fit-test to determine how representative this study sample is of the population. Of the 345 respondents of this study question, 281 were female and 58 were male. A chi-square goodness-of-fit test was conducted to determine whether an equal number of participants from each of the two genders were recruited to the study. The minimum expected frequency was 169.5. The chi-square goodness-of-fit test indicated that the two genders were not equally represented by the participants recruited to the study ($\chi^2(1) = 146.693, p = .000$), with over half of the participants being female. Other genders recruited to this study were cisgender, cisgender female, cisgender male, gender-fluid male, and non-binary. However, the range of participants for each of these genders was 1-2, and the minimum response-rate requirement for the chi-square goodness-of-fit test was 5.

Because an equal ratio of participants is expected for a representative sample of the study population (the student population at the University of Arkansas), this sample is not statistically representative of the population and therefore the responses to the questions in this study cannot be generalized to the whole population. The responses can, however, be used as a starting point and as a guide for the CCE should they want to make changes to the food pantry with the goal of reaching more students who are in need.

Questions 3-7 & 23-25: Demographics. As evidenced by the chi-square goodness-of-fit test performed for question number two, the demographic question responses are not representative of the whole student body at the University of Arkansas. However, of the participants of this study: the majority were ethnicity of white (86.96%), were of age range 16-25 years old (73.62%), did not have a meal plan (71.57%), were either seniors or graduate students with an almost equal response rate for both (23.45% and 23.73%, respectively), live off-campus (78.07%), either taught themselves to cook or learned to prepare food from family/friends, and highly agree that they feel confident in preparing a meal for themselves.

Questions 9-14: Food Insecurity Short Form. Responses to the U.S. Household Food Security Survey Module: Six-Item Short Form short-form were analyzed using Microsoft Excel via the coding system as designed and instructed by the U.S. Household Food Security Survey Module: Six-Item Short Form Economic Research Service, USDA September 2012 User Notes. There were 349 participants who responded to the short-form. Based on responses, 244 responders qualified as having “high or marginal food security,” 61 responders qualified as having “low food security,” and 44 responders qualified as having “very low” food security.

Based on the total respondents, 69.91% of this sample has “high or marginal food security,” 17.48% of this sample has low food security,” and 12.61% has “very low” food

security. It can therefore be inferred that 30.09% of the sample experienced some level of food-insecurity in the last 12 months. This percentage is similar to that presented in Rodica Lisnic's 2016 Student Food Insecurity Report.

Questions 15-18 & 22: Physical barriers to using the food pantry. When inquired about awareness of the food pantry, the majority (44.65%) of respondents indicated that before taking the survey, they were not aware that there is a food pantry on campus. Likewise, the majority (73.70%) of responders indicated that they do not know where the food pantry is located. Furthermore, the majority (57.56%) of responders indicated that their unawareness of the pantry's location would prevent them or would make it very difficult to use the pantry if they needed to. The majority (79.38%) of respondents indicated that the pantry hours of operation would allow them to use the pantry if they needed to. Of the 67 participants who indicated that the pantry hours would not work for them, 34% (23 participants) qualified as either low or very low food security. In other words, 22% of participants who qualified as having some level of food insecurity are unable to utilize the food pantry due to the current hours of operation. The majority (92.17%) of respondents did not know what food options are offered at the pantry.

Questions 19-21: Social barriers to using the food pantry. The majority (45.99%) of participants indicated that they would "probably" feel too embarrassed to use the food pantry if they needed, the majority (24.23%) of participants indicated that they "might" worry that others would think negatively of them if they were seen using the pantry, and the majority (69.44%) of participants indicated that using the food pantry would or does cause them to feel ashamed or like they have failed.

Questions 26-27: Barriers to using the food pantry- open-ended questions. Of all of the participants who have experienced food insecurity in the past but have not used the food

pantry, the majority (38.00%) indicated that they did not use the food pantry because they were unaware of its existence. Of all of the participants who have experienced food insecurity in the past and used the food pantry but hesitated before using it, the majority (21.74%) indicated that they hesitated because of the negative stigma surrounding using a food pantry. Complete, original participant answers that fall under all answer categories except for “does not answer the question” are presented in Appendices B and C. Any responses that included personal/identifiable information were abbreviated to leave out any potentially identifiable information. All responses are presented exactly as they were recorded- with the exclusion of identifiable information- including grammatical and spelling errors.

Discussion and Conclusion

The purpose of this study was to determine why food-insecure students at the University of Arkansas do not use the FCCFP; specifically, the objectives of this study were to a) determine the physical barriers that deter food-insecure students from utilizing the campus food pantry b) determine the social barriers that deter food-insecure students from utilizing the campus food pantry and c) assess food insecurity rates among students at the University of Arkansas. This study successfully completed the objective primarily through questions 26 and 27 and the U.S. Household Food Security Survey Module: Six-Item Short Form. Perhaps a more effective way to answer the first two study objectives would have been to design the survey in a manner that filtered out food-secure individuals in the beginning so that the other questions geared towards determining the barriers would only be answered by food-insecure students. However, data for the food-secure and food-insecure student population still has the potential to provide the CCE with useful insight into reasons why the food pantry usage is low to guide future efforts to increase pantry usage. Overall, the majority of both food-secure and food-insecure participants

indicated that pantry usage is low due to unawareness of the pantry's existence and location. It is also important to note that for all questions that assessed perception of stigma, the majority of students indicated that they do perceive a negative stigma towards having to use a food pantry. It is important to keep this in mind because if efforts are made to increase awareness of the food pantry, usage may not increase to an ideal amount if efforts to reduce perceptions of negative stigma are not also made. Further research should be conducted to determine what strategies would be most effective in increasing awareness and reducing the negative stigma associated with the Jane B. Gearhart FCCFP.

Overall, the results of this study are similar to those of the studies conducted by Purdam, Garratt and Esmail (2016) and Edwards and Evers (2001). Feelings of shame and embarrassment and unawareness of program existence were identified as the major barriers to utilizing food aid resources in the background research as well as in this study. However, previous studies identified negative stigma as being the most predominantly identified barrier by participants whereas this study identified physical barriers such as unawareness of pantry existence as the predominant barrier. It may then be concluded, when applying these data sets to practice, that the predominant barrier to using a food aid resource will most likely be unique to that community. However, previous studies and this study indicate that evaluating stigma and physical barriers may be an efficient place to start when assessing barriers to food pantry usage in other areas.

When applying this data to practice, it should also be kept in mind that solely catering to the majority may not effectively decrease the gap between student food insecurity and student pantry usage. Careful consideration of all identified barriers of pantry usage should be made in order to make a well-rounded and effective change to the pantry. For example, the majority of respondents indicated that the reason the location of the food pantry would deter them from

using it would be that they simply do not know where the pantry is located. It would be a relatively simple fix to increase awareness of pantry location compared to physically relocating the pantry or altering its accessibility (Question 17). However, it may be necessary to consider the minority responses of this particular question (“Yes, the pantry is too far from where I live” and “yes, the pantry is too far from my mode of transportation or from the next place that I need to go”), because one participant responded to Question 26 explaining that although they experience food insecurity, they do not use the pantry due to physical disability, and another participant indicated that although they experience food insecurity, they cannot use the pantry because they would have to walk too far of a distance with bags of food. Because the minority of this study (30.09%) qualified as food-insecure, solutions to the minority answers should be evaluated for cost-effectiveness and the possibility of including those solutions in addition to the solutions for the majority answers.

The Jane B. Gearhart FCCFP serves about 350 patrons per week and has consistently sought to make advancements to the pantry in order to reach more who are in need, such as the initiation of their raised garden beds, the “mobile pantry”, and the “mini pantries” (Lancaster, 2018). This student-initiated pantry is a valuable emergency food aid resource for those in need at the University of Arkansas. The purpose of this research was to collect data on the reasons why so few food-insecure students use the pantry to serve as a resource that may guide their future endeavors to reach more in-need students at the University of Arkansas and reduce food insecurity rates overall on campus, in Northwest Arkansas, and in the greater Arkansas state as a whole.

Limitations and Strengths

Strengths of this study include the use of a government-created and –regulated questionnaire to assess food insecurity, the requirement of students to submit their responses anonymously, the use of Qualtrics, Microsoft Excel, and SPSS for data analysis, and the novelty of and need for this study within the University of Arkansas and the greater research world. The use of the U.S. Household Food Security Survey Module: Six-Item Short Form allowed for a standardized means of assessing food insecurity while removing potential for personal bias in this assessment. The design of the study to record responses in complete anonymity may have increased participation by ensuring students that their responses would remain completely confidential and untied to any personal information. Finally, the utilization of Qualtrics, Microsoft Excel, and SPSS to analyze the raw data reduced potential for human error in statistical analysis.

The major limitation of this study was the sample size and sample characteristics. The sample would have been more representative of the entire student body if the College of Engineering, the School of Law, the Walton College of business, and the Fulbright College of Arts and Sciences had been included in the survey distribution. However, efforts were made to include these colleges (via email and in-person contact with the dean and/or by contacting professors within the college directly), and insight was gained on how to include participants from these colleges for potential future studies of similar nature (i.e., sending the survey link out in the University of Arkansas Newswire, posting it to the University of Arkansas Facebook page or other social media pages, submitting the survey to the University of Arkansas newspaper *The Traveler*, etc.). Another limitation of this study is that food-secure students were included in the survey as opposed to solely food-insecure students. Although it was not intended to only include food-insecure students, designing the survey to only include those students may have yielded a

more accurate identification of the barriers that prevent food-insecure students from using the food pantry, as was the intention in the purpose and objectives of the study. However, obtaining information as to why food-secure students may be deterred from using the pantry or would be hesitant to use the pantry is also valuable because these students may also become food-insecure during their time as a student at the University of Arkansas, and therefore their opinions and perceptions matter as well. Furthermore, those who are faced with the decision of having to use the food pantry and feel the burden of a negative stigma typically worry about what those who are *not* in need of the pantry will think of them, so it is therefore valuable insight to have obtained an assessment of food-secure students' perceptions of stigma surrounding the usage of food pantries. Finally, although the use of the U.S. Household Food Security Survey Module: Six-Item Short Form allowed for a more accurate representation of student food insecurity than non-standardized strategies such as questions designed by the principle researcher of this study, it also qualifies as a third limitation. The Short Form acts as a limitation because the USDA provides longer, more comprehensive questionnaires to assess food insecurity, as utilized in Rodica Lisnic's 2016 Student Food Insecurity Report. The differences in the six-item questionnaire used in this study and the ten-item questionnaire used in the 2016 study may contribute to the discrepancy in calculated overall student food-insecurity rates. Therefore, this study may have yielded a higher or lower rate of overall food-insecurity among students had a longer questionnaire been used. However, the six-item questionnaire was appropriate for this study because adding more questions may have decreased participation; therefore, using the short-form may have increased the sample size for this study.

Acknowledgements

Sarah Elizabeth Yanniello served as the initiator, principle researcher, and author of this study. Mrs. Mechelle Bailey, MS, RDN, LDN functioned as the honors thesis faculty mentor and head of the honors thesis committee. Dr. Catherine Shoulders, BS, MS, MA, PhD and Dr. Jennifer Becnel, BA, MA, PhD functioned as the honors thesis committee members. Mrs. Mechelle Bailey, Dr. Catherine Shoulders, and Dr. Jennifer Becnel all contributed vital intellectual content and suggestions to the study including but not limited to: expert suggestions in designing the study, statistical analysis, and data interpretation. Their time, effort, and support is sincerely appreciated, and without their expertise, creating and conducting this research study would not have been possible. Ms. Isabel Whitehead, BS also contributed to the study by providing suggestions for the study design and by reviewing and editing the study to ensure that all requirements were met through the Dale Bumpers College of Agricultural, Food and Life Sciences Honors Program through her role as an Honors Program Graduate Assistant. A special thanks also goes to Ms. Claire Allison, BA, MPA as the Assistant Director for the Center for Community Engagement (CCE) for her collaboration on and support of the study in hopes to use this data to make advances to the food pantry and other CCE programs. Finally, thanks and acknowledgement are presented to the entirety of the Dale Bumpers College Honors Program for their years of work and dedication which has allowed students of the honors program to conceive, design, and complete honors research of varying topics that coincide with students' unique interests and ideas.

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Appendix A

University of Arkansas Institutional Review Board Protocol Form



UNIVERSITY OF ARKANSAS

Office of Research Compliance
Institutional Review Board

August 31, 2017

MEMORANDUM

TO: Sarah Yanniello
Mechelle Bailey

FROM: Ro Windwalker
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 17-08-036

Protocol Title: *Determining the Physical and Social Barriers that Prevent Food-Insecure Students at the University of Arkansas from Using the Full Circle Campus Food Pantry*

Review Type: EXEMPT

Approval Date: 08/31/2017

Your protocol has been approved by the IRB. We will no longer be requiring continuing reviews for exempt protocols.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

Appendix B

Survey Questions and Responses

Questions 2-7 & 23-25: demographics.

Table 1

Answers to “Please indicate your gender below.”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Female	281	81.45%
Male	58	16.81%
Cisgender	2	0.58%
Cisgender female	1	0.29%
Cisgender male	1	0.29%
Gender fluid male	1	0.29%
Non-binary	1	0.29%
Total	(n = 345)	

Table 2

*Answers to “Please choose the answer below that **best** describes your ethnicity.”*

<u>Answer choice</u>	<u>f</u>	<u>%</u>
American Indian or Alaska Native	7	2.03%
Asian	13	3.77%
African American	5	1.45%
Native Hawaiian or other Pacific Islander	0	0.00%
White	300	86.96%
Other	20	5.80%
Total	(n=345)	

Table 3

*“Which range below best represents your age **in years**?”*

<u>Answer choice</u>	<u>f</u>	<u>%</u>
16-25 y/o	254	73.62%
26-35 y/o	60	17.39%
36-45 y/o	20	5.80%
46-55 y/o	8	2.32%
56-65 y/o	3	0.87%
Above 65 y/o	0	0.00%
Total	(n = 345)	

Table 4

Answers to “Do you have a meal plan? If so, please select the meal plan that you have below.”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Unlimited Plus (Unlimited Meals + \$150 Flex Dollars)	7	2.03%
Unlimited (Unlimited Meals + \$50 Flex Dollars)	9	2.62%
15-Meal Plus (15 meals per week + \$175 Flex Dollars)	18	5.23%
15-Meal (15 Meals per Week + \$75 Flex Dollars)	14	4.07%
10-Meal (10 Meals per Week + \$125 Flex Dollars)	20	5.81%
Junior/Senior (7 Meals per Week + \$115 Flex Dollars)	2	0.58%
Off-Campus 1 (80 meals per Semester + \$50 Flex Dollars)	2	0.5%
Off-Campus 2 (25 Meals per Semester + \$65 Flex Dollars)	11	3.20%
Off-Campus 3 (50 Meals per Semester + \$500 Flex Dollars)	15	4.36%
I do not have a meal plan.	246	71.57%
Total	(n = 344)	

Table 5

Answers to “Which classification below **best** represents your year in college? Select all that apply.”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Freshman	64	18.08%
Sophomore	44	12.43%
Junior	61	17.23%
Senior	83	23.45%
Graduate Student	84	23.73%
Transfer Student	18	5.08%
Total	(n = 354)	

Table 6

“Do you live on-campus or off-campus?”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
On-campus	75	21.93%
Off-campus	267	78.07%
Total	(n = 342)	

Table 7

Answers to “Which of the following **most accurately** describes your experience, knowledge, and comfort regarding food preparation? Select **all** that apply.”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
I have taken classes or have been trained in food preparation	76	12.93%
I have taught myself how to prepare food	206	35.03%

I have learned to prepare food from friends/family	245	41.67%
I have very little experience with food preparation	48	8.16%
I have no experience or education regarding food preparation	13	2.21%

Table 8

Answers to “To what extent do you agree with the statement below? ‘I feel confident that I could prepare a meal for myself and that I would be comfortable while doing so.’”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Highly agree	234	72.67%
Somewhat agree	46	14.29%
Agree	34	10.56%
Disagree	5	1.55%
Somewhat disagree	3	0.93%
Highly disagree	0	0.00%
Total	(n = 322)	

Table 9

Answers to “Which of the following do you have access to on a daily basis? Select all that apply.”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
A kitchen	280	88.88%
A table or counter space to prepare food	289	91.74%
Oven	273	86.67%
Stove/cooktop	273	86.67%
Microwave	307	97.46%
Toaster	224	71.11%
Can opener	255	80.95%
Knives	289	91.74%
Plates	303	96.19%
Forks, spoons, or other cutlery	313	99.37%
Plates or bowls	301	95.56%
Refrigerator	315	100.00%
Freezer	293	93.02%
Containers to store food in	274	86.98%
Total	(n = 315)	

Questions 9-14: Food Insecurity Short Form.

Table 10

Raw scores per participant from the 6-Item Food Insecurity Short Form

<u>Raw Score</u>	<u>Category of Food Security</u>	<u>f</u>
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0	High or Marginal	189
1	High or Marginal	55
2	Low	33
3	Low	15
4	Low	13
5	Very Low	14
6	Very Low	30
Total		(n = 349)

Table 11

Frequency and percentage of respondents of each level of food security

<u>Category of Food Security</u>	<u>f</u>	<u>%</u>
High or Marginal Food Security	244	69.91%
Low Food Security	61	17.48%
Very Low Food Security	44	12.61%
Total	(n = 349)	

Questions 15-18 & 22: Physical barriers to using the food pantry.

Table 12

Answers to “The campus food pantry is open to anyone with a University of Arkansas ID. This includes students, faculty, staff, and anyone else who may have a University ID. There are no other requirements that must be met to use the food pantry- anyone with a University ID, regardless of income, race, ethnicity, age, etc. is eligible to utilize the food pantry. Before taking this survey, were you aware that there is a food pantry on campus that is open to anyone who has a university ID?”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Yes	106	32.42%
No	146	44.65%
I knew that there is a pantry on campus but I did not know if I could use it or not	75	22.94%
Total	(n = 327)	

Table 13

Answers to “Do you know where the food pantry is located?”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Yes	46	14.07%
No	241	73.70%
I have been there before, but do not remember where it is	7	2.14%
I have a general idea of where it is, but am not sure exactly how to get there	33	10.09%
Total	(n = 327)	

Table 14

Answers to “If you needed to use the food pantry, would the location of the food pantry keep you from using the food pantry or make it very difficult to use the pantry? Check all that apply.”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Yes, the pantry is too far from where I live	12	3.49%
Yes, the pantry is too far from my mode of transportation or from the next place that I need to go	14	4.07%
Yes, I do not know where the food pantry is located	198	57.56%
No	120	34.88%
Total	(n = 344)	

Table 15

Answers to “The pantry hours are currently Monday from 11-3, Wednesday from 3-5, and Thursday from 10-2. Would you be able to come to the pantry during any of these hours if you needed to?”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Yes	258	79.38%
No	67	20.62%
Total	(n = 325)	

Table 16

Answers to “How do you feel about the food choices available at the food pantry? Check all that apply.”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
I am always pleased with the options that the pantry has in-stock	5	1.51%
I am pleased most of the time with the options that the pantry has in-stock	5	1.51%
I am sometimes pleased with the options that the pantry has in-stock	5	1.51%
The food pantry does not carry options that I am used to cooking/consuming	3	0.90%
The food pantry does not carry enough options that fit my cultural background	3	0.90%
The food pantry does not carry enough options that I want to consume	4	1.20%
The food choices available keep me from using the pantry	1	0.30%
I do not know what options the food pantry offers	306	92.17%
Total	(n = 332)	

Questions 19-21: Social barriers to using the food pantry.

Table 17

Answers to “Do you/would you feel too embarrassed to use the food pantry if you needed to?”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Definitely yes	32	9.88%
Probably yes	149	45.99%
Probably not	116	35.80%
Definitely not	27	8.33%
Total	(n = 324)	

Table 18

Answers to “If you were faced with the decision of needing to use the food pantry, would you worry that others may think negatively of you if they saw you going to the pantry?(Check all that apply)”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
Definitely yes	31	7.36%
Probably yes	72	17.10%
Maybe	102	24.23%
Probably not	73	17.34%
Definitely not	33	7.84%
Yes, and it would cause me to not use the food pantry	29	6.89%
Yes, but I would still use the food pantry if I needed to	81	19.24%

Table 19

Answers to “Would/does using the food pantry cause you to feel ashamed or like you have failed?”

<u>Answer choice</u>	<u>f</u>	<u>%</u>
I do/would strongly feel this way	32	9.88%
I do/would feel this way to some degree	225	69.44%
I definitely would not/do not feel this way	67	20.68%
Total	(n = 324)	

Appendix C*

Participant Open-Ended Answers to Question 26

*Some answers are repeated in other categories because the response qualified for more than one category.

Table 20

*Answers to “Food insecurity is defined by the USDA as “a household-level economic and social condition of limited or uncertain access to adequate food.” If you feel you have ever experienced food insecurity during your time as a student at the University of Arkansas and did not use the campus food pantry, please indicate why in the space below. If you **have** used the food pantry, please leave this answer blank and proceed to the next question. If you feel that you have never experienced food insecurity, or that you have never needed to use the food pantry, please leave this answer blank and proceed to the next question.”*

<u>Answer category</u>	<u>Responses</u>
Unaware of pantry existence	<ol style="list-style-type: none"> 1. “I did not know that the University of Arkansas had a food pantry for students.” 2. “I have experienced food insecurity but don't know that there is a food pantry at the University” 3. “I did not know there was a food pantry that existed...” 4. “did not know it was available” 5. “In undergrad I definitely experienced food insecurity. I did not know about the food pantry then...” 6. “I didn’t know that it exists.” 7. “No idea campus had a food pantry, but also the hours seem very limited even if I had known.” 8. “I never knew we had a food pantry” 9. “Was not aware there was a food pantry.” 10. “I never knew that there was a food pantry” 11. “I did not know there was a pantry” 12. “I have never known of a food pantry, and have opted for the local ones around NWA” 13. “I experience light food insecurity, but don't necessarily go hungry (all the time). The biggest issue is buying unhealthy food because healthier foods are too expensive to eat every day, and especially 3 square meals a day. I didn't know we had a food pantry on campus. I don't know if this will change my use of the pantry. I feel like there are others who will benefit from its use more than me.” 14. “Didn't know there was a food pantry and don't know it's location” 15. I don't know that University of Arkansas has food pantry and don't know where thr food pantry is” 16. “I did now know that the university offered a good pantry for students. If I would have known, I most definitely would have utilized it at this point. There have been many times where a food pantry would have been useful in my life...” 17. “I didn’t know it existed” 18. “I had no idea there was a food pantry”
I don’t deserve pantry	<ol style="list-style-type: none"> 1. “...and I feel that it reflects poorly on me as a person as well as on the college (we are compensated more highly than other graduate

Stigma

-
- students). I feel that because I am older, I no longer have the right to ask for help and I am concerned that there are others who are in more dire conditions.”
2. “Money has been really tight the past couple months, but I feel that using a food pantry would only be in case of a severe emergency. I would probably turn to family members before it got to that point.”
 3. “When I want to save money or i have extra bills to pay that month, I usually cut on the amount of groceries I buy. It would be nice to go to the pantry when i don't have the money but I feel i don't need the assistance as much as others. I would feel like I'm burdening the system by taking away from others who need the pantry more.”
 4. “I experience light food insecurity, but don't necessarily go hungry (all the time). The biggest issue is buying unhealthy food because healthier foods are too expensive to eat every day, and especially 3 square meals a day. I didn't know we had a food pantry on campus. I don't know if this will change my use of the pantry. I feel like there are others who will benefit from its use more than me.”
 5. “I have not used the pantry and feel that other people are worse off than I am.”
 6. “I have not eaten a few meals because I didn't have any left in my meal plan and wanted to save money, but I've never felt like I have any real right to use the food pantry since I'm from a well off family and know that their are people who truly need while I don't feel like that's the case for me.”
 7. “I felt I did not need it as much as others, and therefore should let others take advantage of it.”
 8. “I do not feel like my situation is dire enough to justify using the food pantry/taking resources that could go to those who have a greater need.”
 9. “I was never sure if my situation was bad enough to use it. I didn't want to take away from students that needed it more than me. I also don't know where it is.”
 10. “I am in student debt from my undergrad...never used the food pantry because I thought it was for poor people. I always had access to food but at the expense of debt...I am not who the kitchen is designed for...However, for some reason I feel that the kitchen is for the homeless or those that have less than myself. I do not want to be greedy or take from others that need it more.”
1. “I feel that it reflects poorly on me as a person as well as on the college (we are compensated more highly than other graduate students). I feel that because I am older, I no longer have the right to ask for help and I am concerned that there are others who are in more dire conditions.”
 2. “Embarrassment because of its very public on-campus location.”
 3. “I have felt food insecurity often. I often can only afford quickly prepared foods that are filled with preservatives and make me feel
-

	<p>awful after consuming. Although I try to buy vegetables and fruit instead when I do have money, they are usually the first ones eaten. I feel like I do not have the nutrition in my meals necessary. I am disabled and unemployed with limited income and mobility. The foods on campus are expensive as well. I have not used the pantry except for once because of the fear of falling trying to walk to it, I do not know the days or hours open and feelings of shame.”</p> <p>4. “I know people who work in the food pantry and feel it is too personal of a problem to share with people I know acquainted with.”</p> <p>5. “I have faced food insecurity but have never used the food pantry. I would feel like a failure if I did use it. There is a general notion that only poor people use such resources. Since success is measured by how much money you have, using a food pantry would make me identify with poor people and thus, as a failure.”</p> <p>6. “I am too ashamed to use it.”</p> <p>7. ““I am in student debt from my undergrad...never used the food pantry because I thought it was for poor people. I always had access to food but at the expense of debt...I am not who the kitchen is designed for...However, for some reason I feel that the kitchen is for the homeless or those that have less than myself. I do not want to be greedy or take from others that need it more.””</p>
<p>Unaware of pantry location Bad location</p>	<p>1. “I learned about the food pantry in a class project but never hear of it generally around campus and to that extent have no idea where is it located.”</p> <p>2. “I don’t know where the food pantry is located.”</p> <p>3. “I did not know where it was located or that I was able to use it with my student ID”</p> <p>4. “Didn't know there was a food pantry and don't know it's location”</p> <p>5. “don't know that University of Arkansas has food pantry and don't know where thr food pantry is”</p> <p>6. “was never sure if my situation was bad enough to use it. I didn't want to take away from students that needed it more than me. I also don't know where it is.”</p> <p>7. “I didn't know where it was and I rationalized that skipping meals or eating less than a balanced diet wasn't terrible”</p> <p>1. “Because I live 3 and 1/2 hours from campus”</p> <p>2. “I have felt food insecurity often. I often can only afford quickly prepared foods that are filled with preservatives and make me feel awful after consuming. Although I try to buy vegetables and fruit instead when I do have money, they are usually the first ones eaten. I feel like I do not have the nutrition in my meals necessary. I am disabled and unemployed with limited income and mobility. The foods on campus are expensive as well. I have not used the pantry except for once because of the fear of falling trying to walk to it, I do not know the days or hours open and feelings of shame.”</p>

Bad hours	<ol style="list-style-type: none"> 3. "I live off campus and there is no parking close to the food pantry that I can park in, which means it takes a long time to get there and I would have to walk a distance with the food." 1. "No idea campus had a food pantry, but also the hours seem very limited even if I had known." 2. "I tried to use the food pantry, but the hours didn't work for me since I had to teach. When I reached out to make arrangements for after hours pick up, they always said they would leave a bag out for me but whenever I went to pick it up, it was never there." 3. "I am often incredibly busy as a graduate student and am usually working or unable to go to the pantry and then take the food home immediately. If it was able to be open after work hours, I would be able to go to the pantry and then go home with the groceries."
Unaware that eligible	<ol style="list-style-type: none"> 1. "did not know where it was located or that I was able to use it with my student ID" 2. "I wasn't desperate for food. I just wasn't able to do other things so I could afford food. I also didn't know the food pantry was for anyone" 3. "I wasn't aware I was eligible for the food pantry"
Lack of food prep knowledge	<ol style="list-style-type: none"> 1. "I did not know there was a food pantry that existed. With it being somewhat serendipitous to taking this survey, I have begun to prep meals in the past few weeks. This has come from watching YouTube... making time for preparing and cooking healthy meals slips down the priority list even though, speaking for myself, know of the benefits. Willful short-mindedness, if you will. Admittedly, having a food pantry, would not fully solve the issue of preparing meals that can last in the fridge or freezer that I've had to learn. Understandably, that is a whole other matter. So to me, there's the need to 1) have the ability of access to food, which the pantry would provide, but there's also 2) the need to prepare healthy AND assorted foods, and 3) the knowledge of storing that food as to not let it waste. I, like many, have come to ask my grandparents and parents a great deal of questions... as to what foods are probably good if left for later. In saying all this, I often wonder if the University of Arkansas offers "How to meal prep for those who are losing their mind from not eating turnips, which they love!?"
Not desperate enough to use	<ol style="list-style-type: none"> 1. "I wasn't desperate for food. I just wasn't able to do other things so I could afford food. I also didn't know the food pantry was for anyone"
Rationalized skipping meals	<ol style="list-style-type: none"> 1. "I didn't know where it was and I rationalized that skipping meals or eating less than a balanced diet wasn't terrible"
Total	(n = 50 respondents)

Note: There were 50 participants who responded to this question. However, some answers fell under more than one category and the table indicates the answers as such.

Appendix D*

Participant Open-Ended Answers to Question 27

*Some answers are repeated in other categories because the response qualified for more than one category.

Table 21

Answers to “If you have used the campus food pantry but hesitated before using it, please indicate why you hesitated in the space below. If you did not hesitate before using the campus food pantry, please type ‘I did not hesitate’ in the space below. If you feel that you have never experienced food insecurity, or that you have never needed to use the food pantry, please leave this answer blank.”

<u>Answer Category</u>	<u>Responses</u>
Stigma	<ol style="list-style-type: none"> 1. “I hesitated because I thought maybe some friends will see me there, and the food provided there will not solve my need problem.” 2. “I hesitated because I did not know what the process to obtain food would be like or what food options would be available for me. I also hesitated because I didn't want people to think less of me.” 3. “I have no used it, but may feel hesitant due to judgment of one thinking I do not deserve to use it or the fact that I simply don't have extra money for food sometimes.” 4. “There is a certain dignity that is lost when a person asks or receives a handout. My human instinct is to provide for myself. My pride sometimes stands in the way. You strip me of my dignity if you offer me a seat at a soup kitchen. That dignity can remain in tact if I am able to prepare and share a meal that I choose to. There is a difference in being able to go out and get all the ingredients that I want and invite the company I choose to enjoy that meal. But subjecting a person to standing in line for handouts (not of my choosing) or joining a group of similarly situated strangers for a bowl of soup is too degrading for some people. Instead we hold on to our pride and do without until we can provide for ourselves.” 5. “Would feel like I failed myself”
Did not hesitate	<ol style="list-style-type: none"> 1. “I did not hesitate” 2. “I did not hesitate” 3. “I did not hesitate” 4. "I did not hesitate”
Pantry location	<ol style="list-style-type: none"> 1. “Distance from home” 2. “I hesitated because the hours didn't work and it was in a hard location to get to”
Pantry options	<ol style="list-style-type: none"> 1. “No one understands that food is life. What you eat is what your body becomes. I eat organic food: food without man-made chemicals. I do not eat much sugar and certainly not conventional commercial food products invariably made with HFCS, preservatives, dyes and myriad synthetic materials. I would rather NOT eat, than eat that kind of thing. I had been told that the pantry had a community garden and there might be fresh vegetables in the Fall. When I went there were only a few tomatoes and no one could tell me if they'd been grown with or without chemicals. I think the pantry is a great idea for most people ~ most people don't care a whit about what they shove in their mouths. However, I will not be using it.”

	2. "I hesitated because I thought maybe some friends will see me there, and the food provided there will not solve my need problem."
Pantry hours	1. "I hesitated because the hours didn't work and it was in a hard location to get to"
Unfamiliar with pantry system	1. "I hesitated because I did not know what the process to obtain food would be like or what food options would be available for me. I also hesitated because I didn't want people to think less of me."
Total	(<i>n</i> = 23 respondents)
<p>Note: There were 23 participants who responded to this question. However, some answers fell under more than one category and the table indicates the answers as such.</p>	