# Consumer agency and food retailer choice in an American urban neighborhood

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#### **ABSTRACT**

This study examines the issue of consumer agency within the food system as manifested by food secure and food insecure households in an urban neighborhood in the United States. Using a self-administered mail survey this study examines food retailer perception and shopping behaviour of food secure and insecure households in Lansing, Michigan. Food security represents a useful lens through which to examine the issue of agency since food, while a necessary part of life, is nonetheless something that is difficult to access for a large sector of the population. By examining both food secure and food insecure households, light is shed on some of the factors that lead to the relative ability of each group to successfully and reliably obtain food. In particular, this study focuses on the perception and behaviour of consumers in relation to the decision to shop, or not to shop, at various food retailers. Some theories of consumer behaviour tend to focus either on class related cultural elements which determine taste preferences while other theories focus on structural elements of the food system which force a limited selection onto various social groups. While certainly class culture influences taste preference to some extent, results from this study suggest that structural elements of the food system and economic differences between food secure and food insecure households have a larger influence on store choice than cultural preferences. In fact, both food secure and insecure households indicated similar sets of criteria used in determining store choices. However, in examination of actual shopping behaviours, this study found that food insecure households are more likely to shop at deep discounters and more likely to travel farther to obtain food. These results suggest that structural elements such as food retailer locations limit the range of shopping options of food insecure households when compared to food secure households.

Keywords: food desert, food access, food security, consumer, food retailer

In many ways, the act of consuming food is exemplary of the relationship between individual decisions and social structures. At one level, eating is an act that is influenced by individual taste preferences and nutritional requirements. On the other hand, eating represents the expression of a set of socially constructed symbols, the manifestation of culturally determined taste preferences, and a decision constrained by a variety of social structures. We eat what we want, but our wants have themselves social roots and are constrained by the foods that we can obtain. The lines that exist between the individual decision and the social structures that constrain and/or enable those decisions are not well understood, in part due to the large number of decisions and actions required to procure, prepare, and consume food. Understanding these lines is important as it allows us to ask some fundamental questions related to who is being included in, or excluded from, the conventional food system. Who has the ability to achieve one's food consumption goals using the resources at hand? In other words, who has agency?

Measures of food security, such as that annually conducted by the United States Department of Agriculture, may provide us with some insight into the differing levels of agency that exist between different groups in the food system. According to the USDA, food secure households are those that "have consistent, dependable access to enough food for active, healthy living" (Nord, Andrews, Carlson, 2006, p. iv). Being food secure does not simply mean that one is included within or has agency within the conventional food system. Simplistic perspectives of agency which assume that food insecure households lack agency while food secure households have it, must be avoided. Agency is best understood as a continuum. Food insecure and secure households clearly differ in their ability to obtain food from the conventional food system—the question is how and why do they differ? This study involves comparisons along two dimensions: 1) differences in perception of food retailers; and 2) differences in behaviour in terms of food retailer selection. Based on a survey of 302 households conducted in an urban Midwestern American neighborhood, this study makes the point that food secure and food insecure individuals often share similar perceptions of the food retail environment. However, due to a limited ability to negotiate the retail environment, food insecure individuals are forced to develop procurement strategies that prioritise cost.

#### LITERATURE REVIEW

The process of procuring food is complicated. In fact, Wansink and Sobal (2007) estimate that people make well over 200 decisions regarding the how much, when, what and who of food consumption on a daily basis. Wansink and Sobal (2007, p. 108) note that these decisions are based in part on personal norms (i.e. habit), but that "the norms can also be altered on any given occasion by the environmental cues around that person". While, as those authors note, the vast majority of food decisions are not consciously made, this does not detract from the importance of understanding the nature and reasons for the decisions that people make.

Some scholars such as Greder and Brotherson (2002) and Kaufman, MacDonald, Lutz & Smallwood (1997) have focused specifically on the food decisions of food insecure families and the ways in which households negotiate resource scarcity. These authors identified five major coping strategies of low income households: (1) relying on others; (2) adjusting resources; (3) reducing food consumption; (4) making trade-offs; and (5) acquiring nutrition and shopping knowledge and skills. Not only does this demonstrate the complexity of decisions regarding food procurement, but it also demonstrates the influence of strategic and conscious decisions

among food insecure households. Specifically, food insecure households are often able to devise strategies to reduce or eliminate some of the problems related to the difficulty of procuring food.

In a similar vein, Kaufman et al. (1997) found that despite the fact that low-income populations often faced higher prices, they were able to adapt by buying more economical and lower quality foods such as hamburger instead of steak. Item selection, consequently, becomes an important way in which cost can be negotiated. Based on household survey data they find their highest income group spent \$48<sup>i</sup> on fish and seafood per person while the lowest income group only spent \$26 (Kaufman et al., 1997, p. 9). Similar trends were found for fresh fruits and vegetables, with high income groups spending much more than lower income groups. Of course, the implications of this are that while item selection may be a useful way of negotiating cost, there are likely some nutritional consequences of eating less fresh fruits, vegetables, and seafood and more hamburger.

In many cases food insecure individuals will go to great lengths to ensure that they and others in their household have sufficient food. Based on focus groups, Kempson, Keenan, Sadani & Adler (2003) found that many of these strategies were unknown, even to practitioners working to educate resource-limited populations. They cited often unacknowledged strategies such as participating in research projects, selling blood, avoiding having guests over for meals or snacks, going to church dinners, cooking with other people, getting food from work, and even committing a crime to go to jail. While on one level these strategies are indicative of the high level of desperation that many of these people feel, they also show that food insecure households have devised some creative and strategic ways to negotiate food insecurity.

Many of the strategies noted by researchers relate to obtaining food outside of the conventional food system. Obtaining food stamps, starting a garden, going to a food bank, or even borrowing food from friends or family represent strategies that are external to the main elements of the conventional food system. This suggests that while resource limited households are often able to obtain sufficient calories, they are often doing so through sources external to the mainstream vector through which people access the food system—the food retailer. While this research points to the importance of alternative food sources for disadvantaged consumers, it does not address questions related to why these consumers do not access all of their food from retailers. Under what circumstances and why do disadvantaged consumers turn to alternative sources to obtain food? To what extent is their behaviour an issue of culture (i.e. disadvantaged consumers are habituated to obtain food from non-retail outlets)? To what extent is their behaviour due to the costs associated with accessing food from conventional sources (i.e. disadvantaged consumers would rather get their food elsewhere, but lack resources)?

While research specifically examining the cultural factors that contribute to food retailer choice is scarce, cultural explanations of consumption decisions might be adapted from individual food preferences. For instance, drawing on Bourdieu's language, lower class households might lack the symbols to interpret the haute cuisine available at some food retailers while higher class households might be drawn to them for reasons not understood by other households. Bourdieu (1984) argues that this stems from the fact that food tastes are socialised from birth leading to different tastes among the class hierarchy. This is meaningful because it suggests that the item selection by food insecure households might be a matter of socially constructed taste, in addition to economic necessity. Caraher, Dixon & Car-Hill (1998) note a tendency among low income households to select items based on cost instead of quality. Potentially, this is indicative of differences in the socially constructed tastes of households of different classes.

The issue of taste preferences is complicated by the issue of availability. As Wright, Nancarrow, and Kwok (2001) describe, globalisation has led to the proliferation of a variety of products within most supermarkets in developed countries. In many ways, preferences that have been, in part, limited by availability are now being challenged by the widespread distribution of various products such as hummus, sushi, and kiwi around the world. Even for food insecure households, supermarkets offer a wide variety of items with relatively low prices. Wright et al. (2001) still argue that the culture in which one is raised, of which social class is a part, strongly influences food tastes. The issue of availability offers a further complication in devising ways to think about food preferences.

The relationship among social structure, agency, and culture is not always clear. As Hays (1994) notes, culture itself is part of a social structure. Agency is a measure of the extent to which one social structure, such as those related to cultural preferences, is able to alter another social structure, such as that of the food system, to match specific needs. In short, the extent to which the structure of the food system coincides with the preferences of a group indicates the amount of agency that group has vis-à-vis the second system. It is possible that the food system is catering to the preferences of both groups. However, the literature examined as part of this study indicates that it is much more likely that food insecure households are finding themselves limited in their ability to select the food retailer which would provides them with food that they would prefer.

#### **METHODS**

The study site was an urban neighborhood located in Lansing, Michigan, USA. Lansing is the capital of Michigan and had a total population in 2000 of around 120,000 (US Census). Downtown Lansing is dominated by state government buildings and other offices. This area was surrounded by several residential areas mixed with commercial activity. Lansing was home to a community college and a law school. Located adjacent to Lansing was East Lansing, the home of Michigan State University, a large land-grant university with over 45,000 students. As with many Michigan cities, Lansing has struggled with the declining American automotive industry; the city had an unemployment rate of 7.6% in 2005 (US Census). Median household income for the city was around \$34,000 in 2005, below the national median of \$46,000 (US Census).

The neighborhood examined in this study was an urban area located on the east side of the city. The land area of this neighborhood was approximately 4.8 square miles. While the neighborhood was primarily residential, there were some small businesses scattered throughout the area and significant commercial activity to the north and between two major roads on its eastern edge. The boundaries used in this study were the 48912 zip code. This area corresponded with the service area of the Allen Neighborhood Center (ANC), a non-profit community group established in 1996 and evolving out of the Eastside Neighborhood Organization (ENO), a 30 year-old volunteer neighborhood advocacy organization. Many people in the area identified as being part of the same neighborhood, in part due to the activities of the ENO and ANC so it was felt these were reasonable boundaries to use. The 48912 zip code corresponded approximately to 17 census blocks on the east side of Lansing. The study site was selected because it was felt that data from the study would directly help the Allen Neighborhood Center, which was initiating a series of programs related to neighborhood food access at the time.

The 2000 U.S. Census provided a sociodemographic profile of the neighborhood. The total population of the study area was 18,583 with 8,740 housing units. The average household had 2.27 people and the average family had 3.09 people. There was some racial and ethnic diversity in the neighborhood. Seventy-three per cent of the population identified as white while 13.3% identified as African American. Just over ten per cent (10.7%) of the neighborhood was Hispanic or Latino/Latina. There was also a significant foreign born population (8.8%).

Even in this relatively small geographic area, a significant amount of economic differentiation was evident. In particular, populations in the northern part of the neighborhood tended to have significantly higher incomes than populations in the southern area. This was evident in the median income of individual census blocks which range from \$14,069 to \$57,768 in the richest. Largely in the southern part of the neighborhood, significant poverty existed and, in aggregate, 18.5% of the people in the neighborhood live below the poverty line.

In order to understand the relationship between food security and shopping behaviours, a survey of this neighborhood was conducted using a self-administered mail survey. Use of a survey to examine food security and procurement patterns was consistent with other research into food security and food deserts. The United States Department of Agriculture (USDA) used telephone surveys in its national assessment of food security (Nord et al. 2006) and has also provided methodologies for conducting food security assessments through other survey modes (Cohen, 2002). The Community Food Security Coalition also discusses the potential of using various survey modes to determine food security levels (Pothukuchi, Hugh, Burton & Fisher, 2002). The survey itself consisted of five mailings in a manner similar to that recommended by Dillman's (2000) Tailored Design Method. The survey took an estimated 15 minutes to complete. It was anticipated that keeping the survey brief would increase response rates. A selfaddressed, stamped envelope was included with both the survey and replacement survey. In both cases, first-class stamps were used on the return envelopes as a means of increasing response rates (Armstrong & Luske, 1987). The level of analysis of the survey was the household, so instructions on the survey asked that the individual primarily in charge of purchasing food was to complete the survey.

The sampling frame for households was constructed based on a list of properties purchased from Accudata Inc. for the zip code of 48912. Accudata Inc. is a marketing company that provides residential mailing lists, based on data obtained from the United States Postal Service. While on site enumeration is commonly regarded as one of the most comprehensive ways to obtain a complete sampling frame, the use of a purchased, residential mailing lists was chosen to save time and resources. Assessments of the accuracy of residential mailing lists compared to on-site enumeration have found sampling frames from the two sources to largely coincide (Iannoaccacchione, Jennifer & Redden, 2003).

The USDA classifies food security into three levels—food secure, low food security, and very low food security. These categories are synonymous with the categories of food secure, food insecure, and food insecure with hunger. The latter nomenclature is used in this study. Nord et al. (2006) explain that:

Households classified as having low food security have reported multiple indications of food access problems, but typically have reported few, if any, indications of reduced food intake. Households classified as having very low food security have reported multiple indications of reduced food intake and disrupted eating patterns due to inadequate resources for food.

Food security is measured yearly in the United States through a series of ten to eighteen questions administered through phone surveys and analysed by the USDA. In the survey used in this study, seven questions were used to measure food security. These questions were similar to those used by the USDA, except questions related to food security in children were excluded. The questions themselves were drawn from a guide developed by the Community Food Security Coalition (Pothukuchi, Hugh, Burton & Fisher, 2002). Research on the assessment of food security using reduced questions sets, such as the ones used in this survey, indicate that these tools are reliable and there is some indication that they correlate with nutritional intake (Keenan, Olson, Hersey & Parmer, 2001). While the survey used in this study was not able to detect child hunger, as the full USDA question set does, it was able to detect both food insecurity and food insecurity with hunger at the household level.

Two sets of data were collected through the survey that pertained to perceptions and behaviours. The first set of data related to the reasons that various stores were selected and the second set of data related to the frequency of shopping trips made to area grocery stores. In the first question set, respondents were given a matrix which listed nearby food retailers and asked respondents to indicate yes or no, via checkbox, whether fourteen factors caused them to be more likely to shop there. Factors included sale items, everyday low prices, bulk items, specialty items, wide selection, selection of non-food items, food quality, close to home, close to work, close to other stores, close to bus, familiarity with store, and information from media. The second set of data asked respondents about how frequently the respondents had shopped at each food retailer in the past 30 days. Furthermore, respondents were asked which store they shopped at most frequently and which store they shopped at second most frequently.

#### RESULTS AND DISCUSSION

The list from Accudata Inc. contained 7,939 addresses. According to the 2000 US Census there were 8,740 households in the neighborhood. While the Accudata Inc. list left approximately 800 addresses unaccounted for, this was still felt to be a sufficiently large sampling frame for the purposes of this study. From the sampling frame a random sample was drawn of 1,100 addresses. Each questionnaire had an identification code placed on it that correlated with the sample in order to track which surveys were returned, and to ensure that replacement questionnaires were sent to appropriate addresses. A total of 302 surveys were returned for a response rate of 27%. Approximately 8% of the sample frame was returned due to vacancies, insufficient or incorrect addresses, or refusal to participate. Of these, the vast majority were returned because the residence was vacant with only a few returned because of an explicit refusal to participate. It is likely that the high per cent of vacancies was an effect of conducting the survey in the summer. A high percentage of those in the sample appeared to be college students, and it is likely that many students were not living in rental housing during the summer.

The representativeness of the sample was examined by comparing the sample to 2000 US Census data from the same zip code. The socioeconomic diversity of the region appeared to be reflected in the sample. Nearly 29% (N=80) of the households surveyed had total incomes less than \$20,000 per year while 28% (N=79) indicated household incomes of greater than \$60,000 per year. The income distribution of the sample matched the income levels reported by the US Census reasonably closely. Only in the case of incomes ranging from \$40,001 to \$80,000 was

there some discrepancy. The sample included an under-representation of households with incomes ranging from \$40,001 to \$60,000. On the other hand, households with incomes of \$60,001 to \$80,000 were over-represented. This may be partially due to the fact that a true comparison between US Census data and sample data is not possible since Census uses \$75,000 as the breaking point between categories while my survey used \$80,000. Still, it appears likely that these income groups were not accurately represented in the sample.

Despite the fact that the income distribution of the sample closely reflected the population, this was not the case with education. The sample had a clear over representation of households with higher education with higher response rates for people with bachelors, graduate or professional degrees. In fact, over 28% (N=83) of the sample indicated that they had a graduate or professional degree, which was much higher than the 12.6% that US Census reported for the zip code. The sample appeared to be more representative of those with some college or bachelor's degrees, although there was still a higher response from those with bachelor's degrees (25.4%, N=75) when compared to the Census data (19.5%). At the same time, there was an under-representation of households with high school degrees or less. Only 3.1% (N=9) of the sample had less than a high school degree and 12.2% (N=36) had only a high school degree compared to 16.1% and 21.8% respectively for the zip code. Notably, US Census collects education data at the individual level while this survey asked for the highest education level of anyone in the household. This may account for some of the discrepancy since many households consist of a primary income provider with a higher level of education than other people in the household. Still, research indicates that surveys may be vulnerable to bias those with higher education and this was likely a factor in this survey.

Over 30% (N=89) of the households in the sample were renters. This was surprising since, according to the 2000 US Census, 47% of the households in the area were rented. However, once the percentage of surveys returned due to vacancies are taken into account these numbers come closer to matching. This likely supports the idea that the neighborhood is very much influenced by college students who might not be present during the summer when the survey was distributed.

Household size appeared to be relatively small with the average household containing only 2.2 people. Just over 20% (N=59) of the households in the survey contained children, with the average household with children containing an average of 2 adults and 2 children. The US Census reports 24% of the households in the neighborhood contain children so the sample appeared to accurately represent families with children. Four per cent (N=12) of the sample consisted of households with a single adult and children. It is likely that the sample underrepresents the number of single-parent households, which the US Census reports as 12.9% of the households in the zip code.

The median age of the person who most frequently obtained food for the household was 51. While this suggests an older population, there was a notable spike in the percentage of respondents between the ages of 21 and 30. Over 18% (N=52) of the sample fell within this age range. Other than this, the age distribution followed a roughly normal distribution around the average age of 49. Elderly populations, which are often more vulnerable to food insecurity, are also represented (just over 9%, N=26, of the sample reported being 71 or older).

Both automobile ownership, and whether anyone in the household had a physical disability, were assessed as these characteristics tend to be associated with food insecurity. Just over 19% (N=56) of the sample households had one or more individuals with a physical disability while 8.5% (N=25) of the sample indicated that they did not own a working

automobile. According to the US Census, 19.9% of the households in the neighborhood had a person with a disability while 11.9% of the neighborhood did not own an automobile. Consequently, the sample was felt to be largely representative on these factors.

While the response rate of the survey was slightly lower than the anticipated value of 35%, the response of 302 suggests that the sample is representative of the population at a confidence interval of +/-5.5% at the 95% confidence level. Furthermore, comparison of the sample against US Census data in terms of income, household size, children, age, disability status, and automobile ownership suggest that the characteristics of the sample are very close to that of the population. In terms of education level and home ownership, the sample appeared to be better educated and less likely to rent than the general population. In the case of the former, this may be due to the effect of education on the likelihood of respondents to appreciate, and consequently respond to, the survey. The survey came from Michigan State University, which was located less than 2 miles from the neighborhood, so it may be that students of this university were more likely to respond. The relatively low instance of renters who were part of the sample is more difficult to explain; however, it may be an artifact caused by conducting the survey in the summer. While these concerns must be considered when generalising the results of this study, the sample was felt to be reasonably representative of the population.

Low and very low food security levels were found among 21.5% (N=65) of households in this study, nearly double the national average of 11% and well above state averages of 11.5% (Nord et al., 2006). While such levels are not necessarily surprising given the high levels of poverty evident in some areas of the neighborhood, as well as results from previous surveys, it nonetheless represents a disturbing trend. Perhaps even more worrisome was that 9.6% (N=29) of the sample indicated very low food security levels. This was nearly three times national levels of 3.3% and more than twice state levels of 4.1% (Nord et al., 2006).

#### FOOD RETAILER PERCEPTION

The first set of hypotheses focused on perceptions of food retailers in the area. Chi-square was used to compare food secure and food insecure individuals based on reasons stores were selected among those who have shopped at each store in the past 30 days. Eleven specific stores were examined, as well as convenience stores and health stores. This represented all major food retailers within six miles of the center of the neighborhood. The list of food retailers was initially compiled based on the results of a survey of 503 households conducted by a neighborhood association where none of the respondents indicated shopping for food outside of that radius (Thomas, 2004). The list of thirteen sources encompassed the vast majority of places where respondents shopped with the only exceptions being farmers markets and dollar stores. Twelve criteria were used to examine perceptions of food retailers, including sale item availability, everyday low prices, availability of bulk items, availability of specialty items, food selection, selection of nonfood items, food quality, proximity to home, proximity to work, proximity to other stores, familiarity with store, information from media sources, and other reasons. Criteria were generated from thematic coding of interviews conducted with neighborhood residents during the previous summer.

The vast majority of the sample shopped at Meijer (91%, N=262) and Kroger (82%, N=236) at least once in the past 30 days. This was followed by convenience stores (58%, N=160) with Wal-Mart (44%, N=115) and Apple Market (41%, N=112) representing other significant food sources. Results were similar when respondents reported the single retailer that

they went to most frequently. Again, Meijer came out on top (45%, N=132), followed by Kroger (25%, N=77). Apple Market (9%, N=26) was third on this list.

Did food insecure and food secure households perceive food retailers as having the same characteristics? To answer this question, selection criteria for each food retailer was compared. Results indicated very few differences in how food secure and food insecure individuals perceived each retailer. Differences in perception were only noted in five of the thirteen food retailers examined and only for a small number of selection criteria. Stores with significant differences were Meijer, Sam's Club, Shoprite, Wal-Mart, and convenience stores. In the case of Meijer, food secure individuals were more likely to shop there due to low prices. Notably, however, the difference was slight though statistically significant. There was some indication that food secure individuals were more influenced by non cost-related factors and, with Meijer, food secure individuals stated that they were more likely to shop there due to quality and selection. Similarly, food secure individuals were more likely to shop at ShopRite due to the availability of specialty items. Interestingly, only in the case of convenience stores were food insecure individuals more likely to shop due to the availability of sale items. At the same time, familiarity was a significant factor for food insecure individuals in the case of convenience stores and Wal-Mart. Contrary to what was expected there was not a statistically significant difference in the emphasis that the two groups placed on distance as a selection criteria.

Overwhelmingly, however, it appeared that food secure and food insecure populations perceived food retailers as sharing similar characteristics, whether the stores examined were supermarkets, grocery stores, discount grocers, membership based stores, health stores, or convenience stores. Out of a total of 156 different store characteristics examined, only eight statistically significant differences were noted and none of these were particularly large. Admittedly, due to relatively small numbers of people who shopped at some of the stores, it was difficult to draw definite conclusions. Nonetheless, the similarity in perceptions demonstrated by both groups supports the conclusions that both food secure and food insecure groups share similar perceptions. In this case, however, it is clear that this similarity of perception is not simply in terms of similar concerns with food cost and quality, but also a shared perception of the characteristics of food retailers.

Given the similarities in perception between the two groups it is worth at least a brief assessment of how retailers were perceived. In order to assess generalised perceptions of retailers, store selection criteria were broken down into four categories: cost related attributes, quality and selection related attributes, distance attributes, and other attributes. Cost related factors included sales and everyday low prices. Food quality and selection items included the availability of bulk items, specialty items, food selection, and food quality. Distance characteristics related to proximity to home, work, other stores, or bus stops. Other factors included familiarity with store, information from media, and other factors. This characterisation allowed us to examine the relative influence of selection criteria on different retailers. Each retailer was then ranked based on the proportion of the sample that had shopped at each store in the past 30 days and stated that cost, quality or selection, distance, or other factors influenced their decision.

It is clear from the chart that cost and food quality and selection were two of the most influential factors related to store selection (Figure 1). Interestingly, the major supermarkets, Kroger and Meijer, attracted consumers primarily on cost, but also based on perceived food quality, selection, distance, and other factors. On the other hand, for deep discounters such as Aldi and Save-a-Lot, and Sam's Club (a membership based bulk store), cost was much more

important. For the health food stores and Horrock's (a farmer's market/grocer), food quality and selection were the top attributes. Finally, for convenience stores and Apple Market (a small grocer closest to most residents), proximity was the predominantly deciding factor.

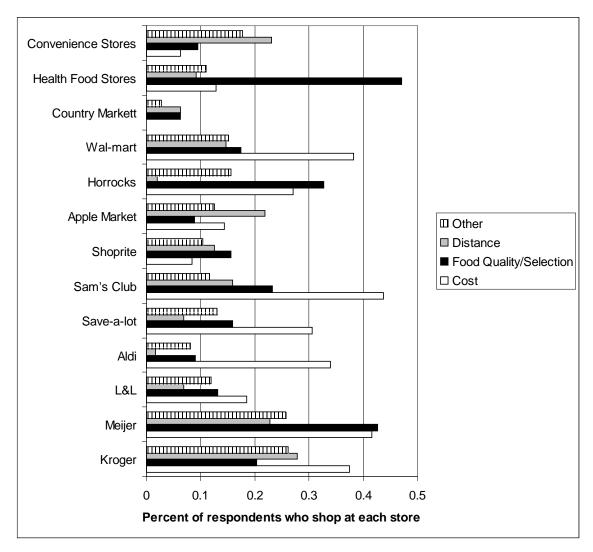
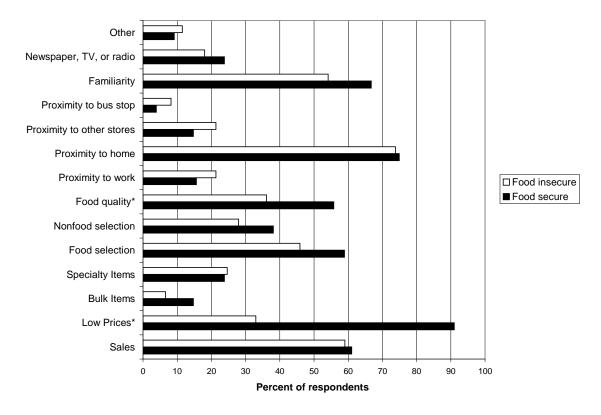


Figure 1: Store characteristics that influenced respondents' decisions to shop there

In order to better understand these differences in retailer perception, the selection criteria that were applied to the store most frequently visited was also examined. Chi-square analysis of these factors identified only two selection criteria with statistically significant differences between the two groups. Surprisingly, food secure households were actually more likely than food insecure households to select a primary food retailer based on everyday low prices. Less surprisingly, food secure households were also more likely to select a primary food retailer based on quality. No significant differences were found for cost, proximity, food selection, or familiarity with the store, or other criteria. These results indicate that even in the case of primary store choice, the criteria that food secure and food insecure households use in store selection is

relatively similar. Cost related factors such as sales and low prices were very important. Other factors such as proximity to home, familiarity with store, food selection, and food quality also carried some significance.



<sup>\*</sup> Indicates a statistically significant difference between groups (p<.05)

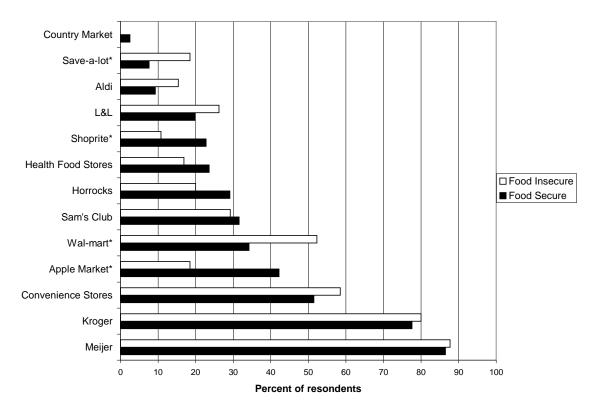
**Figure 2**: Reasons for shopping at most frequently shopped at store by food secure and food insecure households

The data indicates that food secure and food insecure households have similar concerns with food cost and quality. It appears that both groups have a similar set of perceptions of the food retail environment. How does this relate to their actual shopping behaviours?

#### FOOD SHOPPING BEHAVIOURS

While other literature suggests differences between the food procurement patterns of food secure and food insecure households, the differences were not pronounced in this study. Part of this might be due to the relative insensitivity of this research method to complex food procurement methods. In terms of store selection, the vast majority of people from both groups obtained food from Meijer and Kroger, large supermarkets with closest proximity to the neighborhood. Similarly, Meijer and Kroger were reported with the greatest frequency as the stores most frequently visited in the past 30 days.

Notably, convenience stores appeared to be a significant source of food for both groups with 57% (N=122) of food secure households and 60% (N=38) of food insecure households purchasing food from one of these sources in the past 30 days. There is a high density of these stores in the area. Apple Market, a small grocer that is located in the middle of the neighborhood, was the third most visited food retailer.

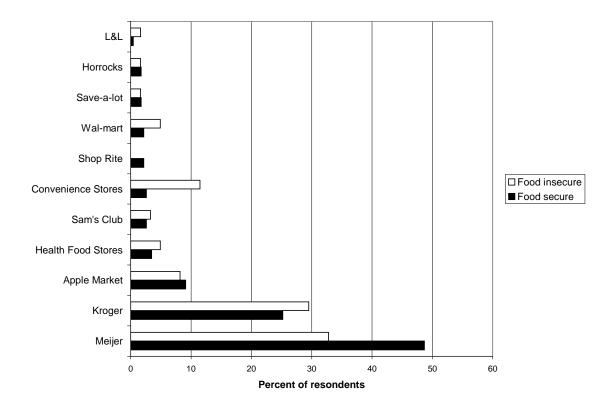


<sup>\*</sup> Indicates a statistically significant difference between groups (p<.05)

**Figure 3**: Stores where food was purchased in the last 30 days by food secure and food insecure households

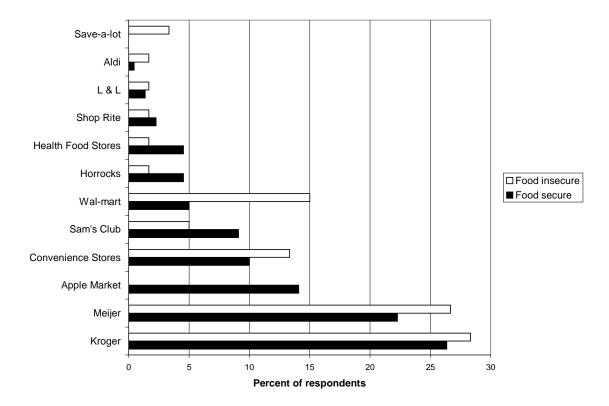
An examination of the stores that respondents identified as their most frequently used food source paints a similar picture of procurement patterns. Again, Meijer and Kroger appear as the primary food sources with other food retailers declining rapidly in importance. Notably, food secure individuals appear to rely more heavily on Meijer than food insecure individuals with 49% (N=112) of food secure households reporting shopping at Meijer the most frequently and only 33% (N=20) of food insecure households reporting the same behaviour.

The remaining food insecure individuals appeared to be relying more heavily on Kroger and Wal-Mart, to a minor extent, and convenience stores, to a much greater extent. Only 3% (N=6) of food secure individuals reported that convenience stores were the most frequently used opposed to over 11% (N=7) of food insecure individuals.



**Figure 4**: Store shopped at most frequently in the past 30 days by food secure and insecure households

Respondents were also asked to identify one other store most frequented in the past 30 days. Differences in store choice became even more apparent in these results. In addition to continued reliance on convenience stores, food insecure individuals also relied on "deep discounters" such as Wal-Mart, Aldi, and Save-a-Lot. While the difference is not as significant as expected, these trends seem to indicate that similarities in group behaviour in terms of general shopping behaviour (i.e. stores where food was purchased at any point in the past 30 days), may mask the extent to which each group relies on the stores in question. Examination of primary and secondary retailer choices indicates that food insecure individuals are relying more on convenience stores and deep discounters to obtain food, even though these sources do not replace reliance on large supermarkets.



**Figure 5**: Store shopped at second most frequently in the past 30 days by food secure and insecure households

The tendency of food insecure individuals to rely on deep discounters is further supported by a chi-square analysis of the stores shopped at during the last 30 days. Statistically significant relationships were evident between food security levels and shopping at Save-a-Lot, Shoprite, Apple Market, and Wal-Mart. Food secure individuals were more likely to shop at Shoprite and Apple Market while food insecure individuals were more likely to shop at Save-a-Lot and Wal-Mart. Shoprite is a local grocer that tends to carry high cost specialty items, such as wine and cheese, so it is possible that this contributes to food secure shopping. The causes for the differences in Apple Market shopping are less clear. Both Save-a-Lot and Wal-Mart represent retailers that emphasise low prices.

The high percentage of the sample that shopped at Kroger and Meijer can be explained, in part, by the number of these retailers that are within proximity of the study site. Respondents reported shopping at five different Kroger stores and four different Meijer stores. Therefore, the most frequently shopped at store was disaggregated into available locations throughout the city (other stores with multiple locations reported included Wal-Mart, Sam's Club, health stores, and convenience stores). Distinguishing between stores of the same chain was important since interviewees discussed times preferences between stores of the same chain noting things like differences in item selection and food quality. At the same time, one might imagine that consumers would simply shop at the store that was closest to their home or work. Re-analysis of the relationship between food security status and store selection with stores at different locations revealed no statistically significant relationship, showing that there did not appear to be a relationship between food security status and the specific location chosen to shop. Interestingly,

food insecure individuals appeared to have a greater propensity to shop at Meijer locations that were not the closest to their homes.

Given the limits of the sample, caution should be used in generalising the results of this study. In comparison to US Census data, there was an over-representation of households with high education levels, high incomes, home ownership, and car ownership. Respondents between the ages of 21 and 30 also appeared to have responded at higher rates. While food insecurity levels were high in the sample (21.5%, N=65) this was still a relatively small number and limits the conclusions that can be drawn regarding this small population.

### **CONCLUSIONS**

Despite the limitations of this study, data indicate that there is some similarity in food shopping perceptions between food secure and insecure households. Differences in perception of the food retail system between food secure and insecure households were not as pronounced as expected based on a review of the literature, and cost and food quality appeared to be an issue for both groups. Differences were more apparent in how the two groups balanced cost and quality. Food insecure individuals did not select stores and items based only on cost, but rather negotiated cost against quality. Sometimes this negotiation was only possible when dealing with items or stores of perceived equal cost; however, quality remained an important part in decision making. Similarly, despite growing theoretical claims that quality was becoming more important than price, most food secure individuals also noted the necessity of balancing cost against quality. Convenience and distance also appeared to be issues of concern for both groups.

The similarity in perception demonstrated by both groups would seem to indicate that the cultural influence of social class on food procurement perceptions may not be as pronounced as one might expect from the work of Veblen or Bourdieu. For both of these theorists, the process of consumption involved the association of cultural values based on social class. While there is ample evidence that food secure and food insecure individuals come from different social classes, data collected in this study indicate that, at least in terms of perception of food retailers, values associated with retailers tends to be similar.

Analysis of the different shopping behaviours of food secure and insecure individuals indicates that social structure places some constraints on the shopping decisions made by both food secure and insecure individuals, with the latter demonstrating a limited ability to negotiate financial constraints, but often doing so at the expense of meeting desires for food quality. Despite these apparent similarities between the two groups, examination of shopping behaviour patterns showed more significant differences. While both groups did most of their food procurement from supermarkets, food insecure individuals had a greater propensity to also procure food from low cost retailers such as Wal-Mart or Save-a-Lot or from sources such as convenience stores that do not necessarily have lower prices, but are used due to perceived convenience (location and proximity).

The implications of this difference in behaviour are significant when related to the difference in perception of food retailers. For instance, Save-a-Lot and Wal-Mart were perceived as desirable primarily because of their low prices, not because of food quality or variety. Yet a higher percentage of food insecure individuals tended to frequent these stores. This suggests that the decision that food insecure individuals are making to shop at these sources involves the all too necessary choice of forgoing desired food quality or selection in order to

meet a budget. While this likely comes as no great surprise, it suggests that any breakdown in class differences in consumption is still very much limited to basic financial differences.

So, while the two groups demonstrate some convergence on an ideological level, there is also divergence at the behavioural level. In a sense, this points to a materialist explanation for food insecurity and hunger rather than an ideological one. Food insecurity does not appear to stem from cultural preferences that are part of class culture, but instead food insecure people share similar values as food secure people. The difference comes when we look at the abilities to act on those values. The implications of this are significant for practitioners who seek solutions to nutritional problems associated with poverty through education. Based on the data from this study, the benefits of educational programs that seek to alter how those who are food insecure perceive and negotiate their food retail environment are likely to have only limited success. Food insecure individuals already demonstrate rational actions to both minimise food costs while trying to maximise food quality and reliability of access. The problem is that they have only limited resources to work with, which limits their range of options.

Fundamentally, this divergence at the behavioural level, while not as pronounced as expected, indicates that food insecure individuals are not being readily served by the structure of the conventional food system. In other words, food insecure individuals have less agency. Hays (1994) makes the point that agency is not the same thing as free will or randomness. He states:

Social structures are simultaneously constraining and enabling: although structural constraints absolutely preclude the possibility of making certain choices, they also provide the basis of human thought and action, and therefore offer the very possibility of human choice. A sociological understanding of agency, then, does not confuse it with individualism, subjectivity, randomness, absolute freedom, or action in general, but recognises it as embracing social choices that occur within structurally defined limits among structurally provided alternatives. (65)

Such a conceptualisation of agency is useful in understanding the role of consumers in influencing the food system because it avoids simplistic explanations whereby some individuals are completely constrained by a structure and others are completely empowered by it. Rather, agency becomes an indicator of the extent to which consumers are able to alter one social structure to coincide with another structure.

A sociological understanding of food requires an understanding of the structure of production and its relationship to consumption. It also requires recognition of the complex series of decisions that are part of the act of consumption. As this study indicates, the structure of the food system, at least in terms of the retail system, is serving segments of the population differentially. Given that most people procure food from food retailers, this is not a small point. Food insecurity has negative consequences, both socially and individually. While item selection was not the focus of this research, there did appear to be differences in fresh produce consumption related to food security status. It is important that future research look closely at the relationship between food retailer choice, item selection, and the variety of other decisions that relate individuals to the food system in order to understand both the causes and consequences of differential agencies in relation to the food system.

#### **Note**

<sup>i</sup> All monetary values expressed in USD

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# **Biographical Note**

Dr. Brian Thomas is an assistant professor of sociology at Saginaw Valley State University located in University Center, Michigan in the United States. He obtained his Ph.D. from Michigan State University. He also has a Master's degree in Environmental Studies from the University of Oregon. He has conducted research on food, agriculture, and the environment with a particular focus on urban food access and local food systems. In addition to studying food deserts, Dr. Thomas also actively engages with community partners to identify solutions to issues of food access.