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Food Advertisements and Access to Primary Care and the Impact on Family Food Decisions Made by Women

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2020

Abstract

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by

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MBA, Plymouth State University, 2011

BA, University of Redlands, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of Doctor of Philosophy

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Abstract

Women are responsible for preparing family meals in 71% of American households. The meal choices that women make has an impact on lifestyle choices for themselves and their family. The purpose of this research was to evaluate the extent to which food advertisements and access to primary care influence a woman's food-making choices. The first question focused on how exposure to food advertisements on television may impact the food choices of women. The second question asked how food advertisements affect women's eating habits. The third question asked how access to primary care impacts food decisions. The theoretical framework integrated the social cognitive theory and cognitive load theory. Quantitative data were collected online with a meal pattern questionnaire. Participants were women with children under the age of 18 in their home (n = 125) who have primary responsibility for food provision/preparation, were born in the United States, live along the east coast, had a high school education or higher, and have a television. Data were analyzed using logistic regression. The results for Research Question 1 (RQ1) showed a statistically significant association of the outcome variable with women's age and employment status. For Research Question 2 (RQ2), only one variable "Household food decision based on a food advertisement you saw" was statistically significant. None of the variables in Research Question 3 (RQ3) were statistically significant. The implications for positive social change are that effectiveness of nutritional recommendations for healthier food choices may be enhanced in socially disadvantaged communities, through food advertisements.

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Dedication

I dedicate this dissertation to my parents, Roberto Chavoya Soriano and Isis Margarita Soriano, my husband Eddie Lee Copelin II, MD, my siblings Margarita Soriano Fuentes, Roberto (Betito) Soriano, Antonio (Toñio) Soriano, and Erasmo Soriano Fuentes, Isis Olachea, and Isabel Olachea who have helped me focus throughout the years as I have accomplished this goal. Dad, although you are not here physically, your memory and spirit remind me that life is for us to be our best at everything we do. Mom, thank you for your endless support, always believing in me, and pushing me to excel in everything I do. You both are great role models of the kind of parent I hope to be. Eddie, your dedication to our future inspires me to always look for a better opportunity and know that we can always work to improve our tomorrow. Maggie, your determination to excel and be perfect with everything has motivated me to do my best, and never give up in what I believe. Beto, your humor has helped me distress when I have needed it the most, I admire your dedication to finding what truly makes you happy and pursing it. Toñio, your humble personality keeps me grounded, always looking for ways to excel and be grateful as you are. Erasmo, your always relax and chill personality has shown me that we can just do what we love, and everything will fall into place. Isis, know that you can do anything you set your heart to do! Isabel, never give up and always strive to your highest potential. Thank you to all my family and friends for the endless support during these last couple of years. To my Baby Copelin arriving July 2020, I can't wait to meet you and enjoy a beautiful journey together with your daddy and I

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Chapter 1: Introduction to the Study

Introduction to the Study

Healthcare administrators are concerned with the health of communities. Food buying and cooking decisions may impact family eating habits. Daily activities influence the eating habits of Americans. Previous studies found that women are the primary individuals in a household to make food choices (Cleland, Granadoes, Crawford, Winzenberg, & Ball, 2013; Lawrence et al., 2009a; Robles, Smith, Ponce, Piron, & Kuo, 2014). Proper eating habits may be influenced by healthcare providers (Bombard, Robbins, Dietz, & Valderrama, 2013; Vaccaro & Huffman, 2012), social-economic status (Jarman et al., 2012), food shopping frequency (Blaylock & Blisard, 1989), and food advertisements (Aktaş Arnas, 2006; Byrd-Bredbenner & Grasso, 2000; Golan & Crow, 2004). However, the factors that influence women's choices have not been well-studied.

Advertising and marketing are possible influences on women as family food decision-makers. Advertisements for food high in sugar content change the eating behaviors of families (Byrd-Bredbenner & Grasso, 2000; Golan & Crow, 2004; Kegler et al., 2014). Women with access to primary care providers (PCPs) may have healthier eating habits based on advice received during their visits (Jerome-D'Emilia, Dunphy Suplee, & Gardner, 2014; Vaccaro & Huffman, 2012). Few researchers have studied what women find to be influencing their food buying, preparation, or eating behavior. There is a lack of studies regarding any potential link between food advertising, access to primary care, and the actual food-related actions of women. This study investigated the

current literature gap of a relationship between women's food-making decisions, food advertisements, and their access to primary healthcare. This study determined how women react to food advertisements and how access to primary care affects their food buying choices.

Chapter 1 will include the background of the study, problem statement, purpose of the study, research questions, theoretical framework, and nature of the study. The definition of terms, assumptions, delimitations, limitations will be discussed. Chapter 1 will provide further details of the significance of the study.

Background of the Study

The health of a community may start with the health of families. Healthcare providers, administrators, and policymakers have an interest in promoting healthy families. The food decisions made by women are part of a healthy family. Healthy People 2020 is a government-funded program that provided national objectives for improving the health of all Americans. Healthy People 2020 involved objectives to maintain healthy body weight and promote a healthy diet in the United States. Part of the Healthy 2020 objectives included a goal for communities to investigate the density of fast-food restaurants, and to determine dietary patterns that may contribute to obesity (Obbagy & Essery, 2012). A parent's lifestyle influences a child's lifestyle. Previous studies found that although both parents influence the lifestyles of their children, women are the primary food-decision makers (Cleland et al., 2013; Jarman et al., 2012; Lawrence et al., 2009a; Reicks et al., 2003; Robles et al., 2014). Two specific factors that may influence

food buying choices are advertisements and primary care access. There is a lack of literature regarding how these two factors might affect women's food buying habits.

Food advertisements via television influence the type of food consumed. For example, 23.5% of women eat while watching television or movies, which may lead to unhealthy behaviors (Bureau of Labor Statistics, 2014). Advertisements for food high in sugar content appear more frequently on television, specifically targeted at children. The impact that food advertisements and access to primary care have on women's food making decisions may influence their lifestyles and eating habits.

Learning about contributing factors will assist with understanding how food advertisement and primary care affects women's food-buying decisions. Access to primary care contributes to lowering medical costs (Espeland et al., 2014) and promoting healthier eating habits (Berkowitz & Fabreau, 2015; Jerome-D'Emilia et al., 2014; Vaccaro & Huffman, 2012). This study may lead policymakers to increase access to healthier food choices, reduce food insecurities, and provide support for women with children between the age 0-18 that may be influenced by food advertisements and access to primary care.

Problem Statement

The problem is the lack of understanding that food advertisements, as well as access to primary healthcare have on women between the ages of 18 and 35 with children under the age of 18, living in the home, who make the food-buying decisions. The study sought to examine the effect that televised food advertisements and access to primary

care have on the choice women make when purchasing food. Poor eating habits influenced by food advertisements contribute to an increase in the use of healthcare services (Espeland et al., 2014). Further research on food consumption choices and body weight may help mitigate the health impact of these decisions. Access to primary care and nutritional education classes for women may influence their food choices. Women who received diet and exercise modification advice from their PCPs were more receptive to changes for healthier eating habits than women who received no advice from their PCPs (Vaccaro & Huffman, 2012). The gathered data might highlight the influence that food advertisements and access to primary care may have on women's food-buying and eating behaviors for healthcare providers, administrators, and policymakers.

Purpose of the Study

The purpose of this research was to examine the influence that food advertisements and access to primary care have on food-buying choices of women. For this study, food choices are defined as a person's choice of food when purchasing (United States Department of Agriculture, 2016). The study aimed to understand how food advertisements and access to primary care influence women's food choices. Analysis of access to primary care providers (PCPs) assisted with studying correlations between women's food-making decisions and frequency of visits to their PCPs. Understanding purchasing power and how this power influenced women may help drive public policy changes to increase access to healthy food choices, reduce food insecurities, and provide support to women.

A questionnaire was used to assess how food advertisements and access to primary care affects women's food choices. Research questions were designed to elicit information about the type of televised food advertisements seen, women's access to primary care, and the impact of food-making decisions based on the ads. A detailed methodology is discussed further in Chapter 3.

Research Questions

The following research questions were used in this study:

RQ1: Is there a statistically significant relationship between the viewing of televised food-based advertisements, demographic characteristics (age, education level, socioeconomic status, ethnicity, and number of children), eating habits of women, and food choice decisions they make for their family?

$H_0$1: There is no statistically significant relationship between the viewing of televised food-based advertisements, demographic characteristics (age, education level, socioeconomic status, ethnicity, and the number of children), eating habits of women, and food choice decisions they make for their family.

H_a1: There is a statistically significant relationship between the viewing of televised food-based advertisements, demographic characteristics (age, education level, socioeconomic status, ethnicity, and a number of children), eating habits of women, and food choice decisions they make for their family.

RQ2: Is there a statistically significant relationship between women who watch food advertisements and their eating habits?

$H_0$2: There is no statistically significant relationship between women who watch food advertisement and their eating habits.

H_a2: There is a statistically significant relationship between women who watch food advertisement and their eating habits.

RQ3: Is there a statistically significant relationship between primary care access and the eating habits of women?

$H_0$3: There is no statistically significant relationship between primary care access and the eating habits of women.

H_a3: There is a statistically significant relationship between women primary care access and the eating habits of women.

Theoretical Framework

Two theories guided this study to examine personal lifestyle characteristics and the influence of women between the ages of 18 to 35 with children under the age of 18 environments such as food advertisements, and access to primary care physicians. The theoretical framework for this study integrated the social cognitive theory (SCT) and cognitive load theory (CLT). These theories provided a baseline to understand what contributed to a woman's food buying behavior. The SCT pertained to an individual's home environment and characteristic behavior with the theory that an individual's knowledge is directly related to their observations of other individuals within their social interactions, experiences, and outside media (Byrd-Bredbenner et al., 2011; Nabi & Thomas, 2013). SCT is necessary for this research to study how a woman's childhood

home environment may have influenced her eating habits and food choices for her families.

An individual's eating habits from childhood are essential to learning their food consumption patterns. CLT consists of a mental effort for working memory, which limits the amount of information an individual can process (Fraser, Ayres, & Sweller, 2015; Zimmerman & Shimoga, 2014) and how their learning occurs (Young, Van Merrienboer, Durning, & Ten Cate, 2014). The CLT also associates with factors that contribute to an individual's decreasing food portions and being sensitive to their environmental factors, which influence eating behaviors (Zimmerman & Shimoga, 2014). The SES of a person may contribute to that individual's cognitive load and their food choices influenced by food advertisements and access to primary care. Learning more about women's lifestyle characteristics will determine if there is a direct correlation between food advertisements and access to primary care.

Nature of the Study

The nature of the study is quantitative. A questionnaire approach was used to explore how food advertisements and access to primary care may impact women between the age of 18-35 with children under the age of 18. The meal pattern questionnaire used is from a previous study that was used a nutritional survey to describe habitual daily intake, such as the time and type of intake occasions: main meal/ light meal/breakfast, snacks, or only drinks (Bertéus Forslund et al., 2005). The data were collected using the meal

pattern questionnaire with additional questions added about access to primary care and televised food advertisement via SurveyMonkey.

For this study, the independent variables are food advertisements (food marketing via television commercials, social media advertisements, and billboard advertisements), educational attainment, socioeconomic level, employment status, and the amount of time spent watching television, and the dependent variables are food choices, diet, and primary care access. I gathered data at local community locations on the east coast using the online survey tool SurveyMonkey. Women who were between 18 and 35, had children under 18 for whom they were primarily responsible for food provision/preparation, were born in the United States, had a high school education or higher, and had a television were invited to participate in the survey. The sample consisted of 125 participants attained based on the G*Power test for logistic regression. The participants provided consent before participating in the study via the SurveyMonkey.

Definitions of Terms

The following are the operational definitions for terms included in the study:

Diet: The type of food people eat on a regular basis, compared to the recommended MyPlate daily checklist (United States Department of Agriculture, 2016).

Educational attainment: The highest level of education completed by an individual (Baum, Cunningham, & Tanenbaum, 2015).

Employment status: The individuals who work to pay anything during the week (Current Labor Statistics, 2006).

Fast food: Restaurant food that is characterized by low costs, large portion sizes, and food high in calories and total fat (Sharkey, Johnson, Dean, & Horel, 2011).

Food advertisement: Food marketing via television commercials, social media advertisements, and billboard advertisements (Kim et al., 2014).

MyPlate: A program by the Center for Nutrition Policy and Promotion, providing daily recommended servings of fruit, vegetables, grains, protein, and dairy (United States Department of Agriculture, 2016).

Social marketing: A technique used to analyze, plan, execute, and influence the behavior of the target audience (Carins & Rundle-Thiele, 2014).

Social media: The process of principals and techniques in marketing to create value to influence a target audience (Tobey, Koenig, Brown, & Manore, 2016).

Socioeconomic Status (SES): Status defined by income, education, wealth, and occupation of individuals (Bosworth, 2018).

Primary care access: A population's ability to receive health care (Murray & Tantau, 1999).

Assumptions

In this quantitative study, data were collected from a computer-administered survey to women through SurveyMonkey. An assumption was that participants answered questions honestly and recalled their eating habits, food advertisements, and access to primary care with accuracy. Another assumption was that women are the primary food-decision makers of their households. I assumed the sample population women between

the ages of 18 to 35 years, have children under the age of 18 years for whom they have primary responsibility for food provision/preparations, born in the United States, with a high school education or higher, and have a television was representative of women who fit the criteria.

Delimitations

Some delimiting factors of this study involved the location and sample population. The study contained a sample of adult women between 18 and 35 living in the United States. Women who fit the criteria of the study were mothers who watch television and have access to primary care. Only women who could give informed consent were invited to participate in this study. The defined geographical area may delimit the generalizability of the study of other groups. Participation was voluntary.

Limitations

All studies have limitations. The participants in the sample may not be of the same ethnicity or SES. The group recruited who met the requirements may have limited experiences. These restrictions may result in biased responses by the women, who have a different interest in their families' overall health. Some limitations may be due to SurveyMonkey with participants being able to complete the survey, and how they interpret each question. The survey may have a bias based on the variables studied and possible unknown variables not studied. There was an anticipation of women completing the entire survey without losing focus on a limitation-another limitation involved in the sampling methodology. The sampling of women occurred in a single geographic area on

the east coast of the US. The defined geographical area may limit the generalizability of the study to regions. A further limitation was that data was limited to self-reported information from each woman. Self-reporting with participants who may have misjudgments, food motive sensitivity, bias, and socially desirable may lead to limitations.

Significance of the Study

This study may be significant to policymakers looking for ways to improve women's eating habits. The outcome of this study may include suggestions for explaining women's eating habits, access to primary care, food advertisements, and public policy changes regarding unhealthy food. Further research should be done based on food advertisements and the impact they have on the food-making decisions of their households, with educational programs to educate women on nutrition (Aggarwal, Monsivais, Cook, & Drewnowski, 2014; Isgor, Powell, Rimkus, & Chaloupka, 2016). This study may inform women regarding factors that influence their eating habits. This study will contribute to social change by influencing public policymakers to look at the impact on women eating healthier based on their access to primary care and food advertisements and change the types of food available. With this study, healthcare services may expand to focus on proper eating habits. At the same time, public policymakers may encourage communities and grocery stores to have healthier options and educational programs for women.

Summary

This study looked at the influence of food advertisements and access to primary care on women's food-making decisions to gain an understanding of the possible impact on family eating habits. Women are food-making decision gatekeepers. Learning about the possible factors that contributed to their decisions may assist in creating new eating habits programs.

Chapter 1 focused on the background, problem statement, purpose, research questions, theoretical framework, nature of the study, definitions of terms, assumptions, delimitations, limitations, and the significance of the study. Chapter 2 includes a review of current literature related to food advertisements, access to primary care, food-buying, and food preparation decisions made by women. Chapter 3 will focus on the methodology for this study. My role and procedures for accessing participants and ethical considerations are explained in more detail in Chapter 3. Chapter 4 will provide statistical analyses, and Chapter 5 will discuss results, conclusions, and recommendations for future studies.

Chapter 2: Literature Review

Chapter 2 includes an exhaustive study of current research related to food advertisements and access to primary care. This chapter has four sections. The first section involves the search strategies used to secure studies. The second section investigates the theoretical framework for the study involving the analysis of food-motivating behaviors. The third section presents variables that may influence women's food making decisions. The fourth section is about studies that used a similar quantitative methodology as this study.

Literature Search Strategy

The literature search included peer-reviewed journals, academic articles, data from books, and personal communications. The databases used included MEDLINE, CINAHL Plus, and ProQuest with Full Text. Keywords and phrases used as search terms included: *women food choices, food advertisement, social cognitive, health behavior, restrained theory, food decisions, socioeconomic status, obesity AND food marketing AND women, adult obesity AND United States, social media AND food advertisement, women AND diet AND food, food advertisement AND socioeconomic status, marketing AND consumer behavior, marketing food AND consumer towards children, women AND food choices, marketing food AND consumer towards women, marketing AND entertainment, women consumers AND food industry, food labels, grocery shopping AND frequency, social media AND marketing AND food, cooking, women AND time, frequency, food shopping AND women, income, obesity, women AND United States,*

women, AND fast food, women AND primary care access, public policy AND food prices, women, health care AND United States.

The initial goal was to obtain scholarly journal articles published within the past five years. However, other relevant scholarly-peer review journal articles older than five years are also part of the study. Many journals and articles reviews provide relevant data regarding issues involving quantitative research, food advertisements, food choices, social cognitive theory, restrained theory, grounded theory, women's food choices, health behaviors, health promotion theory, SES, women's cooking decisions, social media, primary care access, and public policy.

Theoretical Framework

The theoretical framework for this study was the social cognitive theory (SCT) and cognitive load theory (CLT). The first theory, SCT focused on behavior characteristics, which affect a person (Byrd-Bredbenner, Abbot, & Cussler, 2011; Nabi & Thomas, 2013). Previous researchers found motivating factors of home behavior using the SCT (Nabi & Thomas, 2013), and the dietary impact others have on an individual (Byrd-Bredbenner, Abbot, & Cussler, 2011). The analysis of a person's behavioral characteristics may determine other factors that influence their actions. Healthy behaviors based on the frequency of a person's food intake using SCT (Bertéus Forslund, Torgerson, Sjöström & Lindroos, 2005). SCT allowed researchers to analyze the participant's food decision motivating factors.

Many factors influence women's eating behavior. CLT focuses on a person's eating behaviors (Zimmerman & Shimoga, 2014). The ability to learn what motivates everyone allowed for an understanding of the women's characteristics in the study. Previous researchers found that healthcare professional's ability to prevent health-related issues by advocating for healthier food choices, increasing fruit and vegetable options at farmer markets, and creating more walking paths in the community (McPherson et al., 2012). Healthcare professionals may impact a community's food choices. CLT determines the capacity of an individual's ability to learn and keep that memory (ten Cate, Van Merrienboer, & Durning, n.d). The ability to learn will assist with determining if there is a correlation between the number of doctor visits and their food choices. Their environment may influence women's eating behaviors.

Studies Related to Key Variables

The key variables discussed in this literature review include food making decisions, childhood obesity, SES children's influence on women, challenges, cultural beliefs, time spent cooking, health/education behaviors, primary care access, and public policy. An overview of televised food advertisements and access to primary care was searched to explore previous studies on how food advertisements target women.

Obesity Epidemic

The eating habits of adults contribute to the obesity epidemic. Over 17,000 research articles were found in the Walden database about *adult obesity*. When searching for keywords, such as *women, food, obesity, and advertisement,* there were 50 articles

found. Many variables contribute to the obesity epidemic in the United States (US); socio-economic status (Di Noia & Byrd-Bredbenner, 2014; Lawrence & Barker, 2009; Jarman et al., 2012), culture (Golan & Crow, 2004; Sosa, 2012), and home environment (Binkley, Eales, & Jekanowski, 2000; Cullen et al., 2007; Reicks, Trofholz, Stang, & Laska, 2014). In the US, obesity is a significant public health risk with adult obesity increasing over the past 20 years from 14.8% to 20.7%, and childhood obesity from 10.0% to 17.1% (National Center for Health Statistics, 2016). One out of five young people in the US is overweight or obese (Division of Population Health, 2017).

Women have a higher prevalence of obesity. The Centers for Disease Control and Prevention (2015) said that 36% of adults are obese with women have a higher prevalence than men (Ogden, Carroll, Fryar, Flegal, 2015). One in three women are obese (Centers for Disease Control and Prevention, 2015), a direct correlation with female-headed families having a higher prevalence of obesity (Slack, Myers, Martin, & Heymsfield, 2014). A study indicated that obese women maintained their body weight over a year by receiving nutritional education (Metzgar & Nickols-Richardson, 2016). Smith, Colón-Ramos, Pinard, and Yaroch (2016) revealed that obese women have food insecurities, emotional eating habits, skipping meals, and eating sweet foods for snacks. These studies emphasized women's obesity and their eating habits. Healthcare professionals should focus on giving lifestyle advice to patients who are obese or borderline obese.

Dietary habits correlate with physical activity and lifestyle choices. Obese women have a higher frequency of snacks with more energy intake and are less likely to exercise (Bertéus Forslund, Torgerson, Sjöström, & Lindroos, 2005). In contrast to women with a healthier body mass index (BMI), follow a healthier eating habit pattern with a higher level of restrained eating (Byrd-Bredbenner & Grasso, 2011; Konttinen, Haukkala, Sarlio-Lahteenkorva, Silventonien, & Jousilahti, 2009) and are self-motivated (Fisher & Kridli, 2014). Women are receptive to a healthier lifestyle when they prioritize eating habits and exercise. The study may reveal a correlation between obesity and eating habits.

Factors Contributing to Women's Food Choices

Socioeconomic Status

The socioeconomic status (SES) may determine a woman's choice of food. There were 49 articles found in the Walden database for *woman, food choices, and socioeconomic status*. Food choices and primary care access may be different, based on the community's SES. Communities of lower SES have a higher density of fast-food restaurants (Eagle et al., 2012; Michimi & Wimberly, 2015), and are an obese population (Van Hulst et al., 2013). Thus, communities of lower SES had a higher prevalence of being obese and consuming fast food. Research suggested obese women are at a socioeconomic disadvantage (Ball et al., 2012; Edvardsson et al., 2013). Women of lower SES are less likely to prioritize their eating habits (Jarman et al., 2012). Women specifically have a disadvantage in these communities due to their financial status

correlating with their eating habits. The correlation between obesity and SES illustrates the importance of health care services looking at these variables to provide nutritional interventions (Dammann & Smith, 2009). Women's SES may contribute to their limited resources for healthier food options.

Educational Attainment

Women's educational attainment impacts their food decisions (Jarman et al., 2012). A Walden search of the database found over 13,000 articles about *women, food, and education.* Many programs were developed to encourage a healthier lifestyle (Gerards et al., 2012), meal assistance (Wojcicki & Heyman, 2012), providing health lessons (Gerards et al., 2012), food-decision support (Wright et al., 2014), and proper nutrition (Aggarwal et al., 2014). Healthy People 2020 discussed the need to educate the community, improve the quality of education, and socio-economic conditions. The cost of preventive obesity education for children is $196 compared to $427 for treating an obese child (Wright et al., 2014). Higher local obesity correlates with lower levels of education (Slack et al., 2014). Compared to women with higher educational levels are slimmer with healthier bodies (Rasheed, 1998). These variables may indicate the correlation between educational attainments and food choices in this study.

Women need more nutritional education programs. By educating on dietary facts to ensure women are giving their families' proper nutritional daily consumption (Joyce, 2008; Wojcicki & Heyman, 2012). There is a correlation between SES, food making decisions, and reduce the cost of energy-dense meals (Jilcott, Wall-Bassett, Burke, &

Moore, 2011). Therefore, areas of lower SES should offer nutritional programs to assist with making healthier food choices. Research showed the importance of healthcare services to further educate women on making healthier options for their households based on their dietary habits (Jilcott et al., 2011). Nutritional programs assistance women to further educate on proper eating habits.

The cost of food also influences women's food choices. The correlation between SES and healthier food options for women may impact women's food choices. Lower SES communities have a low intake of fruit and vegetable (Bruner & Chad, 2014; Ver Ploeg & Rahkovsky, 2016). Consumption of less fruit and vegetable correlates to the cost of food. Women food purchasing power indicated a lack of food diversity selection based on cost (Amugsi, Lartey, Kimani-Murage, & Mberu, 2016; Cullen et al., 2007). Food purchasing power influenced women's food choices. The low-price food factor influenced a consumer's purchase (Tobey et al., 2016), in lower SES communities with fewer healthy food options (Cannuscio et al., 2013; Doran, 2016). Individuals who live closer to local farmer's markets are more likely to consume five or more servings of fruit and vegetables (Jilcott Pitts et al., 2013; Park et al., 2011). Other factors, such as food advertisements for unhealthy food, are not found in small non-traditional stores (Caspi et al., 2017), and social situations contribute to the consumption of fast food (Thornton, Jeffery, & Crawford, 2013). Reducing these factors via policy measures suggest a gap decrease between SES and healthier eating choices (Daivadanam, Wahlstrom, Ravindran, Thankappan, & Ramanathan, 2014). SES influences women's food selection.

Food Preparation

Learning women's eating habits helps them understand their household food-making decisions. When searching in the Walden database for *women, food preparation, and advertisement,* there were eight articles found. Previous studies showed women are responsible for food prep and shopping, along with 71% accountability for cooking in their household (Ferzacca, Naidoo, Wang, Reddy, & van Dam, 2013; Flagg, Sen, Kilgore, & Locher, 2014; Hamrick & McClelland, 2016; Hartmann, Dohle, & Siegrist, 2013; James, 2004). Whether the food is a brand name or not, it impacts the decisions women make when purchasing food for their families (Hemar-Nicolas, Gollety, Damay, & Ezan, 2015). Lawrence (2009a) found that women's disadvantage is their families refusing to eat healthier choices, and anticipation of food wasting or spoiling (Fish, Brown, & Quandt, 2015). Due to the fear of wasting food, many women may not purchase healthier choices, but the food they know their families will consume. Some women may lack confidence in food preparation since their families may not try new options. For instance, on average, women purchase fast food 2.5 times a week (Hamrick & McClelland, 2016; Kegler et al., 2014). The number of times woman purchases fast food correlated to their lack of confidence and fear of wasting food. Women that prepare more complex meals less than twice a week are insecure with their cooking (Engler-Stringer, Stringer, & Haines, 2011). SES, food selection, meal structure, and home eating patterns contribute to women's food making a choice.

Eating Habits of Women

The baseline for women's eating habits is essential to understand their food choices. There were 51 articles in the Walden database when searching *woman, eating habits, and advertisement*. Some factors that contribute to food selection is the feeling of home that food brings. People relate traditional food (TF) to their culture, creating a sense of home (Bruner & Chad, 2014). Culturally, women related giving up TF to losing part of their cultural heritage and conforming to the dominant culture (Ahye, Devine, Odoms-Young, 2006; James, 2004). Evans et al. (2011) revealed that women did not want to spend on non-TF, with the fear that their children would not eat the food. Women have an emotional eating habit. Mexican mothers categorize a healthy child as one who is overweight and about the same weight as their child; they believe that skinny children are ill and not healthy (Sosa, 2012). These are the baseline to compare women's habits, and determine if these factors, such as TF and culture, impact how food advertisements affect women eating habits. The individual's culture may impact the importance of family values as they relate to food making decisions.

Family Values

When searching keywords, such as *family values, women and food,* there were 159 articles found. Women's family values influence their food making decisions. The food offering is a coping behavior that is taught at an early age to increase positive affects (Myrte Esther, Catrin, & Carlo, 2014) and transferred to the offspring (Jaeggi, & Van Schaik, n.d). Recent studies found that women believe there is family value in food preferences (Dobal, Wesley, & Wilson, 2017), preparing and learning how to cook like

their mothers (Hunt, Fazio, MacKenzie, & Moloney, 2011). In many families, food is part of their culture and values. One study found that women reflected the value of bringing the family together with food (Ahye, Devine, Odoms-Young, 2006). The feeling of food providing comfort and guiding women to make specific food selections contribute to the amount of time women spend cooking.

Time Spent Cooking

The amount of time spent preparing a meal influences the type of food cooked by women. There were 12 articles found when researching the Walden database for *women and time spent cooking*. Women who spent more than 20 minutes preparing dinner to have a higher possibility of eating more fruit and vegetables (Chu, Addo, Perry, Sudo, & Reicks, 2012; Ducrot et al., 2017; Hamrick & McClelland, 2016; McLaughlin, Tarasuk, & Kreiger, 2003) and are confident in their cooking (Fish, Brown, & Quandt, 2015). Van der Horst, Brunner, and Siegrist (2011) stated that women with more cooking skills would prepare more meals. However, Chu, Addo, Perry, Sudo, and Reicks (2012) indicated no correlation between women who spend more time cooking and preparing a healthier meal. Some mothers rely on processed food to feed their families if they do not feel confident enough to cook a healthy meal (Reicks, Trofholz, Stang, & Laska, 2014). In households where women have the primary domestic role, the frequency of how often the family ate from the food street vendors decreased (Van 't Riet et al., 2001). The meal structure is not dependent on the amount of time spent cooking but on other variables, such as diet, physical activity, and type of lifestyle.

Frequency of Grocery Shopping

The amount of time a person goes to the grocery store may reflect their eating habits. Travel time, frequency, and fast food consumption are directly correlated with fewer grocery store trips and consuming more fast food (Jilcott, Moore, Wall-Bassett, Liu, & Saelens, 2011; Kegler et al., 2014). Blaylock and Blisard (1989) indicated a direct correlation between increase shopping frequency, spending money at local stores, and the type of food purchase (Wiig & Smith, 2009), such as more fruit and vegetables (Moreira, Moreira, & Fiates, 2015; Pechey & Monsivais, 2015). The frequency of grocery shopping and the type of food purchased correlated to more fruits and vegetables purchased when shopping was more frequent.

Method of transportation impacted the frequency of women's visits to the grocery store. Those who typically do not go often will not buy perishable goods (Wiig & Smith, 2009), while Wonderlich-Tierney, Wenzel, Vander Wal, and Wang-Hall (2013) finding indicated a higher response to food advertisement based on transportability. However, the type of food purchased may also be dependent on the shopper's attitude. The shopper's attitude influences the food making decisions; those with higher diet qualities have positive eating habits (Aggarwal, Monsivais, Cook, & Drewnowski, 2014). While the frequency of grocery shopping influences the type of food purchased, food label knowledge may be critical to women food making decisions.

Food Labels

Decisions made when food shopping may be influenced by the individual's nutritional knowledge of the products. There were 465 articles found in the Walden database when searching for *women* and *food labels*. The Affordable Care Act is a federally funded program that expands the nutritional education focus on food labels. This type of program may assist with further food education for women. Su, Zhou, Jackson, Soliman, Huang, and Yaroch (2013), suggested that women read nutritional labels more than men. Thus, women's knowledge of food labels may be an influential factor in their food making decisions. A person's understanding of food labels impacts the type of food purchased (James, 2004). When a consumer understands the nutritional implications of the food labels, it drives their food choices. Some consumers do not read the dietary food labels when conducting their grocery shopping (Lewis-Hickman, 2016), while those who read the labels maintain a healthier lifestyle (Hess, Visschers, & Siegrist, 2012). There were recommendations to change the format of nutritional labels with one single serving side and the other the entire container serving facts, which provides consumers a more natural daily understanding of their food intake (Roberto & Khandpur, 2014). Food label knowledge is a catalyst for improving the educational programs to ensure the women are well-aware of the food they are consuming.

Food Advertisements

Food advertisements influence a person's food making decisions via television or social media. Televised food advertisements contribute to food making decisions families and women have when shopping. In the US, food advertising companies spend 1.8 billion

dollars on television advertisements (Estrela, Pereira, & Ventura, 2014), resulted in a 0.25% demand increase (Okrent & Aylin, 2016). Food advertisement consisted of 67% unhealthy foods, targeted families of low SES, and corresponded to the high levels of fat and sugar foods consumed (Adams, Tyrrell, Adamson, & White, 2012; Bacardí-Gascón et al., 2013; DiSantis et al., 2014; Henderson & Kelly, 2005). Studies found a direct correlation between the amount of time exposed to television, fast food advertisement, and the SES (Kim et al., 2014). The food advertisement industry tended to market to the lower SES.

Food advertisement industries focus on people who watch more television. Women who spend 23.5% of their day watching TV have a higher habit of secondary eating (Hamrick & McClelland, 2016), and an increasing number of unhealthy snacks (Dammann & Smith 2009). Advertising expenditures and purchasing ready to cook meals, snacks, fast-food restaurants, and sit-down restaurants influence by food advertisements (Okrent & Aylin, 2016). Compared to a previous study stating food advertisement does not affect the eating habits of women (van Nee, Larsen, & Fisher, 2016). Some people will watch food shows to obtain new recipes and try to prepare them while others will sit for a couple of hours and enjoy the show (Pope, Latimer, & Wansink, 2015). These are the baseline for how food advertisements may influence people.

Women are one of the main focuses of food advertisements. The food industry analyzed women's shopping behavior to direct food advertisements to women (Odell,

2016; Reicks et al., 2003). Marketing techniques revealed that women need a connection to the brand they are purchasing (Getting Social, 2012). However, Kraus (2015) stated that consumers are more interested in the health and taste of a product when making their decisions. These food advertisements are some factors that contribute to the food making decisions women have for themselves and their families.

The marketing industry has established a brand to influence the preferences of children with the type of food they will eat. Children request food selections from their mothers that advertise during the shows they watch, which are high in fats and sugar; 92.4% fatty, sweet, and salty snacks, 4.1% convenience food, and 3.5% dairy and dairy products (Golan, 2004; Missbach, Weber, Huber, & König, 2015; Pettigrew et al., 2013). The concept of branding children to specific types of food is strong (Estrela et al., 2014). Food marketing companies target children by including prizes with meals (Pettersson & Fjellstrom, 2006) such as free toys (Marshall, 2014). Although these companies target children, parents felt it unfair to focus on a vulnerable audience (Den Hoed & Elliott, 2013). The types of food advertisements influenced children, and healthcare service programs should focus on nutritional education for the communities (Amugsi et al., 2016). Children are targeted by the marketing industry to influence their parents on certain goods.

Social Media

Food advertisements have shifted from televised to social media. Social media is a research platform for 90% of consumers to receive feedback on products (Galvan,

2016). There are no regulatory nutritional guidelines for social media company's usage of social media to post food advertisements (Williams, 2013) and influence people to think their unhealthy habits are regular (Pope et al., 2015). Social media is used to obtain healthier recipes (Tobey et al., 2016), such as an online cooking course for women increased their frequency of cooking (Adam, Young-Wolff, Konar, & Winkleby, 2015). Social media has provided people a new platform for more information. Women want transparency with brands and look for recipes when using the products (PR, 2012). Using social media as a variable may confirm the online influences on women. Social media marketing uses branding techniques aimed at women to influence their food making decisions.

Primary Care Access

Women's primary care access may modify their food making decisions and lifestyle modification. One in five women, when seen by their healthcare providers, were not advised on eating habits changes (Bombard et al., 2013). Individuals who received diet and exercise modification advice from their health care providers were more likely to make changes (Vaccaro & Huffman, 2012). Health care professionals have an impact on the education and perspectives provided to patients. Healthcare professional's knowledge and community educational attained are essential to understanding what influences women's food choices (James, 2004). Thus, the importance of health intervention programs to increase the focus on healthier eating habits for the communities' health and healthcare may be beneficial (Jerome-D'Emilia et al., 2014; Metzgar & Nickols-

Richardson, 2016). Healthcare providers can learn to work with communities, learn their cultural behavior, and patient sensitivities to certain beliefs to provide healthier eating recommendations (Fortier, 2008; McPherson, Mirkin, Hatherley, and Homer, 2012). Healthcare access was studied to determine if there is a correlation between women's eating habits, food making decisions, and proper access to care.

Public Policy

The cost of products may impact food making decisions. Fruits and vegetables are more expensive than having fast food leading to a decrease in the ability for women of lower SES to consume (Dressler & Smith, 2013). An increase in the cost of unhealthy food causes a decrease in the purchasing of these products by consumers (Elbel, Taksler, Mijanovich, Abrams, & Dixon, 2013; Khan, Powell, & Wada, 2012). There is a need to reduce the cost of healthful foods to make it affordable for those receiving government assistance (Jilcott et al., 2011). Public policies may look at the cost of foods, and the correlation of food advertisements to drive women to make healthier food choices.

Questionnaires

This quantitative study examined the influences of food advertisements and access to primary care on women's food choices. Previous studies successfully used a survey method. Some surveys were mailed out or answered online, establishing a baseline to obtain the data faster (Hartmann et al., 2013; Kim et al., 2014). The questionnaires were used to ask how often young adults watch television, and how often they eat at fast-food restaurants (Bertéus Forslund et al., 2005; Scully, Dixon, &

Wakefield, 2009). Previous research on food consumption used the quantitative model to analyze the results (Buttet & Dolar, 2015; Di Noia & Byrd-Bredbenner, 2014).

Tools

Specifically, there was a survey that focused on an online survey to compare the food-related activities and dietary behavior (Di Noia & Byrd-Bredbenner, 2014). The sample size was 201, and participants were recruited by different networks that allowed them to do an online survey to establish eligibility (Byrd-Bredbenner et al., 2011). The following was the criteria; females, with at least one child age 12 or younger, married or living with a domestic partner, neither they, their parents, or partners could be employed by health-related profession, secure food access, ate at home at least three times a week, and were primary meal planners (Byrd-Bredbenner et al., 2011). Logistic regression is the analysis used to compare food advertisements and the influences on individuals' eating habits (Bertéus Forslund et al., 2005; Scully, Dixon, & Wakefield, 2009). These research strategies were applied to focus specifically on women and how food advertisement and access to primary care influences their food making decisions.

Meal Pattern Questionnaire

The tool used to answer the questions was a dietary meal questionnaire. The nutritional survey was previously used to describe habitual daily intake, such as the time and type of intake occasions: main meal/ light meal/breakfast, snacks, or only drink (Bertéus Forslund et al., 2005). Jeffery, Baxter, McGuire, and Linde (2006) analyzed the quality of the individual's diet, their food making decisions based on their previous

weeks' eating habits, such as their high-fat foods and frequency. These factors have analyzed any barriers, motivators, nutrition education channels, and concepts of healthful eating (James, 2004), to further understand the eating habits of participants. For this study, additional questions were added to focus on food advertisements, access to primary care, and the correlation to the food making decisions.

Quantitative Methodology

The quantitative methodology is commonly used to assess a person's food frequency questionnaire. The quantitative approach showed women's food frequency varies depending on whether the women have children (Stephanie et al., 2015). A quantitative method provides more accurate and less misrepresentation about food diversity (Martin, Prevel, Becquey, & Arimond, 2010) and traditionally used with food frequency questionnaires (Patricia et al., 2017). These studies provided a baseline for further research conducted during this study.

Women are the primary food making decision-makers. The growing obesity epidemic for children and adults is a preventative disease in the United States. The overall family food choices, food preparation, time spent cooking, the frequency of grocery shopping, food labels, food advertisements, access to the primary care provider and social media will provide a baseline for future research in food advertisements and access to primary care influences on women's food making decisions.

Summary

The association between food advertisements and food choices are important. The SES of women influences the type of food they can afford. The food selection made by women is dependent on their knowledge of what food is considered healthy and suitable for their families. Educational attainment influences the food habits of an individual and their awareness of healthy food options. Access to primary care is essential as it may affect the food choices made by women.

Previous studies have not determined the correlations between food advertisements, access to primary care, and women's food making choices. This study contributes to fulfilling this research gap by examining the associations between food advertisements, primary care access, women's food making decisions, and families' health. It is important to analyze these factors to influence further policymakers regarding food advertisements and women's access to primary care, to improve women's food choices.

Chapter 3 provides a detailed description of the quantitative research methodology, including survey questionnaire, data collection and procedures, procedures for data management, methods of data analysis, ethical and quality considerations, researcher's role, subjectivity and bias, and participants' protection for their privacy.

Chapter 3: Research Method

Learning the influence of food advertisements and access to primary care have on women when making food decisions will assist health care providers, public health officials, and lawmakers through increased knowledge of how to improve woman's eating habits for themselves and their families. In most American households, women are the primary cooks and food decision-makers (Cleland et al., 2013; Lawrence et al., 2009b; Robles et al., 2014). Food companies spend billions of dollars every year, ensuring consumers purchase their products; however, women who receive nutritional access advice from their primary care providers (PCPs) are more likely to have a healthier diet (Vaccaro & Huffman, 2012).

Chapter 3 presents the research design, methodology, the population, sampling procedures, validity of the published instruments, and threats to validity. This study design is quantitative, using a questionnaire approach with logistic regression to analyze the results. The survey and quantitative analysis help to understand the relationships between the independent and dependent variables. The purpose of the study was to understand how food advertisements and primary care access to influence women's food choices.

Research Questions

The following are the research questions for the study:

RQ1: Is there a statistically significant relationship between the viewing of televised food-based advertisements, demographic characteristics (age, education level,

socioeconomic status, ethnicity, and number of children), eating habits of women, and food choice decisions they make for their family?

$H_0$1: There is no statistically significant relationship between the viewing of televised food-based advertisements, demographic characteristics (age, education level, socioeconomic status, ethnicity, and the number of children), eating habits of women, and food choice decisions they make for their family.

H_a1: There is a statistically significant relationship between the viewing of televised food-based advertisements, demographic characteristics (age, education level, socioeconomic status, ethnicity, and a number of children), eating habits of women, and food choice decisions they make for their family.

RQ2: Is there a statistically significant relationship between women who watch food advertisements and their eating habits?

$H_0$2: There is no statistically significant relationship between women who watch food advertisement and their eating habits.

H_a2: There is a statistically significant relationship between women who watch food advertisement and their eating habits.

RQ3: Is there a statistically significant relationship between primary care access and the eating habits of women?

$H_0$3: There is no statistically significant relationship between primary care access and the eating habits of women.

H_a3: There is a statistically significant relationship between women primary care access and the eating habits of women.

The collection of data for these questions came from a local community event via SurveyMonkey on the east coast of the US of women between 18 and 35. These factors regarding how food advertisement and primary care access influence women's food making decisions may lead to data to develop or modify available food options in these communities. These questions were the foundation for the survey.

Research Design and Approach

The method of inquiry was a survey administered to women through SurveyMonkey. The meal pattern questionnaire focuses on female food shopping decisions. The second part of the study included questions about food advertisements, women's access to primary healthcare, and how these factors influence women's food choices.

Setting and Sample

The sample population was women living on the east coast who attended a local community event. The target population for this study was women between the ages of 18 and 35 with children under the age of 18 for whom they have primary responsibility for food provision/preparation. Inclusion criteria included born in the United States, have a high school education or higher, and have a television. Women with no children over the age of 35 who were not born in the United States or did not have a high school degree or higher excluded from the study.

Purposeful Sampling

Walden University Institutional Review Board (IRB) approved this study; the approval number is 07-02-19-0228222. The participants were from a local community event on the east coast of the US. Participants were asked to volunteer as they entered the location. Participant consent forms were on the second screen on SurveyMonkey. These participants were women with children under the age of 18. The participants were also asked if they knew other women who would be interested in participating in the study. Three computers were available for participants to complete the survey. The participants exited the study once they completed the survey with no required follow-up.

Selection of Sample Size

The selection of sample size was determined by previous similar studies done on the topic. The G*Power test used logistic regression, with a priori: Compute required sample size- given alpha, power, and effect size. With power at 0.95, alpha of 0.05, the total sample size was 125.

Methods

The data collection took place at a community event on the east coast of the US. The survey sample population was women who were 18 to 35, have children under the age of 18 for whom they have primary responsibility for food provision/preparation, were born in the United States, had a high school education or higher, and have a television. The specific tool used was a questionnaire via SurveyMonkey. The questions were from the meal pattern questionnaire with additional questions on access to primary care. The

general rating point technique was used to measure how food advertisements and access to primary care influenced women's food making decisions.

The independent variables were food advertisements, educational attainment, socioeconomic level, employment status, and the amount of time spent watching television, and the dependent variables are food choices, diet, and primary care access. These variables were analyzed with the meal pattern questionnaire. The questions consisted of participants ranking the total number of intakes, occasions per day. The categories are the main meals, light meals/breakfast, snacks, and drink only meals. The baseline for this study was a questionnaire that assesses the frequency concerning energy intake and food choices, which will serve as the baseline for this study (Bertéus Forslund et al., 2005). There was a pilot study to test the feasibility of the questionnaire. The pilot study took 20 participants with the same questionnaires to determine if the questions are well-written, no system issues and that SurveyMonkey captures the responses. Informed consent was obtained to use and modify their questionnaire via SurveyMonkey. The validity of this dietary questionnaire was not tested for standard methods (Bertéus Forslund et al., 2005). The population for this instrument was obese women from the Swedish Obese Subjects and referenced women from the population in Swedish cities of Molndal and Orebro (Bertéus Forslund et al., 2005). The meal pattern questionnaire reliability was reproduced with the same participants three months later (Bertéus Forslund et al., 2005). This questionnaire assessed the eating habits of the women in this study, in addition to questions on televised food advertisements, and access to primary

care. Table 1 outlines the research questions that the Meal Pattern Questionnaire focused on analyzing. These questions help analyze any correlation between the dependent and independent variables for the study.

Table 1

Survey Tool Used for Each Question

Question	Analysis Tool
How do viewing food advertisements on television impact the food choices of women?	Meal Pattern Questionnaire
How does viewing food advertisements impact the eating habits of women?	Meal Pattern Questionnaire
How does the diet of women influence their food choices for their family?	Meal Pattern Questionnaire
Do food advertisements influence the women's food choice for her family two or more times per week?	Meal Pattern Questionnaire
What is the correlation between primary care access and the eating habits of women?	Meal Pattern Questionnaire

The characteristics of the sample population are women between the ages of 18 to 35 years, have children under the age of 18 years for whom they have primary responsibility for food provision/preparation, born in the United States, with a high school education or higher, and have a television. The validity of the questionnaire has been to give valid estimates of obese and normal-weight subjects of energy intake (Bertéus Forslund et al., 2005). Some external validity threats may be due to the

interaction of participants with the researcher, participants' response based on remembering information, answering based on the description of the study, the participant's level of education, socio-economic status, and nutritional education understanding. Internal validity may be due to the online survey method, the format of the questions, researchers' order of inputting the response options, and potential disruption of the data when analysis. The demographic information questionnaire was used to collect information for the independent variable's food-based advertisements, demographic characteristics (age, educational attainment, SES, employment status, ethnicity, number of children).

Variables

Independent Variables (IV):

Food based advertisements: 0= none, 1= one to three, 2 = four to six, 3 = seven or more,

Demographic characteristics:

Age: 0 = 18 and younger, 1 = 19-24, 2 = 25-31, 3 = 32-36

Educational attainment: 0 = some school, 1 = completed high school, 2 = completed undergraduate, 3 = completed graduate

Socioeconomic status: 0 = $60,000 or more, 1 = $50,000 to $59,999, 2 = $45,000 to $49,999, 3 = Less than $45,000

Ethnicity: 0= white, 1 = Hispanic or Latino, 2 = Black or African American, 3 = Native American or American Indian, 4 = Asian/Pacific Islander, 5 = Other

Employment Status: 0 = stay at home, 1= part-time (20 hours), 2= full-time (40 hours), 3= over 40 hours

Number of children: 0 = none, 1 = 1-2, 2 = 3-4, 3 = 5 or more

Time spent watching television (per week): 0= none, 1= 5-10, 2 = 10-20, 3= 20-40, 4= 40-60, 5 = over 61 hours

Dependent Variables (DV):

Eating habits:

Eat at home/weekly: 0 = 0 days, 1 = 1-2 days, 2 = 3-4 days, 3 = 5 days. This variable is a nominal scale of measurement.

Eat at fast-food restaurant: 0 = 0 days, 1 = 1-2 days, 2 = 3-4 days, 3 = 5 days. This variable is a nominal scale of measurement.

Types of food: 0 = Hamburgers/cheeseburgers, 1 = Hot dogs, 2 = Pizza, 3 = Latin Style, 4 = Italian Style, 5 = Other. This variable is a nominal scale of measurement.

Family food Choices (per week): 0 = more meats, 1 = more chicken, 2 = more vegetables, 3 = more fruit, 4 = other. This variable is a nominal scale of measurement.

Confidence in Cooking: 0= none, 1= very little, 2= little, 3= confidence, 4= great cook. This variable is a nominal scale of measurement.

Primary Care Access: 0= none, 1= 1 time a year, 2= 2 times a year, 3= not in 5 years, 4= not have seen 10 years. This variable is a nominal scale of measurement.

Data Analysis

Raw data was entered and analyzed using the Statistical Package for Social Sciences (SPSS) software version 25. The research question analyses were presented with means, standard deviations, and ranges for independent variables and a logistic regression summary table for dependent variables. A Likert Scale tool is useful when collecting data via surveys to have a robust set of questions that will focus on the concept that one is trying to measure. The statistical test used was logistic regression. When using logistic regression as the statistical test, the odds ratio will report and interpret the results in the study (Pourhoseingholi et al., 2012). The odds ratio interprets multivariable and bivariate relationships. The SPSS tool was used to analyze the questionnaire data.

Ethical Procedures

Some potential ethical issues involve cultural barriers between traditional beliefs and modern results. Identification of the cultural views and acquisition provides an understanding for healthcare community leaders about the individuals in the community and their knowledge of proper eating habits. Some other ethical considerations for avoiding personal bias include not using participants who are friends or family members of the researcher. Another mitigation of prejudice is not using one's individual views to change the outcome of the study. To ensure no violation of ethical standards, every

participant will input their responses into the system when given and ensure no participant feels forced into responding to the study.

One of the primary considerations is ensuring no ethical problems with language barriers. The IRB does consider ethnicity as a sensitive topic that will require approval before conducting the research. Written permission from Bertéus Forslund for the meal pattern questionnaire has been received to use and modify their questionnaire. Consent forms were obtained via SurveyMonkey and stored on the website platform. Consent forms and information about participants were not critical for the study. Participants were given confidentiality procedures.

Summary

Chapter 3 included a description of the rationale and methodology for conducting this quantitative study to explore how food advertisements and access to primary care influence women's food-making decisions. SurveyMonkey was used to collect the data from the women who met the requirements at the local community event along the east coast. A logistic regression study was used to further analyze the data with SPSS software. Chapter 4 includes the analysis of the data and findings of this study.

Chapter 4: Results

Introduction

This study intended was to assess the relationship between food advertisements, access to primary care, and women's food choices. The method of the study was quantitative and involved three main research questions. The first question focused on how viewing food advertisements on television may impact the food choices of women. The second question focused on the implications of viewing food advertisements on women's eating habits. The third question explored the relationship between food decisions and access to primary care.

Pilot Study

There was a pilot, as outlined in Chapter 3. The aim was to finalize the validation of the questionnaire before completion of the main study. The research tool was a structured questionnaire with 36 questions. The pilot study validated the version of the questionnaire approved by the IRB.

Data Collection

The survey completion lasted one month and 11 days, from July 4, 2019, to August 15, 2019. The data collection took place on the east coast of the US. Each questionnaire took place after participants consented to the study and met the study requirements. The recruitment strategy applied for the data collection included the distribution of flyers and the use of laptops set up to complete the survey on location.

The study's projected response rate and final response were different at the end of the data collection. There were 274 survey participant inquiries with 125 completed. One hundred twenty-five was the final sample of the study. The ratio of 125 completed questionnaires and 274 total numbers of contact/attempt gave the study's response rate of 46%. The discrepancy in response rate was due to respondents not meeting the predetermined inclusion criteria of the study.

Results

RQ1 show significant association with independent variables of women's age and employment status. RQ2 were nonsignificant except for the variable "Household food decisions based on food advertisement you saw". RQ3 were nonsignificant. Their age ranged from 18 to 36, with 72% between 32 and 36 years old. Table 2 shows how often the participants saw food-based advertisements.

Table 2

Frequency Participants watched Food-based Advertisement

	Frequency	Percent
None	5	4.0
1-3 times	26	20.8
4-6 times	29	23.2
7 or more times	65	52.0

The participant's highest level of attained education was 52.8% completed graduate school, and 32.8% completed undergraduate school, as presented in Table 3.

Table 3

Highest Level of Attained Education

	Frequency	Percent
Some School	3	2.4
Completed High School	15	12.0
Completed Undergraduate School	41	32.8
Completed Graduate School	66	52.8

As displayed in Table 4, 73.6% of participants have a total household income of $60,000 or more.

Table 4

Total Household Income

	Frequency	Percent
$60,000 or more	92	73.6
$50,000 to $59,999	8	6.4
$45,000 to $49,999	9	7.2
less than $45,000	16	12.8

Participants' ethnicities were: 42.4% White and 33.6% Hispanic or Latino. Eighty percent of participants have between one and two children. Fifty-two percent reported working a full-time job (40 hours), and 26 stayed at home. Participants' reported time spent watching television is displayed in Table 5.

Table 5

Frequency of Watching Television on a Weekly Basis

	Frequency	Percent
None	14	11.2
5-10 Hours	78	62.4
11-20 Hours	22	17.6
21-40 Hours	9	7.2
41-60 Hours	2	1.6

Table 6 details the mean and standard deviation for the variables from this study. The sample of the population of interest is 100% for the criteria pre-determined as part of the study.

Table 6

Descriptive Statistics

	Frequency of Food-	Age	Highest Level of Attained Education	Total House-hold Income	Ethnicity	Employment Status	Number of Children	Frequency of Watching Television

	Based Advertise-ments							
M	3.23	3.67	3.36	1.59	1.71	2.42	2.21	2.26
Median	4.00	4.00	4.00	1.00	2.00	3.00	2.00	2.00
SD	.917	.606	.787	1.078	1.120	.969	.427	0.812

Food Shopping

Analyzing participants' food shopping habits was the first part of the research questions. Participants responded that in their last month before the survey, the number of times participants food shopped for primarily nonprepared food was zero (2.4%), one to five times (59.2%), six to -10 times (30.4%), 11-15 times (5.6%?), and 16 or more times (16.4%). The majority (95.2%) have their own/household cars as the mode of transportation for food shopping. When shopping, 57.6% had a written shopping list before food shopping, and 31.2% had no written list. Some participants reported not purchasing on their list due to it was on sale, I remembered I needed it, forgot to put on the list, and usually the kids asking for items that have movie characters or something cool on the front of it. For participants who did not have a shopping list, they reported having a different strategy for food shopping such as follow the path in store, go from end to end, follow the isles, list in the head, sales, and repurchase previously brought items.

Forty-two percent of participants reported reading the store circulars or other store advertisements to see price specials in certain stores. From these participants who read the store circulars, 51.2% stated the circular influenced them with items they purchase by buying items to stock up if on sale, clipped coupons, decided what meats to purchase, decided what we get where and base our meals around what is on sale.

However, 57.6% reported not changing the store shopped in to take advantage of price-related specials offered at another store. 62% reported purchasing a different brand from the one usually purchases to take advantage of price-related specials. When asked if they would purchase a store brand item, instead of a name brand item if it costs less 25.6% stated almost always, 32% often stated, 30.4% sometimes and 11.2% stated rarely. If an item within the same food category were on a price-related special, 50.4% would switch the product intended to purchase for the one on sale, while 48.8% said would not switch. When asked if participants had purchased products they or their families had not tried before, only 45.6% stated yes, 41.6% said no. Of those who stated yes, the influencer for that purchase was the following display, free sample, try new, healthier options, store coupons, and promotion.

60% reported not buying an item/brand because they recalled seeing an advertisement on TV, radio, internet, billboard, or bus. While 24.8% stated these advertisements did influence them, and 53.6% responded the items were not ones they or their families had not tried before, 35.2% had some of the time purchased a new item. Seventy-five percent of participants reported not buying an item/brand because of a

coupon dispenser while in the store, and 20% said yes. Only 28% were influenced by shelf-talker printed cards or another sign attached to the store shelf to call a buyer's attention while in-store and 63.2% were not influenced. Items/brands sold with free items or labels or tops for fundraising were only purchased by 17.6% of participants, while 82.4% did not purchase these items. Purchase of an item because of a special such as buy one, get one free, or 10 for 10 sales influenced 86.4% of participants while 12.8% said no. When asked if purchased a product because it had a special message regarding nutritional information or claimed to be healthier, 58.4% stated no, and 38.4% stated yes. Participants answered food shopping questions about their eating habits.

Eating Habits

Participants were asked a series of questions regarding their eating habits. When asked how often they eat at home, 4.8% stated 1-2 days, 11.2% stated 3-4 days, 84% stated 5 or more days. The amount of days participants ate at a fast-food restaurant was 8.8% zero times, 44.8% 1-2 days, 18.4% 3-4 days, and 28% stated 5 or more days. The type of food they ate at home was stated as 45.6% American Cuisine, 6.4% Italian Cuisine, 18.4% Latin American Cuisine, and 29.6% other cuisines such as all the above, African American cooking, Caribbean Indian Asian fusion, and Mexican food. The food choice participants provide their family on a weekly basis is 16.8% more meats, 32% more chicken, 31.2% more vegetables, 12% more fruit, and 8% other such as all the above, all vegetarian, and variety of categories. Participants who stated food advertisements influence their food choices purchased more meat to eat at home on a

weekly basis (see Figure 1). Further, analyze was done of the participants eating habits and whether food advertisement influences their food decisions with the next series of responses.

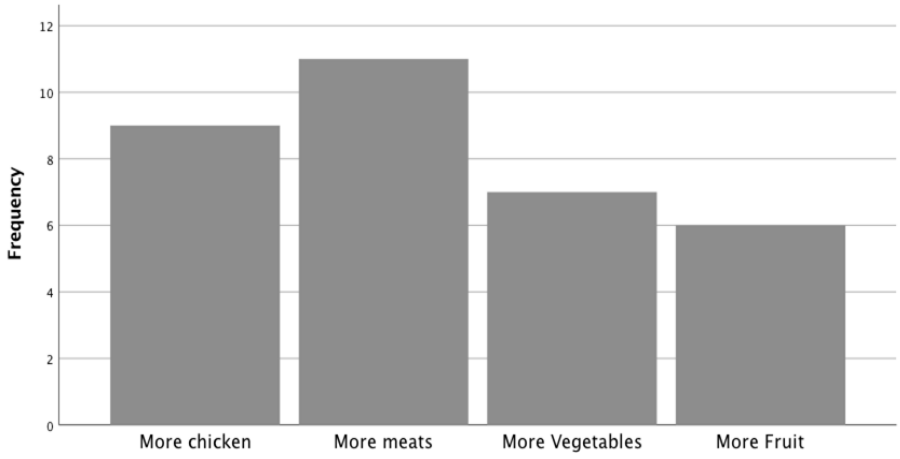

Figure 1. Food advertisements influenced food choices.

Food Advertisement

Other questions regarding purchasing items due to food advertisements were asked to the participants. Based on food advertisements, 70% of participants stated they did not purchase a different product, while 26.4% stated they did. When asked if the participant's children recommended an item based on a food advertisement they saw and purchased it for their child, 74.4% responded no. In comparison, 22.4% stated their children recommendation influenced them to purchase the item. Participants were asked if a household food decision was based on food advertisement, 67.2% stated no, and 28% responded yes. The participant's response suggests food advertisement has little impact

on the specific food purchased. The food advertisement did not change their purchases based on their children's recommendations or purchased a new item based on food advertisements.

Primary Care Physician

The amount of time since participants with a recent physical exam was 56% with less than a year ago, 28.8% 1 year ago, 11.2% 2-4 years ago, and 4% over 5 years. Participants reported that 51.2% of their physicians talked about nutritional choices, while 44.8% did not. Of those participants whom physicians talked about nutrition choices, 45.6% stated it influenced their household food decisions, 36.8% stated it did not, 12% didn't know, and 5.6% refused to answer this question. 84% stated not buying a different product based on their primary care physician's recommendation, while 14.4% were influenced. When asked if a household food decision was made based on the primary care physician's recommendation, 76% responded no, 21.6% stated yes, and 2.4% didn't know. Participants stated their primary care physicians' recommendations did not influence their household food decisions. When making nutritional choices, their primary care physicians' recommendations were nonsignificant.

Discussion of Research Questions and Hypotheses

There were three research question associated with this research. I used logistic regression to analyze the first research question, how does viewing food advertisements on television impact the food choices of women? Table 7 shows the results of the analyses if participants purchased different products due to the food advertisement based

on the independent variables age, level of education attained, income, ethnicity, and employment status. RQ1 results of the analysis were nonsignificant ($p > 0.05$) for independent variables associated with the level of education attained, total household income, ethnicity, and frequency of watched television. RQ1 shows a significant association with independent variables associate with women's age and employment status.

Table 7

Variables of the Equation for Independent Variables

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Age	0.716	0.349	4.203	1	0.040	2.047
	Level of Education Attained	0.047	0.328	0.020	1	0.886	1.048
	Total household income	0.110	0.238	0.212	1	0.645	1.116
	Ethnicity	-0.101	0.188	0.293	1	0.589	0.904
	Employment status	0.504	0.247	4.160	1	0.041	1.656
	Frequency of Watched Television	0.206	0.284	0.525	1	0.469	1.229
	Constant	-3.409	2.115	2.600	1	0.107	0.033

RQ2 is how does viewing food advertisements impact the eating habits of women? I used logistic regression to analyze the impact of viewing food advertisements and women's eating habits. The results of RQ2 were not statistically significant with exception of the variable "Household food decision based on a food advertisement you saw". The regression statistics are presented in Table 8. Table 8 shows an influence on eating habits based on food advertisements.

Table 8

Variables of Dependent Eating Habits of Women

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	Shopped at a different store due to sells	0.641	0.681	0.886	1	0.347	1.899
	Purchased different brand to take advantage of price-related specials	0.909	0.896	1.029	1	0.310	2.481
	Purchased different product within the same category due to price-related specials	0.343	0.653	0.276	1	0.600	1.409
	Purchased an item/brand due to recalled seeing an advertisement on TV, radio, internet, billboard, and bus.	1.187	0.750	2.508	1	0.113	3.277
	Coupon Dispenser Influence	1.077	0.752	2.052	1	0.152	2.936
	Shelf-talker Influence	0.589	0.687	0.736	1	0.391	1.803
	Purchased more of an item because of a special, such as “buy one, get one free”, or “10 for 10 sale”	0.703	1.326	0.281	1	0.596	2.020
	Purchased a product due to special message regarding nutritional information or claimed to be healthier	0.224	0.649	0.119	1	0.730	1.251
	Purchased a product due to child recommendation based on a food advertisement	-0.313	0.867	0.130	1	0.718	0.731
	Household food decision based on a food advertisement you saw	2.007	0.702	8.165	1	0.004	7.438
	Constant	-10.139	3.165	10.262	1	0.001	0.000

I also used logistic regression to analyze RQ3. The results of the analysis were nonsignificant $p > 0.05$. Table 9 shows if there was a correlation between participants purchasing a different product based on the amount of time spent watching television, the most recent physical exam and nutritional recommendations made by their primary care providers.

Table 9

Variables in the Equation for Access to Primary Care

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1a	Physician Nutritional Talk	0.491	0.449	1.199	1	0.274	1.634	0.678	3.936
	Watch Television	-0.013	0.272	0.002	1	0.960	0.987	0.579	1.682
	Most Recent Physical Exam	0.332	0.293	1.287	1	0.257	1.394	0.785	2.473
	Constant	-0.177	1.020	0.030	1	0.862	0.838		

a. Variable(s) entered on step 1: Did your physician talk about nutrition choices? On a weekly basis, how often do you watch television? How long ago was your most recent physical exam?

Conclusion

This chapter contains the results of the analysis, connects the analysis back to the research questions, and demonstrates the consistency of analysis using the quantitative methodology. One hundred and twenty-five participants were surveyed. The survey questions were used from a previous study with the permission of the researcher to use,

add, and change the questions. All participants were women between 18 and 35 who had children under 18 for whom they have primary responsibility for food provision/preparation, were born in the United States, had a high school education or higher, and have a television.

There were three main research questions analyzed for this study. Results on the three research questions with the associated null hypotheses and alternative hypotheses were visually displayed using descriptive statistics. Using SPSS software version 25 calculations of frequencies, percentages, means, and standard deviations were the tools of analysis for the factors. The analysis from the results did not indicate a significant difference between the dependent variables are food choices, diet, and primary care access, and independent variables are food advertisements, educational attainment, socioeconomic level, and the amount of time spent watching television. A correlation was between eating habits based on food advertisements seen on television by participants. Therefore, RQ1 shows a significant association with independent variables associated with women's age and employment status. RQ2 was nonsignificant except for the variable, household food decision based on a food advertisement participant saw. RQ3 were nonsignificant based on the results of the data. Chapter 5 provides a summary of research findings, interpretations, conclusions, recommendations, and implications for positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Chapter 5 includes a summary of the purpose of the study, methodology, interpretation of findings, theoretical framework, implications for social change, recommendations for action, and implications for further study.

Overview

The purpose of this quantitative study was to assess the correlation between women's food making choices, access to primary care physicians, and food advertisements along the east coast of the US. The social cognitive theory (SCT) and cognitive load theory (CLT) were the theoretical frameworks for the study. An exploratory research design was appropriate to determine the variables that influence female food choices. There were significant findings for RQ1 and RQ2 research questions and nonsignificant finding for RQ3.

Interpretation of the Findings

The non-significant food choices, eating habits of women, televised food-based advertisements and demographic characteristics; and access to primary care providers on women's food choices revealed through the survey of women in the study disconfirmed previous indications of the correlation between food advertisements and access to primary care providers affecting women's food choices. The independent variables educational attainment, socioeconomic level, employment status, and amount of time spent watching television are not the main factor in terms of their food choices. Of all the

independent variables, food advertisements affect the food choices correlation with the time spent watching television, women's age and employment status. Women with lower SES are less likely to prioritize their eating habits (Jarman et al., 2012). However, this study found that SES did not contribute to women's eating habits. While the level of education for the participants of the study did not agree with previous studies of women with higher education, making healthier choices (Jilcott et al., 2011). The study revealed these variables are non-significant for women with viewing food advertisements on television.

The analysis revealed the cost of food does not determine women's food choices. Participants revealed the cost of the food is non-significant to their purchasing, as shown in Table 8. Previous studies reviewed purchasing power was based on the food cost (Amugsi, Lartey, Kimani-Murage, & Mberu, 2016; Cullen et al., 2007). While women due prepare the food for their household, the study revealed they prepared more meat, and chicken than fruit and vegetables are previously found by another study (Cullen et al., 2010). The type of food purchased by women is non-significant based on the cost of food.

Analyses of the frequency of grocery shopping, and food labels were nonsignificant. Compared to the method of transportation previously found, it does not impact the type of foods purchased by the individual (Wiig & Smith, 2009). Another study revealed that nutritional food label implications drive food choices (James, 2004). There is no significant correlation between food labels and purchasing choices, as shown

in Table 8. Food advertising in the United States is a billion-dollar industry (Estrela, Pereira, & Ventura, 2014), with 67% of unhealthy foods advertised (Adams, Tyrrell, Adamson, & White, 2012; Bacardí-Gascón et al., 2013; DiSantis et al., 2014; Henderson & Kelly, 2005). Food advertisements do not affect women's eating habits (Van Nee, Larsen, & Fisher, 2016). There was correlation between women's who watched food advertisements and their eating habits. Table 5 revealed 63% of participants spent between 5-10 hours watching television on a weekly basis. 26.4 % of participants stated they purchased their food products based on food advertisements. Agreeing with previous research that women who eat while watching television may lead to unhealthy behaviors (Bureau of Labor Statistics, 2014; Henderson & Kelly, 2005; Nabi & Thomas, 2013). The purchase of food and the influence of food advertisement for women who watched food advertisement is significant.

The marketing technique for food purchasing was not as expected. SCT theory does not contribute to the decisions made by individuals based on their home environments. Kraus found that consumers are more interested in the health of the product (2015), while this study revealed no significant findings of healthier food choices purchased by participants. Women in this study were not influenced by their children's recommendations, as Amugsi's (2016) study had revealed that food advertisements influenced children's choice. Women were not influenced by their children or their observations from others.

Access to primary care was analyzed to determine the correlation between the food choices of women and access to primary care providers. CLT does contribute to the individuals eating behavior. Individuals who receive diet and exercise advice from their healthcare providers are more likely to make changes (Vaccaro & Huffman, 2012). Women who receive diet and exercise modifications did not follow recommendations from their healthcare professionals. The findings confirm that health intervention programs to focus on healthier eating habits may be beneficial for communities' health (Jerome-D'Emilia et al., 2014; Metzgar & Nickols-Richardson, 2016). The study revealed access to primary care is nonsignificant.

Limitations of the Study

As noted in Chapter 1, this study had several limitations. First, the group recruited who met the requirements may have limited experiences with making food choices and different interests for their families. Since the sample size was 125 participants, their experiences may not be representative of the population of the studied group of women. Participants may have a bias response based on their family interests. Another limitation involves the interpretation and completion of the survey via SurveyMonkey. The sample population is limited to a group in a specific geographic location and may not represent all women in the United States. While self-reporting is also a limitation for participants due to misjudgments, food motive sensitivity, bias, and socially desirable responses when responding to the questionnaire.

Recommendations for Further Study

This quantitative study analyzed food advertisements and access to primary care influence on food decisions on women provided insights into future research. One recommendation is to focus on specific SES groups of women, to determine if that is a variable that affects their food choices based on food advertisements and access to primary care. Lower SES individuals are more likely to have a low-price food factor, and they can afford for their families (Cannuscio et al., 2013; Doran, 2016; Tobey et al., 2016). Focusing on the factors of women's confidence in cooking, not fearing food spoiling, planning their fruit and vegetable intake may contribute to further studies (Cullen et al., 2010, Engler-Stringer, Stringer, & Haines, 2011). Future researchers may focus on access to primary care, the nutritional information provided to the patients by their health care providers, and there is a response to the recommendations. Women who received diet and exercise modifications were more likely to make lifestyle changes (Vaccaro & Huffman, 2012). Further research is recommended to study the nutritional information provided by primary care physicians and the correlation it may have on women's food choices. By providing nutritional information, the type of food purchase may be based on the understanding of the food label (James, 2004). Researchers should analyze the role of the community leaders, how they advocate for healthier food options, community programs to educate women, and ensuring there is more awareness of making healthier options.

Implications for Social Change

The initial significance of the study was to determine the factors that may influence women eating habits and the influence of public policymaker's impact on women eating habits based on access to primary care and food advertisements. As previously recommended, further research should be done based on the food advertisements and the impact they have on the food-making decisions of their households, with educational programs on nutrition for women (Aggarwal, Monsivais, Cook, & Drewnowski, 2014; Isgor, Powell, Rimkus, & Chaloupka, 2016). The study was nonsignificant for the influence of televised food advertisements and access to primary care. However, the study revealed women who watched food advertisements did have an impact on their eating habits. A recommendation will be for policymakers to advocate for healthier commercials on televised food and providing more educational programs for women. The more educated women are about nutritional values, the greater the possibility of making healthier food choices (Rashee, 1998; James, 2004; Jilcott et al., 2011). The implications for social change are food advertisements can make an impact by making nutritional recommendations to women for healthier food choices.

Recommendations for Action

Evaluating the research findings provided an opportunity to recommend actions for primary care providers and community leaders. As evidenced in this study, women are not influenced by SES, viewing of televised food advertisement, food choices or access to primary care providers. However, community leaders may advocate for further

education on food choices for women. Publishing the results of this study will distribute the findings to the larger audience outside of the academic community. There is a need to explore the relationship between food advertisements and women's food choices, food advertisements, and access to primary care providers. More research is recommended on how to understand what factors contribute to women's food choices.

Conclusion

The purpose of this study was to determine if women reacted to food advertisements and how access to their primary care providers influenced their food buying choices. The three hypotheses questions were RQ1: Is there a statistically significant relationship between the viewing of televised food-based advertisements, demographic characteristics (age, education level, socioeconomic status, ethnicity, and the number of children), eating habits of women, and food choice decisions they make for their family?, RQ2: Is there a statistically significant relationship between women who watch food advertisements and their eating habits? and RQ3: Is there a statistically significant relationship between primary care access and the eating habits of women? The analysis of the statistical results for RQ1 were nonsignificant, $p > 0.05$ except with association of these independent variables of women's age and employment status. RQ2 were not significant, $p > 0.05$ with the exception of the variable "Household food decision based on a food advertisement you saw." The statistical results for RQ3 were nonsignificant, $p > 0.05$ between access to primary care providers and women's food choices. There is no relationship between food advertisements, televised food

advertisements, and women's food choices. There is a relationship between watched food advertisement and women's eating habits. Positive social change may be found in understanding women's food buying choices to inform policymakers, government regulators, and primary care physicians.

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Appendix A: Population Sample

- Women between age 18 to 35 years
- With children under the age of 18 years for whom they have primary responsibility for food provision/preparation
- Born in the United States
- High school education or higher
- Have a television

Appendix B: Survey Flyer

Food Advertisement and Access to Primary Care's Impact on Family Food Decisions made by Women

Be part of an important health service research study!

- *Are you a woman who is the primary food decision maker of your household?*
- *Are you between 18 and 35 years of age?*
- *Do you have children under the age of 18?*

If you answered YES to these questions, you may be eligible to participate in a health service research study.

The purpose of this study is to analyze the impact that food advertisement and access to primary care may have on women's food making decisions. Food advertisements may influence women's food decisions, impacting their family's eating habits.

This study is being conducted online via SurveyMonkey

The survey will take 40 minutes to complete.

For further information please email the researcher:

Linda Soriano, MBA, BA
Ph.D. Candidate in Health Services with specialization in Public Health Policy

linda.soriano@waldenu.edu
Survey will be available until August 15,2019.

Appendix C: Consent Form

You are invited to take part in a research study about the impact food advertisement and access to primary care has on women's food making decisions determines their lifestyle and eating habits. The researcher is inviting women between the ages of 18 to 35 years, have children under the age of 18 years for whom they have primary responsibility for food provision/preparation, born in the United States, with a high school education or higher, and have a television to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Linda Soriano, who is a doctoral student at Walden University.

Background Information:

The purpose of this study is to analyze the impact that food advertisement and access to primary care may have on women's food making decisions.

Procedures:

If you agree to be in this study, you will be asked to:

- You will be asked to participate in a one-time 40-minute survey.
- The data collection will take place at a local event where computers will be connected to SurveyMonkey.
- The surveys sample population will be women who meet the sample population requirement: ages 18 to 35 years, have children under the age of 18 years for whom they have primary responsibility for food provision/preparation, born in the United States, with a high school education or higher, and have a television.
- The specific tool to be used is a questionnaire via SurveyMonkey.

Here are some sample questions:

1. In the last month, did you ever change the store you shopped at in order to take advantage of price-related specials they were offering at another store?
2. In the last month, would you say that you purchase a store brand item, instead of a name brand item, if it costs less?
3. On a weekly basis, what food choice to you provide your family?
4. On the last month, did you make a household food decision based on your primary

care physician's recommendation?

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at Mineola Library, Westbury Market Fair and Kiddie Playland in Long Island, New York will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as stress, fatigue, or becoming upset. Being in this study would not pose risk to your safety or wellbeing.

These factors of food advertisement influence on women food decisions, which impact their families eating habits, may assist health care providers, public health officials, and lawmakers through increased knowledge of how to improve woman's eating habits for themselves, and their families.

Payment:

Participants will not receive incentives.

Privacy:

Any information you provide will be kept anonymous. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by password protection of the computers. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via _linda.soriano@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is **07-02-19-0228222** and it expires on **July 1, 2020.**

Copy of the consent form will be provided to the participants to keep.

Obtaining Your Consent

If you feel you understand the study well enough to make a decision about it, please indicate by selecting you give your consent on the survey.

Appendix D: Questionnaire

This survey was administered by SurveyMonkey.

1. In the last month, how often do you see food-based advertisements?
    a. None
    b. 1-3 Times
    c. 4-6 Times
    d. 7 or more Times
2. What is your age?
    a. 18 or younger
    b. 19-24 years old
    c. 25-31 years old
    d. 32-36 years old
3. What is your highest level of attained education?
    a. Some School
    b. Completed High School
    c. Completed Undergraduate School
    d. Completed Graduate School
4. What is your Total household income?
    a. $60,000 or more
    b. $50,000 to $59,999
    c. $45,000 to $49,999
    d. Less than $45,000
5. What is your ethnicity?
    a. White
    b. Hispanic or Latino
    c. Black or African American
    d. Native American or American Indian
    e. Asian/Pacific Islander
    f. Other
6. What is your employment status?
    a. Stay at home
    b. Part-time (20 hours)
    c. Full-time (40 hours)
    d. Over 40 hours
7. How many children do you have?
    a. None
    b. 1-2
    c. 3-4
    d. 5 or more
8. On a weekly basis, how often do you watch television?

a. None
b. 5-10 Hours
c. 11-20 Hours
d. 21-40 hours
e. 41-60 hours
f. 61 or more hours

9. In the last month, please estimate the number of times you have gone food shopping for primarily non-prepared items?
    a. Zero Times
    b. 1-5 Times
    c. 6-10 Times
    d. 11-15 Times
    e. 16 or more Times

10. In the last month, what mode of transportation to you use to go food shopping *most of the time*?
    a) My own/household's car, driven by self
    a. Other car (getting ride)
    b. Public Transportation
    c. Walk
    d. Taxi/Hack
    e. Other, Specify:_____
    f. Don't know
    g. Refuse to answer

11. In the last month, did you ever make a **written** shopping list prior to food shopping?
    a. Yes
    b. No
    c. Don't know
    d. Refuse to answer

3a. ***If yes,*** Please tell us what prompted you to buy something that was not on your list.

_____

_____

_____

3b. ***If you did not have a written list,*** Did you have a different strategy for food shopping? (Examples: Following a path in store, List in your head, Following the sales)

_____

_____

_____

12. a. In the last month, did you ever read store circulars or other store advertisements, to see what price specials were occurring at certain stores?
    a. Yes *IF YES, How did that influence you?*_____
    b. No
    c. Don't know
    d. Refuse to answer

13. In the last month, did you ever change the store you shopped at in order to take advantage of price-related specials they were offering at another store?
    a. Yes
    b. No
    c. Don't know
    d. Refuse to answer

14. In the last month, did you ever buy a brand different from the one you usually buy for a product in order to take advantage of price-related specials?
    a. Yes
    b. No
    c. Don't know
    d. Refuse to answer

15. In the last month, would you say that you purchase a store brand item, instead of a name brand item, if it costs less?
    a. Almost Always
    b. Often
    c. Sometimes
    d. Rarely
    e. Never

16. In the last month, did you ever switch the product you intended to purchase with a product within the same food category in order to take advantage of price-related specials? (For example: Bought oranges when you planned to by apples; bought lean ground beef instead of ground turkey)
    a. Yes
    b. No

c. Don’t know
d. Refuse to answer

17. In the last month, did you ever buy a product(s) that you or your family had not tried before?
    a. Yes
    b. No
    c. Don’t know
    d. Refuse to answer

If yes, was there an in-store promotion which drew you to the purchase (Probes: Endcap display, free samples, loudspeaker)_____

18. In the last month, did you ever buy an item/brand because you recalled seeing an advertisement on tv, radio, internet, billboard, bus.
    a. Yes
    b. No
    c. Don’t know
    d. Refuse to answer

    18a. If Yes, how often was (were) the item(s) you bought, a product(s) that you or your family had not tried before?
        a. All of the time
        b. Most of the time
        c. Some of time
        d. None of the time

19. In the last month, did you ever buy an item/brand because you saw a “coupon dispenser” while in the store?
    a. Yes
    b. No
    c. Don’t know
    d. Refuse to answer

20. In the last month, did you ever buy an item/brand because you saw a “shelf-talker” (Printed card or other sign attached to a store shelf to call buyers' attention) while in the store?
    a. Yes
    b. No
    c. Don’t know

d. Refuse to answer

21. In the last month, did you ever purchase an item/brand because you or a family member are/is collecting a free item (e.g. a toy in cereal) or the labels or tops for fundraising (box tops for schools, Yoplait lids for breast cancer) from that product?
    a. Yes
    b. No
    c. Don't know
    d. Refuse to answer

22. In the last month, did you ever purchase more of an item because of a special, such as "buy one, get one free", or "10 for 10 sale"?
    a. Yes
    b. No
    c. Don't know
    d. Refuse to answer

23. In the last month, did you buy a different product because it had a special message regarding nutritional information or claimed to be healthier (For example, now Kashi products have "No High Fructose Syrup" on all boxes)?
    a. Yes
    b. No
    c. Don't know
    d. Refuse to answer

24. In the last month, how often did you eat at home?
    a. 0 Days
    b. 1-2 Days
    c. 3-4 Days
    d. 5 or more Days

25. In the last month, how often did you eat at a fast-food restaurant?
    a. 0 Days
    b. 1-2 Days
    c. 3-4 Days
    d. 5 or more Days

26. What type of food do you eat at home?
    a. American Cuisine
    b. Italian Cuisine
    c. Latin American Cuisine
    d. Style

27. In the last month, did you buy a different product because you saw a food advertisement for that specific item?

a. Yes
b. No
c. Don't know
d. Refuse to answer

28. In the last month, did you buy a specific product because your child recommended it based on a food advertisement?
a. Yes
b. No
c. Don't know
d. Refuse to answer

29. In the last month, did you make a household food decision based on a food advertisement you saw?
a. Yes
b. No
c. Don't know
d. Refuse to answer

30. On a weekly basis, what food choice to you provide your family?
a. More meats
b. More chicken
c. More Vegetables
d. More Fruit

31. How long ago was your most recent physical exam?
a. less than a year ago
b. 1 year ago
c. 2-4 years ago
d. Over 5 years

32. Did your physician talk about nutrition choices?
a. Yes
b. No
c. Don't know
d. Refuse to answer

33. If yes, did it influence your household food decision?
a. Yes
b. No
c. Don't know
d. Refuse to answer

34. In the last month, did you buy a different product because of your primary care physician's recommendation for that specific item?
a. Yes
b. No

c. Don’t know
d. Refuse to answer

35. In the last month, did you make a household food decision based on your primary care physician’s recommendation?

a. Yes
b. No
c. Don’t know
d. Refuse to answer