

FOOD FOR THOUGHT: A MIXED METHODS MEDIA LITERACY
INTERVENTION ON FOOD MARKETING

by

RACHEL M. POWELL

(Under the Direction of Marsha Davis)

ABSTRACT

The Centers for Disease Control and Prevention (CDC) reported that the prevalence of children who are obese has tripled during the past three decades. National estimates shows that children from minority populations are obese at a higher percentage compared to the rest of the population. While lack of physical activity and unhealthy eating have been the primary focus of public health research, practice, and policies, media has a significant influence on food choices, food consumption, and the health status of children today. Media literacy can be used as an effective and practical health communication strategy, offering the ability to serve as both a prevention and intervention tool

The purpose of this study is to examine if a media literacy intervention can increase media literacy knowledge and combat the persuasive nature of unhealthy food advertisements. Parents (n=12) and their children (n=15) were recruited from two local Boys and Girls clubs. They participated in an educational, intervention workshop. The parents completed a pretest before the workshop and a posttest after the workshop

concluded. Volunteers from the workshop signed up to participate in focus groups. There were two focus groups with parents (n=5) and two focus groups with children (n=6).

The quantitative results provided evidence that there were positive changes in parents' media literacy knowledge after the workshop. Through the focus groups, it was found that children shared that they learned about the purpose of advertisements and how to be more critical of unhealthy food advertisements. Also, the focus group data revealed that there were positive changes for both parents and children in their intentions and behaviors in eating healthy. The discussion of this mixed methods study results include integrations of the quantitative and qualitative results, limitation, recommendations for practice, and further research.

INDEX WORDS: Media literacy, Food marketing, Mixed methods, Intervention, Health literacy, Qualitative methods, Focus groups, Children, Youth

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DEDICATION

Thank you to my parents for never allowing me to settle and constantly challenging me to raise the bar. There is no way I would have made it to this point without your selfless love, life lessons, and infinite encouragement. I will forever be grateful for teaching me tenacity, resiliency, and compassion. Your little girl is now a doctor!

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	v
LIST OF TABLES	xi
LIST OF FIGURES	xii
CHAPTER	
1 INTRODUCTION	1
Statement of the Problem	1
Purpose of the Study	5
Research Questions	7
Significance of the Study	7
2 REVIEW OF THE LITERATURE	9
Health Literacy	9
Media Literacy	14
Media Exposure	21
Food Marketing and Effects	22
Unintended Effects	25
Next Wave	26
Integrated Theoretical Framework of Media Literacy	27
Theory of Reasoned Action	29
Chapter Summary	30

3	METHODS.....	32
	Research Design	32
	Sample Description	43
	Workshop Description.....	46
	Phase 1: Quantitative Methodology	47
	Phase 2: Qualitative Methodology	51
4	RESULTS.....	66
	Quantitative Results.....	66
	Summary of Quantitative Results.....	72
	Qualitative Results.....	73
	Outliers	88
	Summary of Qualitative Results.....	92
5	DISCUSSION.....	92
	Summary of Quantitative and Qualitative Results	89
	Integration of Quantitative and Qualitative Results	94
	Limitations.....	100
	Recommendations for Practice.....	102
	Further Research.....	105
	Summary.....	107
	REFERENCES	108
	APPENDICES	
A	Recruitment Flyer.....	116
B	Screening Questionnaire.....	117

C	Parent Consent Form	118
D	Minor Assent Form.....	120
E	Pretest-Posttest Questionnaire	122
F	Focus Group Guide.....	123
G	Grouped Results by Media Literacy Domain	124

LIST OF TABLES

	Page
Table 1: Integrated Theoretical Framework of Media Literacy	28
Table 2: Curriculum description of media literacy intervention	37
Table 3: Methods of recruitment	43
Table 4: Total Sample Demographic Information.....	44
Table 5a: Description of parent participants	45
Table 5b: Description of child participants	46
Table 6: Adapted questionnaire for food marketing from the Smoking Media Literacy Scale that originally developed by Primack et al (2006).....	50
Table 7: Results from pretest-posttest – Authors and Audience domain	67
Table 8: Results from pretest-posttest – Messages and Meanings domain	70
Table 9: Results from pretest-posttests – Representation and Reality domain	72
Table 10: Final coding for focus group	73

LIST OF FIGURES

	Page
Figure 1: Average health literacy scores of adults by race/ethnicity – 2003 National Assessment of Adult Literacy	11
Figure 2: Average health literacy scores of adults by highest educational attainment – 2003 National Assessment of Adult Literacy	12
Figure 3: Percentage of adults who got information about health issues from non-print media (radio and television) by health literacy level – 2003 National Assessment of Health Literacy	13
Figure 4: Theory of Reasoned Action (TRA) Adapted for Food Marketing and Unhealthy Food Consumption	30
Figure 5: Sequential Mixed Method Design with Equal Prioritized Quantitative and Qualitative data	34
Figure 6: Flow of Research Design	35

CHAPTER 1: INTRODUCTION

Statement of the Problem

Obesity is a public health epidemic that has increased exponentially over the years. The Centers for Disease Control and Prevention (CDC) reported that the prevalence of children who are obese has tripled during the past three decades (Ogden & Carroll, 2010). Approximately 17%, or 12.5 million, of children and adolescents ages 2-19 years old are obese (Ogden & Carroll, 2010). The southern region of the United States suffers from higher rates of obesity more than any other region in the United States (Levi, Vinter, St. Laurent, & Segal, 2010). The Healthy People 2010 objectives identified “overweight and obesity” as one of the ten leading health indicators and recognized the need to reduce the proportion (Ogden & Carroll, 2010). Currently, the Healthy People 2020 objectives list “nutrition, physical activity, and obesity” collectively as one of the ten leading health indicators. In 2010, President Barack Obama established the first-ever Task Force on Childhood Obesity, which was created to develop and implement an interagency action plan to solve the problem of childhood obesity. Also in 2010, First Lady Michelle Obama launched *Let's Move!* which is an initiative dedicated to encouraging physical activity and healthy eating among children so that they can live healthier lives. Considering that obesity has still been listed on both the Healthy People 2010 and 2020 objectives shows that a lot of improvement is still needed.

Not only is obesity a public health issue but it also brings on a variety of economic expenses. The healthcare costs affiliated with obesity-related health issues are

extremely high. In 2007, obesity cost the state of Georgia \$2.1 billion from both obese adults and children (Division of Public Health, 2007). The amount of hospitalizations of children within the United States with a diagnosis of obesity has almost doubled between 1999 and 2005 (Trasande, Liu, Fryer, & Weitzman, 2009). The hospital costs due to obesity-related disease in children almost quadrupled in 20 years from \$35 million to \$127 million (Division of Public Health, 2007). Research from the National Institutes of Health (NIH) and CDC show that children who are overweight or obese have a higher risk of coronary heart disease, type 2 diabetes, cancer, hypertension, stroke, sleep apnea, dyslipidemia, and other diseases (Centers for Disease Control, 2009; National Institutes of Health, 1998). The rise in obesity and obesity-related diseases could potentially result in this generation being the first to live shorter lives than their parents (Olshanky et al., 2005). Childhood obesity is an epidemic that has become a national priority, not only for the future health of the children, but also for the economic future of the country.

As with many other chronic diseases, there are racial and social disparities associated with obesity. National estimates shows that children from minority populations are obese at a higher percentage compared to the rest of the population (Estabrooks, Fisher, & Hayman, 2008). There is a distinct disparity in obesity among communities in poverty in comparison to wealthier communities. Nine of the 10 states with the highest rates of childhood obesity are also the states with the highest rates of poverty (Levi et al., 2010). Rural children suffer from higher rates of obesity (Shriver et al., 2011). Rural, low-income, and/or minority families may have a disparity due to a number of issues that include their limited access to healthy food choices and safe options for physical activity. Limited access to resources such as safe parks, fresh fruits and

vegetables, safe sidewalks, and other resources leads to increased rates of overweight and obesity in both children and adults.

While lack of physical activity and unhealthy eating have been the primary focus of public health research, practice, and policies, other factors have caused childhood obesity to be the extensive epidemic that it currently is. Media has a significant influence on food choices, food consumption, and the health status of children today. Television is the primary form of consumed media for children (Horgen, Harris, & Brownell, 2012). Researchers estimate that television viewing is at almost five hours a day for kids ages 8 to 18 years old (Rideout, Foehr, & Roberts, 2010). Television is a key factor in socialization of children in regards to nutritional information and eating habits (Signorielli & Lears, 1992) and causes a majority of children to rely on the information that they get from television to guide food choices. A majority of food commercials that are targeted at children promote “low-nutrient, calorie-dense” products (Powell, Szczypka, Chaloupka, & Braunschweig, 2007; Story & French, 2004), with 97% of the food advertisements seen by children advertising food that is high in fat, sugar, and/or sodium (Powell et al., 2007). In 2009, less than 1% of a sample of more than 500 food advertisements that appeared on children’s television programs featured healthy items such as whole grain breads, fruits, vegetables, and other items considered to be a part of a healthy child’s diet (Kunkel, McKinley, & Wright, 2009). Researchers have identified that these advertisements seen by children have immediate effects on consumption of unhealthy food items (Halford, Gillespie, Brown, Pontin, & Dovey, 2004; Harris, Pomeranz, Lobstein, & Brownell, 2009). Unfortunately, the food advertisements that children see on television not only have an immediate negative effect, but continued

exposure encourages snacking of unhealthy food items that are high in fat and/or high in sugar (Goldberg, Gorn, & Gibson, 1978; Halford et al., 2008; Halford et al., 2004; Harris, Bargh, & Brownell, 2009). Similar to other obesity factors, there are disparities with exposure to television advertisements. Research has shown that the marketing of unhealthy food products is disproportionately targeted at ethnic minority children (Bell, Cassady, Culp, & Alcala, 2009; Grier & Kumanyika, 2010; Henderson & Kelly, 2005). It is important that researchers recognize the powerful effects that television advertisements have on eating habits and social norms of food consumption and consider advertisements a significant contributor to the problem.

This topic became of interest to me after attending a plenary presentation at the 2012 National Conference on Health Communication, Marketing, and Media in Atlanta, Georgia. This presentation was titled “Food Marketing Targeted to Black and Latino Youth: Recognizing Important Customers or Exploiting and At-risk Population” and was made by Jennifer Harris, who is the Director of Marketing Initiatives at the Rudd Center for Food Policy & Obesity at Yale University. The presentation shared results from focus groups that were conducted with White, Black, and Hispanic parents in two US cities. In these focus groups, parents were asked to share their eating habits and attitudes towards food marketing (Ustjanauskas et al., 2010). Also, the focus group discussion covered information on current marketing practices and potential solutions implemented in other countries that could be used in the US. The focus groups concluded by assessing reactions to food marketing practices targeted at ethnic minorities. This was the most interesting and relevant part of the research because it was found that many of the parents that participated actually appreciated advertisements that were directed at their

community. Black parents also shared that they felt like McDonald's website 365black.com presented positive images of community members, and this website made them feel more positively towards McDonald's. The Hispanic parents shared that they enjoyed seeing advertisements targeted at them because they felt that it shows that they are a "growing force" in the United States (Ustjanauskas et al., 2010). As a public health researcher, I saw this as an issue because it seemed that these parents did not have a full understanding of the purpose of advertisements, the level of manipulation being used, and the outcome effects of being exposed to high levels of these advertisements. From this presentation and my personal interests, I wanted to pursue a dissertation topic concerning families, attitudes towards food marketing, and media literacy.

Purpose of the Study

Traditionally, healthier lifestyles interventions for children have focused on increasing physical activity and promoting healthy eating. While researchers and childhood obesity experts recognize that there are significant health benefits associated with increasing physical activity and promoting healthy eating, such as increased self-esteem, development of social skills, and prevention of chronic diseases in the adult years (Becker, Kozyrskyj, Marchessault, & Protudjer, 2010), media should also be an essential part of the conversation. Both the American Academy of Pediatrics (Strasburger, 2006) and the American Psychological Association (Wilcox et al., 2004) support a complete ban on advertising to young children, but until a mandatory policy is implemented, it is the responsibility of health educators and public health professionals to educate youth on how to critically analyze advertisements through media literacy educational interventions.

Media literacy is a consciousness-raising skill that can be used effectively on diverse advertisements to make each person a better and more critical media consumer (Hogan, 2012), which is important considering the explosion of marketing in today's society, especially marketing tailored to children. Not only has children's exposure increased, but the advertisements seen today are more pervasive and intrusive than even before (Linn, 2004). Media literacy interventions can empower children to take control of their media experience by being critical of the advertisements they see (Hogan, 2012; Singer, 2009).

Primarily in research, media literacy interventions have been used with tobacco, alcohol, and violence. While media literacy interventions have not been frequently used with food advertisements, practitioners and researchers find that media literacy programs can successfully change attitudes and often behaviors (McCannon, 2009). Media literacy can be used as an effective and practical health communication strategy, offering the ability to serve as both a prevention and intervention tool (Page, Piko, Balazs, & Struk, 2010; Pinkleton, Austin, Cohen, Miller, & Fitzgerald, 2007). Media literacy education can lead to positive lifestyle changes that can translate into more quality years free from the burdens of multiple chronic diseases. Not only can media literacy help improve the child's self-esteem and level of confidence to live a healthy lifestyle, but it also can reduce the rates of obese and overweight people. The purpose of this study is to examine if a media literacy intervention can increase media literacy knowledge and combat the persuasive nature of unhealthy food advertisements.

Research Questions

The following research questions guided the study.

1. How did a media literacy educational intervention for parents and their children influence their levels of media literacy knowledge?
2. How did a media literacy educational intervention lead to changes in parents' and children's intentions to eat unhealthy and healthy food?
3. How did the media literacy educational intervention affect the parents' and children's attitudes toward the intervention in general and toward food marketing in particular?

Significance of the Study

The majority of interventions for obesity have focused on physical activity and healthy eating. While those are important topics to be addressed, media should not remain in the shadows when discussing the country's childhood obesity epidemic. Media literacy interventions with children have been associated with positive changes in attitudes, intentions, knowledge, and behaviors. Some examples of the studies that were successfully implemented and had significant outcomes were: intervention for middle school students combating substance abuse advertisements (Kupersmidt, Scull, & Benson, 2012); junior high school students and antismoking advertisements (Banerjee & Greene, 2007); intervention for third graders against alcohol advertisements (Austin & Johnson, 1997); media literacy program for sixth graders on media violence (Scharrer, 2006); The Centers for Disease Control and Prevention and other government entities endorsed media literacy for drug prevention (McCannon, 2009). Media literacy has successfully been applied to a variety of public health issues. Traditionally, media literacy interventions have been used with parents or children separately, not together as a

family-based intervention where parents and children learn side-by-side. This study will identify whether family-based media literacy interventions can be applied to food advertisements, which is a novel practice area for media literacy interventions.

CHAPTER 2: REVIEW OF THE LITERATURE

The purpose of this chapter is to provide a literature review of background information on health and media literacy, the effects of media exposure, and the appropriateness of media literacy interventions. This chapter will supply justification for the importance of media literacy interventions specifically, with children.

Health Literacy

Health literacy is defined by the U.S. Department of Health and Human Services as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services to make appropriate health decisions” (U.S. Department of Health and Human Services, 2000). Health literacy is crucial because limited health literacy not only affects people’s ability to seek and properly use health information, but also to adopt healthy behaviors and act on public health alerts (U.S. Department of Health and Human Services). Recognizing its importance, the following goal has been established in the Health Communication and Health Information Technology section of the Healthy People 2020 objectives: “improve the health literacy of the population” (HC/HIT-1) (U.S. Department of Health and Human Services, 2010).

The National Assessment of Adult Literacy was conducted in 2003 and was administered to more than 19,000 adults in households and prisons who were ages 16 years old or older. The survey assessed literacy levels, including health literacy, of adults

that lived in the United States. The range of scores are: Below basic (0-184), Basic (185-225), Intermediate (226-309), and Proficient (310-500). The majority of adults (53%) scored in the Intermediate range, with 248 as the average health literacy score for women and 242 as the average health literacy score for men (Kutner, Greenberg, Jin, & Paulsen, 2006). There were several disparities in average scores related to race/ethnicity and highest level of educational attainment. The following figure (Figure 1) illustrates the average health literacy scores by race/ethnicity. For race/ethnicity, Hispanics had the lowest average score (197), which fell in the Basic category. Blacks had the second lowest average score at 216, which also fell in the Basic category. Whites had the highest average score at 256, which was in the Intermediate category, while Asian/Pacific Islanders were in a close second with an average score at 255. This figure not only compares difference races/ethnicities but also brings to light the obvious disparities that exist within average literacy levels.

There were disparities for highest level of educational attainment also. As illustrated in Figure 2, the average health literacy scores increased as the years of education increase past high school graduation/GED. It is interesting to note that scores were higher for people in high school compared to people who did not graduate from high school. The less than high school/some high school category was the only one with an average score in the Below Basic category, while all others jumped to the Intermediate category.

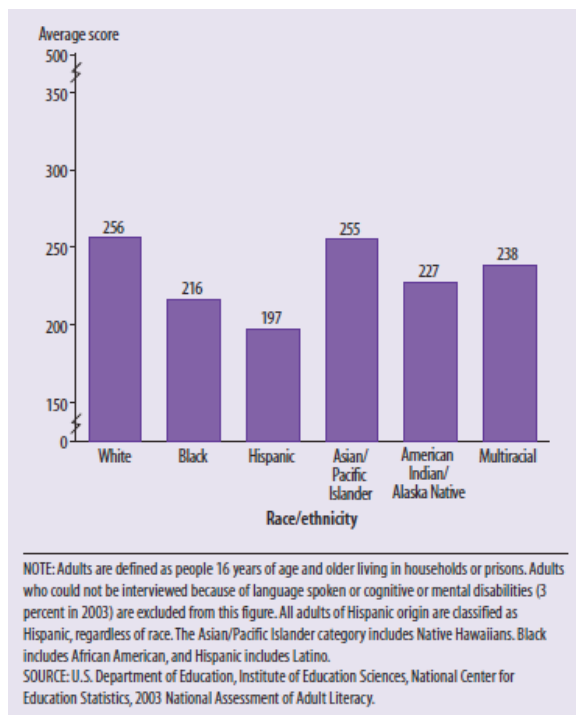


Figure 1. Average health literacy scores of adults by race/ethnicity – 2003
National Assessment of Adult Literacy

Media literacy is a significant part of the extensive health literacy umbrella. As society evolves, people are becoming more and more dependent on media as a primary source for all types of information, including health information. Considering both the reliance that people have on media and the high level of exposure to media, media literacy is becoming just as necessary as health literacy. Figure 3 illustrates the results of the percentage of adults who got information about health issues from non-print media (radio and television) by ranges of health literacy scores from the National Assessment of Adult Literacy. This figure illustrates that people with lower health literacy scores are more dependent on media as a source for health information in comparison to people with higher health literacy scores. People with health literacy scores that are below basic, 33% reported getting a lot of information from non-print media (radio and television) compared to 17% of people who had proficient levels of health literacy report getting a lot of their information from non-print media sources.

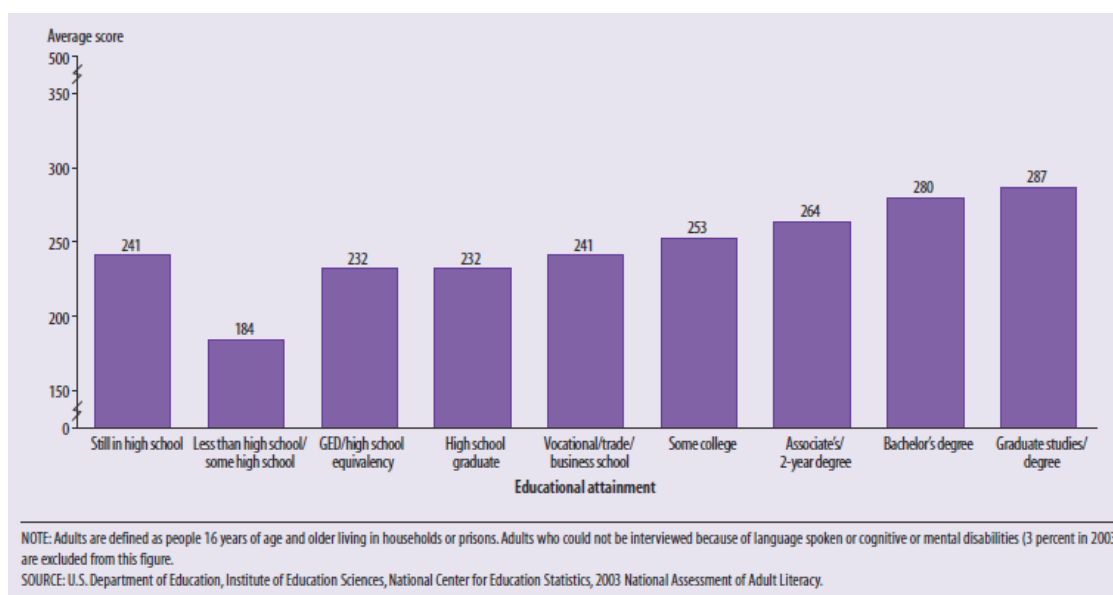


Figure 2. Average health literacy scores of adults by highest educational attainment – 2003 National Assessment of Adult Literacy

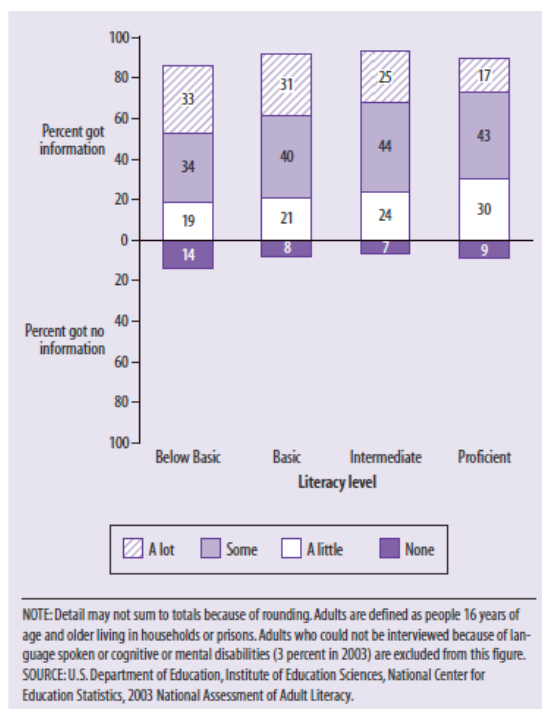


Figure 3. Percentage of adults who got information about health issues from non-print media (radio and television) by health literacy level – 2003 National Assessment of Health Literacy

Health literacy is an important area for the future of health communication because lower health literacy levels are associated with poorer health outcomes and avoidable billions of dollars spent on health care costs (U.S. Department of Health and Human Services). It is important to educate Americans with literacy skills so they can be knowledgeable and process health information that can be used to make informed health decisions.

Increasing one's knowledge, awareness, and responsiveness to health literacy would not only reduce the current health literacy problems, but also has the potential to better the future health of citizens in this country (Institute of Medicine, 2004).

Media Literacy

Media literacy falls under the large umbrella of health literacy. The National Association for Media Literacy Educators (NAMLE) defines media literacy as “a series of communication competencies, including the ability to access, analyze, evaluate, and communicate information in a variety of forms, including print and non-print messages” (National Association for Media Literacy Education, 2012). The NAMLE website also mentions that “media literacy empowers people to be both critical thinkers and creative producers of an increasingly wide range of messages using image, language, and sound” (National Association for Media Literacy Education, 2012). The Core Principles of Media Literacy Education are found on the National Association for Media Literacy Education website and are as follows:

1. Media literacy education requires active inquiry and critical thinking about the messages we receive and create.
2. Media literacy education expands the concept of literacy to include all forms of media (i.e. reading and writing).
3. Media literacy education builds and reinforces skills for learners of all ages.
4. Media literacy education develops informed, reflective, and engaged participants essential for a democratic society.
5. Media literacy education recognized that media are a part of a culture and function as agents of socialization.

6. Media literacy education affirms that people use their individual skills, beliefs, and experiences to construct their own meanings from media messages (National Association for Media Literacy Education, 2007).

The purpose of media literacy education is to equip media consumers to analyze critically media messages (Austin, Pinkleton, & Funabiki, 2007). It is important to utilize media literacy education more specifically as a way to build analytical skills in children considering their high levels of media exposure in today's society. Children encounter advertising on television much earlier than they develop the ability to recognize the content as persuasive (Kunkel & Castonguay, 2012), therefore media literacy education should be encouraged and promoted to begin when they are at the age of understanding the persuasive intent of advertisements, which is eight years old (Blosser & Roberts, 1985; Chan, 2001; Comstock & Paik, 1991; Donohue, Henke, & Donohue, 1980; Oates, Blades, & Gunter, 2011).

Several research projects have discovered that children make better choices when they have higher levels of media literacy (Austin & Johnson, 1997; Banerjee & Greene, 2007; Kean, Prividera, Boyce, & Curry, 2012; Scharrer, 2006). Practitioners and researchers find that media literacy programs can successfully change attitudes and often behaviors (McCannon, 2009). It is a skill that can be used lifelong and will make each person a better and more critical media consumer (Hogan, 2012). Critical analysis skills learned in a media literacy intervention can be applied to combat advertisements for a variety of public health issues.

In public health, media literacy education has been successfully used on a variety of topics such as violence, alcohol, and tobacco, as mentioned later in this section. Media

literacy interventions should be used as a health communication tool to educate and empower consumers of all ages and ensure they are armed with appropriate critical analysis skills. By being more informed consumers, people have the ability to make more educated and healthier food choices.

In several studies that investigated the effectiveness of media literacy programs have discovered that children and adolescents who understand message strategies and media production processes can identify the motives, purposes, and points of view embedded in messages, which leads to an increase in awareness (Austin et al., 2007; Pinkleton et al., 2007; Primack et al., 2006). Through media literacy educational interventions, children can learn about the “true” intentions and purposes of advertisements. Once the children understand the purpose of the advertisements, they can use learned skills to be able to critically analyze advertisements to which they are exposed. When it comes to food marketing, media literacy skills are critical for children to become informed media consumers and understand that the companies and restaurants that are advertising to them are not concerned about their health, but actually using the advertisements to sell a product. Media literacy is becoming an increasingly important health education tool to explore the power of mediated messages. In a study that explored African American women and the role of media literacy in relation to media exposure and food consumption, it was found that healthier food choices are made when there are higher levels of media literacy (Kean et al., 2012).

In the field of public health, media literacy interventions have been not only used with adults, but also with children. Media literacy interventions with children have proven to be successfully implemented and made positive changes to attitudes,

knowledge, and behaviors. Some examples of media literacy studies with children that were successfully implemented and had significant outcomes are: middle school intervention combating substance abuse advertisements (Kupersmidt et al., 2012), junior high school students and antismoking advertisements (Banerjee & Greene, 2007), intervention for third graders against alcohol advertisements (Austin & Johnson, 1997), media literacy program for sixth graders on media violence (Scharrer, 2006), and others. The Centers for Disease Control and Prevention endorsed media literacy for drug prevention (McCannon, 2009). Media literacy has successfully been applied to a variety of public health issues, such as alcohol, tobacco, and violence. While using media literacy intervention with children to combat food advertising is an innovative opportunity, the research and successes of past research projects prove the favorable ability for it to be successfully completed. Understanding that the risk of food marketing does not mirror the legal risks of alcohol or illegal substances for children, there are some similarities in health risks that allow media literacy to be a promising intervention strategy to combat it. Obesity is one of the largest public health epidemics of today's society and it is important to acknowledge and utilize innovative and practical interventions that can help raise consciousness and empower children to have healthier lifestyles. As public health researchers that live and work in diverse communities, creative ideas and thinking about health education allows for a variety of innovative interventions, including media literacy, besides the traditional focus on increasing fruits, vegetables, and physical activity to address the childhood obesity issue.

Age Appropriate

When planning for a media literacy intervention to be conducted with a group of children, it is important to ensure that appropriate ages of children are selected so that they have the ability to fully understand the lessons that are being taught. Psychological researchers have identified that cognitive development happens between the ages of 7-11 years old (Zeinstra, Koelen, Kok, & de Graaf, 2007). During this time, children understand the purpose and intention of advertisements to which they are exposed. Researchers have discovered that the majority of children demonstrate the ability to understand a commercial's persuasive intent around the age of 8 years old (Blosser & Roberts, 1985; Chan, 2001; Comstock & Paik, 1991; Donohue et al., 1980; Oates et al., 2011). Due to the aggressive advertising landscape, children encounter advertising messages on television much earlier than they develop the psychological ability to recognize the persuasive nature (Kunkel & Castonguay, 2012). While specific development differs from child to child, researchers have found that comprehension of the persuasive intent of advertising is very limited before the age of 8 years old (Kunkel & Castonguay, 2012; Wilcox et al., 2004). This key age is important for researchers to keep in mind when developing media literacy interventions and creating them for an appropriate age group that can understand and apply the critique skills to their media consumption

Production

Production, in terms of a media literacy intervention, refers to the opportunity within the media literacy intervention for participants to create a counter advertisement to the regular advertisements that they see. Production can fall anywhere on a spectrum of discussing what the participants would do if they were to create a counter advertisement to actually creating a counter advertisement. For this intervention, the participants will be drawing or writing out their counter advertisement on paper. While some media literacy interventions only include analysis of media messages, supplementing with production has significant benefits. The production process of media literacy does encompass some analysis (Banerjee & Greene, 2007). Adding this creation opportunity for children to create their own media story, documentary, or advertisement can help the children understand the entire process of media production (Kubey, 2000). The production aspect of being able to create an advertisement that counters the ones that the children normally see emphasizes the difference in advertisements for unhealthy food and healthy food and can be used as an effective strategy for promoting healthy behavior (Dixon, Scully, Wakefield, White, & Crawford, 2007). Creating counter-advertisements allows children to creatively counter the harmful media messages that appear frequently on television (McCannon, 2009). The opportunity for children to create something is a familiar task and can provide an empowering moment for children among the intervention. Through this empowerment process of countering the advertisements, the self-centered production approach is often credited for increasing the child's self-esteem through creative self-expression (Tyner, 1992). It allows the children to take their critiquing skills a step further and apply them to their own self-expression. Not only does production increase

self-esteem, but can increase family communication when the production process is done with parents, as in this project.

Family Involvement

Family based interventions are considered the primary approach to obesity treatment (Skelton, Irby, Guzman, & Beech, 2012). Including parents in interventions with children is extremely beneficial, especially for obesity interventions, because of the control they possess over food purchases and consumption for the household. Not only can parents influence their children's health in positive ways, such as altering fast food consumption and increasing healthy food options and knowledge, but also they can mediate the influence of media on their children (Skelton et al., 2012). When media literacy programs include and involve the parents, not only is it a greater success, but also increases the chances of reducing the children's media consumption to be at healthier levels (McCannon, 2009). Parents have the ability to serve as positive role models of media consumption for their children. Parents should be encouraged to be responsible for teaching their children how to watch television critically and how to recognize unhealthy images within advertisements and messages (Signorielli & Lears, 1992). In a family-based media literacy intervention parents and children can learn together about healthy media exposure and the necessary skills to critically analyze advertisements. It is also beneficial to include them in interventions so their personal media literacy knowledge can increase as well. Learning alongside their child can provide an opportunity for parents to initiate family communication around food marketing and their true purpose. Once parents learn media literacy skills, they can better serve as mediators of media influence

on their children and as role models and educators about healthy lifestyles (Skelton et al., 2012).

Media Exposure

In today's society, media is a sociocultural norm. There are a variety of sources of media available to both children and adults. While sources of media vary, television is still the leader of media activity for most children and teens (Horgen et al., 2012; Rideout et al., 2010). Today, almost 90% of households have more than one television set and many are in children's bedrooms (Comstock & Scharrer, 2012). Of children eight years old or older, 65% have a television in their room (Kubey, Banerjee, & Donovan, 2012; Rideout et al., 2010). Televisions have a significant presence in the home; researchers have found that in a typical U.S. home, the television is on for over seven hours a day (M. Morgan, Shanahan, & Signorielli, 2009) and viewing is at almost five hours a day for children ages 8 to 18 (Rideout et al., 2010). Children are spending more time with media than ever before. This increase in exposure includes an increase in not just commercials, but specifically, more child-targeted commercials. It is difficult to know exactly how many advertisements children are exposed to, but many researchers and experts estimates that an average of 26,079 ads per year for children ages 6 to 11 years old are seen (Holt, Ippolito, Desrochers, & Kelley, 2007) and 30,155 advertisements per year for children 8 to 12 years old (Gantz, Schwartz, Angelini, & Rideout, 2007). The child-targeted advertisements are not just appearing on channels and networks that are for created for children, such as Disney, The Cartoon Network, and Nickelodeon, but are also shown on family oriented networks that children watch such as ABC, CBS, Fox, NBC, and others

(Gantz et al., 2007). Considering the shocking number of advertisements that children are exposed too, to no surprise, the advertisements have a negative effect on intention, behavior, and attitudes. These negative effects of advertisements are not even considering new media forms, which are mentioned in a later section.

Food Marketing and Effects

Food marketing has exploded in society and it is nearly impossible to watch a television show without seeing an advertisement for food. Not only is food marketing growing, but also there is an increase in targeted advertisements for sub-groups of the population. Many food companies are directing their advertisements specifically towards children. Food and beverage advertisers spend between \$10 and \$15 billion dollars per year targeting youth alone (Linn & Novosat, 2008). Children and adolescents are significant consumers within the economy, which means that their age groups create a large marketing opportunity for food companies to make a large impact (Institute of Medicine, 2006). Socially, children have become more independent consumers at a younger age; therefore, they have become targets for food advertisements because of the purchasing freedom. Children either start receiving their own money to spend at around age eight or have already been spending for the past few years and one of the earliest products that they can buy without consent from parents are snack foods (Chaplin, 1999; Valkenburg & Cantor, 2001).

Not only are specifically targeted food advertisements being shown at a higher percentage to children, but also the lack of nutritional information in the advertisements is a detrimental factor that contributes to the childhood obesity epidemic. In a research

study that consisted of a nutritional content analysis of advertisements that appeared on top-rated television shows based on Nielsen Media Research ratings data, showed that out of the food products advertised on television in America, a shockingly 97.8% viewed by children were either high in fat, sugar, or sodium (Powell et al., 2007). The majority of food commercials targeted at children fail to meet national nutritional standards, particularly with regards to sugar (Schwartz, Vartanian, Wharton, & Brownell, 2008). In a content analysis research study was done that compared the nutritional quality of food choices advertised on American television to the nutritional guidelines. The findings suggest that a diet of foods advertised on American television failed to comply with both the Food Guide Pyramid and the Daily Values (Mink, Evans, Moore, Calderon, & Deger, 2010). In another research study, a diet consisting of 2,000 calories, which is the recommended amount for an adult, entirely of advertised foods would contain 25 times the recommended servings of sugars and 20 times the recommended servings of fat, but less than half of the recommended servings of vegetables, dairy, and fruits (Mink et al., 2010). This study exhibits how advertisements endorse and contribute to diets that are high in sugar and fat. In 2009, less than 1% of a sample of more than 500 food advertisements that appeared on children's programs featured healthy items such as whole grain breads, fruits, vegetables, and other items in should be in a healthy child's diet (Kunkel et al., 2009). Food advertisements targeted to children do not promote balanced or healthy diets, yet can have a lasting effect on food choices and consumption.

Television exposure is associated with more positive attitudes towards junk food (Dixon et al., 2007). The Institute of Medicine released a report where they analyzed more than 120 studies of food marketing and it stated children's exposure to food

advertising has been identified as a risk factor contributing to childhood obesity (Institute of Medicine, 2006). Media exposure is a contributing factor to the normalization of increased consumption of caloric dense foods that are high in sugar, sodium, and/or, fat. Through several studies, researchers have acknowledged that exposure to television food advertisements increases consumption of unhealthy food items during and immediately after the exposure to advertisements (Halford et al., 2004; Harris, Bargh, et al., 2009). Food advertisements encourage snacking of unhealthy foods that are high in fat and/or high in sugar (Goldberg et al., 1978; Halford et al., 2008; Halford et al., 2004; Harris, Bargh, et al., 2009).

In today's society, children are spending more time with media than ever before (Kunkel & Castonguay, 2012) and the commercials that are aimed at them are more pervasive and aggressive than ever before (Linn, 2004). Television encourages food choices that promote obesity and poor nutrition (Comstock & Scharrer, 2012). Over time, television appears to be a key factor in socialization of children in regards to nutritional information and eating habits (Signorielli & Lears, 1992).

Research has shown that increased exposure to food advertising on television is associated with nutritional misperceptions, such as perceiving unhealthy food as healthy and nutritious (Signorielli & Lears, 1992). The intrusive advertisements that children see are causing them to be misinformed about the true nutritional value of certain foods. Not only are attitudes and knowledge towards food being affected by this increased exposure of food advertisements, but also behaviors.

For several decades, food marketing has not only increased in numbers of advertisements showed and viewed but also more persuasive and aggressive

advertisements. Considering the characteristics of today's commercials, the growing issue has further complicated the childhood obesity epidemic that faces the United States today. The World Health Organization identified that food advertisements affect food choices and influences dietary habits (World Health Organization, 2006). The reinforcement of food marketing has led to the societal normalization of unhealthy food and beverage consumption at escalated levels. Food advertising plays a dominant role in the obesity issue, but there are also unintended effects on parent-child communication.

Unintended Effects

While there are more obvious effects of food advertisements on children's food preferences and consumption, unintended effects are not to be ignored. The advertisements for food and/or drinks seen by children frequently lead them to asking for the advertised product. Research has shown that there is a direct correlation between the advertisement exposure and the child asking for a product, which means the more advertisements that the children are exposed to, the more frequently they ask for the advertised product (Scully et al., 2012). Researchers have also recognized that when children make requests for unhealthy food they see advertised on television, it often leads to parents denying the request, which ultimately leads to parent-child conflicts (Wilcox et al., 2004). In a study, children and their parents were recruited from five different elementary schools in the Netherlands. The children completed a questionnaire in the classroom and then were given a questionnaire to be sent home and completed by their parents. A total of 360 questionnaires were completed and returned. The findings of the study on the unintended effects of television advertisements found that the relationship

between children's purchase requests and parent-child conflict is stronger for younger children (Buijzen & Valkenburg, 2003), which demonstrates the high level of impressionability younger children face. Typically the food products that the children are asking for are low in nutritional value and high in fat, sugar, or sodium and/or are classified as junk food. A life-long high consumption of these unhealthy food options can eventually lead to high rates of obesity. Public health professionals and researchers must provide educational interventions not only to encourage the consumption of healthy food options for the future health of the child, but also to address other unintended issues, such as reducing parent-child conflict.

Next Wave

While television is still the primary source of media for children, other media forms are becoming new platforms for food companies to advertise their products. These new devices and platforms are adding to children's media consumption, rather than replacing television (Tarpley, 2012). The proportion of 8 to 18 year olds who own their own cell phone has increased from about 40% to 66%, while the proportion that own their own iPods or MP3 players exponentially increased from 18% to 76% (Rideout et al., 2010). The increased numbers of children who own these products means that more youth are exposed to a new platform of food advertising through their various media sources and constant connection to the Internet. Also, the Internet is becoming more readily available in homes with the percentage jumping from 74% to 84% in the last five years (Rideout et al., 2010). Not only are more homes getting Internet but the quality is

improving with high-speed access increasing from 31% to 59% in the last five years (Rideout et al., 2010).

Food companies are targeting youth through a variety of platforms such as radio, the Internet, and other digital media. About two-thirds of food companies are using online games and activities as an avenue to market to children (Horgen et al., 2012). Also, food companies are integrating their marketing messages through multiple platforms of media to reach more children and improve their effectiveness. For 20% of the children's advertisements seen on television, the ads also promote a website that children can visit (Gantz et al., 2007). Food companies are capitalizing on the popularity of advergaming websites, which is an online video game that promotes a brand or product by integrating it in the game. Also food companies are using social media sites, such as Facebook and Twitter, among children and using these platforms to further promote food products (Horgen et al., 2012). Since food companies are not just using multiple different media platforms, but also integrating them, there should be more of a push to teach children media literacy skills that can be applied across diverse media platforms and marketing campaigns.

Integrated Theoretical Framework of Media Literacy

The integrated theoretical framework of media literacy is based on the core concepts of media literacy (Table 1). These core concepts of media literacy were used by Primack and other authors in the development of the smoking media literacy (SML) scale (Primack et al., 2006). The three main media literacy domains are: 1.) Authors and Audiences (AA); 2.) Messages and Meanings (MM); and 3.) Representation and Reality

(RR). These media literacy domains were applied to smoking and tobacco when first used by Primack in the development of the smoking media literacy scale. The first domain, authors and audiences (AA), recognizes tobacco industry as being a powerful and manipulative force of particular markets that author message tailored for their audiences. The second domain, messages and meanings, acknowledges how marketers promote tobacco by using appealing production techniques to create messages that arouse emotional response of the viewers. The third and last domain, representation and reality, identifies the difference between what is represented in media and the true health effects of tobacco use (Page et al., 2010). Each core concept listed in Table 1.

Table 1. Integrated Theoretical Framework of Media Literacy

Media Literacy Domain	Related Media Literacy Core Concepts
Authors and Audiences (AA)	AA1: authors create media messages for profit and/or influence
	AA2: authors target specific audiences
Message and Meanings (MM)	MM1: messages contain values and specific points of view
	MM2: different people interpret messages differently
	MM3: messages affect attitudes and behaviors
	MM4: multiple production techniques are used
Representation and Reality (RR)	RR1: messages filter reality
	RR2: messages omit information

Theory of Reasoned Action

The Theory of Reasoned Action (TRA) was created in 1975 by Martin Fishbein and Icek Ajzen and resulted from research on attitudes (Fishbein & Ajzen, 1975). The Theory of Reasoned Action examines the relationships between beliefs, attitudes, and intentions and how they influence behavior (Montano & Kasprzyk, 2008). TRA focuses on theoretical constructs that are concerned with individual motivational factors as determinants of performing a specific behavior (Montano & Kasprzyk, 2008).

After the development of the theory, it was found that the most important determinant of behavior is an individual's behavior intention (Montano & Kasprzyk, 2008). While behavioral intention has been identified as the most important determinant, there are several other things that must change before intention and behavior does. Interventions based on TRA can be designed to target and change beliefs, that will then affect attitudes and subjective norms, which will further lead to a change in intention and behavior (Montano & Kasprzyk, 2008).

The Theory of Reasoned Action was used as a foundation for the development and validation of the smoking media literacy scale (SML). TRA was applied to validate the measure of smoking media literacy scale since theoretically media literacy affects the attitudes and norms that are involved in smoking (Primack et al., 2006). The SML was created in 2006 by Brian Primack and other researchers to evaluate the effectiveness of media literacy interventions designed to reduce adolescent smoking (Primack et al., 2006). For this dissertation, the smoking media literacy scale was adapted for media literacy as it relates to food advertisements and used as the pretest - posttest. The components of the Theory of Reasoned Action were applied to food advertisements and

unhealthy foods. For the purpose of this study, the Theory of Reasoned Action was tailored and applied to food marketing and unhealthy food consumption. Figure 4 illustrates the adapted TRA model.

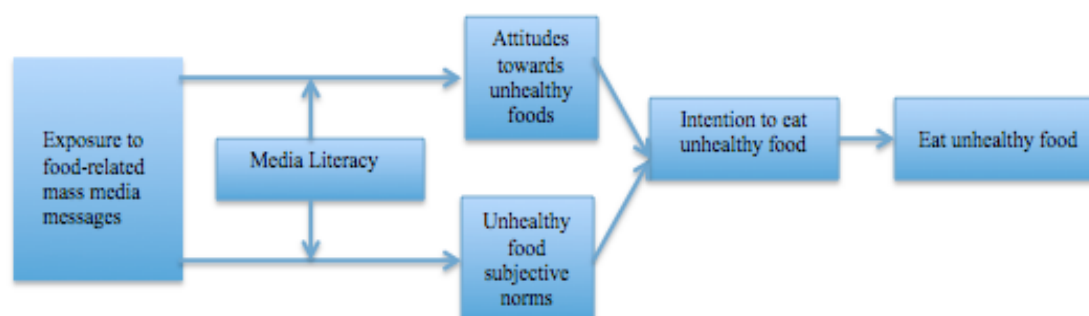


Figure 4 – Theory of Reasoned Action (TRA) Adapted for Food Marketing and Unhealthy Food Consumption

Chapter Summary

Based on the literature, health literacy is important for understanding health information and adopting healthy behaviors, yet there are racial and educational disparities that exist. Media literacy falls under that umbrella and is important for the future health of the nation. In our society, individuals, especially children, are heavily exposed to a variety of sources of media. The majority of advertisements seen are for unhealthy food options, which negatively influences food choices. With the explosion of food marketing and increased obesity rates, it is important to apply innovative educational options to ensure that both adults and children have the skills to be critical of what they are exposed too.

Previous research indicates the successes that media literacy interventions have had with other public health topics, yet there is a gap in the literature for applying media literacy interventions to unhealthy food advertisements. This review of the literature indicates the need for research with parents and children learning media literacy critical analysis skills and applying them to unhealthy food advertisements. This exploratory study provides a media literacy intervention workshop with focus group data for parents and children in 3rd, 4th, and 5th grades.

CHAPTER 3: METHODS

The purpose of this chapter is to provide an overall research design for the dissertation. The implementation plan of both the quantitative (phase 1) and qualitative (phase 2) portion of this mixed methods study are explained. Also, the analysis plans conducted for both phases are described. The study procedures involving human subjects were reviewed and approved by The University of Georgia Institutional Review Board (IRB).

Research Design

Media literacy educational programs have been done with children on a variety of public health topics: middle school intervention combating substance abuse advertisements (Kupersmidt et al., 2012), junior high school students and antismoking advertisements (Banerjee & Greene, 2007), intervention for third graders against alcohol advertisements (Austin & Johnson, 1997), media literacy program for sixth graders on media violence (Scharrer, 2006), and others, but have not been done on unhealthy food advertisements. Considering the high level of food marketing exposure that children and parents have, it is important to educate them on how to critically analyze the advertisements so that they can understand the true intent and the effects. A media literacy education intervention is a promising strategy to raise consciousness and teach critical analysis skills to combat food marketing.

Researchers state that social inquiry begins with a specific purpose rather than starting with specific methodology, or as Greene stated on page 97, “methodology is ever the servant of purpose, never the master” (Greene, 2007). No matter which type of research is used, a key concept to research is to have a systematic and self-conscious research design that includes data collection, interpretation and communication processes to ensure rigor (Mays & Pope, 1995). Considering the exploratory nature of my study, it was decided that incorporating both qualitative and quantitative data would be most beneficial. Using pretest and posttests as phase 1 allows any potential changes in media literacy knowledge to be assessed (research statement 1), while focus groups and observational data in phase 2 allow for changes in intentions (research question 2) and attitudes (research statement 3) to be explored. Mixed methods are commonly used in social sciences because they can be more beneficial in providing better opportunities to answer particular research questions (Teddlie & Tashakkori, 2003).

Mixed Methods

Brewer and Hunter have implied that mixed methods approaches are superior to mono method approaches because of the ability to have data triangulation within one study (Brewer & Hunter, 1989). One key benefit of using mixed methods design is that the strengths of one data collection method can be used to balance out the weakness of another (Teddlie & Tashakkori, 2003). Authors and researchers have suggested that quantitative research is confirmatory and qualitative research is exploratory; therefore, using mixed methods allows for both processes to be present in one study (Teddlie & Tashakkori, 2003).

Sequential data collection methods were used in this mixed methods research. Sequential methods are used when the first method helps inform the second method (Greene, Caracelli, & Graham, 1989). For this study, quantitative research was collected through pretests and posttests, which were used before and after an educational workshop as the intervention. After the intervention, phase 2 of the project with qualitative research was collected through focus groups and observational notes. The results of the quantitative pretest - posttest design allowed for understanding any change in knowledge from before the intervention to after the intervention, yet before conducting focus groups. The focus groups and observational notes allowed for a deeper understanding of participants' thoughts and opinions of the media literacy sessions, as well as, changes in intentions to eat unhealthy food and changes in attitudes.

Figure 5 illustrates the specific type of sequential mixed methods research design that was used for this project. In this design, quantitative comes first and qualitative data follows. The QUAN-QUAL design, where both QUAN and QUAL are capitalized, emphasizes that the data collection and analysis of both the quantitative and qualitative data are equally prioritized in the research design. When both QUAN and QUAL are capitalized, it shows that either one is not given more weight than the other in regards to

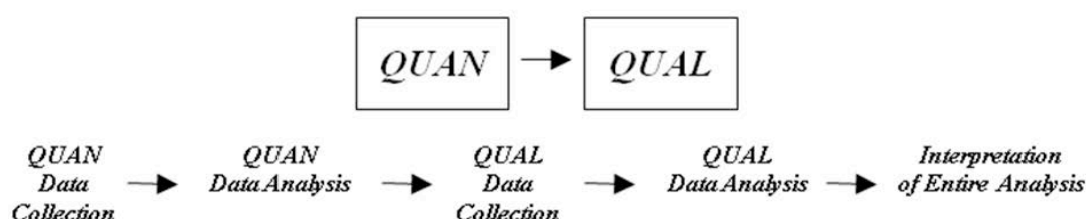


Figure 5. Sequential Mixed Method Design with Equal Prioritized Quantitative and Qualitative Data

importance.

The primary typology is complementarity and triangulation is the secondary typology. Triangulation and complementarity are the two typologies of mixed methods design that lead to multiple inferences that can either confirm or complement each other (Teddle & Tashakkori, 2003). Complementarity is the primary typology for this project because while the pretest and posttests will measure the change in knowledge, the focus groups will be used to assess not just change in knowledge, but also the attitudes and intentions. Also, the focus group data can document experiences that individuals had as participants in the intervention. Complementarity, one of the most common typologies in practice, seeks to find a broader, deeper, and more comprehensive social understanding by using a variety of methods that tap into different dimensions of the same phenomenon (Greene, 2007). Triangulation is the secondary typology where two different types of data were effectively used to be able to cross check results. Triangulation design requires a combination of quantitative and qualitative methods to allow the strengths and limitations of both methods to be used to assess the same phenomenon (Greene et al., 1989). The core premise of triangulation is that all methods have inherent biases and limitations so only using one method to assess a given phenomenon will inevitably yield results that are biased and limited (Greene, 2007).

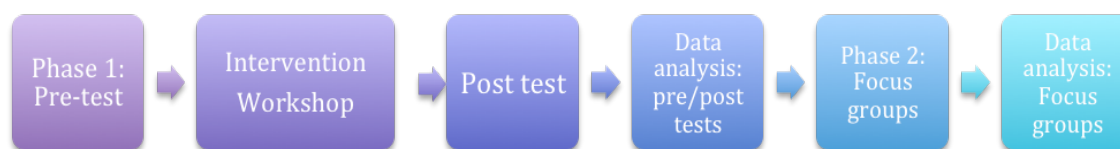


Figure 6. Flow of Research Design

Intervention Description

The family-based media literacy educational intervention was delivered to both the parent and child dyads over a two-hour workshop at a Boys and Girls club location. The curriculum was based on the integrated theoretical framework, which included the core concepts of media literacy (Table 1). The core concepts of the media literacy education were applied to the relationship between media literacy and food marketing.

The flow of the research design is presented as a figure above in Figure 6. The workshop was the first part of the intervention. Before the workshop, the parents completed the pre-test. Following the workshop, the production part was introduced and completed by parent and child dyads. The production process allowed parents and children to work together to produce a counter-advertisement for healthy food or a description of what advertisements that they see on television are honestly saying. Once the production process was completed, the parent and children dyads presented some of their production ideas to the workshop group. Following the presentation of the production ideas, the post-test was administered to the parents. Following the collection of the posttests, focus groups were introduced and volunteers were asked to sign-up if they were interested in participating. After the focus group sign-up, the workshop was concluded. For attending the workshop, the parents received a \$10 Walmart gift card. Also, dinner was provided to both the parents and children at the workshop.

Table 2. Curriculum description of media literacy intervention

Workshop	Media Literacy Core Concepts	Other activities
Introduction – 30 minutes		<ul style="list-style-type: none"> • Introduction of intervention and consent forms • Pretest
Part 1 – 20 minutes	<u>Authors and Audiences (AA)</u> <ul style="list-style-type: none"> • Authors create media messages for profit and/or influence (AA1) • Authors target specific audiences (AA2) 	
Part 2 – 20 minutes	<u>Messages and Meanings (MM)</u> <ul style="list-style-type: none"> • Messages contain values and specific points of view (MM1) • Different people interpret messages differently (MM2) • Message affect attitudes and behaviors (MM3) • Multiple production techniques are used (MM4) 	
Part 3 – 50 minutes	<u>Representation and Reality (RR)</u> <ul style="list-style-type: none"> • Messages filter reality (RR1) • Messages omit information (RR2) 	<ul style="list-style-type: none"> • Activity: Counter advertisement production • Posttest

Production

A significant part of the workshop was the production aspect. This activity allowed children to work with their parents on creating a counter-advertisement to the ones that they normally see on television. The production aspect of being able to create an advertisement emphasizes the difference in advertisements for unhealthy food and healthy food and can be used as an effective strategy for promoting healthy behavior (Dixon et al., 2007). Adding this opportunity for children to create their own media story, documentary, or advertisement can help them to understand the entire process of media

production (Kubey, 2000). Since children's drawings are becoming used more as a significant part of children's research experiences (Veale, 2005), creating counter-ads allows children to talk back to deceptive or harmful media messages and to experience some control over powerful cultural icons and television commercials to which they are exposed (McCannon, 2009). The children worked with their parents to use markers and crayons and draw out or write out a counter advertisement. The children had two options of creating an advertisement for healthy food or describing an advertisement that they see and critiquing what the companies were honestly trying to say with their advertisements. Not only did the drawing/writing activity encourage creativity but also family communication between the child and parent around the topic of advertisements and understanding the true meaning behind them. A content analysis was not done on the advertisements that were created, rather they were used to allow the parent-child dyads to work together and participate in family communication around the topic of food marketing. Another purpose of the advertisements was to provide a creative portion for expressive reflection and further explain what the participants learned in the workshop

Sample

The participants in the family-based intervention and focus groups were dyads of parents and their children. The children were from 3rd to 5th grade (ages 7-12 years old), as this was a requirement for eligibility. Not only was this the target age group selected because children can understand the implications of assenting to participate in research, including what is expected of them by age 7, (Conrad & Horner, 1997; Lowes, 1996), but also majority of children demonstrate the ability to understand commercial's persuasive

intent around age 8 (Blosser & Roberts, 1985; Chan, 2001; Comstock & Paik, 1991; Donohue et al., 1980; Lawlor & Prothero, 2002; Oates et al., 2011). Teaching children from this age group media literacy skills complements children's cognitive development, which happens between ages 7-11 years old (Zeinstra et al., 2007). Jean Piaget, one of the most influential psychologists on cognitive development, believed that from the age of 7 years old children can reason logically and able to conceptualize their thoughts clearly (Lawlor & Prothero, 2002). Also, the range of ages needed to be close enough so that they were developmentally at a similar level. By keeping it between the grade levels of third, fourth, and fifth grades, participants represented an older elementary school population without spilling into middle school years.

The parents of the children were recruited from the University of Georgia, Athens YMCA, and from two local Boys and Girls club locations, which is further discussed in the "Recruitment" section below. The participants of the workshop were the same participants of the focus group. The inclusion criteria was as follows:

- 1.) Child of the parent needed to be in either 3rd, 4th, or 5th grade
- 2.) Child cannot be younger than 7 years old or older than 12 years old

Family-based interventions are considered the primary approach to obesity treatment (Skelton et al., 2012) because adults often are role models in both food and media consumption. The adults' opportunity to be media role models for their children is important to consider when involving them in interventions because they are the ones who control, co-view media, and can create discussions about media with their families in the home (Peterson, 2012). Using the parents as participants alongside their children

allowed for education of both the parents and children; thus, the parents could feel educated and confident enough to serve as mediators of media influence and role models for healthy lifestyles (Skelton et al., 2012). Pairing children with their parents not only increases family communication, but also increases the chances of changing children's media consumption to healthier levels, which ultimately ends in a greater success for the whole family (McCannon, 2009).

Recruitment and Screening

Since the researcher is a student at the University of Georgia (UGA), convenience sampling was used to recruit participants from four departments at the University of Georgia. The four UGA departments that were used included the: facilities management division, parking services, food services, and housing. These departments have a variety of staff that work all over the 759-acre main campus. I met with the director of each department to explain my research interests, my dissertation study, and discuss recruitment options for their staff. The directors of all four departments agreed to recruitment from their staff. According to the directors, the facilities management division has 840 staff members, the parking services department has about 80 staff members, food services has 250 full time employees, and housing has 700 part time and full time staff. The different types of recruitment were selected based on suggestions of the directors, considering that they know the population best. Also, the flyer was posted to the UGA staff listserv, which is an online network of various information and opportunities for staff members. It is open for any UGA staff member to join. The flyer is Appendix A.

For the parking services department, recruitment was done through the posting of flyers in the office and break rooms. The facilities management division was recruited through the monthly staff newsletters for the division. Information was put in a newsletter blurb to inform staff about the project and how they could contact the researcher. Recruitment was also done at a monthly leadership meeting that consisted of the supervisors of the seven different branches that exist within the facilities management division. At the leadership meetings, they were informed about the project and given handouts with contact information to pass along to staff members from their branches that were interested in participating. To reach the food services staff, flyers were printed and put into their individual mailboxes. After meeting with the housing staff director, it was approved that my flyer could be sent through the housing staff listserv, as well as posted in the break rooms.

Recruitment extended outside of the UGA community to two Athens locations of the Boys and Girls Club and an Athens location of the YMCA. Flyers were posted at bulletin boards at the YMCA. For the Boys and Girls Club locations, face-to-face recruitment was used. As the researcher, I set up a table in the lobby at the time parents were picking up their children from 4-6pm. Each interested person was screened to see if they were eligible to participate based on the inclusion criteria mentioned above. Once they were determined to be eligible, a demographic questionnaire was given to the interested person. The questionnaire included questions on demographic information for the parents (age, gender, UGA department work in/Boys and Girls club location, race, highest level of education) and the children (grade level, age of child, and gender of child). The form is also present in Appendix B.

At the on-site recruitment, 72 parents indicated that they were interested in the intervention by signing up and completing a screening questionnaire. Once there was such a high amount of interest, it became obvious that all the participants were going to come from the Boys and Girls club. Considering this, the director was contacted to see if the workshop could be held at one of the two Boys and Girls Club locations to make it more convenient and comfortable for the participants. The Boys and Girls club director agreed to host the workshop at their location. It was beneficial for the Boys and Girls club to host it because then they were able to count it as a “parent event” for the 21st Century Grant through the U.S. Department of Education. Due to spring break, scheduling issues, and appropriate time for the proper paperwork to be completed and submitted for the 21st Century grant, the workshop was delayed. Once the date and time was confirmed, the 72 parents who initially signed up were then contacted based on their preferred method of communication (email, text, or call) to see if they were still interested in participating. The maximum attempts of contacting the parents were two times on different days. If they did not respond to either attempt, they were considered uninterested or unavailable. After the initial round of communication, 42 parents responded that they were still interested in participating in the intervention. Based on the responses of the screening questionnaire, the workshop time and day of the week was selected based on the most frequent combination of these 42 parents. Each of the interested 42 parents was contacted even though their schedules may not have indicated their availability. From the 42 parents, the final sample consisted of 12 adults, which led to 15 child participants.

Table 3. Methods of Recruitment

	Facilities Management Division	Parking Services Dept.	Housing Dept.	Food Services Dept.	Boys and Girls Club (2 locations)	YMCA
Staff Meetings	✓					
In-person					✓	
Monthly newsletters	✓					
Post flyers		✓	✓			✓
Email		✓				
Flyers in mailbox				✓		

Sample Description

The final sample consisted of parents and children from two Boys and Girls club locations in the Athens, Georgia area. Table 4 describes the total sample demographic information for the participants (n=27) and the race, gender, age and education by percentages. Table 5a provides description of the parent participants (n=12) by pseudonym, sex, race, age, and education level. For education level, “less than” means less than two years of college or an Associate’s degree and “more than” means the parent has more than two years of college or an Associate’s degree. Table 5b provides description of the children participants (n=15) by pseudonym, sex, race, age, and grade level. Also, in table 5b, the parent of the child is identified.

Table 4.	
Total Sample Demographic Information (n=27)	
Variable	%
Overall demographics	
Groups	
Parent (n=12)	44.4
Child (n=15)	55.6
Age	
Parent	
29-32	41.7
33-36	33.3
37-40	8.3
41-45	16.7
Child	
8	13.3
9	20.0
10	46.7
11	20.0
Race	
Parent	
Black	83.3
Hispanic	16.7
Child	

Black	80.0
Hispanic	13.3
Missing	6.7
Gender	
Parent	
Female	83.3
Male	16.7
Child	
Girls	40
Boys	60
Education	
Parent	
Less than an Associate's Degree or 2 years of college	83.3
More than an Associate's Degree or 2 years of college	8.3
Missing	8.3
Child	
3 rd grade	26.7
4 th grade	46.7
5 th grade	26.7

Table 5a. Description of Parent Participants (n=12)				
Pseudonym	Sex	Race	Age	Education
Tameka	F	Black	33	Less than
Beth McPherson	F	Black	44	Less than
Swantay	F	Black	30	Less than
Amazing Grace	F	Black	29	Less than
Carrie	F	Black	29	Less than
Mary J.	F	Hispanic	34	Less than
Peter	M	Hispanic	38	More than
Superwoman	F	Black	29	Less than
Cat woman	F	Black	34	Less than
Jesus	M	Black	30	Less than
Hello Happy	F	Black	45	Less than
Mary	F	Black	34	Less than

*Note: The parents selected their own pseudonyms to be used throughout the project.

Table 5b. Description of Child Participants (n=15)					
Pseudonym	Sex	Race	Age	Education	Parent
Peace	F	Black	11	5 th grade	Tameka
Arch	M	Black	11	5 th grade	Beth McPherson
Beyonce	F	Black	8	3 rd grade	Beth McPherson
Damaris	M	Black	10	4 th grade	Swantay
Lil Ma	F	Black	10	4 th grade	Swantay
RJ	M	N/A	10	4 th grade	Amazing Grace
Boss	M	Black	11	5 th grade	Carrie
Olivia	F	Black	9	4 th grade	Carrie
Sherman	M	Hispanic	9	3 rd grade	Mary J.
Seany	M	Hispanic	9	3 rd grade	Peter
Cutiepie	F	Black	10	4 th grade	Superwoman
Michael Jackson	M	Black	8	3 rd grade	Cat woman
Flash	M	Black	10	5 th grade	Jesus
Destiny	F	Black	10	4 th grade	Hello Happy
\$2	M	Black	10	4 th grade	Mary

*Note: The children selected their own pseudonyms to be used throughout the project.

Workshop Description

The workshop was a two-hour educational media literacy intervention that was held on a Saturday in the early evening. It was held in a large room at the Boys and Girls club. There were tables with about 4-6 chairs at each table, where the majority of the parent-child dyads sat together, but there was one table full of children. The intervention workshop was delivered primarily through PowerPoint with video clips and interactive discussion to emphasis educational points and allowed the participant an opportunity to provide authentic reflection. There were often side conversations going on at various tables, especially the table with all children, and the only time I tried to control it was when the volume prevented others from hearing and became distracting. As I presented the information, I walked around the room to prevent a traditional teacher/student set-up

and promote an interactive setting. I did this to provide a more laid back setting where the participants felt that they were co-leaders of the workshop with me. Dinner was provided to the participants and was laid out in a buffet-style that was set-up off to the side, which allowed the participants to be able to help themselves throughout the workshop.

Based on observational notes and a reflection after the workshop, parents and children were able to learn together as a family about food advertisements. During the workshop, parents and children learned analysis skills to think critically about the advertisements they are exposed too. It was a consciousness-raising workshop throughout that promoted an interactive setting among the participants, both parents and children. The workshop started off with an introduction of me and briefly discussed the plan for the workshop. I also introduced the note-taker and had everyone acknowledge the camera by asking everyone to turn around and wave so that everyone was aware it was being recorded. I went over the consent forms and had the parents review and sign their version (Appendix C) while the children reviewed and signed their own minor assent version (Appendix D).

Phase 1: Quantitative Methodology

Quantitative Data Collection

Quantitative research is a paradigm that addresses questions that hypothesize relationships among variables that are measured in numerical and objective ways (Newman, Ridenour, Newman, & DeMarco Jr., 2003). A pretest - posttest design was selected to evaluate overall changes in media literacy knowledge. Pretests can be useful for interventions because they observe selection biases and attrition as sources of

observed effects (Shadish, Cook, & Campbell, 2002). Posttests help eliminate ambiguity about the cause and effect of an intervention (Shadish et al., 2002). The Smoking Media Literacy was adapted for food marketing and was used as both the pretest - posttests.

For the study, a one-group pretest - posttest design was administered to parents to measure any changes in media literacy knowledge, as well as, intentions to eat unhealthy food. The adapted SML was given before the workshop began and was used as the posttest at the end of the workshop. Both the pretest and posttest questionnaires were administered in a paper and pen format.

Due to concerns about using a pretest – posttest with children, focus groups were used to assess the change in media literacy knowledge for the children participants. It was decided that this was a more appropriate method to use with the particular age group of children in the study. The focus group and observational data collection is described in the below in the qualitative methodology section.

Quantitative Measures

The pretest - posttest questionnaire used was adapted from the smoking media literacy (SML) scale that was created by Brian A. Primack, Melanie A. Gold, Galen E. Switzer, Renee Hobbs, Stephanie R. Land, and Michael J. Fine in 2006. During the development of the SML scale, the team of researchers created 120 potential items based on the Theory of Reasoned Action. The 120 items used a Likert-type scale (strongly disagree, disagree, agree, strongly agree) and consisted of 15 items each representing the eight core concepts of media literacy, as shown in Table 1. Once the scale was developed, it was then distributed to eight leading national experts in media literacy, tobacco, and

public health. Also, focus groups with 9th-11th graders were held to get their feedback on the scale from an adolescents' perspective. Based on the feedback received from both the experts and the adolescents, items were edited or eliminated and the scale was reduced from 120 items to 51. After the reduction, factor analysis was completed on the remaining items to assess the reliability and validity of the scale. The factor analysis led to another reduction from 51 items to a final count of 18 items (Table 6). The final scale proved to be adequately measured using a Likert scale with promising reliability and validity. Also, the internal consistency was considered "excellent" by the researchers (Primack et al., 2006).

In the creation of the SML scale, the original researchers did several validity and reliability checks. Considering the strong reliability and validity of the smoking media literacy scale, it is confirmed that it is an appropriate tool to assess media literacy with adolescents. The SML was adapted to assess the media literacy of food advertisements and used as a pretest and posttests for this dissertation study. The intent of the questions was kept, but the language was changed to focus on food marketing. The questionnaire is in Appendix E.

Table 6. Adapted Questionnaire for Food Marketing from the Smoking Media Literacy Scale that was Originally Developed by Primack et al (2006)

Number	Question	Core Concept
1	“Buy-one-get-one-free” deals on cigarettes are designed to get people addicted	AA1
2	Tobacco companies are very powerful, even outside of the cigarette business	AA1
3	Tobacco companies only care about making money	AA1
4	Certain cigarette brands are designed to appeal to younger people	AA2
5	Wearing a shirt with a cigarette logo on it makes you into a walking advertisement	MM1
6	Cigarette ads link smoking to natural things that humans want like love, good looks, and power	MM1
7	Two people may see the same movie or TV show and get very different ideas about it	MM2
8	Different people can see the same cigarette ad in a magazine and feel completely different about it	MM2
9	A tobacco billboard may catch one person’s attention but not even be noticed by another person	MM2
10	People are influenced by TV and movies, whether they realize it or not	MM3
11	People are influenced by advertising	MM3
12	When people make movies and TV shows, every camera shot is very carefully planned	MM4
13	There are often hidden messages in cigarette ads	MM4
14	Most movies and TV shows that show people smoking make it look more attractive than it really is	RR1
15	Cigarette ads shown green, natural, healthy scenes to make people forget about the health risks	RR1
16	When you see a “buy-one-get-one-free” cigarette deal, it’s usually not actually a good deal in the long run	RR1
17	When you see a smoking ad, it is very important to think about what was left out of the ad	RR2
18	Advertisements usually leave out a lot of important information	RR2

Statistical Analysis

The data from the pretest - posttests were screened for missing values and then entered upon collection. Descriptive statistics of differences in mean scores and paired t-tests from pretest - posttests were calculated. Tables were made to compare the pretest - posttests scores for each media literacy core concept represented by questions within the questionnaire used for the pretest - posttests. Statistical significance was defined as being $p < 0.05$. The statistical software used for quantitative analysis was SPSS version 21 for Windows.

Phase 2: Qualitative Methodology

Qualitative Research

Qualitative research is frequently used to explore a particular experience or area of research through words and explanations of experiences. Corbin and Strauss, both prominent qualitative researchers, explain that qualitative studies are usually exploratory and more hypothesis generating than testing (Corbin & Strauss, 2008), which make them appropriate to use for this study to explore if media literacy methodology works with food advertisements. In many exploratory studies, qualitative methodology is considered the most appropriate method because the researchers may not know enough about the topic or research area to test a hypothesis; therefore, qualitative research is conducted to gain a further understanding. Many times the nature of the topic will lend itself to qualitative research because quantitative measures and analyses simply do not fit the problem (Creswell, 2007), such as the change in children's media literacy knowledge,

changes in intentions to eat unhealthy and healthy food for parents and children, and changes in the parent's and children's attitudes towards food marketing.

Researcher's Subjectivity

A researcher's subjectivity should be explicitly stated, since there is no way to escape it because all views are subjective (Phillips, 1990). As stated on page 38 of the book, "subjectivity is not something to be purged from the research community. It is, rather, something to be acknowledged, understood, and learned from in the process of constructing the relations and representations of cultural selves and others" (Roman & Apple, 1990). The subjectivity statement is crucial for qualitative research because in order to understand one's conception of subjectivity, the reader must be able to mentally grab his or her worldview (Eisner & Peshkin, 1990).

Our personal, historical, cultural, and professional experiences are inevitably involved in our research (Koch, 1993). Health researchers are encouraged to examine their individual subjectivity no matter what methodology they use to acknowledge their particular philosophical position that reinforces their research (Bradbury-Jones, 2007). I will state my subjectivity below and how I am linked to this research.

Obesity is one of the top public health priorities of our country, especially for minority populations, including African Americans. Based on BMI scales, I am not obese or overweight but I am an African American woman who is interested in the disparity that exists with obesity. Obesity and the various health effects that come from it have a huge impact on my community. While I have been exposed to obesity through several news outlets since it is considered a top public health priority, I was first exposed to the

research side of obesity during the Masters of Public Health (MPH) program. During my time as a graduate student in the MPH program, I was exposed to obesity research through class assignments, class readings, and professional presentations. When I attended national conferences, I was often drawn to presentations that were obesity-related because of my interest in the topic and the minority disparities that exist.

Also, during my time as a Master's student, I continued to explore my interest of health communication by selecting "health education and communication" as one of my dual concentrations and because of that, I was able to take a variety of classes in health communication. When I started the doctoral program at University of Georgia, I continued on the health communication track and selected "health communication" as my cognate area. By doing so, I was able to, once again, take health communication-based classes, yet this time I had the opportunity to take classes in other departments, such as journalism and communication studies. From these communication classes, as well as, presentations at conferences, I became interested in media's role in the obesity problem of our society, especially related to children and advertisements. The passion I have for childhood obesity and the media's role in the issue led me to select a media literacy intervention for my dissertation.

As a qualitative researcher, it is important to set up background on qualitative research concepts, such as triangulation, and methods, such as focus groups. First, the background and literature will be explained to help the reader understand the importance and why they are used in this dissertation study. Once the background is set, next the various qualitative research methods used in the study will be described.

Triangulation

Triangulation seeks convergence, corroboration, or correspondence of results by using methods with offsetting biases to increase breadth of contrast and inquiry inferences (Greene, 2007). Triangulating is a significant aspect of qualitative research that can ensure validity and reliability of the data instead of using only one research strategy, which introduces bias (Graue & Walsh, 1998). By using various methods of data collection within a research project, the researcher seeks out evidence from a range of different, independent sources and perspectives (Mays & Pope, 1995). A researcher may not be able to use other investigators, but making use of multiple data sources and methods is fundamental to data generation (Graue & Walsh, 1998). Triangulation will be a key factor to use in this research project because of the individual nature of dissertation work.

Denzin (1978) suggests three ways of triangulating: a) using many data sources across time, space, and people; b) using different investigators; and c) using multiple methods (Graue & Walsh, 1998). For this particular project, qualitative data collection in the form of video recorded focus groups and observational notes were used. Focus groups were the primary qualitative method of collecting data within this project. The focus groups allowed for an enriched understanding on the participants' opinions, thoughts, and reflections on the intervention. Also provided the participants an opportunity to share how their perspectives or intentions might have changed. Observational notes of the video recordings of the workshops and focus groups were used as a secondary method of data collection. Observations were used to capture the group dynamics and side conversations that may not be obvious during the focus groups but discovered through

watching the videos. The observational data was used to enrich and supplement the focus group data. This triangulation not only allowed for reliability of the qualitative data, but also allowed the data to be looked at from different angles and perspectives.

Focus Groups

Focus groups are a type of qualitative approach that allows for comprehensive exploration in a natural setting, while providing context and depth to the subject matter (Skelton et al., 2012). Focus groups are group interviews that allow the researcher to collect the responses of several participants simultaneously in one setting. Different researchers may conduct focus groups in a variety of ways, depending on the setting, the participants, or other characteristics that can influence and impact the data collection process. While there are many different ways that researchers can conduct focus groups, they all have similar framework that guide the process (D. L. Morgan & Bottorff, 2010).

An advantage of using focus groups is the group dynamics that can come from the interactions between participants. Often, the group dynamics becomes data itself that can be analyzed. When participating in a focus group, the conversation and comments made by participants can stimulate individuals' memories of their own experiences, which can generate group interactions grounded in experiences (Roberts, 1997). The group dynamics often enrich the data collected during focus groups because they add supplementary discussion and opinions.

Researchers conduct qualitative research when they want to empower individuals to share their stories, have their voices be heard, and minimize the power relationships that naturally exist between a researcher and the participants in a study (Creswell, 2007).

Through the unique characteristic of bringing a broad sense of community, focus groups empower the participants to share their opinions and thoughts (Skelton et al., 2012). This empowerment and community feeling that focus group participants experience often encourages them to openly share their opinions and experiences with a group of people that is similar to them. These attributes and benefits of focus groups, both the empowerment and minimalizing of the power dynamic, make them a common method of data collection that has been and can successfully conducted with children.

Focus groups are especially valuable for obtaining data from children (Krueger & Casey, 2000). Focus groups with children are favored over one-to-one interviews, which tend to be considered inappropriate or too invasive (Barbour, 2008). Researchers suggest that small focus groups are one of the best ways to obtain data from children, because they mirror a natural and familiar form of communication (Gibson, 2012). The majority of children's time is spent in a classroom; therefore, they are more familiar with being and talking in a small group. A focus group situation allows for a more natural and less intimidating setting for children in comparison to one-on-one interviews with adults, which is commonly attached to times when they are in trouble or scared, such as the principal's office or their doctor's visit.

It is important to be flexible when conducting research with children in order to be able to adapt to their needs (Gibson, 2012). Children are creative beings transforming through developmental stages. Depending on what developmental stage they are in, the children's needs are different. Considering their fundamental part of the family system (Gibson, 2012), no matter what developmental stage, it is crucial to treat children with respect and consciously minimize the power imbalance as much as possible.

As discussed earlier, the group dynamics and side conversations between participants within the focus group should not be discounted. In a research project that used focus groups with children, Baturka found that the richest parts of the interviews came from the discussion between the children as they talked to each other about her questions rather than from their direct answers (Graue & Walsh, 1998). Not only can the between-group conversations often be honest answers to the proposed questions, but they also can provide beneficial insight into the children's opinions and thoughts. Many researchers have found that the dynamics of the group being interviewed has served as data itself and been useful when analyzing for findings (Balmer et al., 1997; Berkwits & Inui, 1998; M. Morgan, Gibbs, Maxwell, & Britten, 2002). The benefit of a focus group is that group dynamics can become data, which is not possible in one-on-one interviews. In addition, being in a group encourages flexibility and allows children to build upon other's responses, and also lends itself to the children having the freedom to not have to process the responses of members in the group (Zeinstra et al., 2007).

To ensure that the researcher gets honest and truthful answers in focus group settings with children, the researcher must be sure to create a setting where children feel natural and safe and are encouraged to share divergent viewpoints (Balmer et al., 1997). Placing the children in a natural setting with which they are familiar helps to reduce the power imbalance between the researcher and children (Fine & Sandstrom, 1988). Children feel comfortable to speak more freely when they are with children of the same age (Zeinstra et al., 2007). This is important so that children participating have the confidence to share their opinions, even if it is opposing thoughts of others in the group. As a researcher, it is important to assure the children that there are no wrong answers and

make sure you, as the researcher, are not making assumptions by finishing their responses for them (Zeinstra et al., 2007).

Qualitative Data Collection

Focus groups were conducted after the workshop to allow the participants to further share their experiences and what changes the workshop provided. The focus groups participants were also from the workshop and volunteered to be a part of the focus groups. For this project, four focus groups, two with parents and two with children, were conducted after the workshops were completed and the pretest - posttest data was analyzed. The focus groups were held 1-2 weeks on University of Georgia's campus after the workshop. The focus groups were held on the campus of University of Georgia to be respectful of the Boys and Girls staff's time. Originally, the workshop was not supposed to be held at the Boys and Girls club, but was to accommodate the participants and because the Boys and Girls Club staff could count it as a parent event. While this was convenient for me and the Boys and Girls club staff, it meant that someone from the staff needed to be present to open the building and be there as the workshop went on.

Two of the focus groups were held with parents (n=5) and the other two were held with children (n=6). In the first focus group with parents, there were two adults and in the second parent focus group, there were three participants. In the first focus group with children, there were two children and in the second focus group there were four children. By separating the parents from the children, it ensured that the parents' presence did not have an influence on their children's responses. The focus group with parents allowed the parents to speak freely and share their honest opinions on the intervention workshop and

food marketing. Similar to the parent focus group, the children had an opportunity to reflect on the intervention and discuss food marketing and what they learned. When investigating marketing issues that are child-related, many researchers are moving beyond using parental reports to collect data directly from the children in the forms of focus groups and interviews (Baxter, 2012). Dinner was provided for the focus group participants so the children ate in one room while the parents participated in the room next door and then they switched. Each focus group lasted 30 minutes, which was an appropriate amount of time for conducting focus groups with children and parents. An adult was there to supervise the children while the parents were participating in the focus group. The focus groups were both audio and video recorded. The audiotapes of the focus groups were sent off and professionally transcribed. The video recordings were extremely helpful in cross checking the transcripts of all four focus groups to ensure that the correct speaker was identified and that the transcripts were correct. Also, observational notes were taken of all four focus groups and reviewed along with the note-taker's notes of the focus groups. The note-taker was a fellow doctoral student who had taken several qualitative research classes for UGA's graduate level qualitative research certificate.

Videotaping

Videotaped focus groups, especially ones with children, are commonly used among researchers (Graue & Walsh, 1998). This helps the researcher concentrate on moderating the focus groups and taking notes later after reviewing the tape. Both the workshop and focus groups were video-recorded. Videotaping was used to document all interactions, both big and small, during the workshop and focus groups. The video

recorder was set up in the corner of the room and the recordings used as a tool for three main purposes: to be able to pull out clips for the video-cued multi-vocal ethnography methods that were used for conversation starters in the focus groups, to cross-check the transcripts of the focus groups and ensure the correct speaker was identified, and to allow the researcher to go back and take observational notes.

Video-cued Multi-vocal Ethnography

In order to promote interactive focus groups, “video-cued multi-vocal ethnography” methods from anthropology and ethnography researchers who conducted a project titled *Preschool in Three Cultures* (Tobin, Hsueh, & Karasawa, 2011) were used. While this project did not use traditional ethnography methods as they did in the *Preschool in Three Cultures* project, the video-cued multi-vocal ethnography methods were borrowed and adapted. For video-cued multi-vocal ethnography, different clips of video are used as interviewing cues to promote dialogue in the focus group setting. Once the workshop was videotaped, 30-second clips of interesting or intriguing dynamics or interactions were pulled by the researcher via iMovie and used as conversations starters at the focus groups. The clips that were selected were parts of the workshop that received the most feedback from the participants or parts of the workshop that allowed for reflective thoughts and comments from the participants in the focus group setting. Viewing these clips in a focus group setting allowed the participant to reflect on their participation in the intervention, as well as, honestly share their thoughts or opinions on a certain topic. Using the clips with both children and parents gave the focus group participants an opportunity to observe themselves within the setting of the intervention.

Using this unique ethnography method promoted interactive and dynamic focus group discussion.

Videotapes were also used to cross check quotes from the transcriptions of the focus group to ensure that the correct author was identified. Videotaping was a critical piece of the focus groups with children essentially to know who said what. In most focus groups with teens or adults, participants select a pseudonym to use for identification purposes from the start of the project throughout and even after, during the transcribing and analysis processes. The children were in elementary school and could not be held responsible to remember to state their pseudonym before they spoke each time; therefore, it was essential to go back and check for reporting purposes.

Selection of Video Clips

In order to promote participation and reflection within an interactive focus group, “video-cured multi-vocal ethnography” methods were used. These methods were adopted and adapted from *Preschool in Three Cultures* project and book (Tobin et al., 2011). Three clips from the educational workshop were shown to the focus group participants as opportunities to discuss different parts and topics from the workshop. It also gave the participants an opportunity to share their honest opinions in a reflective manner. The three 30-second clips that were shown were selected based on observational notes made after watching the video recording of the workshop. The clips that seemed to get the most feedback from the participants or provided an opportunity for reflection and discussion were used as conversational prompts.

The first of the three clips was when the fast food logos were shown without names of the restaurants and the participants had to guess the fast food restaurant. The logos were placed on a PowerPoint slide and came in one-by-one. The logos did not have the name of the company but as soon as they were revealed, the participants were able to identify them. The purpose of this clip was to show the power of marketing and branding. When watching this part of the workshop, it was obvious that everyone knew these fast food companies. The children shouted out the names so quickly, even before we had moved onto the next logo. They not only knew all of the restaurants but also were so familiar that it became a race to name them all before I had gotten to the next one.

The second clip was when participants were watching a YouTube video of the food make-up artist who prepares food for commercials. In the YouTube video, the food make-up artist was showing how different parts of a burger are prepared to ensure that it does not lose its color or that it does not look soggy. For example, the food make-up artist explained that the meat is barely cooked on either side to prevent the patty from shrinking and looking too dark in color. Also, she explained that individual sesame seeds are applied with a toothpick and glue so that they are symmetrical and placed in the perfect spot. Other examples were shown so that the participants could understand that food in commercials is not actually edible due to the make-up and adaptations for the purpose of the commercial. This clip was selected because it seemed to be the most interesting part to both parents and kids. Based on the observational notes, the participants, both parents and children, were very shocked at the things shown and brought up in this YouTube video. While taking observational notes, it was noted that many of the children yelled out "Gross!" and "Yuck!" It was also observed that even the parents were shocked and

making faces at some of the things shared about the manipulation of the food for the purpose of shooting a commercial.

The third and final clip was of another YouTube video that discussed food marketing in different settings. In this particular video clip, the lady was sharing that food companies hire psychologists and food experts to gain knowledge on what kids like, how they see, and other details such as what colors and characters to use in their marketing plans. It gave the participants a deeper understanding behind the construction of advertisements and why certain things are used and certain places are selected for the companies to market their products. These particular clips were selected because they appeared to be engaging the participants in the audience and also solicited comments from the participants. They also provided some diversity in topics covered and discussed in the workshop setting that could be discussed more in-depth in the focus group setting.

Observations

Observational notes of the videotaped workshop sessions and focus groups were used as a secondary method of qualitative data collection. Observations were used to capture the group dynamics and side conversations that may not be obvious during either the workshops or the focus groups. From these videotapes of the workshops, observational notes were made about the interaction the parents and children have with each other, as well as with the researcher. The observational data was used to enrich and supplement the other qualitative data. Observations of group dynamics are important in providing insights into social norms (M. Morgan et al., 2002). The content and pace of the conversation was controlled by the participants; therefore, everything may not have

gotten documented during the actual focus group (Berkwits & Inui, 1998). Videotapes were reviewed to find meanings and interactions that were not evident but important in analysis (Berkwits & Inui, 1998). Another benefit of using observations is that it allows me, as the researcher, to take notes of quiet participants that may participate more in side conversations than the responses to the main group (Sim, 1998). This strategy can be important when working with children because of the possibility of them feeling anxious about participation in front of their peers or having shy personalities.

Qualitative Analysis: Constant Comparative Method

For the qualitative data, constant comparative method of analysis was used. Comparative analysis is a staple feature of social science research (Corbin & Strauss, 2008). The first step of this process is called “open coding.” Open coding is defined as segmenting data into categories of information (Strauss & Corbin, 1990). Open coding allows the researcher an opportunity to code the relevant data based on the topic or message of the data. Coding data also allows the researchers to sort the data based on the codes and gives them a handle for making comparisons with other segments of data (Charmaz, 2006). When reviewing transcripts of the focus group data, open coding was used to create themes.

Corbin and Strauss state that as the researcher moves along with analysis, each incident in the data is compared with other incidents for similarities and differences (Corbin & Strauss, 2008). Corbin and Strauss recognize this process as being important to analysis and explain: “This type of comparison is essential to all analysis because it allows the researchers to differentiate one category/theme from another...” (Corbin &

Strauss, 2008). While coding data, it is important that the codes are created so that they lend themselves to be attached to a certain theme. Each theme should be completely independent of others to ensure that there is no crossover. If crossover exists, the themes are not independent enough and should be re-examined. The constant comparative method can be a helpful analysis tool to ensure that the themes are strong enough to stand independently on their own and properly represent significant parts of the data. There were certain incidents in the focus groups that did not necessarily fit in any theme but were important to mention, therefore there is a section titled “outliers” that appears after the three themes are presented below.

CHAPTER 4: RESULTS

The purpose of chapter 4 is to present the results of the intervention dissertation study.

The results, both quantitative and qualitative, are presented below. Integration of the results are presented in chapter 5.

Quantitative Results

The results in Tables 7, 8, and 9 present the results from the pretest - posttests that the parent participants (n=12) completed at the workshop intervention. Paired sample t-tests were used to measure changes in media literacy knowledge between pretest and posttest administration. The pretest questionnaire was administered at the beginning of the workshop and then used again as the posttest at the conclusion of the workshop.

Table 7 presents the results from the questions that conceptualized the first of three media literacy domains – Authors and Audiences. Items 1-4 in Table 7 represents the results from questions 1-4, which are listed in the variable column, from the pretest – posttest questionnaire. Items 1, 2, and 3 represent the Authors and Audience concept 1 (AA1), which state: authors create media messages for profit and/or influence. There were statistically significant changes between the pretest and posttest scores for Item 1 (“Buy-one-get-one-free” deals are designed to get people addicted; mean difference = 0.92, $t(11) = 4$, $p = .002$) and item 3 (Fast food and snack food companies only care about making money; mean difference = 0.5, $t(11) = 3.32$, $p = .007$). Item 2 (Fast food

and snack food companies are powerful, even outside of the food business) and item 4 (Certain fast food and snack food companies are designed to be liked by kids and younger people) did not have statistically significant ($p < 0.05$) differences between the pretest and posttest data. Item 4 is associated with Authors and Audience concept 2 (AA2), which states authors target specific audiences.

Table 7. Results from Pretest - Posttest – Authors and Audience Domain

Item	Core Concept	Variable	Mean difference	95% CI	t	df	p-value
1	AA1	“Buy-one-get-one-free” deals are designed to get people addicted.	0.92	0.41 – 1.42	4.00	11	.002
2	AA1	Fast food and snack food companies are powerful, even outside of the food business.	0.25	-0.15 – 0.64	1.39	11	.191
3	AA1	Fast food and snack food companies only care about making money.	0.50	0.17 – 0.83	3.32	11	.007
4	AA2	Certain fast food and snack food companies are designed to be liked by kids and younger people.	0.25	-0.37 – 0.54	1.92	11	.082

Table 8 presents results from the pretest - posttest questionnaire that conceptualized the second media literacy domain – Messages and Meanings. Items 5-13 in Table 8 represent the results from questions 5-13. For Table 8, item 6 (Fast food and snack food ads link eating their food to things people want like love, happiness, and good looks), item 9 (A fast food or snack food billboard can catch someone's attention but not be noticed by another person), and item 11 (People are influenced by advertising) were statistically significant ($p < 0.05$). Items 5 and 6 measured the media literacy Messages and Meanings concept 1 (MM1), which states messages contain values and specific points of view. While both items 5 and 6 are associated with MM1, only item 6 showed statistically significant change between the pre and post test scores (mean difference = 0.64, $t(10) = 3.13$, $p = .011$). Items 7, 8, and 9 measured Messages and Meaning concept 2 (MM2), which state: different people interpret messages differently. For MM2 there was statistically significant change for only item 9 (mean difference = 0.5, $t(11) = 2.57$, $p = .026$). Items 10 and 11 measured Messages and Meaning concept 3 (MM3), which state: messages affect attitudes and behaviors. From items 10 and 11 associated with MM3, there was statistically significant change for item 11 (mean difference = 0.5, $t(11) = 3.32$, $p = .007$). Items 12 and 13 measured Messages and Meanings concept 4 (MM4), which states multiple production techniques are used. Item 5 (Wearing a shirt with a fast food or snack food company makes you a walking advertisement), item 7 (Two people may see the same movie or TV show and get different ideas about it), item 8 (Different people can see the same ad in a magazine and feel completely different about it), item 10 (People are influenced by TV and movies whether they realize it or not), item 12 (When people make movies and TV shows, every camera shot is planned), and item 13 (There are often

hidden messages in fast food or snack food ads) were not statistically significant ($p < 0.05$).

Table 8. Results from Pretests - Posttests – Messages and Meanings Domain

Item	Core Concept	Variable	Mean difference	95% CI	t	df	p-value
5	MM1	Wearing a shirt with a fast food or snack food company makes you a walking advertisement.	0.27	-0.04 – 0.59	1.94	10	.082
6	MM1	Fast food and snack food ads link eating their food to things people want like love, happiness, and good looks.	0.64	0.18 – 1.09	3.13	10	.011
7	MM2	Two people may see the same movie or TV show and get different ideas about it.	0.36	-0.18 – 0.91	1.49	10	.167
8	MM2	Different people can see the same ad in a magazine and feel completely different about it.	0.45	-0.10 – 1.00	1.84	10	.096
9	MM2	A fast food or snack food billboard can catch some people's attention but not be noticed by another person.	0.50	0.07 – 0.93	2.57	11	.026
10	MM3	People are influenced by TV and movies whether they realize it or not.	0.42	-0.01 – 0.84	2.16	11	.054
11	MM3	People are influenced by advertising.	0.50	0.17 – 0.83	3.32	11	.007
12	MM4	When people make movies and TV shows, every camera shot is carefully planned.	0.33	-0.08 – 0.75	1.77	11	.104
13	MM4	There are often hidden messages in fast food or snack food ads.	0.33	-0.08 – 0.75	1.77	11	.104

Table 9 presents the results from the questions that conceptualized the third media literacy domains – Representation and Reality. Items 14-18 in Table 9 represents the results from questions 14-18, which are listed in the variable column, from the pretest and posttest questionnaire. Items 14, 15, and 16 measured Representation and Reality domain 1 (RR1), which state that messages filter reality. Items 17 and 18 measured Representation and Reality domain 2 (RR2), which state that messages omit information. There were statistically significant changes between the pretest and posttest scores for Item 15 (Fast food and snack food ads show happy and healthy kids and families to make people forget about the health risks) (mean difference = 0.75, $t(11) = 3.45$, $p = .005$) and item 16 (When you see “buy-one-get-one-free” deals, it usually isn’t a good deal in the long run) (mean difference = 0.75, $t(11) = 2.28$, $p = .043$). Item 14 (Most movies and TV shows that show people eating fast food make it look more attractive than it is), item 17 (When you see a fast food or snack food ad, it is important to think about what information they left out), and item 18 (Ads usually leave out a lot of important information) did not have statistically significant ($p < 0.05$) differences between the pretest and posttest data.

Table 9. Results from Pretests - Posttests – Representation and Reality Domain

Item	Core Concept	Variable	Mean difference	95% CI	t	df	p-value
14	RR1	Most movies and TV shows that show people eating fast food make it look more attractive than it is.	0.25	-0.14 – 0.64	1.40	11	.191
15	RR1	Fast food and snack food ads show happy and healthy kids and families to make people forget about the health risks.	0.75	0.22 – 1.23	3.45	11	.005
16	RR1	When you see “buy-one-get-one-free” deals, it usually isn’t a good deal in the long run.	0.75	0.03 – 1.47	2.28	11	.043
17	RR2	When you see a fast food or snack food ad, it is important to think about what information they left out.	0.25	-0.04 – 0.54	1.92	11	.082
18	RR2	Ads usually leave out a lot of important information.	0.17	-0.20 – 0.53	1.00	11	.339

Summary of Quantitative Results

The results of the pretest – posttest showed that there were positive changes made in the media literacy knowledge of the parent participants. Within each media literacy domain (Authors and Audience, Methods and Meanings, Representation and Reality), there were at least two core concepts that had statistically significant results, which shows the diversity in the changes among media literacy knowledge. Scales were constructed by

gr calculating the grouped results by each of the three media literacy domains. Each grouped domain had strong p-values (AA – .000, MM – .002, RR – .005). The results of these t-tests are presented in tables in Appendix G. Below the results from the qualitative data collection method in the form of focus groups are presented.

Qualitative Results

The transcripts of the focus group data were initially analyzed and coded by hand on key parts and potential themes. For each 30 minute focus group, the word counts were as followed: 1st child focus group: 4,696 words, 1st parent focus group: 4,033 words, 2nd child focus group: 4,574 words, and the 2nd parent focus group: 5,115 words. After the four transcripts were completed through constant comparative methods, final codes were created based on themes. After initial and final coding was completed using the constant comparative method, it was found that the codes and themes fell into three main categories. The themes are presented in Table 10 and are as followed: characteristics of advertisements, effects of advertisements, and effects of workshop. There were also some outliers that provided interesting and rich information, yet did not necessarily fit into any of the three categories. They are noted and presented after the categories.

Table 10. Final coding for focus groups		
Theme 1: Characteristics of advertisements	Adults vs. kids	Money
	Lying	Marketing
Theme 2: Effects of advertisements	Pestering Power	Anger
	Commercial influence	Healthy ads
Theme 3: Effects of workshop	Family communication	Convenience
	Workshop	Power

Characteristics of advertisements

Throughout the focus groups, the participants shared that they noticed there were certain tactics or characteristics that the advertisements used, no matter the company. One of the most frequently discussed tactics was tailoring, which means the message or advertisement content was tailored or created for a specific audience. The participants recognized that advertisements are tailored to different groups of people. Damaries, a Black 10 years old, 4th grade boy, was in the first focus group with children and he talked a lot throughout the focus group about his experiences. When asked about differences in advertisements for kids and parents and what they thought about it, he mentioned once instance when he was watching television and he was able to acknowledge how tailoring worked from an outside perspective.

Damaries: My friend, he wants to be an astronaut and he watches this commercial with the astronaut and he was eating a whole bunch of junk food.

Interviewer: Mm-hmm

Damaries: And he was like “Oh man, I want that” because he really likes astronauts and follows them...

Damaries realized that the fact that his friend likes astronauts and this particular company used astronauts in the advertisement made the friend want to buy the product. Through this experience, he was able to understand the power of tailoring messages. It was interesting to see this child reflecting on this experience as an outsider, where he is able to recognize that companies use various things or objects in advertisements to help lure in a diverse, yet large group of people. By using a variety of objects in one advertisement tailored to one age group, the companies are able to appeal to a larger group, which

makes them want to buy the product just because of objects featured in the advertisements. Carrie, a Black female who is 29 years old, was a parent from the second parent focus group. When asked “what do you think about the relationships between advertisements and your children?”, she reflected on when she watches television on different channels and at different times of the day, she notices how the advertising changes depending on the channel and audience.

Carrie: I noticed that, um, advertisers are geared towards gender groups, race groups, and age groups when I watch. I’m like okay, if you watch BET [Black Entertainment Television] you’re going to see a black McDonald’s commercial.

Interviewer: Mm-hmm

Carrie: And I – it – I paid attention to it before, but I’m like now I’m really seeing it, you know, and on the kid’s channels you’re going to have a kid’s McDonald’s commercial...but I do notice that, and if you’re watching daytime TV you’re going to see a total different type of commercial. So I definitely – I think they’re definitely putting a lot of money into it, into how they advertise.

In all of the focus groups, both the ones with children and adults, the participants talked about the advertisements that they are exposed to. During participation in the workshop, they were asked to think about some characteristics of the advertisements that they are most exposed to. Also, as a group, we discussed many different tactics, such as tailoring, that are used in the advertisements and different characteristics that exist from the tactics used. Many of the participants shared that they do not trust the advertisements that they are exposed to. One mother, Swantay, was a participant in the first parent focus group and she is a 30-year-old Black mother. She shared that she doesn’t trust the

advertisements and the information that the companies present because they use perfect people to represent their products. She understands that the companies often showcase the ideal scenario, even though the audience may not look like the people used in the advertisements.

Interviewer: What do you guys think about advertisements as a whole, not necessarily food advertisements but just advertisements for anything, like what do you think about them?

Swantay: They are lying. They are telling you one thing but it's really not the case, it's the total opposite um even in what they present on television like we're seeing the people look healthy, they look happy, they look, you know, like perfect people...we don't look anything like that.

Even the children in the focus group understood that most of the information on commercials are not showing the full truth. Boss, a black 5th grader who is 11 years old, shares his response below.

Interviewer: What's the most important thing that you guys learned at the workshop? Yes?

Boss: The commercials on there are fake.

The children recognize that different tactics are used to present their products in the best possible way; therefore, the information may not be 100% accurate. For example, it is not automatically true that eating from these companies will make you the happiest or healthiest. The commercials are made to be persuasive. The persuasion that is used in commercials is not only to change the viewer's mindset, but also to influence where they spend their money and on what. One of the parent participants, Peter, a Hispanic father

who is 38 years old, shared that he recognizes that the companies' main goal is to make money and they are willing to use whatever tactics will be helpful.

Interviewer: As a parent, how do you feel about these companies or different restaurants making advertisements for your kids, or towards your kids?

Peter: What I think about these companies, um, I think they're just going to make money, any price really. It doesn't matter the cost of life or if we are healthy.

In this part of the focus group, Peter was recognizing that these companies' main concern is not the health of the viewers, but that viewers spend their money with the company, no matter if it is a healthy option or not. Many of the parents recognize that the companies' main goal was to make money as a company, but were upset, as parents, at the fact that the companies are not invested in their children's health and future and are not honest or concerned with their health.

Effects of advertisements

Both participants of the workshop and focus groups shared that they recognize that the majority of advertisements seen are for unhealthy food, which has an influence on their choices and behaviors. The focus group participants further shared that they recognize that this is the purpose of advertising and the companies ultimately want the viewers of the advertisements to spend their money on the products advertised.

Superwoman, a Black mother of two who is 29 years old, shared a moment of enlightenment she had while watching television with her children. She was asked to share her thoughts on the first clip from the workshop that was shown in the focus group. The first clip was from the workshop where I, as the facilitator, put up six logos without

the name of the fast food company up and asked the participants, both parents and children, to identify what companies the logos belonged too. This exercise was done to acknowledge branding and logo recognition.

Superwoman: I didn't realize they [her children] pay so much attention to the, um, commercials and stuff.

Interviewer: Mmhmm

Superwoman: You think it will be like "oh, it's a little break in between, you know, I'm not going to pay attention to the commercial" but they actually do because obviously they know everything on it.

Superwoman realized the influence that advertisements have on her children, both consciously and unconsciously. Previous to the workshop, she shared that she thought of it simply as a break in television programming, but in the workshop when the children were participating in the conversation about advertisements, she began to understand more the true level of influence that these advertisements have on her children, which leads to them asking her for the products they see advertised.

In the food industry, there is something known as pestering power, which is when a commercial has the influence on children so that they "pester" their parents so much for the product that they have seen advertised. Mary J, a 34-year-old Hispanic mother of two, shared that she is constantly being asked to buy products that her kids see advertised.

Interviewer: From a parent's perspective, do you feel like your kids ask for the stuff that is advertised all the time?

Mary J: Yeah always... You know, there's a big sign on the road to McDonald's and then pizza. [her children ask] "Mommy, can I go to pizza today?" "No"

“Please?!” “I already cooked - no” “But I’m hungry now” “Okay wait.” Always something, you know?

Food companies are aware of the pestering power and even go as far as to do research on how many times it takes a child to ask for a product before the parent gives in. Even children, Olivia (Black girl, 9 years old, 4th grader) and Sherman (Hispanic boy, 9 years old, 3rd grader) were sharing in the focus group that the advertisements have influenced them to ask their parents for the product that they see on the commercials.

Interviewer: As a kid, how does it make you feel that these companies are making these advertisements for you?

Olivia: Well, good and bad

Interviewer: Good and bad, okay. Why do you say good and bad?

Olivia: Because sometimes like kids just don’t know, like what to – what they want...And it’s just not good for you, that’s why

Interviewer: Mmhmm – okay. Yes?

Sherman: So sometimes it gets to the kids

Interviewer: It gets to the kids?

Sherman: Like they have little cartoons that get the kids going and saying “Mom, I want this. Dad, I need this.”

Olivia shared that the commercials are advertising food and that they need direction from their parents to help set boundaries on what they should and should not eat. Olivia’s statement was explaining that even though they are exposed to advertisements and may ask for the product, the children may not realize that it is not healthy for them and it is the responsibility of the parents to restrict the consumption of certain types of food. Sherman

followed up by sharing that the advertisements “get to” the children. The characters that the food companies use in the commercials can cause the children to want the product more and cause them to pester their parents to buy them the product.

A major effect of the high exposure to frequent advertisements for unhealthy food is their health. Parents are seeing advertisements for unhealthy foods at a high rate, yet children are exposed even more. The frequent bombarding of advertisements for unhealthy food to children and parents cause them to consume these foods at a higher rate. Parents like Swantay and Peter shared that it makes them upset that these advertisements are just being shown without thinking through the health effects this can have on themselves and their families. The third clip from the workshop was shown, which was a clip of the workshop participants watching a YouTube video of food marketing in different settings and what people are involved in the construction of advertisements. After the clip was shown in the focus group, the participants were asked to reflect and share their thoughts.

Interviewer: So what did you guys think, as yourself and being a parent, about that part of the video?

Swantay: Like Superwoman said, it actually upsets me because I’m yeah...it’s like these scientists, these mad scientists are sitting around thinking about what to do to get children you know hooked on foods that they know for a fact is going to kill them eventually and they don’t care. It’s about money, they couldn’t care less what kind of healthy effects it has on the children and, of course, if they start them off as kids they know that for a fact they are going to continue to eat like this as adults. So that’s it is, it’s kind of pissed me off too.

Swantay was angry about what these advertisements were doing and how they were intentionally seeking out children so that they can become life-long consumers. Peter, a Hispanic father who is 38 years old, shared that he believes that there should be regulation of what type of advertisements are allowed for the future health of the population. He recognized obesity as a huge public health issue and understands that the current aggressive advertising landscape has an influence on the epidemic. When asked as a parent, what he thought about these companies and different restaurants making advertisements towards and for their kids, his response is below.

Peter: But, um, I guess the government have to do something, you know, because of lot of people are getting...everybody is getting obesity, it's just for fast food...fast food.

Two of the children participants who are brother and sister, Boss (Black boy, 11 years old, 5th grader) and Olivia (Black girl, 9 years old, 4th grader), shared that they do not see advertisements for healthy food as frequently in comparison to advertisements for unhealthy food.

Interviewer: Do you guys see advertisements for these healthy foods?

Boss: No, not really

Interviewer: Not really?

Olivia: Because all they want is you to be fat and they just want you to eat unhealthy. They don't sell healthy commercials because they know it's helping you and sometimes people don't want to help you.

Both the children and parents recognized that health issues naturally come up when discussing food advertisements due to the high frequency of unhealthy food

advertisements. Some of the parent and children participants questioned “why were there not as many food advertisements for healthy food as there were for unhealthy foods?” Many of the parents and children expressed their confusion for why there couldn’t be more advertisements for healthy food. While the topic for why there are less advertisements for healthy food was not explicitly brought up in the workshop, the questions were brought up by the focus group participants, both children and parents, which reveals their reflective thinking that came from their participation in the workshop.

Effects of workshop

The workshop provided a new perspective on advertising and educated the participants on how to be more critical of what they are exposed too. Within the workshop setting and the focus group setting, the participants shared how much they learned from the workshop. Some of the workshop participants who were not able to participate in focus groups shared via email how much they enjoyed the workshop. Below is one of the emails sent by one of the parents, Amazing Grace, a 29-year-old Black mother, to express her appreciation of the workshop. She shared that her children are making healthier choices based on the information that they learned in the workshop. Unfortunately, she and her family were not able to attend the focus groups due to scheduling conflicts, but opted to send her reflection through an email, which is shared below:

On another note... your event was AWESOME! I love how you engaged the entire family and included different ways to get us to think about the topic. RJ [her son] is working on a poster to show the effects of not eating healthy and we have a discussion on what is OK to eat almost daily! And the boys start that conversation by the way. I think you have started something positive for my family. Lol. They are seriously questioning what we are putting in our bodies.

Thanks again!
Amazing Grace

Many participants expressed that they were thankful for the opportunity to attend and even asked if there were other workshops happening that they could attend in the future, which indicated their high level of interest. The participants who were able to participate in the focus group also had a chance to further express the benefits of the workshop. When asked how they, as a parent, feel about these companies or different restaurants making advertisements for their kids or towards their kids, there was an extended conversation among parents on how they felt about the workshop and what they felt like it did for their family. Carrie, a Black mother who is 29 years old, shared how the workshop has been beneficial.

Carrie: And I think they're [her children] more aware now too after attending, they know, you know, a lot more about what they're seeing. You know, they know if they want the commercial they're not saying in the back of their minds.

"Oh I want that!" You know, now they're thinking, "Ok this is something to get me to want it", ya know?

The parents acknowledged how helpful and educational the intervention workshop was, not just for themselves but also for their children. Carrie was grateful for the positive influence that the workshop had and the opportunity to present a different side of advertisements to her children. Through the workshop, Mary J, a Hispanic mother who is

34 years old, realized the power of advertisements and the influence they have on her children, but as the parent she knows that she has the power for her children.

Interviewer: Okay. Um, and what was your favorite part of the workshop?

Mary J: Learning about not eating more fast foods and thinking for ourselves. I many not buy something, you know, but I know it's in the newspaper and TV and on the road...too many signs that attack everybody...but it's always your decision and you have to power in that – to buy or not buy.

Mary J. expressed that the workshop helped her realize how powerful the advertisements are and how much influence they have on people's intentions and behavior. She also knows that she has power in being a consumer and making the food decisions for her family. When asked, "What did you think about advertisements before the workshop?"

Peter (Hispanic, male, 38 years old) also shared how his thoughts about the advertisements changed after he attended the workshop.

Peter: Yeah before I saw all this in the workshop, I used to say "Wow, that's creative and that's clear" but after I see all the stuff and how they make it look good, you know, it's like "Oh, that's fake."

Based on workshop attendance, Peter shared that his thoughts about the advertisements changed and he was no longer impressed with what he was seeing. The discussion of the advertisements during the focus group proved to be helpful to the participants to help them recognize what the advertisements were really saying and gave them an opportunity to reflect on that. It also provided a chance for parents to understand their role of being a role model for healthy eating and making healthier choices. Superwoman, a 29-year-old Black mother, expressed how she understood how her family watches what she does.

Superwoman: It's also to lead by example, you know, I may say this food is not good for you, but then they [her children] see me going in there [fast food places] to get it.

Parents often serve as a health behavior role model for their children. They are the first person that children often emulate their eating habits. Superwoman recognized this role and how she should lead by example for her children so that they can learn to make healthier choices. Carrie (Black mother, 29 years old) recognizes her role as a parent of being a healthy role model, and in that role she has the power to choose where she wants to spend her money and what companies she wants to financially support by being a consumer.

Interviewer: Okay, and, um, what's the most important lesson you learned in the workshop?

Carrie: To make wiser choices about where I do choose to, um, to spend my money first of all. Um, but second of all, to be more aware of what we're taking in, you know, as far as our health...

Interviewer: Mm-hmm

Carrie: Not to be so quick to buy the fast food and that everything is not as it seems.

When asked "What was the most important thing you learned at the workshop?" her response was about how she should make healthier choices. The workshop provided a space to reflect on their intentions and behaviors when it comes to healthy eating.

Superwoman shared an outing that her and her daughter had after the workshop and how

the information presented at the workshop immediately influenced her daughter's choices to select something healthy.

Superwoman: So since she [her daughter] attend, we went to IHOP, she's like "I've got to get something healthy"

Interviewer: Mmmhmmm

Superwoman: So she end up getting like a bowl of fruit and like a grilled cheese with lettuce and tomatoes. So, I think by her, you know, coming to the workshop, she benefitted from it.

Another benefit that came from the workshop was the family communication that happened around food marketing and healthy eating. Not only were the parents and children able to learn together about food marketing as a dyad, but they also participated in the production process together. Sherman, a 9-year-old Hispanic boy in 3rd grade, shared that he really enjoyed the production process because of the opportunity to create something with their parents together.

Interviewer: So you guys liked doing it [production process] with your parents?

Sherman: Yeah...and it gave us, um...it gave us some time to come with our parents and make one.

Interviewer: Yeah, make one

Sherman: because sometimes your parents don't hang out with you that much

Interviewer: Yeah

Sherman: and that was a time that you and your parents do something together...and help each other out.

At the end of the workshop, the parents had an opportunity to work with the children on creating a counter-advertisement or an advertisement that states what the advertisements are really saying. When asked about this process in the focus group, the parents seemed to really enjoy working with their children and seeing the children talk about healthy eating after the workshop. This result is consistent with literature and other studies that show that adding a production process brings about more desired change (Banerjee & Greene, 2006, 2007). Swantay, a Black mother of two who is 30 years old, shared how she realized that the children learned from the workshop.

Swantay: And um, Superwoman said earlier, the kids actually did learn a lot from the workshop. As we were going home, they were calling out all these restaurants and mentioning a lot of the things that they learned, um, during the workshop. So they paid attention, so that was a good thing.

Also Swantay shared that her son that attended is more conscious of what foods he is eating and how it affects one's health. The workshop taught him to be more critical of what he consumes and to think twice about it.

Swantay: You know he is noticing that, you know, what fast food does to you and...which he knows before, but now he's really noticing...he's thinking about what he eats more and more so it's a really good thing.

Swantay shared how the workshop was beneficial for her children overall.

Family communication is a positive result of the workshop. Family communication around food marketing can increase the media literacy knowledge and raise the awareness of the persuasive nature of advertisements that parents and children are exposed too. Also, the increase in family communication around healthy eating can help

the parents be accountable for making healthier food choices, as well as, the children being accountable for participating in healthier behaviors.

Outliers

While the results presented above reflect the majority of the results of the focus group in the form of themes, there were a few outlier quotations from the focus groups that did not necessarily fit into any theme, yet should be mentioned to help understand the breadth of topics that were covered in the focus groups.

The first outlier quotation was from a parent, Superwoman, who was a 29-year-old Black mother participant in the first parent focus group. In this quotation, she shares that she did not recognize that there were similarities in the type of marketing between fast food and junk food.

Superwoman: I learned that the food that they are actually preparing and serving our children is not really healthy. I didn't realize how much it affects heart disease and diabetes...I didn't realize that was actually been a major cause to it.

Interviewer: Mmhmm

Superwoman: I thought it was just mostly like just junk food.

Interviewer: Mmhmm

Superwoman: Versus, you know, fast food

It was interesting that this mother did not realize that the health issues were similar for junk food and fast food. Before the workshop, she thought that most of the health issues, such as heart disease and diabetes, came from junk food. At the workshop, she learned that fast food has serious health consequences when consumed frequently. The more

education she receives and more media literate she is, the better role model for healthy eating she can be to her family, including her children.

For the intervention, primarily advertisements on televisions were discussed at the workshop and focus groups. When asked to name some places you see advertisements, the response below from Damaries, a Black 4th grade 10 years old male student, goes beyond television advertisements.

Damaries: On my TV, I hear them on my radio, um I um see them, even when I watch a movie on a DVD sometimes I even see them.

Even as just a 4th grader, Damaries recognizes advertisements that go beyond the television screen. He recognizes something called product placement, where companies place their brand or product in movies, television shows, and other forms of media. Product placement is another form of advertising that is not as obvious as advertisements, yet still has a significant impact on the viewers and their choices. This was important to make note of because this illuminates another opportunity to teach parents and children to notice product placement in different setting such as the television shows and movies they are watching. Also, discussion around product placement could increase the family communication on food marketing and the different tactics fast food and snack food companies use.

The final outlier was the discussion that came up about MyPlate in the focus group setting. MyPlate is a nutritional guide that was created by the United States Department of Agriculture (USDA) in 2011 to show the five food groups and creates a visual of how much of each should be consumed in a meal for a healthy diet. While MyPlate was not discussed in the workshop, a few of the children brought it up when

asked where they see advertisements. The children shared what they have learned in the school setting about eating healthy and the importance of having a colorful plate full of fruits and vegetables when they eat.

Sherman: You should trust what, like the – like the MyPlate with the grains and the fruits, vegetables, protein, berry. I should start eating that more than fast food.

Sherman, a Hispanic boy 3rd grader, recognizes that many of the foods advertised in the schools were not healthy, yet the cafeterias also promoted MyPlate. When asked who has seen MyPlate, all of the children shared that they see it in their cafeterias and classrooms. Olivia (4th grade Black girl) mentioned that there are two choices, both in school and just in general, when selecting food, healthy and unhealthy. It is important the children are educated on media literacy skills to be able to be critical of the advertisements they are exposed too, especially in the school settings where they are often getting conflicted messages. Socially, it is also important that regulations are set to prevent marketing in schools and ensure that we are promoting the health of the children. Conflicting messages should not be present in an educational setting such as schools because it can cause confusion. Schools should be considered a safe place where children can grow and learn how to be healthy, mentally and physically.

Summary of Qualitative Results

The results of the focus groups emphasized the positive changes that parents and children had in their intentions and behaviors to eat healthy. Both children and parents communicated that the workshop was beneficial and made them want to eat healthier and make healthier choices. The focus group data also provided more explanation about the

increase in media literacy knowledge and ability to be critical of the food advertisements for unhealthy food.

CHAPTER 5: DISCUSSION

The purpose of this chapter is to summarize and present integrated results of both the quantitative and qualitative data collection processes. Also, this chapter will acknowledge the limitations of this dissertation study. Finally, the chapter will provide recommendations for practice and future research areas that have resulted from this dissertation.

Summary of Quantitative and Qualitative Results

The goal of this study was to examine how a media literacy intervention can combat the persuasive nature of unhealthy food advertisements. The study was constructed on the foundation of the Integrated Theoretical Framework of Media Literacy. The Smoking Media Literacy (SML) scale, which was built off of the Theory of Reasoned Action (TRA), was adapted and used as the questionnaire to assess increase in media literacy knowledge. According to the results from the adapted SML used as the pretest – posttest, the participants of the intervention workshop increased their media literacy knowledge after participating in the intervention workshop, which was the first research question. While all items of the pretest – posttest did not result in statistically significant changes, some items from each media literacy domain were statistically significant, which shows the overall increase in media literacy knowledge. Only parents completed the pretest – posttests, therefore the children's change in knowledge was not

directly assessed, yet the children participants did share in the focus groups that they learned about food marketing and its intent. In another media literacy education study using pretest – posttest design, it was found that media literacy knowledge was increased after the intervention (Kupersmidt et al., 2012). When asked about what was the most important lesson they learned in the workshop, many children shared that they learned about the different methods companies use in advertisements to influence eating habits and ways that they could participate in healthier eating habits. Similar to this study, Austin, Chen, Pinkleton, and Johnson (2006) concluded that media literacy education enhanced the learning and magnified potential benefits.

The second research question for this study inquired how a media literacy educational intervention lead to changes in parents' and children's intentions to eat unhealthy and healthy food. The change in intentions to eat unhealthy and healthy food was measured through the focus groups. Parents shared that after attending the workshop, they want to make healthier choices and decrease their consumption of unhealthy foods. Participants displayed more reflective thinking of their choices, as in Pinkleton, Austin, Chen, and Cohen (2012). Many parents shared in the focus groups that the workshop helped them recognize that they have the responsibility to serve as a role model for healthy eating for their families, including their children. They recognized that the workshop allowed them the opportunity to reflect on their current behaviors and recognize areas of improvement for healthy modeling and eating. Similar to findings from Kean, Prividera, Boyce, and Curry (2012) and Kupersmidt, Scull, Benson (2012), parents' choices changed after a media literacy intervention to increasing healthy food and decreasing unhealthy foods.

The third and final research question examined how a media literacy educational intervention affected parents' and children's attitudes towards food marketing toward the intervention and particularly food marketing. This research statement was also measured through focus group data. Both parents and children shared their opinions of food advertisements and the changes they had of them after workshop, which is in line with previous media literacy studies done with various topics (Austin & Johnson, 1997; Austin et al., 2007; Scharrer, 2006). Participants, both parents and children, shared in the focus group settings how they thought one thing about food marketing before the workshop, but once they were educated at the workshop, they were able to recognize the different tactics that the food companies use to influence their eating and purchasing behaviors. Children recognize that they ask for the products that are marketed to them, which is in line with the findings from Scully et al (2011). Essentially the workshop served as a consciousness-raising opportunity where they learned how to be more critical of the advertisements they are exposed too.

Integration of Quantitative and Qualitative Results

While some of the items on the pretest – posttest questionnaire did not yield statistically significant results, many of the topics were discussed in the focus groups. The focus groups provided the participants the opportunity to further explain the changes in their knowledge, intentions, and behaviors. While changes may not have been explicitly present in the quantitative data, they were often present in the qualitative data.

Item 2 states fast food and snack food companies are powerful, even outside of the food business. Item 2 is associated with the media literacy domain Authors and

Audience concept 1 (AA1), which states authors create media messages for profit and/or influence. While the paired t-tests were not statistically significant, discussion about this came up in the focus group. Parents, such as Mary J, shared that they needed to take back some of the power from the food companies and they understood that they have the power for their family to decide if they are going to support a company by buying their product. The parents shared that they learned in the workshop how much power the companies have on their and their children's eating habits. Even in the focus groups with children, the children shared that they recognized that the companies have power and use advertisements to influence those watching the advertisements. In the transcripts of the focus group, power was used as the code, which was present in theme 3 (effects of workshop).

Item 4 states certain fast food and snack food companies are designed to be liked by kids and younger people. Item 4 is associated with media literacy domain Authors and Audience concept 2 (AA2), which states authors target specific audiences. This was explicitly discussed in the focus groups with parents and children, which is made apparent by the code "adults vs. kids" in the theme 1 (characteristics of advertisements) of the qualitative data. Parents and children discussed how advertisements were tailored to different age groups. In the workshop, information was presented about how different things are appealing to different age groups, therefore the companies have to tailor their advertisements based on their target audience. For example, in the workshop, when the participants were asked what do children enjoy, they shared that children are typically drawn to music, cartoon characters, bright colors and other child-friendly things. When asked what do parents enjoy or care about, the participants responded saving money and

sales, therefore it was acknowledged that companies would advertise sales and promotions if the tailored audience were adults. In the focus group, a mother - Carrie, expanded on that topic by explaining that she recognized that tailoring is also important for different race and age groups, as well as, different television channels.

In the workshop, the topic of being a walking advertisement by wearing items with a logo did not seem to fit within the context of the workshop, therefore it was not clearly stated. Item 5 states wearing a shirt with a fast food or snack food company makes you a walking advertisement. Item 5 is associated with the media literacy domain Messages and Meanings concept 1 (MM1), which states messages contain values and specific points of view. Due to the topic of being a walking advertisement was not discussed in the workshop it did not come up in the focus group discussions.

Item 7 states two people may see the same movie or TV show and get different ideas about it. Item 7 is linked to media literacy domain Messages and Meanings concept 2 (MM2), which states different people interpret messages differently. This topic was presented in the workshop setting, but was later teased out in the focus group discussions. Participants discussed the importance of tailoring, as presented above in the discussion of item 4. In the focus group, Damaries, shared how his friend wants to be an astronaut, therefore an advertisement with astronauts was more appealing to his friend than him. In this part of the focus group, Damaries recognized how different things are used to appeal to a variety of people with different interests. Similar conversations were had in the focus groups and were coded with the “marketing” code, which was used in theme 1 (characteristics of advertisements).

Item 8 states that different people can see the same ad in a magazine and feel completely different about it. Item 8 is also associated with Messages and Meaning concept 2 (MM2). Discussion about this was brought up by some of the children participants as explained previously in the discussion about astronauts with Damaries and also when tailoring was discussed. In the discussion above, he was able to recognize that different people feel different ways about advertisements depending on a variety of things such as what tactics are used, what the advertisement is for, and who the target audience is.

Item 10 states people are influenced by TV and movies whether they realize it or not. This item is associated with the media literacy domain Messages and Meanings concept 3 (MM3), which states that messages affect attitudes and behaviors. While this item was not statistically significant, it was discussed in the focus group settings and coded by commercial influence, which was incorporated into theme 2 (effects of advertisements). Both parents and children discussed how the primary goal of advertising is to get people to spend money and also influence the audiences to spend their money with different companies. One mother, Superwoman, reflected how she did not previously realize that advertisements had such an influence; she mentioned that she thought they were just a break in the show but participating in the workshop with her children made her realize the true influence of them.

Item 12 states when people make movies and TV shows, every camera shot is carefully planned. This item is associated with Messages and Meaning concept 4 (MM4), which states that multiple production techniques are used. In the workshop, a YouTube video was shown that discussed how food make-up artists are used and other tactics to

create the perfect angle when creating an advertisement. A clip of the participants watching this YouTube video in the workshop setting was used in the focus group discussions to allow for reflection. After the focus group discussion about this YouTube video, it is quite obvious that this was the favorite part of the workshop for both parents and children. An overwhelming majority shared how much they enjoyed this video and people even asked me to send them the link so that they could share with family and friends. They shared how they enjoyed learning about what happens behind the scenes of a food marketing advertisement. Due to them learning more about this process, the participants were able to be critical of the food advertisements they saw after the workshop because they knew that the food presented in the advertisements looked perfect due to different tactics.

Item 13 states that there are often hidden messages in fast food or snack foods ads. This item is associated with Messages and Meanings concept 4 (MM4), which states that messages affect attitudes and behaviors. This concept was acknowledged several times throughout the discussion with parents and children on diverse topics such as characteristics of advertisements and marketing tactics. Particularly, the participants acknowledged that there are hidden messages in fast food or snack food ads when they shared that they felt lied to by the food companies because of the information that was left out. Three different codes are all related to this item: lying (theme 1), marketing (theme 1), and commercial influence (theme 2).

Item 14 state most movies and TV shows that show people eating fast food make it look more attractive than it is. This item is associated with Representation and Reality concept 1, which states that messages filter reality. In the workshop, it was presented that

the food companies use people who are healthy and happy to make it seem like eating their product will make you like the people in the advertisement. In the focus group setting, many parents expressed that they were angry that the companies were using these people who are perfect, healthy, and happy in the advertisement, yet that is not the result of eating their products. One mother, Swantay, shared her anger of how she was upset that they were able to use these perfect people in the advertisements to make it attractive to eat their products. Even children, expressed that the fast food companies should be disappointed in themselves for trying to make it look attractive to eat their products. Other comments and quotations about this topic were coded with “lying” and “marketing” and were presented in theme 1 (characteristics of advertisements).

Item 17 states when you see a fast food or snack food ad, it is important to think about what information they left out. Item 17 is associated with Representation and Reality domain 2, which states that messages omit information. Many of the children and parent participants recognize that the companies hide the truth about the food that is being advertised, especially health information such as health effects of consuming unhealthy foods, and consider this omitting information. Participants, parents and children, shared that they do not trust the advertisements at all, due to the information that is left out. Also, the production process of the workshop gave the participants an opportunity to create an advertisement that shared what the advertisements are really saying. By creating these counter-advertisements or the advertisements that state the truth about the product, the participants are able to see past the advertisements for the true information about the product. Many parent-child dyads created an advertisement that

shared potential health problems that people can get if they eat the advertised product too much.

Item 18 states ads usually leave out a lot of important information. This item is associated with the media literacy domain Representation and Reality concept 2 (RR2). As presented above in the paragraphs for item 13, 14, and 17, many of the participants discussed how they do not trust the advertisements due to the omitted information.

Limitations

This study has several limitations. For recruitment, convenience-sampling methods were used; therefore, the results are not generalizable to all settings. The intervention was done in a rural county, so the results may not be applicable to parents and children living in suburban or urban areas.

The study design was a one-group pre and posttest design. Considering the recruitment limitations, this was the design that was feasible and could be successfully completed. One main limitation to internal validity is the issue around selection. Selection bias exists in this study considering the design and recruitment methods used (Shadish et al., 2002). . In future research, control groups, randomization of participants, and/or other delayed posttests should be considered to improve the validity and reliability of the results.

The total number of participants in the intervention was small due to recruitment constraints, particularly with access to children. Recruitment was extended outside the University of Georgia community and into the Athens community, yet the final sample was still relatively small. While the smaller sample size limited the power of the

statistical analyses of the pretest – posttests, the exploratory nature of the study allowed for an innovative study. The mixed methods results from this dissertation project can be used for future, larger research projects with media literacy and unhealthy food advertisements.

Also, due to time constraints, resource limitations, and concerns about retention, there was only one media literacy workshop. The more workshops that are held the more beneficial it would be for long-term results and positive changes in intention and behavior. In the focus groups, Mary J. shared that “After we finished there [the workshop] he [her son] when asked ‘somebody want to go to McDonald’s?’ ‘No, no’ my son say, ‘no, no more’. But after four days, ‘Mommy, can you buy me McDonald’s’”. This quote shows that her son did benefit from the workshop because he did not ask for McDonald’s for a couple of days after the workshop due to the information that was presented, yet he returned to asking for it after four days. Having multiple workshops may be especially important for children to ensure that they get a full understanding of the educational material presented and that the results are lasting. The repetition of information presented could be beneficial when trying to change intentions and behaviors with healthy eating with children. Also, participants, both parents and children, showed their genuine interest in the workshop by asking if there were more in the future. In larger and more in-depth research projects where there are more resources available, more workshops could be held for the participants.

The questionnaire used for pretest – posttests was adapted from an existing questionnaire (smoking media literacy – SML) and was tested for validity and reliability

by the developers. After the adaptation to food marketing, the questionnaire was not re-tested for reliability and validity but could be addressed in future research.

Considering the independent nature of a dissertation, I served as both the researcher and the teacher of the workshop. While I included measure of validity by having a note-taker at both the workshop and focus groups to cross check their notes with my observational notes, serving in both roles could have potentially influenced the results of the quantitative and qualitative data collection process.

Recommendations for Practice

Based on feedback received from intervention participants, parents and children, they thoroughly enjoyed learning about food marketing and the persuasion nature of the advertisements that they are frequently exposed too.

Food advertisements are designed and implemented by advertisers and marketing specialists and therefore the majority of the information presented does not align with the interest of public health or health promotion (Peterson, 2012). Public health and public policy researchers are working towards the ban of advertisements geared towards children, based on the research that shows a correlation between media exposure and poor health outcomes, such as obesity levels.

Other countries, such as Australia, Canada, Sweden, and Great Britain have already adopted regulations on food companies for advertisements that target young children (Wilcox et al., 2004). The World Health Organization (WHO) released a report in 2006, which provided a variety of example of countries with regulations on the marketing of foods and beverages to children. Some of the countries were Norway,

Brazil, Quebec, Spain, South Africa, and New Zealand (Organization., 2006). It is important that the United States make significant strives to mimic some of the regulatory measures that other countries have adopted.

The American Academy of Pediatrics (Strasburger, 2006) and the American Psychological Association (Wilcox et al., 2004) support the complete ban on advertising to young children. Also, the White House Task Force on Childhood Obesity released a report that stated that to fully address the childhood obesity epidemic, new rules need to be incorporated to limit advertising during children's programming (White House Task Force on Childhood Obesity, 2010). A Joint Task Force on Media and Childhood Obesity was established in 2006 to not only examine the impact that media has on the childhood obesity epidemic, but also help develop and establish voluntary industry standards that limits targeted advertising to children (White House Task Force on Childhood Obesity, 2010).

Not only are food advertisements present in the home environment but the school setting as well. In a study that examined 2007-2012 commercialism trends in a nationally representative sample of US elementary and secondary schools found that overall commercialism increased significantly with grade level (Terry-McElrath, Turner, Sandoval, Johnston, & Chaloupka, 2014). The study and other literature also found that most of the foods and beverages that are marketed at schools are high in calories, sugar, salt, and fat while being low in nutrients (Federal Trade Commission, 2008; Terry-McElrath et al., 2014) School settings need consideration for eliminating unhealthy food advertisements for a couple reasons. The first is that children do not have a choice to attend school so they cannot avoid the advertisements present in the setting. Also, school

takes up a significant amount of children's lives. Frequent exposure to school advertisements for unhealthy foods can have influence on their consumption patterns, as research has shown (Wilcox et al., 2004), as well as contradict messages in the home environment.

The explosion and level of persuasion used in unhealthy food advertisements has opened doors for it to be compared to tobacco advertisements. While there is a distinct difference in tobacco and food, the main one being that people have to eat and do not have to use tobacco products, the corporate mindset behind the marketing of the products are very similar. Unhealthy food companies are targeting the majority of their commercials to kids to appear "cool", which is similar to the method that tobacco companies used. It has been acknowledged that the tax on sugary beverages is a proposed replicated method based on the successes of the tobacco control (Pomeranz, 2014). Also, this taxing of sugary beverages is based on the fact that smoking incidence and prevalence has declined partially due to the successful policy implementation of increased taxes (Pomeranz, 2014). The similarities in both the corporate mindset behind the marketing of tobacco and unhealthy food, as well as, the taxing policies allow for a natural comparison between these major public health issues and how marketing plays a huge role.

While these rules and policies would drastically limit or eliminate the media exposure to children, they have not yet been implemented. Until the implementation of rules for advertisement and/or bans on advertising to children happen, it is the responsibility of parents, caregivers, and health promoters to promote and support media literacy interventions. Parents and caregivers should encourage these interventions to

ensure that their children have the appropriate skills to critically analyze and self-regulate the advertisements that they are frequently exposed too. Media literacy interventions should continue to be offered in an engaging way, like this workshop, which used production and required parents and children to work together. Health educators should implement media literacy programs to empower and increase the self-efficacy of children across the nation to become informed media consumers. Based on all of the research that shows the influence advertising has on the health of young children, the American Psychological Association released a report in 2004 where they recommended that psychologists conduct media literacy research to assist in the development of effective curricula for students at various grade levels (Wilcox et al., 2004). Psychologists recognize the benefit of media literacy interventions for children and have endorsed the continued research and support of media literacy interventions. Children and adolescents are consuming more food and unhealthy snacks away from the home setting (Story & French, 2004), therefore it is crucial to empower them with the necessary skills to be used in any and all settings. Media literacy interventions prove to be a promising strategy that allow participants, including children, to take control of their media experiences by negotiating, questioning, and analyzing the images that they are exposed too (Hogan, 2012; Singer, 2009).

Further Research

Researchers have recognized the importance of being able to apply media literacy skills to a variety of genres or media texts (Peterson, 2012). Both the literature and the results of this project have suggests that media literacy interventions are crucial for the

health of future generations, especially considering the high levels of exposure to various media sources. This dissertation served as an exploratory study for larger family-based interventions and media literacy studies with food advertising. Media literacy interventions should continue to be researched, explored, and developed to combat unhealthy food advertisements, as well as, to see if an experimental design would present similar results. As presented earlier, media literacy interventions have been done various subjects such as violent advertisements, as well as, advertisements for tobacco and alcohol and new areas for media literacy interventions should be recognized as well. It is important to acknowledge the various public health issues that are partially attributed to the media and advertising.

While many media literacy interventions have focused on kids, adults, particularly parents, should not be forgotten about. Adult media literacy is extremely important, considering the natural role adults play in the media consumption of their children, as well as, their ability to create discussion or co-view media in their home with their families (Peterson, 2012). In future media literacy studies, parents and children should be encouraged to learn together to promote family communication around marketing and media literacy. Family communication was not only a theme of the qualitative work done in this research project, but came up several times in the focus group discussions. Many parents shared their experiences of critically analyzing the advertisements with their children.

Summary

Though conducting media literacy interventions with children to combat food advertising is an innovative method to address the obesity epidemic, the research and successes of past media literacy projects proves the ability for it to be successfully applied. While the risk of food marketing does not mirror the risks of alcohol or illegal substances for children as far as legal consequences, there are similarities in the aggressive marketing tactics that allow media literacy to be a promising intervention strategy to combat it. Obesity is one of the largest public health epidemics of today's society and it is important to use diverse and innovative interventions that can help educate and empower children to be more critical consumers and lead to healthier lifestyles. Obesity interventions that do not just promote the consumption of fruits and vegetables and increasing physical activity, but also educate children about media effects, are crucial to the future health of the next generation. Childhood obesity is a vast public health epidemic that has many behavioral components. Media has its role within the childhood obesity issue of this country. Media has a strong presence in our culture and television is still the primary form of consumed media for children (Horgen et al., 2012). It is important that we recognize that media literacy interventions are beneficial for the future health of children. Children who have high BMIs often become obese adults who are at risk for many chronic diseases, so it is necessary to support and offer a variety of public health intervention that educate children on how to make healthier food choices.

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Appendix A: Recruitment Flyer



Are you a parent of a 3rd, 4th, or 5th grader?
Want to discuss the food advertisements that your child sees on TV?

If so, you and your child may qualify for an educational program that is a research study being conducted at The University of Georgia!

The name of the research study is “Food for Thought” and you can be randomized into either a control or intervention group. Both the parents in the control and intervention group will take a pretest, participate in a workshop, and then take a posttest. The workshop for the control group will include both parents and children and will be on healthy eating. The parents and children in the intervention group will participate in a workshop on media literacy and food advertising. Parents and children from the intervention group could be contacted to participate in a focus group a few weeks after the workshop is completed and posttest is taken.

The eligibility criterion are:

Parent have a child in 3rd, 4th, or 5th grade (minimum: 7 years old and maximum: 12 years old)

If you are eligible and decide to participate, you will receive a \$10 Walmart gift card and you and your child will receive a free dinner!!

If you are interested, please contact Rachel Powell at rmpowell@uga.edu or 713-231-4613 for more information.

Dr. Marsha Davis (PI) and Rachel Powell (Co-PI) in UGA College of Public Health are conducting the research study. The PI, Dr. Marsha Davis, can be contacted at davism@uga.edu

Appendix B: Screening Questionnaire

Screening Questionnaire

This screening questionnaire is used to make sure you are eligible for the study. This information will not be shared with anyone and will only be used for internal research records (to make sure payment is received, future contact for focus groups, etc.). The only thing used is the pseudonym (fake name), which will be used in place of your name in all reports and write-ups.

Parent information:

Name: _____

Pseudonym (fake name): _____

UGA Division (if applicable): _____

Age: _____

Sex: Male Female

Race: White Black Hispanic Asian Multiracial
OtherDo you have more than an Associate's degree or 2 years of college? Yes or
NoChild information:

Name: _____

Pseudonym (fake name): _____

Grade level of child: 3rd grade 4th grade 5th grade

Age of child: _____

Sex: Male Female

Race: White Black Hispanic Asian Multiracial
Other

Appendix C: Parent Consent Form

Parent Consent Form

Food for Thought: A mixed methods media literacy intervention on food marketing

My name is Rachel Powell and I am a doctoral student at the University of Georgia. For my dissertation, I am interested in how people understand media and advertisements and educating parents and children. I am also interested in how people analyze food advertisements and how food advertisements play a part in the childhood obesity problem. This research is being done under the direction of Dr. Marsha Davis (706-542-4369) in the Department of Health Promotion & Behavior at the University of Georgia. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. Please take the time to read the following information carefully.

The procedures are:

- Your family will get a 2-hour media literacy intervention where you and your child will learn together about media literacy.
- The end of the intervention will consist of an exercise where you and your child will create an advertisement
- After the intervention, there will be focus groups. You could be asked to participate in one focus group with other parents and, separately, the kids will have one focus group with other kids
- Each participant will be free to share their experiences and comments, as there are no right or wrong answers.
- All discussion will be kept confidential and will only be used for research purposes.

Key notes about the project:

- Each participant (parent and child) will select a pseudonym (fake name) at the intervention and continue to be used through the entire study.
- The intervention will be video-recorded and the focus groups will be both video-recorded and audio-recorded
- The videotapes will only be used for identification purposes and observational notes and the audio files will be transcribed.
- I will be the only one who views the audiotapes and the videotapes will be kept for 5 years in a locked file on my personal computer. The audiotapes will be destroyed August 2014 at graduation.
- If you decide to withdraw from the study, your information will be kept as part of the study and may continue to be analyzed, unless you make a written request to remove, return, or destroy the information.

The only foreseeable risks or discomforts could be light psychological risks (e.g., feelings of stress/discomfort, sadness guilt or anxiety, loss of self-esteem, etc.) around the discussion of food marketing and childhood obesity. There are no direct benefits in being in this study, but the researcher hopes to learn more about media literacy.

Your family will receive a \$10 gift card and a free dinner for participating in the workshop. If you participate in focus group, you will receive a free dinner.

To voluntarily agree for you and your child to take part in this study, you must sign on the line below. Your signature below indicates that you are agreeing to take part in the research and you have read this entire consent form.

Name of Researcher

Signature

Date

Name of Participant

Signature

Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to the Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, GA 30602; Email: IRB@uga.edu; Telephone 706-542-3199

Appendix D: Minor Assent Form

**Child Consent Form****Food for Thought: A mixed methods media literacy intervention on food marketing**

We are doing a research study to talk about food marketing. We are asking you to be in the study because we want to know what children think. If you agree to be in the study, you will be a part of a 2-hour workshop with your mom or dad. We will give you a free dinner and you and mom or dad will get a \$10 Walmart gift card. At the end of the workshop, you will work with you parent to make an advertisement. After the workshop, you could be asked to meet in a group with other kids from the study called a focus group and talk to us about your thoughts. If you say “yes” to being in the focus groups, you will get another free dinner. If you say “yes” to being in the focus groups, you will allow us to videotape the workshops and allow us to videotape and audiotape the focus groups. The videos will be kept private and no one will see them other than me. Being in the study may improve your ability to understand food advertisements.

You do not have to say “yes” if you don’t want to. No one, including your parents, will be mad at you if you say “no” now or if you change your mind later. We have also asked your parent’s permission to do this. Even if your parent says “yes,” you can still say “no.” Remember, you can ask us to stop at any time. Your grades in school will not be affected whether you say “yes” or “no.”

There are no right or wrong answers and all your answers will be kept private. You will pick a fake name and use that. We will not use your real name on any papers that we write about this project. We will only use your fake name so other people cannot tell who you are.

You can ask any questions that you have about this study. If you have a question later that you didn’t think of now, you can call me at 713-231-4613 or email me at rmpowell@uga.edu.

Name of Child: _____ **Parental Permission on File:** ☐
Yes ☐ No

Signing here means that you have read this paper or had it read to you and that you are willing to be in this study. If you don't want to be in the study, don't sign.

Signature of Child: _____ **Date:** _____

Appendix E: Pretest – Posttest Questionnaire

Name: _____

Parent survey

	Strongly Agree	Agree	Disagree	Strongly Disagree
1.) “Buy-one-get-one-free” deals are designed to get people addicted				
2.) Fast food and snack food companies are powerful, even outside of the food business.				
3.) Fast food and snack food companies only care about making money.				
4.) Certain fast food and snack food companies are designed to be liked by kids and younger people.				
5.) Wearing a shirt with a fast food or snack food company makes you a walking advertisement.				
6.) Fast food and snack food ads link eating their food to things people want like love, happiness, and good looks.				
7.) Two people may see the same movie or TV show and get different ideas about it.				
8.) Different people can see the same ad in a magazine and feel completely different about it.				
9.) A fast food or snack food billboard can catch some people’s attention but not be noticed by another person.				
10.) People are influenced by TV and movies whether they realize it or not.				
11.) People are influenced by advertising.				
12.) When people make movies and TV shows, every camera shot is carefully planned.				
13.) There are often hidden messages in fast food or snack food ads.				
14.) Most movies and TV shows that show people eating fast food make it look more attractive than it is.				
15.) Fast food and snack food ads show happy and healthy kids and families to make people forget about the health risks.				
16.) When you see “buy-one-get-one-free” deals, it usually isn’t a good deal in the long run				
17.) When you see a fast food or snack food ad, it is important to think about what information they left out.				
18.) Ads usually leave out a lot of important information.				

Appendix F: Focus Group Guide

Focus group guide Parents and Children

Questions:

- Talk about what you learned from the workshop. Any reactions?
- What did you think about food advertisements before the workshop?
- What do you think about food advertisements now, after the workshop?
- Did the workshop make you change what you want to eat? If so, how?
- What's the most important lesson you learned in the workshop? (ask everyone to share)

Showing the clips

*Participants will be showed clips from the workshop and asked to reflect on it...(main question)

- “I am going to show you some video segments, stop me when you have a comment or want to share your thoughts”

Appendix G: Grouped Results by Media Literacy Domain

	Mean	Std. Deviation	95% CI	t	df	p-value
Authors and Audiences Domain (AA)	0.479	0.328	0.271 – 0.687	5.06	11	.000

	Mean	Std. Deviation	95% CI	t	df	p-value
Messages and Meanings Domain (MM)	0.433	0.354	0.203 – 0.653	4.19	11	.002

	Mean	Std. Deviation	95% CI	t	df	p-value
Representation and Reality Domain (RR)	0.433	0.433	0.158 – 0.709	3.46	11	.005