PARENTAL MEDIATION OF ADVERTISING AND CONSUMER COMMUNICATION: THE EFFECTIVENESS OF PARENTAL INTERVENTION ON YOUNG CHILDREN’S MATERIALISTIC ATTITUDES

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Jennifer Leigh Chakroff, M.A.

*****

The Ohio State University

2007

Dissertation Committee:

Associate Professor Amy I. Nathanson, Adviser

Assistant Professor Osei Appiah

Professor Daniel G. McDonald

Approved by

Graduate Program in Communication
This study was designed to determine how parents discuss advertising and consumer issues with their children and how children perceive these discussions. In addition, the effectiveness of parent-administered, active mediation at reducing the materialistic attitudes of five- to seven-year-old children was tested. To this end, surveys were administered to 96 parents and children who then participated in an experiment. Parent-child dyads were randomly assigned to one of three conditions: no mediation control, realism active mediation, or desirability active mediation. Parents then were trained to administer their respective mediation strategies in their homes for a week. At the end of the week, the children were brought back to view and provide their reactions to a series of commercials.

In spite of the differences reported by parents and children, a moderate positive correlation was found between the reports of mediation. In addition, although children in the realism mediation condition did not exhibit lower materialistic attitudes, those children in the desirability mediation condition did. Finally, concept-oriented consumer communication was negatively related to materialistic attitudes. Overall, this study determined that desirability mediation and concept-oriented communication are ways for parents to reduce the unintended negative effects of advertising on young children. Furthermore, training parents to deliver mediation strategies designed to alter the
perceptions of character desirability was effective. Future research should consider ways to refine parent training sessions and desirability mediation messages in order to provide parents with practical advice.
Dedicated to Grandma George and Papa Chuck
ACKNOWLEDGMENTS

“The LORD is my strength and my shield; my heart trusts in him, and I am helped. My heart leaps for joy and I will give thanks to him in song.” Psalm 28:7.

The list of people who have helped me reach this point in my career is numerous, and I am eternally grateful for their support and guidance. I could not have finished this project without my mentors, colleagues, friends, and family who provided me with a wonderful support system.

First, I would like to thank my adviser, Amy Nathanson for her help throughout my time at The Ohio State University and with this project in particular. Amy was always quick to respond to questions I had and always provided quality feedback for me to consider. Her comments made me think critically about my study and led to a better end product.

Next, I also would like to thank the other members of my committee: Osei Appiah and Daniel McDonald who both helped provide valuable suggests which contributed to the growth of this project. I truly appreciate the time my entire committee dedicated to me. In addition, I would like to thank Tony Roberto for his help and advice along the way.

Without the churches, parents, and children who participated, this study would not have been possible. I thank each and every one of you for taking the time to help me. I hope you enjoyed the experience as much as I did.
Special thanks go to the numerous colleagues who helped me throughout my time at OSU. First, I met Andy Merolla, one of the first days in the program, and I could not have made it through the last four years without his friendship and support. The same can be said for Gina Zirilli. Thank you, Gina, for always being around to listen to me. Half way through my tenure at OSU, I had the good fortune to be officemates with Eric McGraw. Thanks, Eric, for always making me laugh and teaching me to love Ohio. Thanks to Emily Machuga for allowing me to stop in for hugs whenever I needed one. In addition, Teresa Myers and I became friends my final year at OSU, and I truly can say that her love has given me the strength to make it through until the end. My support system did not stop there. A special thank you goes to Tiffany Thomson, Bell O’Neil, Melissa Yang, Martha Fay, Sophia Lin, Rob Griffiths, SungJin Rye, Vinnie Cicchirillo, and Kellie Carlyle who all helped in their own way throughout my years at OSU.

My friends outside of OSU also deserve a huge thank you. We have all been through so much together, and I relied on their love and encouragement over the last few years more than ever. A special thank you goes out to Michelle, Kyle, Cheryl, Kristine, Mike, Dana, Melissa, Heather, Phil, Alysa, and Jonathan for being there for me during my entire time in graduate school. I cannot express how much your friendship has meant to me over the years. Thanks to all of the wonderful, caring, and loving friends I have made through Xenos Christian Fellowship. Your love and respect for God helped me strengthen my own relationship with Him, and for that, I am forever grateful.
Very special thanks go to my Grandma Eva for her extra hugs and Grandma Baba for all of her notes. Even though I have had to move away, my extended family has given me their unconditional love and believed in what I am doing. Your encouragement has meant the world to me. I special thank you to my second family, The Watkins Family. You guys have been with me every step of the way since preschool, and I can’t tell you how much you mean to me. Mike, you told us to stay in school forever, and I actually listened!

My sister, Krystal, has been my best friend since before she could get out of her crib, and I could not imagine my life without her. Krystal, thank you for letting me talk, laugh, and cry during our really late night chats. You helped me talk through more than one section of my dissertation, and I truly respect your abilities as a writer. I love you!

Last, but certainly not least, I must thank my Mom and Dad. You have always supported my decisions throughout my education, and that confidence in me was empowering. You also taught me how to set goals and work hard to reach them even when it meant making tough decisions. I simply would not be where I am today without the love and guidance you gave me. Your support means the world to me, and I know I am lucky to have such great parents. You truly are my heroes. I love you so much!
VITA


2001………………………………….. B.A. Communication, Michigan State University

2003………………………………….. M.A. Communication, Michigan State University

2001-2003……………………………. Teaching Assistant, Michigan State University

2003-2007……………………………. Graduate Teaching and Research Associate, The Ohio State University

FIELDS OF INTEREST

Major Field: Communication
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>ii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iv</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>v</td>
</tr>
<tr>
<td>Vita</td>
<td>viii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>xi</td>
</tr>
</tbody>
</table>

## Chapters:

1. Introduction                                                        | 1    |
2. Literature Review                                                   | 5    |
   - Overview of Advertising Research on Children                      | 5    |
   - Unintended Effects of Advertising                                | 10   |
   - Curbing the Negative Effects of Advertising                      | 14   |
   - Advertising Mediation                                            | 21   |
   - Theoretical Explanations                                          | 23   |
   - Testing the Mediation of Advertising                              | 28   |
   - Child Development                                                | 33   |
   - Parent Training                                                   | 35   |
   - Summary                                                           | 36   |
3. Methods                                                              | 40   |
   - Participants                                                      | 40   |
   - Procedure                                                         | 41   |
   - Parent Survey                                                     | 42   |
   - Procedure                                                         | 42   |
   - Measures                                                          | 43   |
   - Parent Training                                                   | 47   |
   - Experimental Manipulation                                         | 47   |
   - Parent Log of Communication                                       | 49   |
   - Child Survey                                                      | 50   |
   - Procedure                                                         | 50   |
   - Measures                                                          | 51   |
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing Session</td>
<td>54</td>
</tr>
<tr>
<td>Stimulus Condition</td>
<td>54</td>
</tr>
<tr>
<td>Post-Viewing Measures</td>
<td>56</td>
</tr>
<tr>
<td>Debriefing</td>
<td>60</td>
</tr>
<tr>
<td>4. Results</td>
<td>61</td>
</tr>
<tr>
<td>Manipulation Check</td>
<td>61</td>
</tr>
<tr>
<td>Analysis of Research Questions</td>
<td>62</td>
</tr>
<tr>
<td>Analysis of Potential Covariates</td>
<td>65</td>
</tr>
<tr>
<td>Analysis of Hypotheses</td>
<td>69</td>
</tr>
<tr>
<td>5. Discussion</td>
<td>72</td>
</tr>
<tr>
<td>Reports of Advertising Mediation and Consumer Communication</td>
<td>73</td>
</tr>
<tr>
<td>The Impact of Consumer Communication on Materialistic Attitudes</td>
<td>78</td>
</tr>
<tr>
<td>The Effectiveness of Parent Training</td>
<td>80</td>
</tr>
<tr>
<td>The Effectiveness of Specific Mediation Strategies</td>
<td>82</td>
</tr>
<tr>
<td>Implications</td>
<td>85</td>
</tr>
<tr>
<td>Limitations and Future Directions</td>
<td>88</td>
</tr>
<tr>
<td>Appendix A: Tables</td>
<td>91</td>
</tr>
<tr>
<td>Appendix B: Recruitment Flyer</td>
<td>99</td>
</tr>
<tr>
<td>Appendix C: Parent Recruitment Letter</td>
<td>101</td>
</tr>
<tr>
<td>Appendix D: Parent Survey</td>
<td>103</td>
</tr>
<tr>
<td>Appendix E: Realism Training Script</td>
<td>109</td>
</tr>
<tr>
<td>Appendix F: Desirability Training Script</td>
<td>113</td>
</tr>
<tr>
<td>Appendix G: Realism Parent Handout</td>
<td>117</td>
</tr>
<tr>
<td>Appendix H: Desirability Parent Handout</td>
<td>119</td>
</tr>
<tr>
<td>Appendix I: Conversation Log</td>
<td>121</td>
</tr>
<tr>
<td>Appendix J: Child Pre-Viewing Survey</td>
<td>123</td>
</tr>
<tr>
<td>Appendix K: Child Post-Viewing Survey</td>
<td>129</td>
</tr>
<tr>
<td>List of References</td>
<td>137</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>92</td>
</tr>
<tr>
<td>Descriptive Statistics for Parental Reports of Mediation Items</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>93</td>
</tr>
<tr>
<td>Descriptive Statistics for Parental Reports of Consumer Communication Items</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>94</td>
</tr>
<tr>
<td>Descriptive Statistics for Child Reports of Mediation Items</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>95</td>
</tr>
<tr>
<td>Descriptive Statistics for Child Reports of Consumer Communication Items</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>96</td>
</tr>
<tr>
<td>Percentages of Children Remembering Discussion by Mediation Condition</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>97</td>
</tr>
<tr>
<td>Correlations Between Children’s Perceptions of Realism, Desirability, Social Expectations, and Materialistic Attitudes</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>98</td>
</tr>
<tr>
<td>Adjusted Means of Children’s Perceptions of Commercials and Attitudes by Mediation Condition</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

Advertising is pervasive throughout television. With children watching around four hours of television per day (Nielsen Media Research, 1998), they are exposed to an enormous amount of advertising on a daily basis. In fact, Gantz, Schwartz, Angelini, and Rideout (2007) estimate that children between two- and seven-years-old see close to 14,000 television advertisements per year while children ages eight- to 12-years-old see more than 30,000 per year. Even this number is on the conservative side given the increase in technology and diversification of where advertising has begun to appear. Given the influx of advertisements children are exposed to, researchers have tried to address the amount of ads children see each year, the possible unintended negative effects the ads can have on children, and what the people in the child’s environment can do to help curb such effects.

In looking at how to mitigate the unintended effects of advertising, researchers have begun to look at using parental mediation techniques, previously used with television programs, on advertising content. Although preliminary results of these studies indicate that mediation could be effective at reducing the negative effects of advertising,
there are still some questions that need to be answered in order for such techniques to be shared with the public and their use promoted.

First, there has been very little advertising mediation research. Much of that which has been conducted has focused on increasing children’s understanding of advertising not on reducing the unintended effects. Given the concern about advertising to children, especially recently in the public (Rideout, 2007), it is surprising that this is the case. Therefore, research needs to begin to focus on this aspect of advertising mediation. Initially, research should start with understanding how parents interact and communicate with their children with regards to commercial content and consumer issues. In addition, researchers need to know how children perceive these interactions.

Second, it is important to build theoretical explanations for the design of mediation strategies. Doing so helps researchers make more sound predictions and be able to explain why mediation works. Right now, very little of the research in this area focuses on the mechanisms that guide the mediation of advertising.

Third, given the developmental differences of children, it also is important to develop strategies and predictions which address these different abilities to comprehend messages. This not only increases the usefulness of the research but also ensures that the most vulnerable children are not forgotten. Given this, strategies designed for younger children in particular need to be empirically tested.

Fourth, knowing exactly what the content of advertising mediation messages should be is one of the underlying goals in developing theoretically-driven strategies.
Telling parents to set rules, to watch with their child, or to talk is not enough. Researchers must explain what parents should say or do, and why.

Finally, regardless of media content, previous research has yet to determine the impact of mediation messages delivered from parents themselves. In fact, this is often a criticism of mediation research. In the past, this research has argued that because the parent-child relationship is more important to the child than the experimenter-child relationship, the effects of mediation only would be stronger if delivered by a primary caregiver. However, this claim has yet to be tested. Furthermore, most mediation research is conducted outside of the child’s home. In other words, the child does not receive the mediation messages or the media exposure in their natural setting. In order to really understand how mediation would work in the home and increase the external validity of this line of research, mediation needs to be tested under these conditions.

Therefore, the purpose of this study is to further examine how active mediation techniques can be applied to advertising content. In doing so, this study hopes to determine how parents currently discuss advertising with their children, determine how children perceive these discussions, develop a theoretical model of advertising mediation for young children, and test the effectiveness of active mediation administered by parents at reducing the materialistic attitudes of children. This chapter will discuss the empirical and theoretical issues related to each of these topics. To begin, a more complete look at the research conducted on advertising and children will be examined. Next, in an effort to determine how to curb the influence of advertising, general consumer communication and parental mediation will be covered followed by a review of the handful of studies which
have looked at mediating advertising content. This discussion will be followed by a closer inspection of the issues surrounding the effectiveness of an active mediation strategy.
CHAPTER 2

LITERATURE REVIEW

Overview of Advertising Research on Children

As Jennings and Wartella (2006) note, a majority of the research on children and advertising has been conducted in the 1970s and 1980s. Below, the seminal pieces of this area, along with some of the more current studies, will be examined. First, the common features of advertising and the processing of advertising will be covered.

Common Features

One research area people have explored looks at the common features children’s advertising contains. One of these important features is the actual product being advertised. Barcus (1980) found that more than 80% of all advertisements directed at children featured toys, cereal, candy, or fast food restaurants. Toy advertisements are generally found to be seasonal. In other words, toys are advertised most heavily around Christmas. However, the rest of the year, cereal and candy commercials are the most frequent (Atkin & Heald, 1977). Another common feature of children’s advertising are the themes commercials tend to encompass. Barcus (1980) and Kunkel and Gantz (1992) both found that most commercials emphasized the fun or happiness the product could provide (i.e., socially desirable attributes) and rarely emphasized the product features...
(i.e., how a product works). A final common feature that many researchers have cited is the use of product disclosures and disclaimers like “each part sold separately” or “part of a balanced diet.” These are used to help curb the public concern of deceptive advertising. However, research has shown that these disclaimers are not understood by young children (Liebert, Sprafkin, Liebert, & Rubinstein, 1977; Palmer & McDowell, 1981).

Processing of Advertising

While some researchers have studied the common features of children’s advertising, others have explored how much children comprehend those features. This area of study centers around two different cognitive skills needed to understand advertising messages fully. The first is the ability to distinguish between the commercial and the program. Researchers have found around the ages of four or five children are able to discern if they are watching a commercial or a program (Ward, Reale, Levinson, 1972). However, Kunkel (1988) points out that distinguishing between a commercial and a program does not necessarily mean the child understands the commercial is not a part of the plot of the program.

This understanding is not helped by bumpers. These devices which say things like, “We’ll be right back after these messages,” are designed to help children know when a program has stopped and a commercial is about to begin. However, research reveals that these do not help children because the bumpers do not seem to be different than the programming (Palmer & McDowell, 1979). In fact, they sometimes use characters from the show to deliver the message.
The second ability needed to fully comprehend an advertisement is the ability to recognize the persuasive intent of advertisements. This capability requires the capacity to appreciate the advertiser’s perspective. Several researchers (Flavell, 1968; Gibbs, 2003; Piaget, 1954; Strayer, 1993) have emphasized the fact that children under the age of seven have difficulty taking the perspective of another person because they are perceptually bound and egocentric. Because children are perceptually bound, when they receive information, they focus on the visually salient images and concrete examples. This is why even very young children are able to recognize brands since they are visual cues that do not require interpretation (Macklin, 1996). Furthermore, since children of this age are egocentric, they process the information only in terms of how it is useful to them.

Therefore, if the children are unable to take the perspective of the advertiser, then they have difficulty recognizing what the goal of the advertiser is. Because of this cognitive limitation, much of the research indicates that children under the age of seven do not have the ability to ascertain the persuasive intent of advertisements (Kunkel, 2001). What is more, when researchers measure persuasive intent, it is defined literally as the child knowing the advertiser was trying to sell them something.

This is conceptually different from recognizing that the messages in an advertisement might be biased (Young, 1990). It is not known when children are able to discern this information. Therefore, children may understand that advertisers want to sell them something but not understand that in order to do so they may skew the presentation of products. In order to critically view commercials, children need to understand both the
persuasive intent and inherent biases in advertising. If children understand this potential bias, then they may be more skeptical of advertising than if they only know that the advertiser is trying to get them to buy something.

However, as children get older, around the age of 9, their development allows them to consider multiple features of an item and multiple perspectives of the consumption of that item (Acuff, 1997). These developments allow children to recognize why commercials exist and why the messages presented in them are framed the way they are. Another major developmental milestone at this age is the child’s ability to understand the social significance of material goods (Valkenburg & Cantor, 2001). Now, not only can children recognize brands, but they also understand the status associated with these brands. At this stage, children are now able to form impressions of commercials and products based on social comparison and group norms.

In addition to the work on the developmental differences of the processing of advertising processing, it is important to consider the development of children into consumers. Valkenburg and Cantor’s (2001) descriptive model of this process allows researchers to begin to understand when children may be vulnerable to the negative effects of advertising. The researchers explain that prior to age two, children merely are developing their own wants and preferences based on awareness. Therefore, this awareness could be exacerbated by television advertising.

In the toddler years, Valkenburg and Cantor (2001) explain that children begin to make requests for specific products. As requests increase, there is an increase in parent-child conflict due to disappointments. What is more, at this age, children also have
developed gender-typed schemas which guide their specific requests for and play with “sex-appropriate” toys (Cobb, Stevens-Long, & Goldstein, 1982). These schemas can be reinforced and altered by television exposure (Calvert & Huston, 1987).

By the time children reach elementary school, their gender stereotypes already have been constructed (Drabman, Robertson, Patterson, Jarvie, Hammer, & Cordua, 1981). These include what roles each gender should have and what types of things each gender is capable of. Also, children are becoming more independent consumers (Valkenburg & Cantor, 2001). Combined, these studies could indicate that upon reaching elementary school, children already are prepared to begin purchasing items that they feel society has deemed appropriate for them. Plus, around age four is when children begin making independent purchases, and by age five, most have made such a purchase (Valkenburg & Cantor, 2001).

This feeling of social pressure emerges on a more visible front by the time children reach late elementary school. According to Valkenburg and Cantor (2001), this stage of consumer development emphasizes conformity. This social conformity coincides with children’s ability to role-take and decenter. These abilities make it possible for material goods to now have social value. In fact, at this age, children begin to prefer products that can lead to social interaction, like music (Buijzen & Valkenburg, 2000). Therefore, what children see on television at this stage could not only affect their preferences, but also how they feel other people think about the things being advertised.
Unintended Effects of Advertising

Even if children do not comprehend the purpose of advertising, the commercials still may have both intended and unintended effects. The obvious intended effects of most commercials are to establish brand preference, product desire, and eventually product purchase. However, the unintended effects could have a larger impact. When a child watches an enormous amount of advertising, the combined themes and images used could have a greater influence than just one advertisement trying to sell one product. Poor eating habits, more positive attitudes about alcohol, parent-child conflict, and materialistic attitudes are all unintended effects resulting from advertising exposure. Each of these will be reviewed below.

Poor Eating Habits

It is not surprising that one of these unintended effects of advertising is the influence advertisements can have on a child’s eating habits given the propensity for children’s advertising to focus on food and candy. Public concern over this negative, unintended effect stems from research which indicates eating habits started in childhood frequently are carried on through a person’s adult life (Jacobson & Maxwell, 1994). What is more, the percentage of children who are at risk of being overweight is increasing each year (Kaiser Family Foundation, 2004). Other research has suggested that the increase in childhood obesity corresponds to the growing trend of advertising unhealthy foods to kids (Horgen, Choate, & Brownell, 2001).

To begin looking at the potential causes of children’s poor eating habits, correlational research has found that those children who reported more frequent viewing
reported higher consumption of candy, sugared cereal, and advertised foods (Atkin, 1980). What is more, experimental research also has shown this relationship between commercial viewing and poor eating habits. Atkin and Gibson (1978) exposed one group of children to a *Pebbles* commercial while the control group was not exposed to the commercial. Ninety percent of the experimental group wanted to eat the cereal compared to 67% of the control group. In another experiment, Gorn and Goldberg (1982) exposed one group of children to commercials for candy and *Kool-Aid* and another group to commercials for fruit and fruit juice. They found that children’s eating choices at camp were significantly influenced by the advertisements that they viewed.

*Positive Attitudes about Alcohol*

Alcohol advertising has become more and more prominent on television. Strasburger (2001) explains that although advertisers claim they do not specifically target an underage audience, there is a recent increase in alcoholic beverages which are more sugary and an increase in alcohol advertising during sports programming, which have a large youth audience. These are only some of the reasons why people have begun to question the impact advertising may be having on children’s positive attitudes about alcohol and drinking.

The question then becomes if this exposure really does impact children. Unfortunately, children’s brand awareness does not stop with toys. In a recent study, nine- and ten-year-old children were able to recognize the Budweiser Frogs as much as Bugs Bunny (Lieber, 1996). Several studies have found that viewing of alcohol advertising correlates with favorable attitudes toward drinking (Atkin, & Block, 1993;
Grube & Walack, 1994). What is more alarming is that exposure to advertising has been shown to lead to drinking behavior in adolescence (Atkin & Block, 1993; Austin & Knaus, 2000).

**Parent-Child Conflict**

Parent-child conflict is defined as any disagreement or arguing that takes place between the parent and the child. One situation where parent-child conflict often arises is when a child’s purchase requests has been denied. Several cross-sectional studies have reported correlations between reported purchase request, denial of that toy or food request, and subsequent conflict (Robertson, Ward, Gatignon, and Klees, 1989). In fact, Valkenburg and Cantor (2001) reported that 70% of parents with five-year-old children have experienced a purchase-related conflict in a store with their child. Furthermore, they found that 63% of parents of six-year-olds and 66% of parents with seven-year-olds experienced this situation.

Due to the public’s concern for these disagreements, researchers began looking at potential sources of influence that lead children to make the purchase requests in the first place. The media was one source that researchers investigated, and studies have reported positive correlations between reported exposure to advertising and purchase requests (Buijzen & Valkenburg, 2000; Robertson & Rossiter, 1976, 1977). Additional survey research also found a direct link between exposure to advertising and parent-child conflict (Atkin, 1975a, 1975b). In an observational study, Atkin (1978) found that children expressed high rates of disappointment and anger as a result of a parent’s refusal to buy cereal at the grocery store. Experimental research also found a positive
relationship between exposure to commercials and increased purchase requests (Goldberg & Gorn, 1978; Stoneman & Brody 1981). Taken together, these studies seem to indicate that exposure to advertising increases purchase requests. As a result of those purchase requests or as a direct result of exposure to advertising, there are increases in parent-child conflict.

**Materialistic Attitudes**

Materialism is another unintended effect of advertising exposure. It is often defined as the fixation on possessions. In other words, they are attitudes that place belongings and money at a central place in the person’s life. Belk (1984) explains that possessions are a main source of satisfaction and dissatisfaction for a materialistic person. According to Schroeder and Dugal (1995), people who are materialistic are aware and concerned with things that give them status and are influenced highly by external sources. Materialistic attitudes also have been said to lead to rising living standards, chaotic lifestyles, and little saving (Schor, 1998). Moreover, research shows that materialism can lead to negative psychological outcomes like lower self-esteem (Belk, 1984) and lower life satisfaction (Belk, 1984; Richins & Dawson, 1992). When thinking about how children of different ages may exhibit materialistic attitudes, the previously discussed developmental differences seem to indicate that although all children can distinguish between different products and brands, they will express their desires differently. Younger children, due to their egocentric nature, may focus on the quantity of money or possessions they want. Older children, who can perspective-take, may focus on the social value of the possessions.
With all of these negative outcomes associated with materialism, researchers questioned whether advertising partially causes such beliefs. This is especially the case since television influences values and conceptions of reality by providing mediated images of rewards and consequences which can indicate social expectations and acceptance (Bandura, 1986). According to a survey conducted by Atkin (1975b), 64% of mothers interviewed think television commercials contributed to their child’s materialistic attitudes. In support of this claim, experimental research has shown that more materialistic attitudes are in part caused by exposure to television commercials (Greenberg & Brand, 1993; Goldberg & Gorn, 1978). Although these experiments may lack high levels of external validity, some surveys have shown that increased viewing of advertisements is correlated with higher levels of materialism (Churchill & Moschis, 1979; Richins, 1987). However, to solve the question of directionality, longitudinal research also was conducted (Moschis & Moore, 1982). The results indicated that there was no relationship between exposure to advertising at time one and materialistic attitudes at time two unless the children came from homes with little discussion about consumption. In other words, children in those homes that did not discuss consumer behaviors had more materialistic morals if they viewed more television.

Curbing the Negative Effects of Advertising

Government Regulation

One of the possible ways to mitigate these negative effects is through the help of the government. Even though the government passed the Children’s Television Act of 1990 to restrict the amount of advertising per hour during children’s programming, little
can be done to restrict advertising in general, although the Federal Communication Commission (FCC) and the Federal Trade Commission (FTC) have both considered it. This is not only in part because of the First Amendment but also because corporations have such large economic resources. Still, the FCC has kept the time limit set at 10 minutes and 30 seconds of advertising per hour on weekends and 12 minutes per hour on weekdays. Putting this into perspective, Australia, Canada, and Great Britain have all banned television advertising directed at children (Kunkel et al., 2004).

Industry Regulation

Given the lack of power organizations such as the FCC have over advertisers, it is important to note that the industry itself has set up guidelines for ethical advertising due to public concern. These guidelines are set up by the Children’s Advertising Review Unit (CARU) which is a part of the National Council of Better Business Bureaus. These guidelines range from how the product is presented in the commercial to how much sales pressure is applied in the commercial. Overall, most of the guidelines are too general or vague to be tested empirically (Kunkel & Gantz, 1993). Therefore, although it is a step that the industry has decided they will at least formalize a self-regulating attempt, there is no economic or legal consequence to advertisers should they not conform to the regulations.

Media Literacy

In addition to the government and industry regulations, the education system also could be used to help socialize consumer behavior in children. Some schools have begun to encourage the integration of media literacy into their curriculums. Media literacy is
defined as the critical viewing perspective through which one approaches the media (Potter, 1998). Therefore, these programs usually involve a series of lessons which are designed to increase a child’s understanding of the media. In addition, schools often have units which help children learn particular consumer skills like the value of money, how to make purchases, or general economics. The combination of these trends creates an ideal environment to help children learn about the impact of the media on their consumer knowledge, attitudes, and behaviors.

In one such program, Robinson, Saphir, Kraemer, Varady, and Haydel (2001) tested a media literacy curriculum which targeted third and fourth grade children in an effort to reduce their overall exposure to television. The curriculum consisted of 18 lessons over six months which encouraged children to reduce the time they spent with media and take part in other activities. In doing so, they found, as a result of viewing less television overall, those children who received the curriculum were less likely to make product requests than those children who did not receive the curriculum. Although this is encouraging, most media literacy curriculums have focused on critical viewing skills. In these programs, most measured and found that those children exposed to the curriculums were better able to recognize the persuasive intent of advertising (Brucks, Armstrong, & Goldberg, 1988; Donohue, Henke, & Meyer, 1983; Peterson & Lewis, 1988; Roberts, Christenson, Gibson, Mooser, & Goldberg, 1980). However, it is important to note that these programs all used children eight-years-old and older.

One media literacy curriculum went beyond instructing children to recognize persuasive intent and looked at how a media literacy curriculum could impact the
desirability of the advertised products. Feshbach, Feshbach, and Cohen (1982) tested a curriculum designed to increase children’s understanding of the advertising process and techniques. They found that second and fourth graders who had completed the curriculum desired the advertised products in commercials they were shown less than those children who had not been exposed to the curriculum. This indicates that with older children the schools could have some power over influencing not only the understanding of persuasive intent but also the desirability of products. However, media literacy programs take extensive amounts of time and cooperation to fully enrich the children with the knowledge needed to critique television on their own.

**Parental Interactions**

In addition to possible laws and curriculum changes, the more realistic option may be for parents to discuss the advertisements their children are viewing. In fact, researchers have argued that the two greatest influences on consumer socialization are the media and the family (O’Guinn and Faber, 1987). There is some research which looks at how family consumer communication impacts how children interpret and react to advertising. This research indicates that there are two general dimensions of family consumer communication. The first is concept orientation. This type of communication emphasizes the expression of individual opinions and ideas. The other is socio-orientation which emphasizes the obedience to authority and getting along with others (Chaffee, McLeod, & Atkin, 1971; Moschis & Moore, 1979).

A series of studies found that those families which had a more concept-oriented communication style had children who were better able to understand the advertising
techniques used in the commercials (Moschis, 1985). Additionally, these children also exhibited lower materialistic attitudes, fewer purchases requests, and fewer parent-child conflicts than children from socio-oriented families (Buijzen & Valkenburg, 2005; Moore & Moschis, 1981). However, again, all of these studies were conducted with children over the age of eight. Therefore, researchers are still unsure as to what type of consumer communication might be more prevalent and effective in families with children younger than this.

Although this general consumer communication has an impact on how children interpret advertising, one type of parental communication might be even more direct when it comes to mitigating the effects of advertising. Research has shown adult mediation to be effective in increasing the learning from television (Coder-Bolz, 1980; Desmond, Singer, Singer, Calam, & Colimore, 1985) decreasing aggressive tendencies (Nathanson & Cantor, 2000; Hicks, 1968) and decreasing the stereotyped views of sex role (Coder-Bolz, 1980). According to Valkenburg, Krcmar, Peeters, and Marseille (1999) adult mediation can be divided into three different types: restrictive mediation, coviewing, and active mediation.

First, restrictive mediation is simply making rules as to what a child is allowed to watch. For instance, the child may not be allowed to watch television after 9 p.m. Of the three types of mediation described, restrictive mediation appears to be the most self-explanatory. In most research, restrictive mediation is said to be the occurrence of rules or restrictions in the home about television. These rules could include the amount of time
a child is allowed to watch television, when a child is able to watch, or the content or specific shows a child is not allowed to watch.

Is restrictive mediation as uncomplicated as it seems? Much like active mediation, restrictive mediation often is assessed by asking the parents or the children if there are rules in their home about television. Even though the occurrence of rules or restrictions is important to know, this simple frequency measure does not help researchers determine the reasons behind some of the interesting findings on restrictive mediation. For example, why there appears to be a curvilinear relationship between the amount of restrictive mediation and aggression (Nathanson, 1999) is left unanswered when researchers simply attempt to know the number of rules in a home. Therefore, when using restrictive mediation in research, by discerning the context in which the rules were set and how the rules are enforced, researchers will have a better understanding of this concept and could begin to answer some of the questions surrounding restrictive mediation.

The next possible solution is coviewing. In the literature, coviewing is defined as watching television with a child. Although this seems straightforward, it should be noted that watching with a child does not mean that any discussion is occurring. Once discussion occurs, it could be said that active meditation is now taking place if the discussion is about television. Coviewing is simply viewing the television in the same location as a child.

Another distinction recently made in the literature concerns the intentionality of coviewing. Yang and Nathanson (2005) explained that although measures of both active and restrictive mediation inherently imply intent to influence children, coviewing
measures only tap the actual frequency without addressing the motivational side of this form of mediation. In fact, in their study, the authors found evidence of both intentional and passive coviewing. This distinction could predict very different types of effects since those parents using intentional coviewing may have very different thought patterns than those using passive coviewing. As a result, passive and intentional coviewing must be measured when researching the effects of coviewing.

The final mediation strategy is active mediation. Active mediation is the discussion of the content that is being presented on television. Discussion can range from themes shown in programs to those presented in television advertisements. In addition, previous work also has suggested that active mediation itself is actually a multidimensional construct (Austin, 1993). In this typology, active mediation could contain comments that are categorizing, validating, or supplementing. Categorization comments help explain whether or how television reflects real life. Validations can endorse or condemn either the accuracy or the representativeness of the content on television. Finally, supplementation mediations attempt to relate the television content to the real world with additional information.

This breakdown of active mediation allows researchers to get a better picture of how adults may be discussing television content with children. For instance, with this scheme, interactions with children that explain the formal features of a program could be considered categorization mediations. In other work, this type of mediation has been termed factual mediation (Nathanson, 2004; Nathanson & Yang, 2003). Furthermore,
discussions that stem from television where a mediator attempts to show a child how to use the information viewed would be considered supplementation mediation.

Although there are a variety of conceptualizations of active mediation, most research tends to measure this construct by asking parents or children how often these types of discussions occur. In fact, gathering information from both sources could give researchers a more clear understanding of how mediation is being delivered and interpreted. As previously noted, the content of the active mediation is of particular importance to the outcome of the mediation. Therefore, researchers should take this into account when measuring mediation behaviors.

Advertising Mediation

Although previous work on parental mediation has focused on television programming, it also has been used on advertising content in recent years. This transfer of intervention strategies to commercials from programming is justifiable in spite of the inherent differences between the two forms of content. Advertising is still a source of entertainment for younger children largely because they still prefer fast-paced content (Acuff, 1997). In addition, although children between the ages of five and eight are able to distinguish between commercials and programming, they do not yet understand the persuasive intent of commercials. Combined, these perceptions could lead children to pay as much attention to the commercials as they do to an actual program.

The strategies used in advertising mediation are quite similar to mediation of programming except, to date, no research has been conducted on the influence coviewing has on children’s interpretation of advertising. However, restrictive and active mediation
both have been studied. In advertising mediation, restrictive mediation entails limiting the amount of commercial exposure. Although new technology is making this more possible, children are inundated with commercials even outside the home, so this might not be the most practical solution. The active mediation of advertising content can range from comments made about the commercials to explanations about the persuasive intent of the commercials.

Overall, there has been very little research on advertising mediation, particularly that which focuses on younger children. In fact, research still needs to determine what messages parents may use when discussing commercials. Given the recent work which reveals children’s perceptions of advertising mediation can be a significant predictor of the success of the interventions (Rozendaal & Buijzen, 2007), it is important that future work also looks to children to determine how frequently mediation is occurring. By understanding both parents’ and children’s reported use of mediation, researchers are able to help clarify what children understand and what the best way would be for parents to discuss advertising with them.

Most of the advertising mediation research has focused on the intended effects of advertising like product preferences and requests (Prasad, Rao, & Sheikh, 1978), children’s comprehension of advertising (Bijmolt, Claassen, & Brus, 1998), or skepticism (Wiman, 1983). Currently, there are only three studies that look at the effectiveness of parental mediation at reducing the negative effects of advertising. First, when pro-nutritional public service announcements were shown to children and accompanied by positive comments from an adult co-observer, Galst (1980) found that the children...
between the ages of three- and six-years-old who heard the comments selected snacks with low nutritional value less than those children who saw commercials without hearing positive comments about more nutritional foods. In a study of children ages eight to 12, Buijzen and Valkenburg (2005) were interested in materialistic attitudes, purchase requests, and parent-child conflict. In their survey of 360 parent-child dyads they found that those parents who did not use active mediation of advertising were much more likely to have children that expressed materialistic attitudes and made more purchase requests than those children receiving active mediation.

In a study more theoretically grounded, Buijzen (2007) introduced a model of advertising mediation. Results revealed that factual mediation (i.e., “These commercials are intended to sell.”) reduced advertising persuasion by increasing skepticism and knowledge of persuasive intent. Furthermore, evaluative mediation (i.e., “These commercials are stupid.”) reduced advertising persuasion by influencing the children’s attitudes toward commercials. However, this model only worked for older children. Therefore, it is important that researchers consider theoretical models that could work with younger children.

Theoretical Explanations

These examples of studies at least provide initial justification that parents have the ability to influence children’s processing of advertising. However, theoretical explanations are needed still. Early work on advertising mediation has not explained the effectiveness of such strategies. As discussed earlier, in more recent work, some have begun to think about the theoretical mechanisms that drive the effectiveness of such
mediations (Buijzen, 2007). However, even these explanations fail to explain an effective strategy for younger children.

For years, researchers have called for theoretical explanations of the effects of advertising and interventions that take into account the multiple ways people process advertising (Linvingston & Helsper, 2006; Wartella, 1982). Therefore, researchers should consider both the cognitive and affective aspects of persuasion when looking to inhibit the negative effects of advertising. This study is an initial attempt at doing so. Therefore, below the message interpretation process model (Austin, Roberts, and Nass, 1990) along with social cognitive theory (Bandura, 1986) will be described in an effort to explain how mediation for younger children could be framed.

Beyond explaining why mediation is effective in general, the message interpretation process model developed by Austin et al. (1990) has the ability to dictate potential mediation content. Originally, this model has been used to help create and test media literacy curricula. It has not been tested yet with more simple messages that parents could use. Furthermore, it is not clear whether this type of processing model would be effective at helping children younger than age eight. Therefore, this study will test a dual-process model based on that developed by Austin et al. (1990).

To begin, the messages parents say when using active mediation should be based in theory. Therefore, it is helpful to better understand how advertising influences perceptions in the first place. Like other dual-process models (Chen & Chaiken, 1999), the message interpretation model explains that people interpret messages using multiple
processing mechanisms. In this case, people internalize messages through cognitive and affective routes.

The cognitive decision-making process relies on a child’s comparison of their own world to the world presented on television. This comparison indicates to the child how realistic the media world is. The authors argue that if a child does not have some sort of parental influence explaining the real world, then the child is more likely to accept the television world as real. This indicates that parental mediation attempting to discuss the level of realism could be effective.

Perceptions of reality have been defined as a multidimensional construct (Potter, 1988). First, the magic window is the term used to explain the continuum of beliefs that range from television being complete fiction to television being a “window” of the real world. The second dimension, identity, is the degree to which a person perceives television characters and events to be similar to people and events in real life. Finally, the third dimension is the perceived utility of television. In other words, it is whether television is perceived as providing information on social expectations. These three dimensions combine to form a child’s perception of realism. From there, a child who sees the depiction as realistic is more likely to use the portrayal as evidence that conforming to the values presented will lead to positive reactions or consequences.

However, it is important to note that in spite of developing a more complete understanding of the biases in advertising, as children get older, their desire for products does not decrease (Comstock & Paik, 1987). This is one indication that children do not process advertising solely on a cognitive level. Children who understand the unrealistic
image commercials present either need to be encouraged to use this as a cognitive defense against persuasion or there is more than one mechanism at work which also needs to be highlighted for the children. The message interpretation process model should be effective at explaining mediation of advertising for younger children because it does take into account more than just the cognitive processing.

The model explains that emotional processing often operates in conjunction with more logical reasoning. Austin et al. (1990) explain that desirability of the television commercial or character also plays a large role when interpreting messages. Desirability, as used in the study, also is defined as a multidimensional construct that encompasses the perception of the overall attractiveness of a portrayal. In other words, desirability refers to how attractive the characters are, how much fun the characters seem to be having, how interesting the product appears, and how much positive feedback the actions of the characters in the commercial are getting. Taken together, these aspects create the overall level of social attraction the commercial depicts. This level of desirability that is portrayed leads to increases in social expectations that these actions are rewarded or held in high esteem. These expectations, as in the cognitive route, lead to viewers endorsing the subsequent attitudes and behaviors that reflect these expectations.

Although the message interpretation process model (Austin et al., 1990) helps explain that expectations are created through how realistic and desirable a portrayal is depicted, it does not necessarily explain how these expectations influence subsequent attitudes and behaviors. Social cognitive theory (Bandura, 1986) explains that these perceived expectations influence attitudes and behaviors through a person’s motivation.
Within the aspect of motivation, Bandura (1986) explains that people have a self-regulatory capability. This capability includes several inhibitors and disinhibitors. These mechanisms regulate how one behaves and whether the motivation to behave in a certain manner is present. In addition, disinhibitors or inhibitors can be evoked through either direct or indirect interaction, like the mass media.

Disinhibitors, Bandura (1986) explains, are self-exonerating mechanisms. When disinhibitors are activated, the person behaving in a typical antisocial manner has disengaged his or her internal control. This allows him or her to perform typically negative behaviors without experiencing any negative affect. On the other hand, inhibitors are internal restraints that prevent a person from behaving in certain ways by anticipating the self-censure that would follow violating one’s self standards (Bandura, 1986).

Working in conjunction with this self-regulation process is a person’s self-reflective capability which explains that a person has both personal and social standards that he or she wants to uphold. Behaving in a socially approved manner leads to self-pride according to Bandura (1986), which is a main motivator for people. In other words, people would be more likely to behave or think in a certain way if they thought it would make them feel good about themselves. To do so, they must meet the standards that they have set for themselves and the standards they believe society has set for them. After behaving in a certain way, people then evaluate the reactions of others and their own reactions.
This self-reflection process helps to determine the emotional impact an event will have on a person. When one does not follow socially approved actions, he or she will experience negative consequences that will, in turn, regulate their future behavior. Bandura (1986) explains that people use the media to help ascertain what these social standards are. In the case of materialism, if television commercials appear realistic and create expectations that buying things and having more is normal and gets positive reactions, then subsequent materialistic attitudes could form. This line of reasoning relies on cognitive processing. Likewise, if television commercials make the portrayals appear desirable, they create expectations that having things is beneficial, rewarding, and attractive, then materialistic attitudes also could form from this affective route.

Testing the Mediation of Advertising

Although the message interpretation model (Austin et al., 1990) does predict that processing occurs through both cognitive and affective routes, previous research has not tested interventions which aim to reduce the desirability of commercials. In spite of this, given previous research and theory that explains both routes are in use, one can return to the question of what the most effective parental intervention strategy would be to mitigate the effects of advertising on materialism.

First, restrictive mediation may not be a practical solution. Despite the fact that new technologies are making it possible for viewers to reduce the amount of advertising they are exposed to, the pervasiveness of advertisements, makes it virtually impossible for children to not be allowed to watch them. Next, since coviewing does not necessarily mean that discussion is occurring, one can not assume that the child is becoming more
critical, especially since Moschis & Moore (1982) found the relationship between television commercial viewing and materialism to exist when no discussion was occurring.

Alternatively, active mediation may be effective at reducing materialism because it relies on discussion. A survey conducted by Austin (1993) looked into the factors correlated with skepticism of public affairs media. Austin surveyed 346 adolescents in two San Francisco Bay Area schools to determine the different types of family communication norms to which the adolescents were exposed. These norms included concept orientation, socio orientation, communication warmth, and active mediation. The survey found that active mediation was the only significant predictor of skepticism in public affairs’ media after controlling for parents’ education levels. Austin (1993) concluded the study by emphasizing that active mediation can be an effective way for parents to influence how their children interpret what they are viewing on television.

In spite of this finding, researchers still do not know what the content of this active mediation should be. We merely know that talking helps. Based on the message interpretation process model (Austin et al., 1990), it appears that there would be two routes mediation of advertising could take: cognitive and affective. Work by Nathanson (2004) has used these two approaches to mediation, albeit without labels, in previous research. This experiment indicated that evaluative, or affective, mediation may be more effective in most cases. However, the author also recommends that several types of cognitive and affective mediation be tested prior to making such a claim. Therefore, this study attempts to do so while keeping in mind how advertising content is processed by
children. By using the message interpretation process model (Austin et al., 1990), this study is able to extend previous research by explaining and testing the potential mediating variables which could help researchers further ascertain why particular strategies are effective.

To take the cognitive route first, this type of mediation could focus on reducing the realism of advertising. Can active mediation decrease the perception of reality? Along with research indicating that active mediation correlates with skepticism is research indicating that it also correlates with perceptions of reality (Warren, 2001).

Survey research suggests that active mediation and decreases in perceptions of realism are correlated. In their study of 91 kindergarten and first graders, Desmond, Singer, Singer, Calam, and Colimore (1985) surveyed parents on their mediation practices and their children on their perceptions of the reality of television. The authors found family discussions to be positively associated with accurate perceptions of reality. A second study, conducted by Messaris and Kerr (1984), interviewed 296 mother-child dyads. The children were in first, third, and fifth grades. They found that mothers who told their children that “Television is make believe,” were more likely to have children who did not believe television characters represented real-life people than mothers who did not give their children the simple mediation.

Although these studies do not address the issue of causality, experiments involving media literacy curriculums have been conducted. Dorr, Graves, and Phelps (1980) conducted a study on a television literacy program with 99 kindergarten, second, and third graders. They found that those children who learned about television
productions and economics were able to abandon previously held ideas about things that were not true about television. Roberts, Christenson, Gibson, Mooser, and Goldberg (1980) also conducted an experiment with a media literacy program with 72 second graders, 53 third graders, and 68 fifth graders. Children were assigned to view one of two educational films or a control film. Those children who viewed the educational films on consumer behavior and advertising were significantly more skeptical than those who viewed the control film.

Based on this literature and the message interpretation process model, it appears that active mediation can reduce perceptions of realism. In addition, research consistently has shown that those who view the media as realistic are more likely to expect similar consequences and reactions to attitudes and behaviors in real life (e.g., Buerkel-Rothfuss & Strouse, 1993; Irving & Berel, 2001; Ward & Rivadeneyra, 1999). In other words, when the media portray positive reactions for materialistic attitudes or behaviors, children who view the media as more realistic are able to use it as a basis for judging what the reactions of people would be like if they felt or behaved in a similar manner. Children who do not see the media as a realistic representation for what would happen do not use it as a source of this information.

The question still remains whether this type of mediation and model can be applied to the topic of materialism. Therefore, to further examine these relationships, the second path of influence, the affective route, will be examined. The model explains that the affective path is influenced, at least in part, by the desirability of the television characters.
In the work done by Austin et al. (1990), desirability has been defined as perceived attractiveness of the portrayal. Surprisingly, given the affective route put forth by the model, no mediation or media literacy research has dealt exclusively with decreasing desirability. However, a few studies have examined similar constructs, sometimes in order to control for them. For example, in their study of 154 primarily 10- and 11-year-olds, Austin and Meili (1994) surveyed subjects on the level of desirability of people who consume alcohol on television. It was found that parents can inhibit the effects of desirability by influencing expectations themselves. Although this study was cross-sectional and does not examine the direct impact of mediation on desirability, it does lend support to the notion that parents can influence the emotional processing route.

Other studies examine how mediation impacts likeability or attractiveness of characters. For example, in their experiment with 351 second through sixth graders, Nathanson and Cantor (2000) found that encouraging children to think about the victim of violence resulted in younger children evaluating the character as more favorable. Also, Nathanson (2004) found five- to seven- and 10- to 12-year-old children in the experiment who hear comments like “All of these people in the TV show are NOT cool” (p. 326) reported decreased liking of the program and the character. Overall, even though these studies do not measure desirability exactly, it appears that they can impact the emotional processing of media messages.

Like realism, there also been research linking how desirable people view a media portrayal and their subsequent expectations regarding the consequences and reactions to such attitudes and behaviors (Reeves & Garramone, 1982). In other words, people who
see a product being advertised as appealing will be more likely to expect that if they had that product they would receive those desirable attributes or qualities than those people who do not see the same product as desirable. Since research shows that both realism and desirability can lead to expectancy development, it is also important to note that there has been much research which explains that expectations of the reactions and consequences to attitudes and behaviors lead to the likelihood of attitudes or behaviors being expressed (Goldman, Brown, & Christiansen, 1987; Christiansen, Roehling, Smith, & Goldman, 1989).

**Child Development**

Although these findings offer evidence that mediation can influence perceptions or realism and desirability, one still needs to ask whether these types of active mediation strategies will be effective for children of all developmental levels. Why is it that these younger children are an interesting population to study? Along with the development of a child into a consumer which was discussed in detail earlier, children are developing cognitively, emotionally, morally, and socially.

Although there is debate in the literature over whether there are cohesive stages of a child’s development for each of these concepts, there is much work that concludes that younger children process media messages differently than older children and adults (Collins, 1973; Dorr, 1983). This is the case when it comes to children’s ability to judge the reality of television portrayals. Several studies indicate that children under the age of eight are unable to recognize the cues present in television programming that indicate the program is not real (Wright, Huston, Reitz, & Piemyat, 1994). Not only do younger
children have difficulty picking up on the cues that would indicate a fictional portrayal, but research in advertising suggests that children younger than eight-years-old can not fully process commercials (Kunkel, 1988, 2001). Taken together, these ideas make younger children the most vulnerable to advertising exposure.

At the same time, children at this age are still heavily influenced by their parents. Once children get into later elementary school, their peers begin to have a much greater influence than their parents. However, these younger children still value their parents’ opinions above their peers. This makes this population ideal for mediation strategies because the children are likely to listen to and take into consideration what their parents say.

In addition, these younger children are just developing their consumer attitudes and values. Therefore, it is early enough in their development that the media and peers have not started to mold children’s values to a point where the values are already firmly planted. At this early stage of consumer development, children are still trying to assimilate information. By parents mediating at this stage, they could have a greater impact than at any other time in their child’s development.

Overall, the developmental stages set out by Piaget (1957) and Gibbs (2003) match up to those stages of consumer development discussed earlier because consumer socialization involves many different aspects of growth. Cognitive development helps children understand what products would be beneficial for them. Emotional development allows children to understand the emotional appeals companies attempt to use, and it also makes it possible for children to deal with the emotions that may arise as a result of a
denial of a purchase request. Finally, moral development helps children consider the social impact products may have by considering the implications of their purchase or use.

Parent Training

In addition to testing the theoretical mechanisms guiding cognitive and affective mediation with younger children, as mentioned earlier, mediation research has been criticized for being artificial due to the fact that usually it is an experimenter delivering the mediation messages to the children. Since much of the work in this area assumes that having parents deliver mediation messages would create even more positive results given that the relationship between parent and child is stronger, this assertion needs to be tested. Therefore, this study will attempt to do so by training parents to deliver the mediation messages to their own children.

Research on parent training or parent education assumes, as does research on parental mediation, that the interactions parents have with their children can alter the way children feel, think, and behave. Given this, much of the literature on parent interventions comes from the public health arena which looks at ways parent training can help difficult children overcome learning or behavior problems. In fact, studies have shown that parent training programs have been effective at decreasing behavior problems in children (Burnett, 1988; Graziano & Diament, 1992; Patterson & Narrett, 1990) and increased children’s self-esteem (Cedar & Levant, 1990).

Although these studies usually contain long-term training programs, there are some studies which lend support to the idea of a single-shot parent training session which would make parent training on the mediation of advertising content a more realistic
option. For example, as Glascoe, Oberklaid, Dworkin, and Trimm (1998) report, physicians often have to train parents quickly in how to watch for symptoms in their children or how to administer medications. In order to determine the most effective and efficient ways to train parents on these topics, the researchers conducted a meta-analysis of patient education studies. They found that although verbal advice is helpful, parents benefited most from specific information that was given in multiple formats (i.e., verbally with reinforcement on information handouts). Therefore, the parent training session for this study used these methods.

Summary

Overall, very little is known about how parents communicate with their children under the age of eight about consumer issues in general or advertising more specifically. This is regardless of the fact that there is much research indicating that these children are particularly vulnerable to advertising. Therefore, this study will look at parent and child perspectives on consumer communication and mediation in order to assess what types of interactions parents report doing and children actually perceive to be happening. In addition, recent research has indicated that differences between the reports can have meaningful interpretations on outcome measures of interest (Rozendaal & Buijzen, 2007).

Also, theoretical explanations for advertising mediation need to be tested. One of the most problematic unintended effects of advertising is materialistic attitudes, so this study will test parental mediation strategies aimed at reducing materialistic attitudes while considering the developmental abilities of the young children. Finally,
methodologically, parental mediation research has yet to determine if parents can be
effectively trained in the administration of mediation and reduce the unintended effects of
the media without an experimenter mediating in their place. This study will train parents
to test the assumptions of previous research.

First, since little research has been done in this area, in an effort to better
understand the messages parents already may be sending to their children regarding
advertising, the following research question was formed:

RQ1: How do parents mediate advertising content and discuss consumption, and
how does it compare to children’s perceptions of parental mediation and discussion?

Overall, previous empirical work and theoretical models suggest that decreasing
the realism and/or desirability of television advertisements will decrease materialistic
attitudes because they decrease the social expectations television provides. However,
although younger children have the ability to find characters on television desirable, they
are not able to distinguish between fantasy and reality. Therefore, children exposed only
to a strategy aimed at reducing realism would be akin to them receiving no mediation
since they do not have the cognitive ability to determine fantasy from reality. On the
other hand, since younger children can find television characters desirable, an active
mediation strategy aimed at reducing this desirability should be effective for this age
group. Therefore, the following hypotheses were posited:

H1: Younger children in the desirability active mediation condition will exhibit
significantly lower materialistic attitudes when compared to the younger children in the
no mediation control condition who will not differ from the realism mediation condition.

37
To test the theoretical mechanisms, the literature described above indicates that social expectations are positively related to the attitudes and behaviors of the relevant expectancies. Given the developmental abilities previously discussed, the following hypotheses were advanced with regards to expectancies:

H2: Younger children in the desirability active mediation condition will report significantly lower perceptions of social expectations when compared to the younger children in the no mediation control condition who will not differ from the realism mediation condition.

To further examine the underlying mechanisms presented in the message interpretation process and in discussions of the processing of advertising, it is suggested that realism and desirability are positively related to higher social expectations. Nonetheless, the literature on developmental differences indicates that younger children can not distinguish between fantasy and reality. Therefore, only the desirability condition should alter children’s perception of the portrayal:

H3: Younger children exposed to the desirability active mediation condition will find the television characters significantly less desirable than those children in the no mediation control condition who will not differ from the realism mediation condition.

Furthermore, although research has shown that general consumer communication impacts children’s view of advertising and materialistic attitudes, this influence has not been tested with children under the age of eight. To date, we do not know if the relationship between consumer communication and materialistic attitudes shown in the research for older children holds for younger children as well. Therefore, in order to fully
understand how these younger children are developing into consumers and how these forms of communication impact that development, the next research question was posited:

RQ2: How does general consumer communication impact younger children’s materialistic attitudes?
CHAPTER 3

METHODS

In order to understand the types of parent-child communication about advertising that occur and to test the effectiveness of different types of mediation delivered by parents, this study was conducted in multiple phases. Upon agreeing to participate, parents were randomly assigned to one of three conditions (realism active mediation, desirability active mediation, no mediation control) and attended a parent training session for their group where they also completed a parent survey. In addition, immediately following their parents’ training session, children completed a short survey that served to gather the children’s perspective on the family communication and to determine a baseline for the children’s materialistic attitudes. Then, for the next week, parents in the mediation conditions discussed commercials with their children. At the end of this week, the children returned to view a series of commercials and report their reactions. The following sections detail the specific procedures for each phase of the study.

Participants

96 parents and their children ages five- to seven-years-old from two churches in Columbus, Ohio participated in both phases of the study. Previous research suggests that these younger children fall below the age demarcations which correspond with the
developmental differences in children’s abilities to take the perspective of others and understand the persuasive intent of advertising (Kunkel, 1988, 2001; Kurdek & Rodgon, 1975; Selman & Byrne, 1974). Therefore, these are the children that could be considered the most vulnerable to advertising messages. The average age of the children was 5.56, and 68% were female.

Approximately 85% of the parents who participated in the study were mothers, and the remaining 15% were fathers. The median age of the parents was 33, although the range was 29 to 37. Almost 81% of the sample reported their ethnicity as Caucasian, 10% as African American, 4% as Latino, and 4% as Asian. 84% of the parent sample had graduated from college. In addition, 90% reported that they had a spouse who had graduated from college. Finally, almost 50% of the sample reported that their average annual household income was between $40,000 and $69,000.

Procedure

To recruit participants, flyers (Appendix B) were handed out in the lobby of the churches prior to the start of the services to make parents aware of the opportunity. Then, a table was set up in the lobby where parents were stopped at the end of the service and asked to participate. At this point, parents were given a more detailed recruitment letter (Appendix C). In almost every interaction, the details of the study that were mentioned in the letter were discussed so that parents could decide immediately if they wanted to participate with their child. Those times when a discussion did not take place occurred if the parent did not have time to stop and simply took the information home.
The meeting dates, times, and locations were organized with the churches prior to this initial recruiting. Each date/time combination was assigned a condition randomly. When parents agreed to participate, they were randomly assigned to a condition and given a list of potential meeting times that corresponded to their group. Parents then selected the meeting time that worked best for them and their child and were asked to bring the consent form with them to the church the day of the parent meeting and child survey. Parents granted consent for both phases of the study on this form. Due to space limitations in the meeting rooms at both churches, the number of participants was capped at seven people to make sure the rooms were not crowded. The median size of the meetings was six people. The range was between four and seven people.

Parent Survey

Procedure

As mentioned earlier, before meeting with the children, parents attended a meeting where they first took a survey and, then, if they were in one of the mediation conditions, received their parent training. The children waited in a separate room where an adult from the church waited with them. After finishing the meeting, the parents brought the children to the meeting room for their survey. The parent survey (Appendix D) was used to gather demographic information, media use, materialistic attitudes, consumer communication, and use of parental mediation. Demographic information included age, ethnicity, gender, education level, and household income so that those variables can be controlled for in the analyses. Because it is likely that parents want to
present themselves as the best parents possible, the survey was introduced with the following paragraphs to avoid as many socially desirable answers as possible:

We are interested in learning about how parents may talk to their children about different types of behaviors. Because this area of research is growing, it is not currently known how much, if at all, parents discuss commercials and consumer activities with their children. Keep this in mind when you answer these questions. If you have more than one child between the ages of 5 and 7, please think of the child with the birthday closest to today who also will participate in this study.

You could find that you do not have any of these conversations or you could find that you have a lot of these conversations. Right now, researchers do not know for sure. In addition, we do not know if these conversations occur how they may impact a child. Therefore, there are no right or wrong answers to the following questions or statements.

The more honest you can be, the more likely we will be able to get a better understanding of these types of parent-child interactions. Also, remember that your answers will not be shared with anyone. Thank you for your participation.

Measures

Parental mediation. To measure parents’ mediation of advertising content, Buijzen and Valkenburg’s (2005) adapted version of Valkenburg, Krcmar, and Peeter’s (1999) original mediation scale was used. The Buijzen and Valkenburg (2005) scale altered the widely used parental mediation of television scale to fit the context of commercials. Parents respond to the 10 items which ask them to report how frequently they use active and restrictive mediation with questions like “How often do you tell your child that the purpose of advertising is to sell products,” and “How often do you tell your child that s/he should not watch television advertising at all?” Response options ranged from “never” = 0 to “often” = 3 on a four-point Likert scale. Both forms of mediation were measured in order to determine how parents generally managed commercials in their home. Confirmatory factor analytic results indicated that factor structure implied in Buijzen and Valkenburg (2005) was consistent with the data and the scale was two-
dimensional (Hunter & Gerbing, 1982). The responses to each of the five items were averaged to create an active mediation scale ($\alpha = 0.82, M = 2.00, SD = 0.49$) and a restrictive mediation scale ($\alpha = 0.78, M = 1.74, SD = 0.52$).

In addition to these scales, parents were asked a series of questions that were designed to look at how frequently they use cognitive and affective forms of active mediation specifically. Three items were created to determine how frequently parents used cognitive forms of mediation. For example, “How often do you tell your child that products sometimes do not do everything they claim to do in a commercial?” Response options ranged from “never” = 0 to “often” = 3 on a four-point Likert scale. In addition to these items, an additional three items also were created to measure affective forms of mediation. For instance, “How often do you tell your child that the people in commercials are not that cool because of the products they are using?” Again, response options ranged from “never” = 0 to “often” = 3 on a four-point Likert scale.

Although a few questions that deal with the use of cognitive and affective mediation have been used within previous mediation scales, they have not been labeled as such nor have there been more than one or two items which specifically ask about these types of messages used at a time. Due to the arguments and findings of previous research that it is not simply talking with your child about television but the specific content of the messages that is in important, it was necessary to gauge not only how frequently parents are mediating but also what types of messages they may be sending. The responses to each of the three items were averaged to create a cognitive mediation scale ($\alpha = 0.74, M = 1.57, SD = 0.67$) and an affective mediation scale ($\alpha = 0.77, M = 1.57, SD = 0.63$).
Consumer communication. Because the general communication parents have with their children about consumption impacts a child’s materialistic attitudes and the way they view advertising (e.g., Churchill & Moschis, 1979; Moschis, 1985), it was important to measure this type of communication in addition to parental mediation. Consumer communication measures the general discussions parents may have with their child about consumption issues or behavior. On the other hand, the mediation scales measured communication which was specific to commercials.

Buijzen and Valkenburg (2005) adapted the original family communication patterns scale developed by Chaffee et al. (1978) to fit consumer-related communication that occurs between parents and children. As with the original scale, this adapted form measures the concept-orientation and socio-orientation of the consumer communication. Parents responded to questions like “How often do you tell your child to consider the advantages and disadvantages of products and brands?” and “How often do you tell your child that which products s/he should or should not buy?” Response options ranged from “never” = 0 to “often” = 3 on a four-point Likert scale. Confirmatory factor analytic results indicated that factor structure implied in Buijzen and Valkenburg (2005) was consistent with the data and the scale was two-dimensional (Hunter et al., 1982). The responses to both sets of the seven items were averaged to create a concept-orientation scale ($\alpha = 0.93, M = 1.41, SD = 0.73$) and a socio-orientation scale ($\alpha = 0.87, M = 1.67, SD = 0.59$).

Similarly, it was important to know if children get an allowance. In other words, do children have an opportunity to buy things with their own money, and if so, do parents
talk about how to spend the allowance? Therefore, parents were asked if their child got an allowance. Then, if they did, parents were asked if there were rules on how their child spent it, if they talked about how it should be spent, and if the child had to do anything to get the allowance. 76% of the children in this sample received an allowance. Of these children, only 70% had rules on how they could spend the money, 86% of their parents discussed how their children might spend the money, but only 68% of the children had to do anything to earn the money.

**Materialistic attitudes.** The nine-item version of the Richins and Dawson (1992) material values scale will be used. In a series of studies, Richins (2004) developed and tested this shorter version of the original scale and found that it still had relatively high reliability with a Cronbach’s alpha ranging between .82 and .84. In addition, the shorter version of the scale was shown to have convergent validity. This nine-item scale was used instead of the popular Belk (1985) Materialism Scale because previous research (Sirgy et al., 1998) has found that confirmatory factor analysis for the Belk (1985) scale fails to confirm the factor structure implied. Furthermore, as Richins (2004) explains, the shorter version of the scale should reduce hypothesis guessing. Parents responded to statements such as, “I like to own things that impress people,” and “My life would be better if I owned certain things that I don’t have,” on a five-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). Confirmatory factor analytic results indicated that factor structure implied in previous research was consistent with the data and the scale was unidimensional (Hunter et al., 1982). The responses to the nine items were averaged to create a materialistic attitudes scale ($\alpha = 0.84$, $M = 1.26$, $SD = 0.43$).
Parent Training

After completing the survey, parents who were assigned randomly to the cognitive mediation condition or the affective mediation condition stayed for a training session which lasted around 20 extra minutes. The meeting for the parents in the no mediation control condition was completed when parents were done filling out the survey.

Experimental Manipulation

During the week in between the surveys and the experiment, parents in the experimental conditions were trained to hold discussions about commercials with their children. The training sessions were conducted by the principal investigator. The following description provides an overview of the training sessions. For a complete description see Appendixes E and F for training scripts and Appendixes G and H for the handouts. It was explained to the parents that research has indicated that media exposure can have some negative effects on children; however, some research has indicated that parents can help curb these negative effects. Therefore, they were told that to see if parents could help reduce the negative effects of advertising, this study wanted to have parents hold conversations with their child throughout the next week.

Next, those in the cognitive mediation training were told, “There is some evidence that how real a child sees a commercial to be determines the effects of that commercial. Therefore, we would like to see if discussing how realistic (or unrealistic) commercials are could reduce materialistic attitudes.” Those in the affective mediation training were told, “There is some evidence that how desirable (i.e., fun, cool, pretty, popular, likable) a
child thinks a character in a commercial is determines the effects of that commercial. Therefore, we would like to see if discussing how undesirable the characters and products in commercials are could reduce materialistic attitudes.”

In an effort to control the amount of parental mediation that occurs during the week, parents in both mediation conditions were told to have a conversation once a day for the week in between the survey and the viewing portion of the experiment. To help with these discussions, parents were given conversation prompts on handouts. Parents were reminded that these conversations did not need to be long, and then, as a group, we read through the list of conversation prompts.

Specific features of the prompts were discussed with the training groups. For example, in the cognitive mediation training, the parents were told, “these prompts are designed to have the conversation focus on how advertising sometimes skews the presentation of the product.” In the affective mediation training, the parents were told, “these prompts are designed to have the conversation focus on how commercials are not pleasant because the things and people in them are not desirable (i.e., fun, cool, pretty, popular, likable).”

Knowing what to say was only one step of the training though. After the prompts themselves were discussed in the training session, the training switched to when exactly to have the conversations. Therefore, on the same handout that listed the conversation prompts, the parents received a list of conversation opportunities that included ideas like having a conversation when you see a commercial on television, when you see a toy in the store, or when your child is talking about spending money. There was not a restriction
as to when this discussion occurs (i.e., while viewing a commercial or when playing with toys). Instead, parents simply were told to have these conversations when they deemed it appropriate. This could be particularly useful for future mediation research as more and more children are exposed to media messages when they are not around their parents (e.g., in their own bedrooms, in school, or at a friend’s house). In addition, when parents are given practical advice on when to talk with their children about these topics, any restrictions that are too complicated could lead to parents ignoring the recommendations.

Now that the conversation prompts and opportunities had been discussed, the training sessions moved on to discuss more specific examples so that parents could get a better idea how to deliver the mediation. Two example commercials were shown to give parents ideas on how they might go about mediating advertising as it actually occurs. The first commercial was for Hasbro Nerf Dart Tag, and the second was for Barbie Hair Highlights. Neither would be used later in the stimulus condition for the children, but they were similar to other commercials parents would come across on television. Examples of what might be said during each of those commercials were then discussed using the conversation prompts. In addition, examples of mediation at each of the other conversation opportunities were given. All of the examples in the cognitive session dealt with realism of commercials and the portrayals, and all of the examples in the affective session dealt with the desirability of the portrayals.

Parent Log of Communication

After the examples had been discussed, the conversation log was passed out to the parents. In order to determine more accurately what the parents actually say, when it was
said, and what they child’s reaction was, parents in the mediation conditions were asked to keep a log of these activities (Appendix I). In addition, in order to attempt to control the desire for parents to alter their viewing or communication behaviors for this week, the parents were reminded that the best way for the researchers to determine specific things parents might want to say or not say to their child it was important that they were as normal in their activities as possible. Parents were asked to bring the log back with them when they brought their child in for the second session. Unfortunately, only about 65% of the logs were returned. However, those that were returned combined with the manipulation checks should give some indication of if and how parents delivered the mediation they were trained to. At the end of the meeting, parents were then thanked for attending the training session and asked if they had any questions. In general, the questions that came up were logistical in nature (i.e., clarification of the next meeting date or time).

Child Survey

Procedure

Upon completing the parent meeting, parents picked the children up from a nearby room to bring them to the child survey session. Parents were not present during the survey administration. Those children whose parents had granted consent for their participation and who had verbally assented were asked to complete the pre-viewing survey (Appendix J). This survey asked children to report their media use, perceptions of parental mediation and consumer communication, and their materialistic attitudes. As it was likely that the parents would want to appear to be good parents, the children also
would want to appear to be good children. In order to avoid the children trying to tell the experimenters what they want to hear, before beginning the survey, children were told, “We are here to talk with you about television commercials. I want to ask you a few questions about how you and your parents talk to each other and what you think of commercials. If you don’t want to answer a question, you don’t have to, and if you want to stop and go back to the waiting room, just let me know. Okay? We should be done in about 10 minutes. There are no right or wrong answers, so please answer as honestly as you can. Okay?” An experimenter, trained in the execution of the surveys read the questions and possible answers to the children to ensure that literacy did not affect their responses.

Measures

All items were pretested for clarity and understanding on a convenience sample of four, five-year-old children (75% female). Items that were understood by all four children were included in the final measures. Then, the completed measures were tested to ensure that the young children would not be fatigued by the length of the instruments.

Media use. Because some children do not have a clear concept of how long they watch television, they were asked to report their media use by reporting what times of the day they have or have not watched. Children responded to how much they watch television before school, after school before dinner, and after dinner before bed on a four-point Likert scale (0 = “not at all” to 3 = “a lot”). Then, to judge how much they watch on the weekends, they were asked to respond on the same scale how much they watch television on the weekends in the morning, during the day, and at night. The responses to
the items were used to form a television exposure index by adding together the weekday items multiplied by five and the weekend items multiplied by two. This total was then divided by 21 (three measurements per each of the seven days) to get an average daily exposure index ($\alpha = 0.73, M = 1.75, SD = 0.53$).

In addition to the general media use questions, the children were asked how often they watch commercials and how often they change the channel during commercials, again on the same scale. In order to assess commercial exposure, the question asking how often the child changed the channel was recoded so that higher numbers also represented more commercial exposure. The two items were then added together and divided by two in order to create the average commercial exposure index ($\alpha = 0.73, M = 1.49, SD = 0.77$).

_Perception of parental mediation._ In order to measure children’s perceptions of parental mediation of commercials, the parental mediation questions used earlier in this study and by Buijzen and Valkenburg (2005) were adapted to the perspective of the child. In addition, fewer items were used to prevent fatigue on the part of the children. In all, two questions each measured children’s perception of active mediation, restrictive mediation, and affective mediation. Three questions measured their perception of the cognitive mediation their parents used. Response options ranged from “not at all” = 0 to “a lot” = 3 on a four-point Likert scale. For example, children were asked, “How often does a parent tell you that commercials make things look better than they really are?” and “How much of the time does a parent tell you to turn off the TV when you are watching commercials?” Previous research has demonstrated that children are able to give their
perceptions of adult mediation (Nathanson, 2001). Therefore, it was reasonable to assume
that children would be able to report how frequently parents mediate commercials as
well. The responses to each sets of items were averaged to create an active mediation
index ($\alpha = 0.71$, $M = 0.92$, $SD = 0.58$), a restrictive mediation index ($\alpha = 0.72$, $M = 1.24$,
$SD = 0.64$), a cognitive mediation index ($\alpha = 0.78$, $M = 0.81$, $SD = 0.58$), and an affective
mediation index ($\alpha = 0.80$, $M = 1.32$, $SD = 0.70$).

*Perception of consumer communication.* Similarly, it was beneficial to know how
children perceived the general consumer communication in their home to be. Therefore,
as was done with the parental mediation items, the consumer communication items used
in this study and previous work by Buijzen and Valkenburg (2005) were adapted in order
for children to report their perspective of the frequency of such interactions. The
completed measure consisted of 10 items with response options ranging from “not at all”
= 0 to “a lot” = 3 on a four-point Likert scale. Children responded to questions like
“How much does a parent tell you to think about what is good and bad about something
you want to buy?” and “How often much does a parent tell you what you can or can’t
buy?” Confirmatory factor analytic results indicated that factor structure implied in
Buijzen and Valkenburg (2005) was consistent with the data and the scale was 2
dimensional (Hunter & Gerbing, 1982). The responses to both sets of four items were
averaged to create a concept-orientation scale ($\alpha = 0.86$, $M = 1.10$, $SD = 0.57$) and a
socio-orientation scale ($\alpha = 0.81$, $M = 1.21$, $SD = 0.68$).

*Materialistic attitudes.* An adapted version of Goldberg, Gorn, Peracchio, and
Bamossy’s (2003) youth materialism scale was used to assess the materialistic attitudes
of the students in the study. This 6-item scale was used instead of the popular adult materialism scales (Belk, 1985; Richins & Dawson, 1992) because the language and contexts of the adult versions would have been unclear to children. Coefficient alpha for the original scale was .75. Also, scale validation indicated that convergent validity was assessed and supported in Goldberg et al. (2003). Although the scale was used originally with older children, it appears that the language was not be too difficult for those children who are younger. Children responded to statements such as, “How much do you want a job that pays a lot of money when you grow up?” on a four-point Likert scale (0 = not at all; 3 = a lot). Confirmatory factor analytic results indicated that factor structure implied in previous research was consistent with the data and the scale was unidimensional (Hunter & Gerbing, 1982). The responses to the six items were averaged to create a materialistic attitudes scale \( \alpha = 0.80, M = 1.16, \text{SD} = 0.53 \).

Viewing Session

*Stimulus Condition*

One week later, children returned to the church for the viewing session of the experiment. Prior to viewing the series of commercials, in an effort to prevent the children from guessing what the experiment was about, the study was framed to the children as a project looking at their reactions and opinions about television commercials. Specifically, the children were told, “We are here again to talk with you about television commercials. I want to show you a few commercials and ask you a few questions about them. Would you like to see the commercials and answer some questions? Okay, good. If you don’t want to answer a question, you don’t have to, and if you want to stop and go
back to the waiting room, just let me know. Okay? We should be done in about 10 minutes. By telling us what you really think you are helping us understand children better. Please pay attention because later we want to ask you some questions about what you see.”

After this introduction, the children began to view the commercials on a television and DVD provided by the church. Because reactions to commercials can be influenced by the programs they are embedded in, children viewed the commercials alone rather than with a television program (Goldberg & Gorn, 1987; Kamins, Marks & Skinner, 1991). In total, there were four commercials that the children viewed.

One commercial was for the game Mall Madness. The 15-second commercial starts off in cartoon-form with three cartoon girls saying that it is their “mission to nail every sale.” The commercial then switches to actual girls having fun while playing the game as the voiceover explains that the “sales keep moving and the ATM keeps giving.”

Another was a Hot Wheels commercial. The 30-second commercial starts by showing hot wheels racing around a track. Then, it shows an excited boy playing with the new fastest and longest track, the V-Drop. Next, the Flash Flood toy water gun by Hasbro was advertised with a 15-second commercial which showed a group of boys playing with the water guns as the voiceover explained that the new toy will allow you to “Wash away the competition.” Finally, Barbie Fairytopia Mermaidia was advertised with a 30-second commercial which started with an animated scene of Barbie mermaids swimming through water. Then, the commercial showed actual girls playing with the different mermaid Barbies and the Bubble Vanity that goes with them.
These commercials were chosen because they depicted children playing with a variety of different toys. In addition to the diversity in the products being advertised, there also was variety in the gender of the actors in the commercials. The commercials are split with two commercials including boys and two including girls. Given this range of depictions in product and gender, one can argue that these commercials are typical of what a child would see if he or she was viewing television. Furthermore, because there are young children in every commercial and they are taking part in activities that children could participate in, the commercials have increased realism for the child, which has been shown to increase learning (Pingree, 1978). The commercials also were shown in reverse order for half of the subjects to have the ability to control for potential order effects.

**Post-Viewing Measures**

After viewing each clip, the children filled out the perceived realism, desirability, and materialism scales. After answering questions after each of the four commercials, the children also answered a short set of questions which included a manipulation check, questions about their general attitudes toward commercials, and questions about their general materialistic attitudes (Appendix K). As in the pre-viewing child survey, an experimenter read the questions and answers aloud to the children in order to ensure that literacy did not influence their responses. Furthermore, like the items in the pre-viewing measures, all scales were pretested with the same group of children to increase clarity and understanding while decreasing fatigue on the part of the children.

**Perceived realism.** To measure how real the children viewed the commercials, a perceived realism scale was administered. The scale consisted of three items that the
participants rated on a four-point Likert scale from “Not at all” = 0 to “A lot” = 3. One example from this scale is “How much do you think kids in the commercial are just like kids in real life?” Although the items were adapted from other measures of realism to fit commercials rather than programs (Greenberg & Reeves, 1976; Ward, 1971; Wilson & Weiss, 1991), most previous measures were too long to administer to children after each commercial. The responses to the three items across all of the commercials were averaged to create a perceived realism index (α = 0.66, M = 2.10, SD = 0.31).

Character desirability. In order to measure the perceived character desirability of the kids in the commercials, children responded to a series of four questions like “How much do you like the kids in the commercial?” Response options ranged from “Not at all” = 0 to “A lot” = 3 on a four-point Likert scale. These items were similar to items used in Austin and Johnson (1997) which resulted in a Cronbach’s alpha of .82. This scale was altered so that the wording would be more understandable to children and shortened to keep their attention. The responses to the four items across all of the commercials were averaged to create a character desirability index (α = 0.90, M = 1.83, SD = 0.44).

Expectancies. To measure the perceived social expectations, an adapted version of the expectancy scale used in Austin and Johnson (1997) was used. The original scale was used with kids with a Cronbach’s alpha level of .85. The scale was adapted to fit the content of the commercials and the literacy level of the younger children. For example, children responded to three questions like “How cool do you think the toy would make you to other kids?” Response options range from “Not at all” = 0 to “A lot” = 3 on a
four-point Likert scale. The original scale has been used with children as young as eight-years-old. However, the alterations from words like “popular” to phrases like “people like you,” should make this scale appropriate to use with this sample. The responses to the three items across all of the commercials were averaged to create a social expectations index ($\alpha = 0.84, M = 1.64, SD = 0.47$).

**Materialism.** Finally, after each commercial, the children were asked “How much do you want the toy?” Again, response options ranged from “Not at all” = 0 to “A lot” = 3 a four-point Likert scale. The responses to this item added up across all of the commercials was averaged to create a materialism index ($\alpha = 0.85, M = 1.69, SD = 0.52$).

Then, after viewing all for commercials, the same materialism measure that was used in the pre-viewing survey portion of this study was used as a post-viewing measure of materialistic attitudes. As previously discussed, the scale is a six-item adapted from Goldberg, et al.’s (2003) youth materialism scale which was changed to switch the statements children were asked to agree with to questions that they can indicate how much they think something happens. Even though one could question the use of the same measure in the pre-viewing and the post-viewing portion of this study, because the two testing sessions were one week apart from each other, the concern that children would remember the scale and their responses was reduced. Confirmatory factor analytic results indicated that factor structure implied in previous research was consistent with the data and the scale was unidimensional (Hunter et al., 1982). The responses to the six items were averaged to create a materialistic attitudes scale ($\alpha = 0.76, M = 1.67, SD = 0.44$).
Although the self-report measure of materialism might have produced socially desirable responses this bias should have affected all of the children in the same manner.

*Attitudes toward commercials.* In order to determine if the children’s overall attitude toward commercials was altered by the parental mediation, a version of Rossiter’s (1977) seven-item children’s attitude toward TV commercials scale was used. Children responded to questions like “How much do commercials tell the truth,” and “How much do you like most television commercials?” The scale was adapted to change the response options that ranged from “I agree very much” to “I disagree very much,” to response options that range from “not at all” to “a lot” so that children were able to use the response options they had become comfortable with. Although the original scale was used with children as young as nine-years-old, these alterations made the scale easier for this sample to understand. In fact, Rossiter (1977) even suggests that with response option alterations, this scale could be used with children as young as kindergarten. In fact, confirmatory factor analytic results indicated that factor structure implied in previous research was consistent with the data and the scale was unidimensional (Hunter et al., 1982). The responses to the seven items were averaged to create an attitudes toward commercial scale ($\alpha = 0.87, M = 1.76, SD = 0.53$).

*Manipulation check.* At the end of this survey, the children were asked a series of questions to determine if over the last week they remembered if their parents had talked with them about commercials in general, the realism of the portrayals in commercials, or the desirability of the portrayals. This helped determine whether the parent training was successful.
**Debriefing.**

To ensure that the no mediation condition was not affected by the materialistic attitudes conveyed in the clip, children in all conditions were told to think how advertisements do not show life like it really is and that the people in them are not that cool. Furthermore, given the evidence that limiting overall television exposure can reduce the unintended effects of advertising (Robinson et al., 2001), children also were told that they should try to spend time doing other activities besides watching television so that they can have fun doing lots of different things. Parents were told that the purpose of the study was to explain how active mediation could help them reduce the amount of materialistic attitudes they see in their child when they picked their child up from this second meeting. In addition, parents were told that after the completion of the study, a question and answer session on media and children would take place with the researcher at the church.
Manipulation Check

Chi-squares were computed to determine whether children in the mediation conditions remembered their parents discussing commercials with them throughout the previous week. First, chi-square analysis revealed that there were significant differences between the conditions, \( \chi^2 (2) = 37.50, p < .05 \). That is, 87.5% of the children in the cognitive mediation condition and 87.5% of the affective mediation condition remembered their parents discussing commercials. However, only 25% of the children in the no mediation condition reported that their parents discussed commercials with them in the previous week.

Then, to assess whether children in each of the specific mediation conditions remembered the specific content of these discussions, a series of chi-squares were conducted. First, to test the cognitive manipulation, a significant chi-square showed that 87.5% of children in the realism mediation condition remembered their parents discussing how commercials do not show things the way they really work while only 34% of children in the desirability condition reported the same, \( \chi^2 (2) = 41.40, p < .05 \). Analyses also revealed significant differences between the groups when they were asked
to remember if their parents discussed how commercials do not tell the truth, $X^2 (2) = 44.44$, $p<.05$. Specifically, 90.6% of the children in the realism mediation condition and 28.1% of the desirability mediation condition reported recalling such conversations.

Likewise, to test the affective manipulations, a significant chi-square revealed that 31.3% of the children in the realism mediation condition and 84.4% of the desirability mediation condition reported remembering their parents discuss how the toys in commercials would not make people like them, $X^2 (2) = 39.17$, $p<.05$. One final chi-square showed that there were significant differences between conditions on if children remembered parents discussing how the toys in commercials were not cool, $X^2 (2) = 38.35$, $p<.05$. Specifically, 28.1% of the children in the realism mediation condition and 87.5% of the desirability mediation condition recalled these discussions.

Analysis of Research Questions

Research question one asked how parents mediate advertising content and discuss consumption, and how does it compare to children’s perceptions of parental mediation and discussion. In order to test these questions, correlations and differences between the parent-reported and child-reported measures were computed. To first begin determining how parents report mediating advertising, means and standard deviations of each mediation item are displayed in Table 1. Overall, active mediation styles ($M = 2.00$, $SD = 0.49$) were reported to occur more frequently that restrictive mediation styles ($M = 1.76$, $SD = 0.57$), $t (95) = 3.39$, $p<.05$. The most frequently reported active mediation message was telling children that the purpose of advertising is to sell products ($M = 2.04$, $SD = 0.61$). This was closely followed by reports of parents discussing that the products are not
of good quality (M = 2.00, SD = 0.63). The most commonly reported restrictive mediation messages were telling children that they should not watch commercial networks because they broadcast too many commercials (M = 1.85, SD = 0.74) and that they should not watch television advertising at all (M = 1.84, SD = 0.76).

When assessing how frequently parents reported using specific types of active mediation, it was found that there were no differences in parents use of mediation messages targeting realism (M = 1.57, SD = 0.67) and the use of those messages targeting character desirability, (M = 1.57, SD = 0.63), t(95) = -0.036, p>.05. The most frequent comment made was a realism mediation strategy which told children that tv commercials only point out the good things in a product (M = 1.72, SD = 0.78).

Next, it was found that parents report a higher level of socio-oriented consumer communication (M = 1.68, SD = 0.59) than concept-oriented consumer communication (M = 1.41, SD = 0.89), t (95) = -2.87, p<.05. Not surprisingly, then, the most frequent form of consumer communication was parents telling their children not to argue with them when they say no to a product request (M = 1.73, SD = 0.80). Of the concept-oriented messages, the most frequently reported message was parents explaining that the child can help make purchasing decisions when the product is for the child (M = 1.57, SD = 0.89). Table 2 depicts the means and standard deviations of each item for the parental reports of consumer communication.

When looking at children’s reports of mediation and consumer communication, there are some differences to be noted. First, children reported their parents using more restrictive mediation (M = 1.24, SD = 0.64) than active mediation (M = 0.92, SD = 0.58),
t (95) = 3.70, p<.05. Table 3 displays the means and standard deviations of each of the mediation items. Specifically, children most frequently report being told to turn off the tv when they are watching commercials (M = 1.31, SD = 0.68). Children also report their parents using more messages which target character desirability (M = 1.32, SD = 0.70) than messages targeting realism (M = 0.81, SD = 0.58), t(95) = -5.23, p<.05. The most common message aimed at character desirability children reported hearing was that the people in commercials were not having fun because of the product (M = 1.38, SD = 0.81).

In addition to these messages which specifically discussed commercials, children’s perceptions of consumer communication were measured. The means and standard deviations of each item for the children’s reports of consumer communication are depicted in Table 4. Unlike the parental reports, children did not report a significant difference in their parent’s use of concept-oriented communication (M = 1.10, SD = 0.65) or socio-orientation communication, (M = 1.21, SD = 0.68), t(95) = -1.14, p>.05. Similar to parental reports of consumer communication, the most common message children reported hearing was that their parents say not to argue when they say that they will not buy something (M = 1.33, SD = 0.89).

Although this descriptive information is useful to determine what parents actually discuss and what types of content children perceive hearing, it is also important to determine what, if any, significant differences between the parent and child reported communication exist. In terms of the general reports of active mediation, parents (M = 2.00, SD = 0.49) reported higher levels of use than children (M = 1.31, SD = 0.68)
reported receiving, t (95) = 16.09, p<.05. Likewise, parents (M = 1.76, SD = 0.57) reported greater use of restrictive mediation than children (M = 1.24, SD = 0.64) reported receiving, t (95) = 7.03, p<.05. When looking at the specific forms of active mediation, the same patterns were found. Parents (M = 1.57, SD = 0.67) reported using realism mediation messages more than children (M = 0.81, SD = 0.58) reported receiving them, t (95) = 9.66, p<.05. In addition, parents (M = 1.57, SD = 0.63) reported using desirability mediation messages more than children (M = 1.32, SD = 0.70) reported hearing them, t (95) = 3.14, p<.05.

When looking at the general forms of consumer communication, children also reported discussing consumer issues less than their parents. First, children (M = 1.10, SD = 0.65) reported lower levels of concept-oriented consumer communication than parents (M = 1.41, SD = 0.89), t (95) = 4.37, p<.05. Also, children (M = 1.21, SD = 0.68) reported lower levels of socio-oriented consumer communication than parents (M = 1.68, SD = 0.59), t (95) = 6.17, p<.05. Taken together, these comparisons indicate that parents simply report more advertising mediation and consumer communication than children. These results are similar to the results of other mediation studies which have looked at both parent and child reports (Fujioka & Austin, 2003; Nathanson, 2001).

Analysis of Potential Covariates

After understanding how parents mediate advertising and how children perceive these mediations, it is important to test the effectiveness of these messages. In order to understand the impact the mediation manipulations had on materialistic attitudes, social expectations, and desirability, potential covariates were analyzed to determine what
controls should be used in the subsequent analyses. Variables that were not of theoretical interest but are related to the predictor variables need to be controlled so that they do not serve as sources of spuriousness.

First, a variety of demographic variables were tested. Since previous research indicated gender, age, annual household income, television exposure, commercial exposure, and consumer communication impact mediation results, the variables were analyzed as potential covariates. Parent and child reports of the consumer communication variables were tested while children’s reports of age, gender, television exposure, and commercial exposure were used. A majority of the variables did not need to be used as controls. First, gender was analyzed with respect to the dependent variables. There were no significant differences between males (M = 2.08, SD = 0.32) and females (M = 2.12, SD = 0.31) on perceptions of realism, t (92) = -0.544, p>.05. Nor did boys (M = 1.89, SD = 0.45) and girls (M = 1.80, SD = 0.44) differ significantly on their perceptions of character desirability (t (92) = 0.945, p>.05). Likewise, boys (M = 1.60, SD = 0.46) did not differ from girls (M = 1.65, SD = 0.49) on their reports of social expectations, t (92) = -0.460, p>.05. Finally, they also did not differ on their materialistic attitudes, t (92) = -0.058, p>.05, M = 1.67 for both groups.

Next, age and annual household income were tested. There was no relationship between the age of the child and their perceptions of realism (r (96) = -.096, p>.05), character desirability (r (96) = -.139, p>.05), social expectations (r (96) = -.041, p>.05), or materialistic attitudes (r (96) = -.050, p>.05). Furthermore, there was no relationship between the annual household income and the children’s perceptions of realism (r (96) =
character desirability (r (96) = -.151, p>.05), social expectations (r (96) = -.028, p>.05), or materialistic attitudes (r (96) = -.015, p>.05). Therefore, age and household income were not used as controls.

In addition to the demographic variables, television exposure and perceptions of consumer communication were tested. There was no relationship between television exposure and children’s perceptions of realism (r (96) = -.033, p>.05), character desirability (r (96) = -.161, p>.05), social expectations (r (96) = -.157, p>.05), or materialistic attitudes (r (96) = .087, p>.05). Nor was there a relationship between parental reports of socio-oriented consumer communication and children’s perceptions of realism (r (96) = .067, p>.05), character desirability (r (96) = -.004, p>.05), social expectations (r (96) = .032, p>.05), or materialistic attitudes (r (96) = .161, p>.05). Similarly, there was no relationship between children’s reports of socio-oriented consumer communication and their perceptions of realism (r (96) = -.016, p>.05), character desirability (r (96) = -.138, p>.05), social expectations (r (96) = .041, p>.05), or materialistic attitudes (r (96) = -.020, p>.05).

Results of the tests of concept-oriented consumer communication were not uniform. First, parental reports of this form of communication were not related to children’s perceptions of realism (r (96) = -0.130, p>.05), character desirability (r (96) = -0.003, p>.05), or social expectations (r (96) = 0.069, p>.05). Children’s reports mimicked these results. They were not related to perceptions of realism (r (96) = -0.018, p>.05), character desirability (r (96) = 0.037, p>.05), or social expectations (r (96) = -0.043, p>.05).
On the other hand, parental reports of concept-oriented consumer communication were significantly related to materialistic attitudes ($r (96) = -.22, p<.05$). Although there were no significant differences between the no mediation group ($M = 1.46, SD = 0.80$), realism mediation group ($M = 1.54, SD = 0.74$), and desirability mediation group ($M = 1.24, SD = 0.64$) on their level of parent-reported concept-oriented consumer communication ($F (2, 93) = 1.517, p>.05$), parental reports of this form of consumer communication were used as a covariate to increase the precision of the comparisons between the groups.

In addition, child reports of concept-oriented consumer communication were tested. These reports also were significantly related to materialistic attitudes ($r (96) = -.22, p<.05$). Children in the no mediation group ($M = 1.11, SD = 0.61$), realism mediation group ($M = 1.14, SD = 0.55$), and desirability mediation group ($M = 1.05, SD = 0.57$) did not differ significantly on the levels of this form of communication. Although, like the parental reports, children’s reports of concept-oriented consumer communication did not vary significantly across conditions ($F (2, 93) = 0.222, p>.05$), this variable also will be controlled for in subsequent analyses to ensure a more precise estimate of the impact of the experimental conditions.

In addition, children’s commercial exposure was correlated to their materialistic attitudes, $r (96) = .26, p<.05$. Despite the fact that there were no significant differences on commercial exposure between the three conditions ($F (2, 93) = 1.947, p>.05$), the children’s advertising exposure was included as a control to ensure children’s reports of advertising mediation were not confounded by their exposure to such content. Finally, as
expected children’s materialistic attitudes at time one were significantly related to their materialistic attitudes at time two, r (96) = .34, p < .05. Although there were no differences between the conditions on children’s baseline materialistic attitudes (F (2, 93) = 2.376, p > .05), they were controlled for to avoid confounding the results.

Given these results, different tests required different controls. When testing the impact of mediation on materialistic attitudes, parent and child reports of concept-oriented consumer communication, baseline materialistic attitudes, and children’s advertising exposure were controlled for. All other tests controlled for children’s advertising exposure only.

Analysis of Hypotheses

In order to test the hypotheses, planned comparisons were used to determine if the mediation groups differed on their perceptions of realism, character desirability, social expectations, and materialistic attitudes. Planned comparisons were used to help reduce the risk of increasing familywise error. As Keppel (1991) recommends, because planned comparisons are theoretically-driven, no special correction was used for these hypothesis tests. Some may be concerned about the correlations between the variables. However, as Table 6 shows, the correlations were relatively weak to moderate in strength. Therefore, the variables do seem to be measuring different concepts. Table 7 shows the adjusted means for each of the mediation conditions on the dependent variable.

The first hypothesis looked to test if the realism mediation or desirability mediation manipulations helped reduce the materialistic attitudes of children compared to children not receiving any mediation. It was found that children in the realism active
mediation group (adjusted M = 1.76) did not differ from children in the no mediation group (adjusted M = 1.67) on their post-viewing materialistic attitudes, F (1, 89) = 0.004, p>.05. On the other hand, as predicted, younger children in the desirability mediation condition (adjusted M = 1.48) exhibited lower post-viewing materialistic attitudes than children in the no mediation condition (adjusted M = 1.76), F (1, 89) = 8.381, p<.05, η² = .09.

In order to test the theoretical explanations for these predictions, hypothesis two looked to test which mediation strategies could help alter the perceptions of social expectations. It was predicted that children in the realism active mediation condition would not report decreased perceptions of social expectations when compared to children in the no mediation control condition. In fact, younger children in the realism mediation condition (adjusted M = 1.74) did not differ on their perceptions of social expectations from children in the no mediation condition (adjusted M = 1.75), F (1, 92) = 0.005, p>.05. What is more, as predicted, younger children in the desirability mediation condition (adjusted M = 1.42) exhibited lower perceived social expectations than children in the no mediation condition (adjusted M = 1.75), F (1, 92) = 8.084, p<.05, η² = .08.

Next, in order to fully determine if mediation strategies could change how desirable characters are perceived, hypothesis three was tested. Hypothesis three predicted that children in the realism active mediation condition and children in the no mediation conditions would not differ in their perceptions of character desirability. Indeed, this was the case. Younger children in the realism condition (adjusted M = 1.95) did not differ from children in the no mediation condition (adjusted M = 1.91) on their
perceptions of character desirability, F (1, 92) = 0.165, p>.05. In addition, as predicted, children in the desirability mediation condition (adjusted M = 1.62) saw the portrayals as less desirable than children in the no mediation condition (adjusted M = 1.91), F (1, 92) = 6.672, p<.05, \( \eta^2 = .07 \).

Given what has been found with relation to how parents may mediate advertising to help reduce materialistic attitudes, it is also important to discern what impact general consumer communication has on materialistic attitudes. Therefore, the second research question sought to discover how general consumer communication was related to children’s attitude toward commercials and materialistic attitudes. After controlling for television exposure and commercial exposure, partial correlation analyses revealed that of the two dimensions of consumer communication, higher levels of concept-oriented communication related to lower levels of materialistic attitudes in children. First, parent-reported concept-oriented communication was negatively related to children’s materialistic attitudes, \( r (92) = -.249, p<.05 \). In addition, child-reported concept-oriented communication was negatively related to children’s materialistic attitudes, \( r (92) = -.231, p<.05 \). On the other hand, socio-oriented communication was not related to children’s materialistic attitudes.
CHAPTER 5

DISCUSSION

The main focus of this study was to examine parents’ use of advertising mediation and consumer communication in an effort to determine how parents might help mitigate the negative effects of advertising. To do so, parent and child reports of active mediation, restrictive mediation, cognitive active mediation, and affective active mediation were taken along with their reports of concept- and socio-oriented consumer communication. Then, parents were trained to deliver mediation messages in the home. The effectiveness of these manipulations were examined to determine if active mediation strategies designed to change the perceptions of realism or character desirability could reduce post-viewing materialistic attitudes in young children.

Overall, the results of this study provide mediation research with answers to several questions. First, researchers now have a better description of how parents communicate with their children about advertising and consumer behaviors. There is also a better description of how children perceive these interactions. Second, theoretically-driven strategies were tested with younger children to determine what specifically parents should say to help mitigate the unintended effects of advertising.
Finally, this study was one of the first mediation studies to train parents to deliver the mediation in the home.

Reports of Advertising Mediation and Consumer Communication

One of the goals of this study was to determine how parents mediate advertising content and what types of consumer communication they use. Generally, parents reported using active mediation strategies more frequently than they do restrictive mediation strategies. This implies that parents feel they talk about commercials with their children more than they simply tell them to stop watching the advertising. This being the case, helping parents understand what they should say should be a priority. This is partially because there were no differences in the amount parents reported using realism versus desirability mediation messages.

This is encouraging that parents use both forms of mediation because it could indicate that they are aware of the different ways advertising could influence their children. However, it is not clear why parents hold this variety of conversations. Research has shown that parents are concerned about the impact of advertising on children (Buijzen & Valkenburg, 2005; Grossbart & Crosby, 1984). However, it is unclear if this concern is what motivates discussion. Although it could be that they are aware of why advertising impacts children, it could just as easily be that parents are unaware of what they should say, so they try to cover their bases by discussing a variety of topics. Future research should consider systematically testing this explicitly to determine which argument is supported. Currently, why parents choose to discuss advertising is unknown. This could impact the ways they choose to mediate advertising. Moreover, by making
parents more aware of the ways advertising impacts their children and why children are more vulnerable to advertising, they would be better able to understand what types of conversations would be the most beneficial.

In addition, parents report using more socio-oriented consumer communication than concept-oriented consumer communication. In other words, these parents stress the harmony in a family more so than negotiation. This is interesting because these parents report more active mediation which encourages discussion but more socio-oriented consumer communication which encourages conformity. Since the contradiction between these forms of communication were found here by using similar measurements to those in previous studies, it is unlikely that this relationship is a measurement issue.

However, it is important to consider the unique features of this sample. This sample was drawn from churches. Although the church does not stress conformity, it often emphasizes respecting and obeying authority (Mahoney, 2005). That being said, the socio-oriented consumer communication items look at how parents stress their authority on consumer issues. Children who are taught to respect their parents’ decisions and keep the harmony in a family in other areas of their life, like in church, would be likely to hear the same messages when parents discuss consumer behaviors. This could mean that although these parents are open to discussing things with their children, they still emphasize the fact that the parents are the authority figures of the household.

Along with understanding how parents mediate advertising and discuss consumer behaviors, this study sought to understand how children perceive these interactions. The children’s reports of advertising mediation and consumer communication are slightly
different than the parental reports. First, children reported their parents using more restrictive mediation than active mediation. It is not necessarily surprising that children remember things their parents have told them not to do more than conversations. This is largely because parents would be more likely to repeat the rule in order for the child to retain it since public perception and research agrees that children are more likely to remember something which has been repeated than something that occurs only once (Powell & Thomson, 1996).

When looking more closely at the types of active mediation, children reported their parents using more messages that were targeted at character desirability than the realism of the portrayals. This suggests that there are certain messages which children retain better than others. There are a variety of explanations for this difference. Assuming parents deliver messages in the manner they reported, it appears that children may remember the desirability messages more than those which focus on realism. This could be because the realism messages are not as interesting to them. Since these messages point out things that children do not have the cognitive ability to grasp, they may be ignored or not processed. As discussed earlier, because children do not understand the concept of reality (Wright et al., 1994), mediation strategies aimed at realism would be akin to children not receiving any mediation. Therefore, it could be argued that when parents use realism strategies children simply do not remember the conversations because they are unable to process the messages.

On the other hand, it might not be that children do not remember the realism messages, but instead, they simply remember the desirability conversations more. In
other words, kids understand what is cool and desirable, but realism is still a concept that evades them. In addition, it could be that children are more likely to remember messages which deal with desirability because they are more similar to conversations they have with their parents about other topics involving peer pressure. For example, parents often tell their children that they should not do something just because one of their friends is doing it. Therefore, it may be that the familiarity of the concepts in the message are easily applied to commercials. The question then becomes if there something that could be done to help children remember these cognitive messages more or because they are beyond children’s cognitive ability, should parents forgo their use.

In addition to the reports of how parents mediate advertising, children also were asked about how their parents discussed general consumer issues with them. Children did not report any significant differences in their parents’ use of concept-oriented consumer communication or socio-oriented consumer communication. This becomes interesting because parents actually reported using socio-oriented consumer communication more frequently. In all, children report more restriction and little communication about commercials or consumer issues. Put another way, children are less aware of conversations but more aware of rules. Since research has shown that the conversations can be effective at mitigating the negative effects of advertising, it is important for researchers to consider how to make children retain more of the information parents discuss in spite of the cognitive limitations they face.

Overall, the results of this study show that there is a moderate positive correlation between parent and child reports of advertising mediation and consumer communication.
Therefore, even though they disagreed on the amount of communication that occurred,
generally, when parents reported more mediation and consumer communication, the
children also reported noticing more mediation and consumer communication. In
addition, parents reported higher levels of mediation and consumer communication than
children. This relationship is similar to the relationship between parent and child reports
of mediation which has been found in other research (Fujioka et al., 2003; Nathanson,
2001).

Recent research has suggested that these differences can be accounted for by
children’s lack of awareness of the mediation their parents are administering (Rozendaal
& Buijzen, 2007) rather than a social desirability bias on the part of the parents (Fujioka
& Austin, 2003). Rozendaal and Buijzen (2007) found that parent-reported mediation
was a moderate predictor of child-reported mediation. This lends support to the argument
that children may recognize and remember only some of the mediation parents attempt.
As discussed earlier, due to their limited processing capacity, children can not retain all
of the information parents discuss. Therefore, it is likely that children forget some of the
mediation.

This being the case, parents may need to be encouraged to hold many
conversations with their children rather than just discussing commercials once in a while.
Encouraging a continuous dialogue while watching television could lead children to
remember more of these conversations. In addition, when testing mediation strategies,
researchers should focus on making sure children have the cognitive ability to process the
message. Likewise, parents should make sure the mediation is at the cognitive level of the
child by continuing to become more informed of appropriate cognitive and social expectations for the age of their child. That way, children have a better chance of understanding the whole message and, therefore, remembering it.

That being said, future research should begin to determine ways that parents can not only mediate advertising with their children, but also how to make sure children are aware of the mediation. That is, children need to retain how their parents feel about the commercials, products, or characters in order to be influenced by the interaction. Some may argue that it is better that kids are not so aware of their parents’ attempts to influence them. However, there are a few arguments to counter this. First, Rozendaal and Buijzen (2007) found that children’s awareness of mediation is notable because their perception is an important predictor to the success of the interventions. Secondly, this problem of awareness could depend on the age of the child. Although older children may rebel against such information, younger children would not be as likely to do so. Finally, in addition, parent discussion about consumer issues should not and might not be thought of as an attempt to influence any more so than any other type of parent-child communication. By understanding how parents actually deal with this particular area of children’s socialization, researchers are then able to determine what the potential effects of these messages could be and what, if any, changes parents should make to help their child’s development.

The Impact of Consumer Communication on Materialistic Attitudes

In addition, significant negative correlations were found between concept-oriented consumer communication and materialistic attitudes in young children. This
indicates that those parents who openly discussed consumer behaviors were less likely to have more materialistic children than those parents who did not discuss consumer behaviors as much. Whether these types of general consumer communication messages could be used by parents as ways to decrease materialism would need to be empirically tested. Still, these results support the notion that the more you discuss advertising or consumption, the less materialistic attitudes develop in young children.

Although the impact of family communication patterns on younger children’s materialistic attitudes had not been studied previously, research with older children support these findings. Older children and adolescents who come from a more concept-oriented family have reported lower materialistic attitudes, fewer parent-child conflicts, and increased consumer knowledge (Buijzen & Valkenburg, 2005; Moore & Moschis, 1981). Therefore, it appears that these results hold across a child’s development. This being the case, parents should be encouraged to speak openly with their child about consumer-related issues. Concept-oriented consumer communication could be effective at mitigating the unintended effects from advertising because it encourages children to be more critical and consider multiple points of view (Moschis & Churchill, 1978; Moschis & Moore, 1982).

On the other hand, the results of this study show no relationship between socio-oriented consumer communication and materialistic attitudes. Most of the previous research compares the two types of consumer communication. The results, as discussed above, indicate that concept-oriented communication is more beneficial to children’s ability to defend against the unintended effects of advertising (Moschis, 1985). However,
they do not discuss the relative contribution of socio-oriented consumer communication
to these effects. Only a few studies have indicated that socio-oriented communication
could be detrimental. Moschis (1987) explains that socio-oriented communication could
lead adolescents to become more vulnerable to external sources of influence like
television. This could be because adolescents are at an age where conforming to their
parents is not appealing. Therefore, it is important that researchers continue to test the
influence of socio-oriented communication on children to determine if the difference in
these findings is related to developmental stages.

The Effectiveness of Parent Training

Although it was important to determine what types of conversations parents report
having and those children perceive to have, the major goal of this study was to test
parent-delivered mediation techniques to determine methods that might help reduce
younger children’s materialistic attitudes. As discussed previously, people process
advertising through cognitive and affective routes. Therefore, one method of mitigating
the negative effects would be to alter one of these ways a child processes commercials.
The mediation techniques parents delivered in this study were designed to do so. To alter
the cognitive route, parents were trained to deliver mediation messages which targeted
the realism of the portrayals in the commercials. Alternatively, to alter children’s
affective processing, parents were trained to deliver mediation messages which targeted
the perception of character desirability in the commercials.

Manipulation checks revealed that the parent training was effective at getting the
parents to deliver the messages. First, children in the mediation conditions remember
their parents discussing commercials with them in the previous week. Most of the children in the no mediation condition did not report their parents discussing advertising. Parents followed through and had the conversations required for the manipulation. What is more, the parents were faithful to the training in the topics they discussed. Children in the realism condition reported remembering their parents discuss how commercials do not always tell the truth or do not always show things the way they work. Likewise, children in the desirability condition remembered their parents discussing that the toys in the commercials are not cool or would not make people like them.

Overall, this method of training actually worked regardless if the discussions themselves were effective at mitigating the negative effects of advertising. The combination of face-to-face meetings with examples and handouts allowed parents to execute the mediation strategies as instructed. This is encouraging because much of the parent training literature details extensive, multi-session training programs (Burnett, 1988; Graziano & Diament, 1992; Patterson & Narrett, 1990). Although these programs usually deal with behavioral problems, which could be more complicated, the general structure of the sessions in this study provide evidence that shorter sessions can be effective ways to inform parents. In fact, due to the limited time doctors and patients interact, medical research has supported these smaller scale training sessions even if social sciences have used more intensive programs (Glascoe et al., 1998). Therefore, this study can be used as an example of how researchers interested in training parents may be able to use programs that do not require parents to spend as much time in training sessions as was previously thought.
The Effectiveness of Specific Mediation Strategies

Although the parent training was able to educate parents to deliver the mediation, the conversations which focused on realism did not alter the young children’s processing of the commercials. First, those children did not differ from the no mediation group on their perceptions of the social expectations the products could provide. These children still thought that the toys the commercials advertised would provide them with positive social rewards. In addition, the children in the realism group did not differ from the no mediation group on their post-viewing materialistic attitudes. Without mediation, or with mediation that is not effective, children are more likely to use commercials as sources of information. In other words, the children in the realism mediation condition still used the advertisements to provide them with information on what to expect from society should they own certain products. These findings support previous research and theory which indicates children use media to learn vicariously (Bandura, 1986).

Since the unintended effects of the commercials were not mitigated by the realism mediation, it could be argued that the parent training was simply not effective for the cognitive training group. However, children in the realism mediation conditions still reported remembering that their parents had discussed the realism of commercials with them. This finding also lends support to the argument made earlier that it is more likely children remember desirability mediation messages more than realism messages not that they do not remember the realism messages at all.

In this study, that was not the case. Children remembered both types of conversations. This could be because children were prompted to think about the specific
conversations they had with their parents recently rather than general measures of conversations. Other research on children’s recall of information, suggests that although children do remember things they are told or shown, they may not be able to bring them to the front of their mind without prompting or cues. Therefore, since this portion of the study asked them to recall specific conversations, it made the connection for the child, and they were able to remember the discussions with greater ease.

This line of reasoning brings about another point. Given children’s lack of cognitive development, it could be that they need more than one week of their parents discussing the realism of commercials in order for this type of intervention to be effective. Do children need more time or in depth conversations to grasp concepts such as realism? Future studies should consider the research put forth in education which looks at scaffolding children’s learning environments (Vygotsky, 1933/1978). It could be that there are ways to help younger children process cognitive mediation strategies.

Although only a few studies have tested mediation strategies with children younger than seven-years-old, this study supports previous research which has found similar results when using cognitive mediation strategies (Chakroff & Smith, 2006). Overall, as predicted, these young children were not helped by the cognitive interventions. Given the vast literature on child development, it would appear that children do not comprehend discussions which revolve around critical viewing skills like realism. These messages simply did not help alter children’s perceptions of the advertising.
However, younger children did benefit from the affective messages. First, children in the desirability condition reported decreased perceptions of character desirability. Put another way, parents who discussed how the characters in commercials were not that popular, fun, or cool, in fact, had children who found them less desirable than children who did not have such conversations. Children use characters on television as models for behavior when they are attracted to them. As a result, these children also reported decreased perceptions of positive social expectations. Since children use social expectations as a way to determine how to think, feel, and act, a mediation technique which can reduce the desirability of a character and consequently the positive expectancies could be useful for a variety of applications. If a character is not viewed as desirable, children may not choose to model their actions after this character. For example, given that many of the characters on television have unhealthy eating habits, children who do not find these characters desirable would not be likely to model these habits in their own life.

This extends to the attitudes children have about consumption in general. Children in the desirability group reported lower post-viewing materialistic attitudes compared to children in the no mediation condition. By altering how children viewed the characters, this mediation strategy was able to mitigate the unintended effects of the commercials.

Why was the desirability mediation effective when the realism mediation was not? It could be that the desirability mediation messages were easier for parents to integrate into their everyday conversations and viewing experiences. If that is the case, then the children may have been more likely to internalize those conversations because
they more closely mirrored other conversations they have had with their parents. Future research should consider interviewing parents after they have been trained and have executed the mediation in the home to determine what mediation strategies parents felt most comfortable using and why.

Implications

Previous mediation research which attempted to reduce the negative effects of advertising by impacting the affective processing route found that younger children did not benefit from such an intervention. However, when looking closely at the manipulation of this study and previous research, there is a distinct difference. First, Buijzen (2007) mediated children’s feelings about the commercials or products. On the other hand, this study used a mediation strategy which altered children’s perceptions of the characters in the commercials.

Since it is the behavior of these characters which children use as models, mediation strategies which target the characters rather than the commercial itself may be more effective. In fact, previous mediation research had had success with this type of strategy when attempting to reduce the negative impact of television violence (Chakroff & Smith, 2006; Nathanson & Cantor, 2000). In the future, researchers should make the theoretical distinction between mediation strategies which attempt to alter the perceptions of the characters versus those that attempt to alter the perceptions of the programming itself. Although both strategies may be effective in certain situations, to move this literature forward, researchers need to systematically test the differences between the two styles of mediation.
To date, research had yet to provide mediation techniques that have shown to be effective with these younger children. Therefore, this is a first step in determining how these more vulnerable children can be helped. Although they are unable to grasp the messages designed to influence their cognitive processing, it appears that younger children can still be helped by messages aimed at their affective processing.

It is also important to consider the theoretical implications of these findings. First, the message interpretation process model does not appear to hold up when tested with this sample of younger children. In this study, these younger children did not use cognitive processing to interpret the advertisements. That being said, other forms of cognitive strategies should be tested. It could be that children do not process commercials through the lens of realism, but they may look for arguments that use justification or reasoning which would be processed through the cognitive route. However, the findings from the desirability condition indicate that when researchers look at children’s reactions to advertising, character desirability is an important variable. This also supports arguments made in social cognitive theory that claim attractive characters are more likely to serve as models for behavior (Bandura, 1986).

Given this, more systematic tests of the desirability prompts that were used in this study could help refine which messages are the most effective at getting children to think about advertising differently. Much of the previous work in mediation has used multiple mediation messages over the course of the viewing experience (e.g., Chakroff & Smith, 2006; Coder-Bolz, 1980; Desmond et al., 1985; Nathanson & Cantor, 2000). In order for researchers to know which strategies are the most effective, these messages need to be
singled out and tested on their own. In addition, since ease of implementation of these messages is of concern, researchers also should consider holding focus groups with parents to determine what strategies make sense to use with children in the home.

Seeing as parents think differently about different types of content on television, researchers should continue to consider the specific content when studying mediation techniques. As mentioned earlier, it would be useful for researchers to know why parents mediate advertising. By understanding their motivations, researchers would be able to refine parent training sessions.

This was, in fact, the major contribution of this study. Parents delivered the mediation in their homes after brief training sessions rather than having an experimenter deliver the message. With just one meeting, parents were able to successfully give mediation messages to their children. In doing so, this study supports previous research which had only suggested that parents themselves could be effective mediators.

One of the critiques of mediation research is that parents are not always with their children when they are exposed to media content. In spite of this, most of the tests of mediation have experimenters delivering the mediation immediately before, during, or immediately after the viewing content. Therefore, previous research has provided support for the immediate effectiveness of mediation. However, as the criticism explains, parents can not always be present to mediate their children’s viewing experience. Therefore, research needed to determine if messages delivered at times other than the immediate viewing situation could still mitigate the negative effects of exposure.
These mediation messages were not delivered to the children as they viewed the commercials. Rather, parents discussed commercials with their children for a week, and then children were systematically exposed to a series of commercials in a viewing session with the experimenter. Therefore, the results of this study indicate that when parents have discussions with their children about commercials, children use that information even when they are not with their parents. The effects of mediation are not only immediate, but they can have a long-term impact on the way a child processes commercials. Given this encouraging news, researchers need to continue to use this method to test the long-term effectiveness of mediation strategies at mitigating the negative effects of viewing.

Limitations and Future Directions

One limitation of this study is that the sample was skewed toward a high socio-economic status. Many of the parents who participated were stay-at-home parents. This means most of the parents had more time to commit to the training and implementation of the mediation strategies than other parents who work outside of the home might have to give. In addition, the fact that this sample was collected in churches could have some implications.

For example, these children might be inclined to listen to their parents more so than children who have not had a strong religious upbringing. This could be due to the fact that some teachings of the church emphasis listening to authority figures. The question still remains whether other samples would exhibit the same relationships. However, since this study was concerned primarily with testing the process of training parents to deliver mediation, the sample was not a large concern for this study. However,
future research should attempt to test this process with other, more diverse samples to
determine how effective such training is with children and parents of different
circumstances.

Although this study did have parents deliver the mediation in their homes, the
children still viewed the subsequent commercials in their church with other children.
Also, many of the parents did not return the parent logs which detailed how the
conversations about commercials occurred. Therefore, it is impossible to determine
exactly what these parents said to their children. So, future research should consider
alternative methods of data collection. For example, once parents have been trained,
researchers could visit families in the home to have parents deliver the mediation while
the child viewed commercials in a more natural setting. Researchers could then observe
the actual conversations and reactions rather than relying on parents’ reports.

It should be noted that these particular mediation messages were only tested with
younger children. Given that children’s cognitive abilities continue to develop, it would
be predicted that older children would benefit from the desirability mediation as well as
the realism mediation. However, future work should continue to focus on a variety of
different developmental levels in order to assure that parents use mediation techniques
that are appropriate for their child’s age.

Generally, the mediation of advertising content is a genre which is only beginning
to receive attention in the literature. However, given the increasing concern over the
unintended effects of advertising, researchers should continue to pursue this content area.
Several recommendations stem from this study. First, researchers should continue to test
mediation strategies which are theoretically-driven. Also, when testing mediation strategies, researchers should look at those strategies aimed at characters versus those aimed at the commercial itself. In doing so, advertising mediation research can begin to determine what the most effective mediation techniques are. Further, continuing to find ways to reach even the youngest children is an area that needs further development. This includes testing the relative contributions of cognitive and affective processing of advertising to determine if the message interpretation process model holds for younger children. In addition, since parent training was shown to be effective with this particular sample, future research should look at ways to refined and empirically test these training sessions. Finally, advertising does not always have negative intentions and effects. Mediation research should consider ways that parents can help children of different developmental levels gather useful information from the advertising that they see as well as help mitigate the unintended, negative effects.
APPENDIX A

TABLES
<table>
<thead>
<tr>
<th>How often do you tell your child…</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>That advertising depicts products as better than they really are</td>
<td>1.99</td>
<td>0.61</td>
</tr>
<tr>
<td>That advertising does not always tell the truth</td>
<td>1.97</td>
<td>0.62</td>
</tr>
<tr>
<td>That the purpose of advertising is to sell products</td>
<td>2.04</td>
<td>0.61</td>
</tr>
<tr>
<td>That not all advertised products are of good quality</td>
<td>2.00</td>
<td>0.63</td>
</tr>
<tr>
<td>That some advertised products are not good for children</td>
<td>1.99</td>
<td>0.72</td>
</tr>
<tr>
<td><strong>Total active mediation scale (α = .82)</strong></td>
<td>2.00</td>
<td>0.49</td>
</tr>
<tr>
<td>To turn off the television when s/he is watching commercials</td>
<td>1.71</td>
<td>0.78</td>
</tr>
<tr>
<td>That s/he should not watch commercial networks because they broadcast too many commercials</td>
<td>1.85</td>
<td>0.74</td>
</tr>
<tr>
<td>To switch to a channel that broadcasts fewer commercials</td>
<td>1.59</td>
<td>0.84</td>
</tr>
<tr>
<td>That s/he should not watch television advertising at all</td>
<td>1.84</td>
<td>0.76</td>
</tr>
<tr>
<td>To watch specific networks that broadcast relatively few commercials</td>
<td>1.78</td>
<td>0.76</td>
</tr>
<tr>
<td><strong>Total restrictive mediation scale (α = .78)</strong></td>
<td>1.76</td>
<td>0.57</td>
</tr>
<tr>
<td>How products sometimes do not do everything they claim to do in a commercial</td>
<td>1.60</td>
<td>0.84</td>
</tr>
<tr>
<td>That tv commercials only point out the good things in a product</td>
<td>1.72</td>
<td>0.78</td>
</tr>
<tr>
<td>The people in commercials are not like people in real life</td>
<td>1.40</td>
<td>0.86</td>
</tr>
<tr>
<td><strong>Total cognitive mediation scale (α = .74)</strong></td>
<td>1.57</td>
<td>0.67</td>
</tr>
<tr>
<td>That the people in commercials are not that cool because of the product</td>
<td>1.58</td>
<td>0.74</td>
</tr>
<tr>
<td>That the people in commercials are not having that much fun because of the product</td>
<td>1.68</td>
<td>0.67</td>
</tr>
<tr>
<td>That people in the commercials are not that popular because of the product</td>
<td>1.47</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>Total affective mediation scale (α = .77)</strong></td>
<td>1.57</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Table 1. Descriptive Statistics for Parental Reports of Mediation Items
<table>
<thead>
<tr>
<th>How often do you tell your child…</th>
<th>$M$</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>That every member of your family should have some say in family purchase decisions</td>
<td>1.32</td>
<td>0.90</td>
</tr>
<tr>
<td>To give his/her opinion when discussing family purchases</td>
<td>1.29</td>
<td>0.92</td>
</tr>
<tr>
<td>To give his/her opinion about products and brands</td>
<td>1.34</td>
<td>0.90</td>
</tr>
<tr>
<td>that you respect his/her expertise on certain products and brands</td>
<td>1.47</td>
<td>0.85</td>
</tr>
<tr>
<td>that you consider his/her preferences when making a purchases</td>
<td>1.45</td>
<td>0.84</td>
</tr>
<tr>
<td>To consider the advantages and disadvantages of products and brands</td>
<td>1.45</td>
<td>0.84</td>
</tr>
<tr>
<td>That s/he can help make the purchasing decisions when the product is for him or her</td>
<td>1.57</td>
<td>0.89</td>
</tr>
<tr>
<td>Total concept-orientation scale ($\alpha = .93$)</td>
<td>1.41</td>
<td>0.73</td>
</tr>
<tr>
<td>That you know which products are best for him/her</td>
<td>1.71</td>
<td>0.75</td>
</tr>
<tr>
<td>Not to argue with you when you say no to their product requests</td>
<td>1.73</td>
<td>0.80</td>
</tr>
<tr>
<td>That you expect him/her to accept your decisions about product purchases</td>
<td>1.72</td>
<td>0.74</td>
</tr>
<tr>
<td>Which products are or are not purchases for the family</td>
<td>1.68</td>
<td>0.86</td>
</tr>
<tr>
<td>Which products s/he should or should not buy</td>
<td>1.60</td>
<td>0.76</td>
</tr>
<tr>
<td>That you have strict and clear rules when it comes to product purchases</td>
<td>1.61</td>
<td>0.80</td>
</tr>
<tr>
<td>That s/he is not allowed to ask for products</td>
<td>1.70</td>
<td>0.82</td>
</tr>
<tr>
<td>Total socio-orientation scale ($\alpha = .87$)</td>
<td>1.68</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Table 2. Descriptive Statistics for Parental Reports of Consumer Communication Items
How often does a parent tell you… & $M$ & SD  \\ 
---  & --- & ---  \\ 
That commercials make things look better than they really are & 0.96 & 0.66  \\ 
That commercials don’t always tell the truth & 0.91 & 0.68  \\ 
  Total active mediation scale ($\alpha = .71$) & 0.92 & 0.58  \\ 
To turn off the tv when you are watching commercials & 1.31 & 0.68  \\ 
That you should not watch commercials at all & 1.18 & 0.70  \\ 
  Total restrictive mediation scale ($\alpha = .72$) & 1.24 & 0.64  \\ 
That things do not always do everything they say they do in a commercial & 0.79 & 0.68  \\ 
That commercials only point out the good things about a product & 0.74 & 0.68  \\ 
That people in commercials are not like people in real life & 0.90 & 0.72  \\ 
  Total cognitive mediation scale ($\alpha = .78$) & 0.81 & 0.58  \\ 
That people in commercials are not that cool because of the product & 1.26 & 0.73  \\ 
That people in commercials are not having fun because of the product & 1.38 & 0.81  \\ 
  Total affective mediation scale ($\alpha = .80$) & 1.32 & 0.70  \\ 

Table 3. Descriptive Statistics for Child Reports of Mediation Items
<table>
<thead>
<tr>
<th>Description</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>That everyone in the family gets to say what they think about something the</td>
<td>1.18</td>
<td>.71</td>
</tr>
<tr>
<td>family is going to buy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>That they think about what you want when they buy something for the family</td>
<td>1.13</td>
<td>.68</td>
</tr>
<tr>
<td>That you should think about the good things and the bad things about</td>
<td>1.07</td>
<td>.65</td>
</tr>
<tr>
<td>something you are going to buy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>That you can help decide about buying something if it is for you</td>
<td>1.02</td>
<td>.65</td>
</tr>
<tr>
<td>Total concept-orientation scale ($\alpha = .86$)</td>
<td>1.10</td>
<td>.57</td>
</tr>
<tr>
<td>Not to argue when they say that they will not buy something</td>
<td>1.33</td>
<td>.89</td>
</tr>
<tr>
<td>Which things you should or should not buy</td>
<td>1.24</td>
<td>.79</td>
</tr>
<tr>
<td>That they know what products are best for you</td>
<td>1.02</td>
<td>.78</td>
</tr>
<tr>
<td>That you are not allowed to ask for things you want them to buy</td>
<td>1.25</td>
<td>.92</td>
</tr>
<tr>
<td>Total socio-orientation scale ($\alpha = .81$)</td>
<td>1.21</td>
<td>.68</td>
</tr>
</tbody>
</table>

Table 4. Descriptive Statistics for Child Reports of Consumer Communication Items
<table>
<thead>
<tr>
<th></th>
<th>Realism Mediation</th>
<th>Desirability Mediation</th>
<th>No Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General discussion</strong></td>
<td>87.5%</td>
<td>87.5%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Commercials not showing things they way they really work</strong></td>
<td>87.5%</td>
<td>34%</td>
<td>7.1%</td>
</tr>
<tr>
<td><strong>Commercials do not tell the truth</strong></td>
<td>90.6%</td>
<td>28.1%</td>
<td>9.5%</td>
</tr>
<tr>
<td><strong>Toys in commercials will not make people like you</strong></td>
<td>31.3%</td>
<td>84.4%</td>
<td>7.5%</td>
</tr>
<tr>
<td><strong>Toys in commercials are not cool</strong></td>
<td>28.1%</td>
<td>87.5%</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

Table 5. Percentages of Children Remembering Discussions by Mediation Condition
<table>
<thead>
<tr>
<th></th>
<th>Realism</th>
<th>Character Desirability</th>
<th>Social Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realism</td>
<td>1</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>Character Desirability</td>
<td>.067</td>
<td>1</td>
<td>_</td>
</tr>
<tr>
<td>Social Expectations</td>
<td>.151*</td>
<td>.579**</td>
<td>1</td>
</tr>
<tr>
<td>Materialistic Attitudes</td>
<td>.148*</td>
<td>.071</td>
<td>.195**</td>
</tr>
</tbody>
</table>

*p<.10., **p<.05

Table 6. Correlations between Children’s Perceptions of Realism, Desirability, Social Expectations, and Materialistic Attitudes
<table>
<thead>
<tr>
<th></th>
<th>Realism Mediation</th>
<th>Desirability Mediation</th>
<th>No Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realism</td>
<td>2.06</td>
<td>2.09</td>
<td>2.16</td>
</tr>
<tr>
<td>Character Desirability</td>
<td>1.95</td>
<td>1.62</td>
<td>1.91</td>
</tr>
<tr>
<td>Social Expectations</td>
<td>1.74</td>
<td>1.42</td>
<td>1.75</td>
</tr>
<tr>
<td>Materialistic Attitudes</td>
<td>1.77</td>
<td>1.48</td>
<td>1.76</td>
</tr>
</tbody>
</table>

Table 7. The Adjusted Means of Children’s Perceptions of Commercials and Attitudes by Mediation Condition
APPENDIX B

RECRUITMENT FLYER
Research Study on Children and Advertising

Why is this research important?
Have you ever wondered if you should talk to your child about advertising? Do you worry that society is becoming more materialistic? Many people are worried about the influence that advertising can have on young children. One consequence of exposure to advertising is a growing materialistic culture. This study is interested in discovering how parents might help reduce the materialistic attitudes they see in children.

Who can participate?
If you are a parent of a 5- to 7-year-old child, we would like you and your child’s help.

What would we be asked to do?
- First, parents will attend a 20 minute meeting to answer a short survey. Some parents will be asked to discuss specific things with their child for the next week.
- Before these discussions occur, the children will be asked a short set of questions. For a week, in their own home, parents will talk with their children about commercials.
- At the end of the week, children will be shown four commercials and answer a few questions about each.

Is there any compensation?
Parents who agree to participate will be able to take part in a question/answer session at the end of the study with the co-investigator on the effects of the media on children.

Where would I go to participate?
The meeting will be held right here at the church. Stop by the table in the lobby to find out more about the project and your rights as a participant in a research study conducted through The Ohio State University. Potential meeting times can be discussed with the researcher.

If you have any questions or concerns, please contact:
Jennifer Chakroff
Doctoral Candidate
School of Communication
The Ohio State University
614-247-6837
chakroff.2@osu.edu.
APPENDIX C

PARENT RECRUITMENT LETTER
Dear Parent or Guardian:

Many people are worried about the influence that advertising can have on young children. One consequence of exposure to advertising is a growing materialistic culture. This study is interested in discovering how parents might help reduce the materialistic attitudes they see in children. As a doctoral candidate in the School of Communication at The Ohio State University, I am writing to request you and your child’s participation in a research study.

With your permission, trained researchers from The Ohio State University will hold meetings at your church. During this meeting, you will complete a short survey that asks about different aspects of your communication with your child. The meeting also will discuss different things you could discuss with your child. After the meeting, you will be asked to hold conversations with your child about commercials for the next week and keep a log of these discussions.

Before these conversations occur, your child will be asked a few questions about their communication and media use. Then, after the week of conversations has passed, your child will be shown four commercials and asked a few questions about each of them. There is a separate parental permission form attached to this letter which describes your child’s rights as a participant in a research study.

Participation in this study is voluntary, and you and your child may withdraw your consent to participate at any time without penalty or loss of benefits to which you are otherwise entitled. In addition, no identifying information will be connected to your answers, and they will be kept confidential.

There are no risks associating with participating in this study. Parents, teachers, and researchers all would benefit from a better understanding of whether parents discuss commercials with children and how adults might reduce materialistic attitudes in children. Therefore, this study will attempt to provide people with this knowledge in order to better prepare them to discuss and monitor this type of behavior with young children.

Parents who agree to participate will be able to take part in a question/answer session at the end of the study with the co-investigator on the effects of the media on children. You and your child’s participation is very important to us and would help us to learn more about children and advertising. If you are willing to have you and your child participate please read and sign the attached parental permission form and return it when you attend the parent meeting.

If you are willing to participate, please see the researcher at the table in the church lobby reach her at the phone number or email listed below to select a meeting time that works best for your schedule.

If you have any questions about this project, you can contact Jennifer Chakroff at 614-247-6837 or via email at chakroff.2@osu.edu. If you have any questions regarding your rights as a research subject, you should contact the staff of the Ohio State University Office of Research Risks at (614) 292-6950. Thank you very much for considering participating in this study.

Sincerely,

Jennifer Chakroff, Doctoral Candidate
School of Communication, The Ohio State University
Directions: We are interested in learning about how parents may talk to their children about different types of behaviors. Because this area of research is growing, it is not currently known how much, if at all, parents discuss commercials and consumer activities with their children. Keep this in mind when you answer these questions. If you have more than one child between the ages of 5 and 7, please think of the child with the birthday closest to today who also will participate in this study.

You could find that you do not have any of these conversations or you could find that you have a lot of these conversations. Right now, researchers do not know for sure. In addition, we do not know if these conversations occur how they may impact a child. Therefore, there are no right or wrong answers to the following questions or statements.

The more honest you can be, the more likely we will be able to get a better understanding of these types of parent-child interactions. Also, remember that your answers will not be shared with anyone. Thank you for your participation.

Please respond to the following questions about the types of things you may or may not discuss with your child.

How often do you tell your child…

That advertising depicts products as better than they really are?
- Never
- Rarely
- Sometimes
- Often

That advertising does not always tell the truth?
- Never
- Rarely
- Sometimes
- Often

That the purpose of advertising is to sell products?
- Never
- Rarely
- Sometimes
- Often

That not all advertised products are of good quality?
- Never
- Rarely
- Sometimes
- Often

That some advertised products are not good for children?
- Never
- Rarely
- Sometimes
- Often

To turn off the television when s/he is watching commercials?
- Never
- Rarely
- Sometimes
- Often

That s/he should not watch commercial networks because they broadcast too many commercials?
- Never
- Rarely
- Sometimes
- Often
To switch to a channel that broadcasts fewer commercials?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

That s/he should not watch television advertising at all?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

To watch specific networks that broadcast relatively few commercials?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

How products sometimes do not do everything they claim to do in a commercial?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

That tv commercials only point out the good things in a product?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

The people in commercials are not like people in real life?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

That the people in commercials are not that cool because of the product?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

That the people in commercials are not having that much fun because of the product?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

That people in the commercials are not that popular because of the product?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
</table>

Now, we would like to ask you more specifically how you may or may not deal with consumer issues with your child.

Does your child get an allowance?  Yes  No

If yes,

a. How much per week does your child get? ________

b. Do you have rules on how they spend it?  Yes  No

c. Do you talk with them about how they should spend it?  Yes  No

d. Does your child have to do anything to get the allowance?  Yes  No

If yes, what does s/he have to do?

____________________________________________________

____________________________________________________

105
How often do you tell your child…

That every member of your family should have some say in family purchase decisions?

Never Rarely Sometimes Often

To give his/her opinion when discussing family purchases?

Never Rarely Sometimes Often

To give his/her opinion about products and brands?

Never Rarely Sometimes Often

That you respect his/her expertise on certain products and brands?

Never Rarely Sometimes Often

That you consider his/her preferences when making a purchase?

Never Rarely Sometimes Often

To consider the advantages and disadvantages of products and brands?

Never Rarely Sometimes Often

That s/he can help make the purchasing decisions when the product is for him or her?

Never Rarely Sometimes Often

That you know which products are best for him/her?

Never Rarely Sometimes Often

Not to argue with you when you say no to their product requests?

Never Rarely Sometimes Often

That you expect him/her to accept your decisions about product purchases?

Never Rarely Sometimes Often

Which products are or are not purchased for the family?

Never Rarely Sometimes Often

Which products s/he should or should not buy?

Never Rarely Sometimes Often

That you have strict and clear rules when it comes to product purchases?

Never Rarely Sometimes Often

That s/he is not allowed to ask for products?

Never Rarely Sometimes Often
Next, we would like to ask you how you feel about owning things.
I admire people who own expensive homes, cars, and clothes.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

The things I own say a lot about how well I’m doing in life.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

I like to own things that impress people.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

I try to keep my life simple, as far as possessions are concerned.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

Buying things gives me a lot of pleasure.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

I like a lot of luxury in my life.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

My life would be better if I owned certain things I don’t have.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

I’d be happier if I could afford to buy more things.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>
Finally, we would like to ask you some basic questions about your family.

How many hours of television do you watch on:

- Monday __________
- Tuesday __________
- Wednesday __________
- Thursday __________
- Friday __________
- Saturday __________
- Sunday __________

How old are you? __________

What is your gender? __________

What is your ethnicity? _____________________

What is your average annual household income?

- _____$10-19,999
- _____$20-29,999
- _____$30-39,999
- _____$40-49,999
- _____$50-59,999
- _____$60-69,999
- _____$70-79,999
- _____$80-89,999
- _____$90-99,999
- _____$100,000+

What is your highest educational level?

<table>
<thead>
<tr>
<th>Below High School</th>
<th>High School</th>
<th>Junior College/Trade School</th>
<th>Bachelors Degree</th>
<th>Graduate Degree</th>
</tr>
</thead>
</table>

What is your spouse’s highest education level?

<table>
<thead>
<tr>
<th>Below High School</th>
<th>High School</th>
<th>Junior College/Trade School</th>
<th>Bachelors Degree</th>
<th>Graduate Degree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

When is your child’s birthday? ______________

What is your child’s gender? ______________

Thank you for participating!!

108
APPENDIX E

REALISM TRAINING SCRIPT
Parent Training Script – Realism Mediation

Welcome everyone, and thank you for taking the time to participate in this study on how parents can help reduce the materialistic attitudes of children. Remember, your participation is completely voluntary and this meeting should only take around 20 minutes. Also, even though you have agreed to participate, you may choose not to answer some questions in the survey or to stop at any time without penalty. As with your child’s responses, your responses will be held confidential and you will not be identified in any publication that could result from the study.

To begin, we will take a little while to fill out this survey which is designed to get an idea how you interact and communicate with your child. Please remember that this is a relatively new area of study, so the more honest you can be with your responses the more accurate of a picture we can put together. [Pass out parent surveys]

Parents fill out survey.

Thank you for completing the survey. Now, you may have heard stories in the news or from friends that talk about how the media can sometimes have unintended negative effects on children. However, some research has shown that parents can help reduce these negative effects. Because the goal of this study is to determine if certain conversations you have with your child may help reduce some of the negative effects of advertising, as it was mentioned in the letter you received earlier, over the next week, we would like you to discuss commercials with your child.

However, in order to test if these conversations are effective, they need to be relatively controlled. So, today, we are going to talk about the specific things you should be discussing. There is some evidence that how real a child sees a commercial to be determines the effects of that commercial. Therefore, we would like to see if discussing how realistic (or unrealistic) commercials are could reduce materialistic attitudes.

In order to see if consistent conversations help children, once a day for the next week you should have this type of conversation with your child. In order to help you with this, I have guides here that contain conversation prompts. [Pass out conversation prompts] These are the most important aspect of the next week.

Each day, you should select one of the conversation prompts. Please keep in mind that these conversations do not need to be long. In fact, they will probably be relatively short unless your child asks questions. So, let’s read through these prompts to see if you have any questions.

1. Commercials only point out the good things about toys.
2. Commercials show toys as better than they really are.
3. Toys do not always do everything they say they do in a commercial.
4. Kids in commercials do not act like they would in real life.
5. Commercials do not show things like they are in real life.
6. Commercials do not always tell the truth.
7. Even though commercials make it seem like the toy is the best does mean it is.

As you may guess, these prompts are designed to have the conversation focus on how advertising sometimes skews the presentation of the product. So, these are a variety of ways you can begin to talk with your child about how unrealistic commercials sometimes are.

Knowing what to say is one thing though. Knowing how and when to begin these conversations is something else. So, in addition to the conversation prompts, I also have a list of conversation opportunities listed on the handout with the conversation prompts. Let’s read through these to see if you have any questions.

1. When you see a commercial on television
2. When you see a toy in the store
3. When your child is playing with a toy
4. When talking about spending money

The easiest time to have one of these conversations is when you and your child see a commercial on television. So, as an example, let’s watch the following commercials.

[Show parents two commercials – Hasbro Nerf Dart Tag and Barbie Hair Highlights

Hasbro – shows guys playing with the dart guns, nerf darts flying quickly through the air and sticking instantaneously to the targets. The players all have perfect aim.

Barbie – shows girls highlighting their hair and the hair of their Barbies with the toy. Highlights turn out perfectly, and you can see them clearly on light or dark hair.]

When you see a commercial like these (and these were not hard to find), you can start a discussion with your child by using one of the prompts.

For example, after viewing the Nerf commercial, you could start a conversation using prompt #3 (toys do not always do everything the commercial says/shows that it will) by saying something like, “even though that just showed you that the nerf darts fly really fast and stick right away, sometimes commercials show toys doing things that they can’t do in real life.”
Or, after viewing the Barbie commercial, you could start a conversation using prompt #1 (commercials only point out the good things about toys) by saying something like, “even though that showed the hair highlighting, the commercial didn’t say how you can get the highlighting out. Sometimes commercials only point out the good things about a commercial, and don’t tell you things that are bad about a toy.”

If you wanted to use a different opportunity to talk about how unrealistic commercials sometimes are, you could have the conversation when the child sees a toy he or she wants. You could remind him or her that “even though the commercials made the toy seem like the best one doesn’t mean that there isn’t something else that might be better.”

Or, as another example, if you are playing with your child, you could talk about “how the kids in commercials do not play with the toys the same way real kids would.”

Finally, if you are discussing money with your child, you can talk about how if they want to spend their money on something to remember that “commercials do not always tell the truth, so they should make sure they want the toy for what it really looks like not how the commercial shows it.”

Keep in mind, the focus of your conversations should be on the realism of the portrayal be it how the product really works or how commercials don’t show people doing things like they would in real life.

In order to really understand what messages might be the most helpful, we have a log for you to record what happens in these conversations. [Pass out log]

You will notice that there are the following column headings: date of conversation, time of conversation, # of prompt used/what you said, what your child said/did in response, what were you doing at the time of the conversation (watching commercials, playing, etc?)

For each day, please have one conversation about the realism of commercials and record the interaction in your log. Please bring the log with you when you bring your child for the second session of the study.

Thank you for your time today! Are there any questions?
APPENDIX F

DESIRABILITY TRAINING SCRIPT
Welcome everyone, and thank you for taking the time to participate in this study on how parents can help reduce the materialistic attitudes of children. Remember, your participation is completely voluntary and this meeting should only take around 20 minutes. Also, even though you have agreed to participate, you may choose not to answer some questions in the survey or to stop at any time without penalty. As with your child's responses, your responses will be held confidential and you will not be identified in any publication that could result from the study.

To begin, we will take a little while to fill out this survey which is designed to get an idea how you interact and communicate with your child. Please remember that this is a relatively new area of study, so the more honest you can be with your responses the more accurate of a picture we can put together. [Pass out parent surveys]

Parents fill out survey.

Thank you for completing the survey. Now, you may have heard stories in the news or from friends that talk about how the media can sometimes have unintended negative effects on children. However, some research has shown that parents can help reduce these negative effects. Because the goal of this study is to determine if certain conversations you have with your child may help reduce some of the negative effects of advertising, as it was mentioned in the letter you received earlier, over the next week, we would like you to discuss commercials with your child.

However, in order to test if these conversations are effective, they need to be relatively controlled. So, today, we are going to talk about the specific things you should be discussing. There is some evidence that how desirable (i.e., fun, cool, pretty, popular, likable) a child thinks a character in a commercial is determines the effects of that commercial. Therefore, we would like to see if discussing how undesirable the characters and products in commercials are could reduce materialistic attitudes.

In order to see if consistent conversations help children, once a day for the next week you should have this type of conversation with your child. In order to help you with this, I have guides here that contain conversation prompts. [Pass out conversation prompts] These are the most important aspect of the next week.

Each day, you should select one of the conversation prompts. Please keep in mind that these conversations do not need to be long. In fact, they will probably be relatively short unless your child asks questions. So, let’s read through these prompts to see if you have any questions.

1. People in commercials are not having fun.
2. People in commercials are not popular.
3. People in commercials are not cool.
4. The toys in commercials are not the most fun.
5. The things advertised in commercials will not make other people like you.
6. Commercials are annoying.
7. The toys in commercials will not make you cool.

As you may guess, these prompts are designed to have the conversation focus on how commercials are not pleasant because the things and people in them are not desirable (i.e., fun, cool, pretty, popular, likable). So, these are a variety of ways you can begin to talk with your child about how undesirable commercials sometimes are.

Knowing what to say is one thing though. Knowing how and when to begin these conversations is something else. So, in addition to the conversation prompts, I also have a list of conversation opportunities listed on the handout with the conversation prompts. Let’s read through these to see if you have any questions.

1. When you see a commercial on television
2. When you see a toy in the store
3. When your child is playing with a toy
4. When talking about spending money

The easiest time to have one of these conversations is when you and your child see a commercial on television. So, as an example, let’s watch the following commercials.

[Show parents two commercials – Hasbro Game of Life with Sponge Bob and Barbie Hair Highlights

Hasbro – shows kids playing the game and giggling

Barbie – shows girls highlighting their hair and the hair of their Barbies with the toy, and the voiceover talks about how the girls can be fashionable. Highlights turn out perfectly, and you can see them clearly on light or dark hair.]

When you see a commercial like these (and these were not hard to find), you can start a discussion with your child by using one of the prompts.

For example, after viewing the Game of Life commercial, you could start a conversation using prompt #1 (the people in commercials are not having fun) by saying something like, “even though the kids are giggling they are not having fun. They are working,” or use prompt #6 and simply tell your child that “commercials are annoying.”
Or, after viewing the Barbie commercial, you could start a conversation using prompt #3 (the toys in commercials will not make you cool) by saying something like, “even though that showed the hair highlighting and said that this is how you can be fashionable, the kids in that commercial are not cool.”

If you wanted to use a different opportunity to talk about how undesirable the characters in commercials sometimes are, you could have the conversation when the child sees a toy he or she wants. You could remind him or her that “toys in a commercial will not be what make you cool.” (prompt 7)

Or, as another example, if you are playing with your child, you could talk about “how the toys in the commercials are not the most fun.” (prompt 4)

Finally, if you are discussing money with your child, you can talk about how if they want to spend their money on something to remember that “the things advertised in commercials will not make other people like you.” (prompt 5)

Keep in mind, the focus of your conversations should be on the lack of desirability of the portrayal be it how commercials in general are annoying or how the toys in commercials will not make people like you.

In order to really understand what messages might be the most helpful, we have a log for you to record what happens in these conversations. [Pass out log]

You will notice that there are the following column headings: date of conversation, time of conversation, # of prompt used/what you said, what your child said/did in response, what were you doing at the time of the conversation (watching commercials, playing, etc?)

For each day, please have one conversation about the lack of desirability of the characters and toys in commercials and record the interaction in your log. Please bring the log with you when you bring your child for the second session of the study.

Thank you for your time today! Are there any questions?
Conversation Prompts:
1. Commercials only point out the good things about a product.
2. Commercials depict products as better than they really are.
3. Products do not always do everything they claim to do in a commercial.
4. People in commercials do not act like they would in real life.
5. Commercials do not show things like they are in real life.
6. Commercials do not always tell the truth.
7. Even though commercials make it seem like the product is the best does not necessarily make it the best.

Conversation Opportunities:
1. When you see a commercial on television
2. When you see a toy in the store
3. When your child is playing with a toy
4. When talking about spending money

Example Conversations:
• “After viewing the Nerf commercial (or similar commercial), you could start a conversation using prompt #3 (toys do not always do everything the commercial says/shows that it will) by saying something like, “even though that just showed you that the nerf darts fly really fast and stick right away, sometimes commercials show toys doing things that they can’t do in real life.”
• “After viewing the Barbie commercial (or similar commercial), you could start a conversation using prompt #1 (commercials only point out the good things about toys) by saying something like, “even though that showed the hair highlighting, the commercial didn’t say how you can get the highlighting out. Sometimes commercials only point out the good things about a commercial, and don’t tell you things that are bad about a toy.”
• When your child sees a toy he or she wants, you could remind him or her that “even though the commercials made the toy seem like the best one doesn’t mean that there isn’t something else that might be better.”
• If you are playing with your child, you could talk about “how the kids in commercials do not play with the toys the same way real kids would.”
• If you are discussing money with your child, you can talk about how if they want to spend their money on something to remember that “commercials do not always tell the truth, so they should make sure they want the toy for what it really looks like not how the commercial shows it.”

Keep in mind, the focus of your conversations should be on the lack of realism in how the commercial shows the kids and the products.

For each day, please have one conversation and record the interaction in your log. Please bring the log with you when you bring your child for the second session of the study.

Thank you so much for your participation! If you have any questions or concerns, please do not hesitate to contact Jennifer Chakroff at 614-247-6837 or via email at chakroff.2@osu.edu.
APPENDIX H

DESIRABILITY TRAINING HANDOUT
Parent Handout – Desirability Mediation

Conversation Prompts:
1. People in commercials are not having fun.
2. People in commercials are not popular.
3. People in commercials are not cool.
4. The toys in commercials are not the most fun.
5. The things advertised in commercials will not make other people like you.
6. Commercials are annoying.
7. The toys in commercials will not make you cool.

Conversation Opportunities:
1. When you see a commercial on television
2. When you see a toy in the store
3. When your child is playing with a toy
4. When talking about spending money

Example Conversations/situations:
- After viewing the Game of Life commercial (or similar commercial), you could start a conversation using prompt #1 (the people in commercials are not having fun) by saying something like, “even though the kids are giggling they are not having fun. They are working,” or use prompt #6 and simply tell your child that “commercials are annoying.”

- After viewing the Barbie commercial (or similar commercial), you could start a conversation using prompt #3 (the toys in commercials will not make you cool) by saying something like, “even though that showed the hair highlighting and said that this is how you can be fashionable, the kids in that commercial are not cool.”

- When the child sees a toy he or she wants, you could remind him or her that “toys in a commercial will not be what make you cool.” (prompt 7)

- If you are playing with your child, you could talk about “how the toys in the commercials are not the most fun.” (prompt 4)

- If you are discussing money with your child, you can talk about how if they want to spend their money on something to remember that “the things advertised in commercials will not make other people like you.” (prompt 5)

Keep in mind, your conversations should be about the lack of desirability (i.e., fun, cool, pretty, popular, likable) of the characters or products in the commercial.

For each day, please have one conversation and record the interaction in your log. Please bring the log with you when you bring your child for the second session of the study.

Thank you so much for your participation! If you have any questions or concerns, please do not hesitate to contact Jennifer Chakroff at 614-247-6837 or via email at chakroff.2@osu.edu.
APPENDIX I

CONVERSATION LOG
<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Time</th>
<th>Conversation Prompt/Discussion</th>
<th>Child's reaction (verbal or nonverbal)</th>
<th>Situation (please check one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any Additional Comments:
APPENDIX J

CHILDREN’S PRE-VIEWING SURVEY
ID #: __________  Children’s Pre-viewing Survey

We are here to talk with you about television commercials. I want to ask you a few questions about how you and your parents talk to each other and what you think of commercials. If you don’t want to answer a question, you don’t have to, and if you want to stop and go back to the waiting room, just let me know. Okay? We should be done in about 10 minutes. There are no right or wrong answers, so please answer each question as honestly as you can. Okay?

First, we want to ask you about how much television you watch?

How much do you watch TV before you go to school?

Not at all  A little  Some  A lot

How much do you watch TV after school before you eat dinner?

Not at all  A little  Some  A lot

How much do you watch TV after dinner before you go to bed?

Not at all  A little  Some  A lot

On the weekends, how much do you watch TV in the morning?

Not at all  A little  Some  A lot

On the weekends, how much do you watch TV during the day?

Not at all  A little  Some  A lot

On the weekends, how much do you watch TV at night?

Not at all  A little  Some  A lot

How much do you watch when the commercials are on?

Not at all  A little  Some  A lot

How much of the time do you change the channel when commercials come on the tv?

Not at all  A little  Some  A lot
Now, we want to ask you about things one of your parents might talk to you about.

How often does a parent tell you…

That commercials make things look better than they really are?

Not at all A little Some A lot

That commercials don’t always tell the truth?

Not at all A little Some A lot

To turn off the TV when you are watching commercials?

Not at all A little Some A lot

That you should not watch commercials at all?

Not at all A little Some A lot

That things do not always do everything they say they do in a commercial?

Not at all A little Some A lot

That commercials only point out the good things about a product?

Not at all A little Some A lot

That people in commercials are not like people in real life?

Not at all A little Some A lot

That people in commercials are not that cool because of the product?

Not at all A little Some A lot

That people in the commercials are not having fun because of the product?

Not at all A little Some A lot
Next, we want to talk to you about money and how you might spend it.

Do you get an allowance? Yes No (if no, skip to question 3)

If yes,

a. How much do you get per week? ________
b. Are there rules to how you can spend it? Yes No
c. Does a parent talk to you about how you should spend it? Yes No
d. Do you have to do anything to get the allowance? Yes No

How much money do you think you should get for an allowance? ________
How much money do you think you should get for your birthday? ________
How many toys do you think you should get for your birthday? ________
How often does a parent tell you…

That everyone in the family gets to say what they think about something the family is going to buy?

Not at all A little Some A lot

That they think about what you want when they buy something for the family?

Not at all A little Some A lot

That you should think about the good things and the bad things about something you are going buy?

Not at all A little Some A lot

That you can help decide about buying something if it is for you?

Not at all A little Some A lot

Not to argue when they say that they will not buy something?

Not at all A little Some A lot

Which things you should or should not buy?

Not at all A little Some A lot
That they know what products are best for you?
Not at all  A little  Some  A lot

That you are not allowed to ask for things you want them to buy?
Not at all  A little  Some  A lot

Now, we want to ask you how you feel about having certain things.

How much do you wish you could have more things?
Not at all  A little  Some  A lot

How much do you want a job that pays a lot of money when you grow up?
Not at all  A little  Some  A lot

How much do you think having more toys makes you more happy?
Not at all  A little  Some  A lot

How much do you think that money makes you happy?
Not at all  A little  Some  A lot

How much do you want to buy toys that other kids have?
Not at all  A little  Some  A lot

How much do you need to have the newest toys?
Not at all  A little  Some  A lot

Finally, we just want to ask you how you feel about commercials.

How much do you think television commercials tell the truth?
Not at all  A little  Some  A lot
How annoying are most TV commercials?

Not at all  A little  Some  A lot

How much do you think commercials only tell you the good things about a product and don’t tell you the bad things?

Not at all  A little  Some  A lot

How much do you like most TV commercials?

Not at all  A little  Some  A lot

How much do you think TV commercials try to make people buy things they don’t really need?

Not at all  A little  Some  A lot

How much can you believe what people in commercials say and do?

Not at all  A little  Some  A lot

How much do you think the things advertised the most on TV are the best things to buy?

Not at all  A little  Some  A lot

Now, I just have two more questions for you.

How old are you?  5  6  7

Are you:  A boy  A girl

Thank you for talking with me!!
APPENDIX K

CHILDREN’S POST-VIEWING SURVEY
Children’s Second Session Survey

We are here again to talk with you about television commercials. I want to show you a few commercials and ask you a few questions about them. Would you like to see the commercials and answer some questions? Okay, good. If you don’t want to answer a question, you don’t have to, and if you want to stop and go back to the waiting room, just let me know. Okay? We should be done in about 10 minutes. By telling us what you really think you are helping us understand children better. Please pay attention because later we want to ask you some questions about what you see.
How much do you think the kids in the commercial are just like kids in real life?

Not at all  A little  Some  A lot

How much do you think the commercial showed kids doing things just like they would be doing in real life?

Not at all  A little  Some  A lot

How much do you think commercials show what other kids like?

Not at all  A little  Some  A lot

How much do you think other kids like the kids in the commercials?

Not at all  A little  Some  A lot

How much fun does it seem like the kids in the commercials are having?

Not at all  A little  Some  A lot

How much do you like the kids in commercials?

Not at all  A little  Some  A lot

How cool are the kids in commercials?

Not at all  A little  Some  A lot

How much will the toy make people like you?

Not at all  A little  Some  A lot

How happy will the toy make you?

Not at all  A little  Some  A lot

How cool do you think the toy would make you to other kids?

Not at all  A little  Some  A lot

How much do you want the toy?

Not at all  A little  Some  A lot
Commercial #2:

How much do you think the kids in the commercial are just like kids in real life?

Not at all  A little  Some  A lot

How much do you think the commercial showed kids doing things just like they would be doing in real life?

Not at all  A little  Some  A lot

How much do you think commercials show what other kids like?

Not at all  A little  Some  A lot

How much do you think other kids like the kids in the commercials?

Not at all  A little  Some  A lot

How much fun does it seem like the kids in the commercials are having?

Not at all  A little  Some  A lot

How much do you like the kids in commercials?

Not at all  A little  Some  A lot

How cool are the kids in commercials?

Not at all  A little  Some  A lot

How much will the toy make people like you?

Not at all  A little  Some  A lot

How happy will the toy make you?

Not at all  A little  Some  A lot

How cool do you think the toy would make you to other kids?

Not at all  A little  Some  A lot

How much do you want the toy?

Not at all  A little  Some  A lot
Commercial #3:

How much do you think the kids in the commercial are just like kids in real life?

Not at all  A little  Some  A lot

How much do you think the commercial showed kids doing things just like they would be doing in real life?

Not at all  A little  Some  A lot

How much do you think commercials show what other kids like?

Not at all  A little  Some  A lot

How much do you think other kids like the kids in the commercials?

Not at all  A little  Some  A lot

How much fun does it seem like the kids in the commercials are having?

Not at all  A little  Some  A lot

How much do you like the kids in commercials?

Not at all  A little  Some  A lot

How cool are the kids in commercials?

Not at all  A little  Some  A lot

How much will the toy make people like you?

Not at all  A little  Some  A lot

How happy will the toy make you?

Not at all  A little  Some  A lot

How cool do you think the toy would make you to other kids?

Not at all  A little  Some  A lot

How much do you want the toy?

Not at all  A little  Some  A lot
Commercial #4:

How much do you think the kids in the commercial are just like kids in real life?

- Not at all
- A little
- Some
- A lot

How much do you think the commercial showed kids doing things just like they would be doing in real life?

- Not at all
- A little
- Some
- A lot

How much do you think commercials show what other kids like?

- Not at all
- A little
- Some
- A lot

How much do you think other kids like the kids in the commercials?

- Not at all
- A little
- Some
- A lot

How much fun does it seem like the kids in the commercials are having?

- Not at all
- A little
- Some
- A lot

How much do you like the kids in commercials?

- Not at all
- A little
- Some
- A lot

How cool are the kids in commercials?

- Not at all
- A little
- Some
- A lot

How much will the toy make people like you?

- Not at all
- A little
- Some
- A lot

How happy will the toy make you?

- Not at all
- A little
- Some
- A lot

How cool do you think the toy would make you to other kids?

- Not at all
- A little
- Some
- A lot

How much do you want the toy?

- Not at all
- A little
- Some
- A lot
Now that you have answered the questions about the commercials you just watched, we have a couple of more questions to ask you before we are done.

How much do you think television commercials tell the truth?

- Not at all
- A little
- Some
- A lot

How annoying are most TV commercials?

- Not at all
- A little
- Some
- A lot

How much do you think commercials only tell you the good things about a product and don’t tell you the bad things?

- Not at all
- A little
- Some
- A lot

How much do you like most TV commercials?

- Not at all
- A little
- Some
- A lot

How much do you think TV commercials try to make people buy things they don’t really need?

- Not at all
- A little
- Some
- A lot

How much can you believe what people in commercials say and do?

- Not at all
- A little
- Some
- A lot

How much do you think the things advertised the most on TV are the best things to buy?

- Not at all
- A little
- Some
- A lot

How much do you wish you could have more things?

- Not at all
- A little
- Some
- A lot

How much do you want a job that pays a lot of money when you grow up?

- Not at all
- A little
- Some
- A lot

How much do you think having more toys makes you happier?

- Not at all
- A little
- Some
- A lot
How much do you think that money makes you happy?
Not at all A little Some A lot

How much do you want to buy toys that other kids have?
Not at all A little Some A lot

How much do you need to have the newest toys?
Not at all A little Some A lot

In the last few days, how often has a parent talked with you about...
Commercials?
Not at all A little Some A lot

How commercials do not show things the way they really work?
Not at all A little Some A lot

How commercials do not tell the truth?
Not at all A little Some A lot

How the toys in commercials will not make people like you?
Not at all A little Some A lot

How the toys in commercials are not cool?
Not at all A little Some A lot

Now, I just have two more questions for you.
How old are you? 5 6 7
Are you: A boy A girl

Thank you for talking with me!!
LIST OF REFERENCES


Austin, E. W., & Knaus, C. (2000). Predicting the potential for risky behavior among those 'too young' to drink as the result of appealing advertising. *Journal of Health Communication, 5*(1), 13-27.


