

The Role of Parental Mediation in Children's Consumer Socialization on the Web

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CHAPTER 1

INTRODUCTION

Children are active Internet users and engaged in a range of different online activities. In Korea, almost all elementary school students (99.9%) use the Internet, and children aged 3-9 spend average 8.7 hours on the Internet per week (National Internet Development Agency of Korea, 2009). Seventy-four percent of Korean elementary school-aged children use email, and 58% are bloggers or social networking site users (Newswire, 2008). Similar phenomena are also found in the USA. Eighty-four percent of US children (aged 8-18) have Internet access at home and spend about one and a half hours using computers per day (Rideout, Fohhr, and Roberts, 2010). Most of their computer use time is devoted to social networking (22 minutes), video websites like YouTube (15 minutes), and instant messaging (11 minutes).

Encouraged by the great potential of the Internet to reach the young consumer group, advertisers have employed various strategies to appeal to children online. Some of the major strategies include building brand websites, placing brand logos and promotional messages on youth-oriented websites, facilitating children's blog creation and selling virtual products that can be used to decorate the blogs, and creating advergames where children can interact with brand messages in the game context (American Academy of Pediatrics Committee on Communications, 2006; Buckleiner and

Mediatech Foundation, 2008; Calvert, 2008; Chester and Montgomery, 2007; Children Now, 2005; Neeley, 2007).

Although little is known whether and how various online advertising practices affect children (Mallinchrodt and Mizerski, 2007; Neeley, 2007), current online advertising practices targeting children have raised concerns among parents and consumer advocate groups. It has been argued that the interactivity of online advertising can lead children to be more actively engaged with advertised brands/products for a prolonged time period (Gurau, 2008; Mallinchrodt and Mizerski, 2007). Also, in online advertising, the line between promotional messages and noncommercial content often blurs, making children vulnerable to the persuasive intention of marketers (Kunkel et al., 2004; Mallinchrodt and Mizerski, 2007; Moore, 2006; Neeley, 2007; Schor, 2004). Other concerns include marketers' invasion of children's privacy (Lwin, Stanaland, and Miyazaki, 2008; Neeley, 2007; Youn 2008), children's over-dependency on the Web (Korea Agency for Digital Opportunity & Promotion, 2007; Leung, 2004; Liu and Kuo, 2007), children's excessive expenditure online (Hawn, 2007), and easier access to child-inappropriate commercial content (Neeley, 2007).

Speculations and concerns associated with online advertising impact have caused parents to feel a need to monitor and control their children's online activities (NetSmartz, 2008). Greater parental responsibility comes with greater needs for us to understand the nature of parental mediation regarding children's online activities and the effects and effectiveness of such intervention (Neeley, 2007). The purpose of this study is to examine children's interactions with and responses to online advertising targeting children as a

type of consumer socialization outcomes, and to investigate the role of parental mediation in the process of children's consumer socialization on the Web. To date, research on parental mediation has rarely examined Internet use among children and children's interaction with online ads, despite the dramatic increase of children's Internet use (Eastin, Greenberg, and Hofschire, 2006; Lwin, Stanaland, and Miyazaki, 2008). Considering that parents have been under increasing pressure to deal with problems associated with the Internet (Eastin, Greenberg, and Hofschire, 2006) and the important role of parental mediation in children's responses to advertising (Buijzen and Valkenburg, 2005), research on parental mediation in the new media environment is timely and important.

Consumer socialization (Moschis and Churchill, 1978) is used as a theoretical framework of this study. According to the consumer socialization framework, parents are one of the most important influencing agents in the children's consumer socialization process, as parents assist their children in developing a consumer role through parent-child discussion, reinforcement, and modeling. Parental mediation of children's interaction with online advertising can be understood as an effort to socialize their children to become "healthy" consumers through active mediation based on parent-child discourse, restrictive mediation based on sets of standards and rules, and/or co-using/co-surfing.

This study views children as media consumers whose consumption attitudes and behaviors are affected by their exposure to online advertising as well as their interactions with various socialization agents, including parents, within a sociocultural environment.

Particularly focusing on the role of parents as a socialization agent in children's consumer socialization, this study sets out to address the following objectives in the context of online advertising: (1) to better understand what parents do in terms of mediating children's online activities; (2) to investigate what factors account for differences in what parents do (antecedents), and (3) to examine how different parental mediation strategies impact the outcomes of the consumer socialization process (effects).

CHAPTER 2

LITERATURE REVIEW

2. 1. Children as Consumers

With a declining birth rate and smaller family size and the increasing number of dual income families, today's children tend to become autonomous and influential consumers at an earlier age than previous generations (Brusdal, 2007; Lindstrom and Seybold, 2003; Marshall, O'Donohoe, and Kline, 2007; Ozmete, 2009; Schor, 2004). As "primary consumers," children have their own disposable income to spend to satisfy their needs (Cowell, 2001). It is estimated that children's direct purchase power exceeds \$40 billion a year in the USA (Schor, 2004). In Korea, children receive an average of \$400 per year for allowance and go shopping alone to purchase snacks, school supplies and toys 2-3 times a week (Newswire, 2006a).

Additionally, as "influencers," children substantially affect the purchase and consumption of grown-ups (Bakir, Rose, and Shoham, 2006; Caruana and Vassallo, 2003; Cowell, 2001; John, 1999). According to the "*Project Brandchild*" survey administered across eight countries, one out of every two children aged 8-14 expresses their opinions about the adult purchases made in their homes. Overall, they affect about 60% of all brand decisions made by their parents (Lindstorm and Seybold, 2003). John (1999) states that this influencer role takes place at a very early age, as young as two-years old. Children are also capable of using various persuasion techniques—from

begging and pestering to bargaining and negotiating with their parents— in order to pursue their consumption needs (John, 1999; Marshall, O’Donohoe, and Kline, 2007).

While it appears to be clear that today’s children are influential consumers who are raised to be consumers, the question of whether or not marketers should treat children as *mature consumers* and target them by employing the same persuasion tactics used to appeal to adult consumers is subject to debate. There are two different views of children as consumers (Austin and Reed, 1999; Brusdal, 2007; O’Sullivan, 2005; Strasburg and Wilson, 2002). One is to view children as “active interpreters and shapers” of their own world. According to this view, children have clear preferences, and they are able to accurately express their needs. Therefore, their needs should be respected and fulfilled, and consumption should be encouraged at an early age (Austin and Reed, 1999; Brusdal, 2007; Schor, 2004). The other view is to regard children as “vulnerable victims of commercial pressure.” According to this viewpoint, children often become victims of commercial interests because they are vulnerable to marketing tactics, easily persuaded by marketers to pursue products that they do not really need or are not supposed to have, such as alcohol, tobacco, unhealthy foods, violent video games and movies (American Academy of Pediatrics Committee on Communications, 2006; Children Now, 2005; Kunkel et al., 2004; O’Sullivan, 2005).

Beliefs about children’s developmental abilities and their understanding of social/environmental factors may influence whether one sees children as active interpreters or vulnerable victims of commercial interests. Most researchers have agreed that it is harder for very young children to correctly understand commercial intention

behind marketing messages due to their low level of cognitive capability (American Academy of Pediatrics Committee on Communications, 2006; John, 1999; Kunkel et al., 2004; Mallincrodt and Mazerski, 2007; Moore and Rideout, 2007; Neeley, 2007). A number of age-based developmental stage models, including the very early work of child psychologist Jean Piaget, have been applied to examine the relationship between children's age and their abilities to comprehend how marketplace operates. A general consensus is that comprehension of commercial intent is positively associated with children's age, and that children before reaching ages 7-8 have difficulties fully understanding the intent of marketing communication messages (American Academy of Pediatrics Committee on Communications, 2006; John, 1999; Kunkel et al., 2004; Neeley, 2007). By 7-8-years old, though there can be variation by individual characteristics, most children understand the intent of marketing messages such as advertising, and no longer believe that advertising always tells the truth (John, 1999; Schor, 2004; Ward, Wackman, and Wartella, 1977).

Although age plays an important role in children's consumer learning, researchers have also noted that cognitive development defined by age is not the only factor affecting children's consumer knowledge acquisition (Ellis, 2008; John, 1999; Strasburg and Wilson, 2002; Ward, Wackman, and Wartella, 1977). Human learning does not occur in a vacuum. Instead, it takes place in a social setting. Thus, children's learning is affected by multiple social factors such as family, peers, and mass media as well as by their direct experiences.

As primary caregivers for children in most societies, parents teach their children how to understand the marketplace and act as consumers by sharing consumption experiences (e.g., going shopping together), talking about consumption, setting rules to control children's money spending, and being a consumer role model for children (Cho and Cheon, 2005; John, 1999; Neeley and Coffey, 2007; Ward, Wackman, and Wartella, 1977).

Peers also play an important role in children's consumer learning. This is especially true for older children and adolescents who spend an increasing amount of time with peers (Bukoski, Brendgen, and Vitaro, 2007; Hudley, 2008). Peers can substantially affect the way children acquire consumption skills especially when parental influence is weak. For instance, one of the main findings regarding peer influence has been that peers play a stronger role in children's consumer socialization when less communication between children and parents occurs (John, 1999).

Finally, as a window to the world and a source of marketplace information, mass media transmit cultural and social values to children and affect children's beliefs, attitudes, and behaviors (Dubow, Huesmann, and Greenwood, 2007; Singh, Chao, and Kwon, 2006; Ward, Wackman, and Wartella, 1977). Considering that today's children spend a considerable amount of time on mass media,¹ and that mass media are inundated

¹ According to a survey conducted with 8-18 year-olds residing in the U.S. in 2005, children spend about six and a half hours a day on media including television, video games, movies, music, and the Internet (Roberts, Foehr, and Rideout, 2005). A recent survey conducted with 13,000 people aged between 8 and 24 in 12 countries in Asia revealed that youth in Asia spend nine and a half hours each day consuming some form of media (e.g., Internet, watching television/ DVD/VCD/videos, reading newspapers or magazines and listening to the radio), with Korean youth ranked as number one in time spending on media, with 13.7 hours a day (Synovate, 2009).

with commercial messages, it is not surprising that children's perception and knowledge related to the marketplace and consumption are affected by their exposure to mass media (John, 1999; Rideout, Roberts, and Foehr, 2005; Schor, 2004; Synovate, 2009).

Although social interactions with various "others" are essential in the development and acquisition of consumer learning in all age groups, such social interplay appears to be particularly important for older children who have obtained some level of consumer knowledge and are actively participating in various social interactions. As stated earlier, most children understand the commercial intent of advertising once they reach the age 7-8. In addition, children around this age have more sophisticated understanding of the marketplace, advertising, and brand than do children under 7 (John, 1999). Furthermore, from around this age, children develop more advanced social comparison skills and start appreciating the existence of "others," understanding that others may have different opinions and motives from theirs (Barenboim, 1981; Selman, 1980). As children approach ages 10-11, a social relationship becomes even more important in their consumer decision making, and they tend to pay more attention to the social meaning of the marketplace and social aspects of being a consumer (John, 1999; Selman, 1980).

In sum, the literature indicates that children are consumers with multifaceted characteristics. While they are influential consumers with both direct and indirect buying power, their consumer knowledge and consumption skills vary by age and social environment. Cognitive development plays an important role in children's knowledge and understanding of how the market operates, but it should be noted that cognitive

development takes place in a social setting. Children are surrounded by various others within different sociocultural environment, and their acquisition of learning properties is affected by their interactions with the surroundings. Therefore, when it comes to understanding children as consumers, it is important to understand the social context where children acquire consumption-related knowledge and skills. Especially for older children who have obtained some basic understanding of the marketplace mechanism and are increasingly exposed to various socialization agents, social interactions are expected to play a significant role in shaping children's consumer attitudes, beliefs, and behaviors.

2. 2. Children's Socialization as Consumers and the Role of Parents as Socialization Agents

Socialization Theory

As children's cognitive development and social learning are largely affected by social contexts, the question of "how a child becomes a member of a society through his/her interactions with surroundings" has attracted much research attention among child development psychologists, sociologists, and family communication scholars (Maccoby, 2007). Socialization theory is a useful framework to understand and explain the role of social contexts in children's learning and development. *Socialization* is defined as "processes whereby naïve individuals are taught the skills, behavior patterns, values, and motivations needed for competent functioning in the culture in which the child is growing up" (Maccoby, 2007, p.13). The term "processes" as a plural form in the definition implies that socialization is not a simple and single directional process. Instead, it

involves complex, multi-faceted and multi-directional processes involving multiple social systems such as family, schools, media, society, and culture (Younge and McAdoo, 2008). Although socialization occurs throughout one's life, socialization research has heavily focused on children because a profound and lasting socialization tends to take place during one's childhood (Maccoby, 2007). The main focus of socialization research is the processes through which children acquire and develop learning properties—both cognitions and behaviors—that are vital for them to perform given social roles in a sociocultural context (Moschis, 1978).

In the socialization research framework, children are viewed as “learners” who are affected by their social interactions with specific sources that transmit norms, attitudes, and behaviors. Such specific sources are called “socialization agents.” Socialization agents are key components of socialization research because they are viewed as direct influences on children's learning processes (Hastings, Utendale, and Sullivan, 2007; Laible and Thompson, 2007; Moschis, 1978; Moschis and Churchill, 1978; Ward, Wackman, and Wartella, 1977). Socialization agents may be individuals (e.g., parents, siblings, or peers) or organizations (e.g., schools or mass media) that have frequent contact with a learner (e.g., a child) and pass on social norms, knowledge, attitudes, skills and behaviors to the learner through modeling, reinforcement, and social interaction.

Modeling entails a child's imitation of an agent's behavior in an effort to be similar to the agent. In this case, a socialization agent functions as a role model.

Reinforcement is about agent-oriented reward and punishment mechanisms. Rewards or

incentives are offered to a child when the child meets a socialization agent's expectation, and physical, verbal or restrictive punishments are imposed to a child in an opposite situation. Finally, *social interaction* involves communication between a socialization agent and a learner. It is more inductive than coercive in that the agent tends to use reasoning to inform children of social norms and principles (Laible and Thompson, 2007; Moschis, 1978; Moschis and Churchill, 1978; Ward, Wackman, and Wartella, 1977).

A child's contact and interaction with a socialization agent take place within a particular sociocultural setting. Therefore, when it comes to investigating children's socialization, it is important to understand not only "who are interacting with the child" but also "under what circumstance the interactions take place." A social setting within which a child interacts with and is affected by a socialization agent is conceptualized as "social structural variables" (Moschis and Churchill, 1978). Social structural variables include age, gender, and origin/race/ethnicity of a child and a socialization agent, socioeconomic status, family size, and other relevant demographic and environmental factors that are unique to the child and that may directly or indirectly influence the socialization processes and outcomes (Bush, Smith, and Martin, 1999; Moscardelli and Liston-Heyes, 2005; Moschis and Churchill, 1978). Social structural variables have often been examined as antecedents of the child-agent interaction patterns or control variables that can further explain the link between the socialization processes and outcomes.

Socialization processes result in a variety of consequences, which are called "learning properties" or "socialization outcomes." Socialization outcomes include, but are not limited to, social skills, social understanding, social motivations, emotional

maturity, and social behaviors, which help an individual function as a member within a given social system (Hastons, Utendale, and Sullivan, 2007; Maccoby, 2007; Moschis, 1978). According to Moschis (1978), socialization outcomes can be either normative learning properties that conform to socially prescribed behaviors (e.g., prosocial and rational behaviors) or ones that are associated with an individual's cognitions and behaviors that enable the individual to play a given social role, regardless whether the role conforms to a set of social standards prescribed in a particular social system (e.g., general preference and motivations for consumption, materialism, and aggression). This suggests that all socialization outcomes are not necessarily prosocial. For example, socialization researchers, particularly those focusing on the peer influence on adolescents' socialization, have reported that interactions with deviant friends can result in more engagement in delinquent behaviors of teenagers (see Bukowski, Brendgen, and Vitaro (2007) for a review of delinquent peer influence). Even parents, who are often considered "rational socialization agents" (Moschis, 1978), can cause less desirable socialization outcomes (i.e., lower prosocial behavior, lower empathy, etc.) if parents use too much control involving coercive and autonomy-threatening punishments (Hastings, Utendale, and Sullivan, 2007).

In sum, socialization of children is a function of children's contacts and interactions with socialization agents within a given social setting. It results in children's acquisition of various social learning properties, such as beliefs, attitudes, skills, and behaviors that can help children play certain social roles within a society. Learning properties, called, "socialization outcomes," can be both normative and non-normative,

though. That is, what children acquire from social interactions can be prosocial, antisocial, or neutral. Socialization agents play an important role in socialization of children because they are the main sources that transmit learning properties to children through modeling, reinforcement, and social interactions. Depending on how socialization agents interact with children, socialization outcomes can vary.

Social structural variables are also important in socialization research. Although social structural variables are not the main focus of socialization research, they enhance our understanding of the implications of the child-agent relationship and its outcomes. Taking together, socialization can be understood as dynamic learning processes involving three key components – socialization agents, social structural variables, and socialization outcomes. The comprehensive nature of the socialization theory makes it an effective framework to explain young people’s learning processes and learning properties in various domains including product purchase and consumption.

Consumer Socialization: Overview

One of the domains where the socialization framework has been applied is research on children as consumers. Until the mid-1970s, the socialization framework had rarely been employed outside the fields of psychology and sociology, and the main focus of socialization research had been social orientations such as gender role and moral development of children (see Grusec and Hasting’s *Handbook of Socialization: Theory and Research* (2007) for an extensive review of socialization research from the mid-1950s). It was around the mid-1970s when communication and marketing scholars started paying special attention to children as consumers in response to growing public concerns

about advertising and marketing practices targeting children, and acknowledging the utility of the socialization framework in research on children and their socialization into the consumer role (John, 1999; Moschis, 1978; Moore and Moschis, 1980). Since then, consumer socialization research has thrived, and a substantial body of research on children's consumer socialization has been accumulated (John, 1999).

As the term indicates, *consumer* socialization research specifically focuses on *consumer* learning processes and outcomes of children. Consumer socialization is defined as a multi-faceted process by which children acquire and develop a broad range of consumption-related attitudes, knowledge, and skills (Bakir, Rose, and Shoham, 2006; Moschis and Churchill, 1978; Ward, Wackman, and Wartella, 1977). As a framework stemming from broader socialization research, the main focus of consumer socialization research is to explain how children are socialized as consumers through their interactions with various socialization agents within a sociocultural environment (Chan and McNeal, 2006; Cowell, 2001; Moschis and Churchill, 1978; Rose, Bush, and Kahle, 1998).

Socialization agents have often been examined as the main interest of consumer socialization research because they have direct contact with children and affect the way children acquire consumption-related learning properties (Cowell, 2001; John, 1999; Mangleburg and Bristol, 1998; Moschis and Churchill, 1978). In the context of consumer socialization, socialization agents are defined as "specific sources from which norms, attitudes, motivations, and behaviors are transmitted to young consumers" (Chan and McNeal, 2006, p. 37). Among various socialization agents, parents, peers, and media have received the most research attention as major socialization agents of children's

consumer socialization (Chan and McNeal, 2006; Cowell, 2001; John, 1999; Mangleburg and Bristol, 1998).

Children's interactions with socialization agents entail consumer socialization outcomes—consumption-related attitudes, beliefs, and skills. The subjects of *consumption* are not limited to “tangible” goods that can be purchased in stores, but also include “intangible” properties such as mass media and mass communication messages. In the field of marketing, researchers have focused on various general consumption-related properties acquired in the market, such as children's general marketplace attitudes, knowledge, and beliefs (e.g., Lacznia, Carlson, and Muehling, 1995; Mangleburg and Bristol, 1998; Moore-Shay and Lutz, 1988; Moschils and Churchill, 1978; Schindler, Lala, and Grussenmeyer-Corcoran, 2008) as well as purchase and consumption behaviors (e.g., Moschils and Churchill, 1978; Singh, Chao, and Kwon, 2006).

When children's consumer socialization is examined in the context of communication, researchers have looked into how children's interactions with socialization agents affect the way they think, understand, and consume media messages such as television programs and advertising. Particularly in advertising, researchers have addressed the role of children's interactions with socialization agents in children's understanding of advertising (e.g., Chan and McNeal, 2006), attitudes toward advertising (e.g., Bush, Smith, and Martin, 1999), and skepticism toward advertising (e.g., Mangleburg and Bristol, 1998; Moscardelli and Liston-Heyes, 2005).

The next section reviews the literature of consumer socialization, focusing on the role of three major socialization agents (parents, peers, and mass media) in children's consumer socialization processes and outcomes. The section examines the importance of each socialization agent in children's consumer socialization and different socialization outcomes associated with children's interactions with different socialization agents.

Role of Socialization Agents in Children's Consumer Socialization

Parents

In consumer socialization research, parents have received the most research attention among various socialization agents because parents are the primary agent of children's socialization (Caruana and Vassallo, 2003; Cowell, 2001; Dotson and Hyatt, 2000; Moscardelli and Liston-Heyes, 2005; Moschis and Churchill, 1978; Ozmete, 2009). Grusec and Davidov (2007) provided important reasons that make parents the primary socialization agent. First, parents and children are biologically prepared to be attracted to each other and remain in close proximity, as they are part of biosocial system that operates to help children deal with various social demands. Second, due to their close physical and emotional proximity, parents and children need common understanding regarding the nature of appropriate behaviors to make their lives within a family boundary easier and more comfortable. In order to reach such common understanding or consensus, parents are motivated to socialize children by teaching what is appropriate and inappropriate within a house and in the society in general. Third, most societies expect parents to take care of their children and teach children what is considered right and

wrong within the society and to take responsibility for children's misconduct. In other words, societies assign parents the primary caregiver role.

Empirical studies have demonstrated that parents play an important role in children's socialization. Studies focusing on parent-child communication, for example, have consistently suggested that the way parents communicate with their child about the marketplace is significantly associated with various consumer socialization outcomes. Early works of Moschis and colleagues (e.g., Moschis and Churchill, 1978; Moschis, Moore, and Smith, 1984) demonstrated that the frequency of parent-child communication regarding goods and services in general was positively associated with rational and socially desirable consumer socialization outcomes, such as effective consumer behaviors (e.g., carefully reading most of the things written on packages or labels), accurate perceptions regarding adult consumer functions, obligations, and rights (e.g., checking warranties and guarantees before buying, buying returnable bottles instead of throwaway ones, etc.), and the ability to filter and comprehend puffery in advertising among adolescents.

Later, researchers paid closer attention to two specific patterns of family communication—concept-oriented communication (i.e., a horizontal and open-communication style encouraging children to develop autonomy) and socio-oriented communication (i.e., a vertical communication style emphasizing children's deference to parental rules and authority). Studies have revealed that concept-oriented family communication is positively associated with children's critical assessment of the marketplace (Moschis, Prahasto, and Mitchell, 1986), skepticism toward advertising

(Moscadelli and Liston-Heyes, 2006), shopping independence (Carlson, Grossbart, and Walsh, 1990; Moschis, Prahasto, and Mitchell, 1986), and influence on family purchase decisions (Bakir, Rose, Shoham, 2006; Carlson, Grossbart, and Walsh, 1990).

In addition to parents' communication styles, general parenting styles and practices have also been found to affect children's consumer socialization processes. Regarding parenting styles, Carlson and Grossbart (1988) demonstrated that mothers with an authoritarian parenting style (i.e., demanding children to conform to parental rules without questioning) were more likely to restrict their elementary school-aged child's consumption behaviors, in comparison to parents characterized by a permissive parenting style (i.e., exerting less control over children's conduct and allowing more self-regulation by children).

When it comes to general parenting practices, a survey conducted by Ward, Wackman, and Wartella (1977) found that children's consumer skill acquisition (i.e., brand message information processing skills and money use skills) was a function of both parent-child interactions and parent's own consumer behaviors. Kamaruddin and Mokhlis (2003) further demonstrated that the level of parent-child interactions was negatively associated with children's social and hedonic purchase decision making (i.e., making a purchase decision based on the belief that 'a higher priced, best-selling, new in market, nationally-known, and advertised' means better quality).

Overall, as the primary socialization agent, parents affect children's consumption-related attitudes, beliefs, and behaviors through various modes—from general parenting styles and consumption behaviors to communication styles and interactions with children.

However, parents are not the only socialization agent affecting children's consumer socialization. Especially, as children grow older, parents' influence on children's consumer socialization tends to diminish, as children's interactions with external agents such as peers and media increase (Bukowski, Bredgen, and Virato, 2007; Maccoby, 2007). Children's growing pursuit of autonomy with age increase is another factor affecting the significance of parents as a socialization agent (Grusec and Davidov, 2007).

Peers

Peers play an important role in children's consumer socialization, especially for school-aged children spending a substantial amount of time with peers in school (Bukoski, Bredgen, and Vitaro, 2007; Hudley, 2008). However, peer influence on children's consumer socialization has received less research attention, in comparison to parent influence on consumer socialization. Furthermore, most research on peer influence on consumer socialization was conducted with adolescent samples (John, 1999). Therefore, our understanding of peer influence on consumer socialization is limited to older children. Followings are key findings regarding peer influence on consumer socialization of adolescents.

First, adolescents' interactions with peers can result in positive consumer socialization outcomes. Moschis (1978) demonstrated that adolescents' interpersonal communication with peers regarding consumption issues was positively associated with the adolescents' marketplace knowledge and rational consumption behaviors. To be specific, the levels of adolescents' interpersonal interactions with peers were found to be significantly and positively associated with consumer affair knowledge, the ability to

filter puffery in advertising, and information seeking behaviors prior to making a purchase decision. A similar finding was reported by Kamaruddin and Mokhlis (2003) on the basis of a survey with Malaysian adolescents. The researchers found that interactions with peers were positively associated with teenagers' quality- and price-conscious decision-making styles (i.e., carefully and systematically searching for the best quality/best value before making purchase decisions).

In addition to the development of consumption knowledge and rational marketplace behaviors, adolescents' interactions with peers have also been found to lead them to be more conscious about a social meaning of consumption. Moschis (1978) demonstrated that adolescents' interactions with peers were significantly and positively associated with social motivation for consumption. That is, when adolescents make a purchase decision, what other people think about goods/brands is important. Regarding this finding, Moschis explained that adolescents' interactions with peers appeared to lead adolescents to be more attuned to social and expressive meaning of consumption. Kamaruddin and Mokhlis (2003) reported a similar finding. They found that adolescents high on peer interactions tended to be more brand-conscious (i.e., conscious about what other people think about brands/products when they made a purchase decision).

Some studies have suggested that interactions with peers could also result in negative consequences. In addition to finding the association between peer interactions and brand consciousness, Kamaruddin and Mokhlis (2003) revealed that peer interaction was also a significant predictor of teens' impulsive buying behaviors and feeling of confusion prior to making purchase decisions. Moschis and his colleagues (Moschis,

1978; Moschis and Churchill, 1978; Moore and Moschis, 1980) reported that teens' interactions with peers concerning products and services (e.g., talking about buying) were significantly and positively associated with the level of materialism. In the context of media consumption, Nathanson (2001b) found that teens' discussion about violent television programs with their friends was positively associated with the teens' involvement in aggressive behaviors during high school.

In sum, although limited in quantity and sample characteristic (i.e., focusing on older children), the consumer socialization literature suggests that interactions with peers are associated with children's (especially adolescents') consumer socialization. Outcomes of peer socialization can be both positive and negative and both rational and expressive (Moschis, 1978).

Media

Media is another important socialization agent, especially for modern children who are exposed to a tremendous amount of media messages on a daily basis (Graves, 2008). Inundated with advertising and marketing messages, media is one of the primary marketplace information sources, transmitting consumption norms and values to children and affecting children's consumer attitudes and beliefs (Dubow, Huesmann, and Greenwood, 2007; Singh, Chao, and Kwon, 2006; Ward, Wackman, and Wartella, 1977). Acknowledging the potential role of media in children's socialization, Dubow, Huesmann, and Greenwood (2007) claimed that "the very act of engaging with the mass media...provides learning opportunities that socialize children, and what children observe

through the mass media's window on the world alters their beliefs, attitudes, and behaviors" (p. 408).

Outcomes of consumer socialization through media are both positive and negative. On the positive side, media have been found to help children obtain marketplace knowledge and develop a healthy level of skepticism. Mangleburg and Bristol (1998) demonstrated that amount of television viewing was positively associated with teenagers' skepticism toward advertising. The researchers suggested that exposure to television may provide teens with opportunities to improve marketplace knowledge, which in turn, can help them critically assess advertising messages. The same finding was reported by Moscardelli and Liston-Keyes (2005) with a different sample of teenagers in the USA.

However, Chan and McNeal (2006) reported that the amount of Chinese children's (aged 6-14) television viewing was negatively associated with their understanding of commercial communications (i.e., what television commercials are and why television stations broadcast commercials). This was true even after controlling for children's age. Moschis and colleagues (Moschis, 1978; Moschils and Churchill, 1978) reported that the amount of television viewing among teenagers was positively associated with materialism and with having higher social motivations for consumption (i.e., the extent to which children are affected by their perceptions of what other people think about goods/brands). Additionally, the amount of television viewed was negatively associated with economic motivations for consumption.

In sum, children's exposure to media, especially television, has been found to affect children's consumer socialization. It results in both positive and negative consumer socialization outcomes. While exposure to media can help children acquire marketplace knowledge and develop advertising skepticism, it has also been found to be associated with negative consequences such as materialism.

Parents' Influence on Influence of Other Agents

As children's consumer socialization is affected by multiple socialization agents, it is possible that different agents interact with each other. While various ways of interactions are plausible, parents' influence on children's interactions with external socialization agents such as peers and media has received the most research attention. This may be due to the assigned role of parents as the primary agent in children's socialization. According to Grusec and Davidov (2007), one of the roles of parents as the primary socialization agent is to control resources available to children and manage the environment to make sure that the children are protected from undesirable social influences. In other words, parents are socially authorized to supervise and control children's interactions with peers and media.

When it comes to peer influence on children's socialization, it has been found that children's frequent interactions with peers could result in some undesirable socialization outcomes such as delinquent behaviors, materialism, and television-induced aggression (e.g., Moore and Moschis, 1980; Moschis and Churchill, 1978; Nathanson, 2001b). However, researchers have empirically demonstrated that parents can serve as a buffer against undesirable peer influence. For instance, Mason et al. (1994) and Virato,

Brendgen, and Tremblay (2000) found that children's attachment to parents weakened the association between children's exposure to deviant friends and their delinquent behaviors, suggesting that parents' relationship with their child moderates peer influence on the child's behavior. In other words, parents' relationship with children and their involvement in childrearing can affect the degree to which children are affected by peer influence. It has also been found that peer influence on children's consumer socialization is weakened when more communication between children and parents occurs (John, 1999).

The role of parents as the primary socialization agent is even more emphasized in regard to media influence on children. Researchers have empirically demonstrated that parental behavior and interactions can weaken the link between children's exposure to media and undesirable media effects. From a series of surveys with Dutch children aged 8-12, Buijzen and colleagues (Buijzen and Valkenburg, 2005; Buijzen, van der Molen, and Sondij, 2007; Buijzen et al., 2008) found that parents' talking with their child about advertising weakened the association between the child's exposure to advertising and materialistic attitudes. A similar moderating effect of parental discussion was found for children's exposure to violent news events and their experiencing negative emotions (e.g., fear, worry, and anger). Similar findings have also been reported in the context of the Internet. The extent to which parents monitor and talk about children's use of the Internet has been found to be negatively associated with children's willingness to disclose personal information on the Web (Livingstone and Helsper, 2008; Lwin, Stanaland, and Miyazaki, 2008; Youn, 2008), the likelihood of being bullied online (Mesch, 2009), and

the extent to which children are exposed to child-inappropriate content on the Web (Livingstone and Helsper, 2008).

Altogether, the existing literature suggests that parents play a central role in children's consumer socialization, as they affect the way their child becomes a consumer both directly and indirectly. As a primary socialization agent, parents directly affect consumer socialization of their child by transmitting consumer knowledge, attitudes, and skills through modeling, reinforcement, and social interactions. Unless parents are too coercive or controlling, which often bring boomerang effects (Cantor and Wilson, 2003; Lwin, Stanaland, and Miyazaki, 2008), and unless the child reaches the point where the influence of external agents (e.g., peers) become more important than the parents, the child's interactions with his/her parents result in desirable consumer socialization outcomes such as effective consumption strategies, accurate perceptions of consumer functions, and the ability to understand and critically assess marketing messages (Hastings, Utendale, and Sullivan, 2007).

Not only do parents directly influence children's consumer socialization, they also moderate other socialization agents' influence, especially media influence, on children. It is especially true when the outcomes of children's interactions with other socialization agents are potentially socially undesirable. Parents control and manage the surroundings of their child to make sure that the child is protected from any negative social influences and grows as a healthy member of the society. It is primarily because the society assigns parents the primary caregiver role, and parents are naturally motivated to protect their children from any negative social effects.

2. 3. Parental Mediation of Children’s Media Use

The role of parental involvement in children’s media consumption has been well recognized in parental mediation research (Lwin, Stanaland, and Miyazaki, 2008).

Parental mediation is defined as strategies parents employ to control and supervise their child’s media use (Warren, 2001). While there are other terms to refer to such parental practices (e.g., parental control, parental intervention, etc.), the term “mediation” has been widely used to capture a range of parental strategies to manage the potential impact of media on children (Livingston and Helsper, 2008).

Parental mediation research has found that a child’s exposure to various media messages can affect his/her attitudes and behaviors, but that these media effects can be “mediated by” the extent to which the parents are involved in monitoring and controlling the child’s media consumption (Mesch, 2009). In other word, parental supervision and control of children’s media use can serve as a moderating variable. Considering that parents are understood as “mediators” affecting the magnitude of media effects on children, “mediation” seems to be an appropriate term to use to explain the role of parents in children’s media-related consumer socialization. It should be noted that this is a different meaning of the term from how it is used in a statistical analysis sense.

Parental meditation goes beyond simple restriction of children’s media use to cover parent-child communication on media-related issues and various monitoring strategies (Livingston and Helsper, 2008). In parental mediation research, three general approaches to mediating children’s media consumption have been identified—active mediation, restrictive mediation, and co-using (Austin et al., 1999; Fujioka and Austin,

2003; Komaya and Bowyer, 2000; Nathanson, 2001a; Valkenburg et al., 1999; Warren, Gerke, and Kelly, 2002; Warren, 2003). Active mediation refers to parents' explaining and discussing the undesirable aspects of media contents and appropriate media consumption behaviors. Restrictive mediation involves parents' setting rules to control children's media usage in terms of appropriate media content and the total amount of media exposure permitted. Finally, co-using is shared media experience between parents and children without parental instruction or critical discussion.

Researchers examining parental mediation have focused on (1) what specific child-parent factors predict these three different parental mediation types; and (2) how different parental mediation strategies are associated with different socialization outcomes such as children's media-related understanding, attitudes, beliefs, and behaviors. The subsequent sections review the existing research literature on the key influencing factors (antecedents) and effects/effectiveness (outcomes) of each parental mediation approach, which have been examined. Most of this research has taken place in the context of television.

2. 3. 1. Key Influencing Factors in Parental Mediation

Not all parents employ the same levels and types of parental mediation. While some parents practice higher levels of parental mediation, others tend to be more permissive about their child's media use or do not purposefully supervise how the child uses media. Some parents set more rules on their child's television viewing or Internet use, whereas others prefer discussions about media-related issues to rulemaking. Therefore, to enhance our understanding of parental mediation, it is important to explore

what factors influence parental mediation practices. This section examines four key antecedents of parental mediation: (1) perceptual and attitudinal factors; (2) parenting style; (3) family communication pattern (FCP); and (4) social structural variables.

Parents' perceptions of media and media content have been examined as one of the key predictors of the levels and types of parental mediation (Austin et al., 1999; Meirick et al., 2009; Nathanson, 2001a; Tsfati, Ribak, and Cohen, 2005; Valkenburg et al., 1999; Warren, 2001; Warren, Gerke, and Kelly, 2002). However, the role of parents' perceptions of *their own child* has received less research attention, although the communication (e.g., third-person effects) and psychology literature (e.g., self research) suggests that how parents think about their child may play an important role in parental conduct. This study examines potential influence of parental perceptions of both media content and beliefs about their own child on parental mediation behaviors.

Parenting style, which refers to the emotional climate in which parents raise children (Darling and Steinberg, 1993), has been examined as a key antecedent of children's developmental and social outcomes. However, most parental mediation research has focused on child development and psychology aspects (Eastin, Greenberg, and Hofschire, 2006). Only a few studies (e.g., Carlson and Grossbart, 1998; Eastin, Greenberg, and Hofschire, 2006) investigated the role of parenting styles in parental mediation. Considering that parenting style has been found to be associated with various parental socialization behaviors and outcomes (Glasgow et al., 1997; Grusec and Davidov, 2007), the role of parenting style in parental mediation deserves further

research attention, especially when parental mediation is discussed as a key factor in children's consumer socialization.

Family communication pattern (FCP), which indicates how parents and children talk about consumption in general (McLeod and Chaffee, 1972), is another potential antecedent of parental mediation. The main difference between FCP and parental mediation is that the former is more about general communication style on a broad range of issues among family members, while the latter focuses on both verbal and nonverbal parental behaviors on a specific type of consumption—children's media use. Despite the difference, FCP and parental mediation are closely related to each other. It is because both deal with parent-child interactions and both affect consumer socialization processes and outcomes of children.

Social structural variables, defined as background factors associated with learners and socialization agents (Ward, Wackman, and Wartella, 1977), have also been considered key components in the consumer socialization framework. Some of the most frequently examined social structural variables in parental mediation research (children's age and gender, parents' gender and education) are discussed as potential antecedents of parental mediation.

(1) Perceptual and Attitudinal Factors

Parents' Perceptions of Media and Content

Existing studies have demonstrated that parents tend to have certain attitudes toward and beliefs about media that their child uses. These perceptual factors have been found to play an important role in the ways parents supervise and control their child's

media consumption (Austin et al., 1999; Meirick et al., 2009; Nathanson, 2001a; Tsfat, Ribak, and Cohen, 2005; Valkenburg et al., 1999; Warren, 2001; Warren, Gerke, and Kelly, 2002).

In the context of television, Nathanson (2001a) investigated how parents' attitudes toward violent television programs were associated with parental mediation. She measured the attitudes of parents of 2nd to 6th graders on three constructs: (1) parents' personal affinity for violent television (i.e., the degree to which violent programs are important and useful for themselves); (2) perceived utility of violent television for their child (i.e., the degree to which violent television is useful in teaching their child about the social world); and (3) perceived harm of violent television for their child (i.e., the degree to which parents think violent television has harmful effects on their child). Nathanson found that parents' personal affinity for violent television and perceived utility of violent television on their child were negatively associated with restrictive mediation and positively associated with co-viewing. However, these attitudes were unrelated to active mediation. These findings were true even after controlling for children's gender and age and parents' education levels. On the other hand, parents' perceived harm of violent television on their child was found to be a positive predictor of both active and restrictive mediation, and a negative predictor of co-viewing.

Nathanson's findings suggest that both restrictive and active mediation stems from parents' negative perceptions about a particular media genre (i.e., violent television). The difference between restrictive and active mediation was that restrictive mediation was motivated by both parents' affective evaluation of the media genre (i.e.,

affinity for violent television) and beliefs about the genre (i.e., perceived utility and harmful effects of a given media content on their child), whereas active mediation was mainly a function of beliefs about television violence rather than personal liking or disliking of it. Unlike restrictive and active mediation, co-viewing was more frequently employed by parents who did not perceive any harmful effects of violent television, who believed violent television had a more positive impact on their child's social learning, and who personally liked violent television programs. These results suggest that co-viewing likely stems from parents' personal liking of a particular media genre rather than from an intent to mediate children's television viewing.

Warren and his colleagues (Warren, 2001; Warren, Gerke, and Kelly, 2002) further demonstrated that both restrictive and active mediation was a function of parents' negative perceptions of media content. From a mail survey with parents/guardians of elementary school-aged children (ages 6-12), Warren (2001) found that parents who were highly concerned about negative effects on their child of viewing violent, sexual, or profane television content were more likely than less concerned parents to practice higher levels of both restrictive and active parental mediation of children's television viewing. Like Nathanson's study (2001a), parents' concern about such television content was not associated with parents' co-viewing of television. These findings held true after controlling for parent-child demographic variables (i.e., children's gender and age, parents' gender, education level, and household income), as well as children's television viewing hours per week.

Warren et al. (2002) replicated Warren's 2001 study, using the same parental mediation and attitude measures, but utilizing a different survey method (i.e., telephone survey) with a different type of sample (i.e., parents of children aged 1-17 residing in two Southern cities in the U.S.). Identical results were reported. Once again, both restrictive and active mediation was predicted by parental concerns about child-inappropriate television content, whereas co-viewing was not associated with parents' negative perception about the given media content. The researchers explained the findings stating that co-viewing might be more about "coincidence" than "purposeful intervention," whereas restrictive and active mediation is likely to be motivated by parents' intervention intention (Warren, Gerke, and Kelly, 2002).

Similar findings were also reported from a sample of Dutch parents of children aged 5 to 12 (Valkenburg et al., 1999). After controlling for parent-child background variables (i.e., parents' gender and education, children's gender, age, and television viewing time), parents' concerns about television-induced aggression and fighting were found to be positive predictors of restrictive mediation. The authors also found a positive association between parents' concerns about television-induced fighting and active mediation, although this association did not reach the traditional significance level ($p = .06$). In addition, as in the other studies, parental concerns about negative influence of violent television were not associated with co-viewing in this study.

Outside the television context, Nikken and Jansz (2006) found that parents' co-playing of electronic games with children aged 8-18 was predicted by parents' beliefs about positive effects of these games on their child's social and emotional well-being

(e.g., improving social skills, learning to control emotions, expanding their circle of friends, letting oneself go, relaxing), but not by parents' negative perceptions such as perceived attitudinal and behavioral influence of game playing on their child (e.g., becoming violent, getting wrong ideas about what is acceptable, imitating rude or obscene language, considering violence a normal way of solving problems). However, such negative perceptions were positively associated with both restrictive and active parental mediation of children's game playing. These findings held after controlling for parents' characteristics (educational level, gender, and frequency of game playing), children's characteristics (children's age and gender, and game enthusiasm), and family size. Nikken and Jansz's study (2006) appears to be the only published study outside the television context investigating how parental perceptions of media content are associated with parental mediation.

Overall, the existing literature demonstrates that parents' perceptions of certain media content play an important role in the way parents mediate their child's media use. Those who have negative perceptions and beliefs about media are more likely to be involved in purposeful mediation (i.e., active mediation and restrictive mediation).

Parents' Perceptions of Their Children

Most parental mediation research has focused on the role of parents' perceptions of *media* or *media content*. However, although there is no published study that has explicitly examined the association, it seems plausible that parents' perceived relationship with their children may also play an important role in the way parents choose to supervise and control the children's media use.

Social psychology research on the self and the social distance corollary in third-person effect research provide relevant insights and empirical evidence on a possible connection between parents' perceived relationship with children and their parental mediation. The self literature indicates that people's motivation to maintain positive self perception can affect the way they perceive and interact with others (Aron et al., 1991; Aron, Aron, and Smollan, 1992; Greenwald, 1980; Ross and Sicoly, 1979). According to this line of research, people are motivated to boost and preserve positive self-perception, and this motivation often results in overestimating self-worth and personal qualities and underestimating others' abilities (Greenwald, 1980; Ross and Sicoly, 1979). As we are motivated to maintain positive self-perception, "being influenced by mass media messages" is often considered "ego-threatening," especially if the messages have socially negative connotations and detrimental consequences (e.g., advertising with strong intent to sell, pornography, violent television programs, etc.).

Such self-serving bias is often expanded to close others. According to Aron and colleagues (Aron et al., 1991; Aron, Aron, and Smollan, 1992), people often consider close others (e.g., family, friends, or romantic partners) a significant part of themselves. As close others are considered a part of self, they are likely to be perceived to be better than distant others, being less vulnerable to media influence and being smarter than distant others. Thus, parents' motivation to be "good parents" may affect their perceptions about, and behaviors toward, their children.

In the field of communication, the third-person effect model (Davison, 1983) postulates that people tend to perceive others (third-persons) to be more susceptible to

media influences than themselves, especially when “the other” is physically or psychologically distant from the self (Cohen et al., 1988; Duck and Mullin, 1995; Peiser and Peter, 2000; Scharrer, 2002). This phenomenon is called the social distance corollary (Duck and Mullin, 1995). Third-person effect researchers (e.g., Chapin, 2000; Cohen et al., 1988; Duck and Mullin, 1996; Gunther, 1995; Gunther and Mundy, 1993; Salwen and Dupagne, 2003) have empirically demonstrated that people are inclined to perceive different media effects on close others versus distant others. That is, people tend to assume that close others are less susceptible to (or immune to) influence of undesirable media messages than distant others.

Some studies have demonstrated that such ego-enhancement bias holds particularly in the context of parents’ perceptions of their own children. For example, Hoffner and Buchanan (2002) revealed that parents judged that television violence had stronger effects on other children than on their own child. Tsftati and colleagues (2005) investigated the same phenomenon with a television drama containing sex, violence, and coarse language. The researchers also found that parents tended to think that their child was less likely than other children at their child’s age to be affected by such television content. Recently, Meirick et al. (2009) also demonstrated that parents tended to believe that their child was less susceptible than other children to television-induced materialism. This suggests that parents’ perceived closeness to their child can affect the degree to which they perceive media effects on the child, which in turn, may affect their parental mediation behaviors.

Overall, both self and third-person effect research suggests that people tend to treat close others as part of self and to perceive the close others differently from distant others. As a result, people tend to think close others are less vulnerable than distant others to harmful media effects. It can be because they think they are less susceptible to media influence than others, and since close others are part of self, they presume that the close others will be similar to themselves—being smart and less vulnerable to harmful media content and other social influence. Regarding parents' perception of their child versus others, research on self implies that the biased self-enhancing perceptions also might stem from parents' motivation to maintain positive self-image—being good parents: They may want to feel that they are doing well as parents in order to enhance and preserve positive self-perception. Since their children are under the protection of the good parents, their children 'should be' less susceptible to media influence.

Although there is no doubt that many parents would perceive their children as closer to them in comparison to other children, the question of *to what extent* parents feel that their children are close to them has never been addressed in third-person effect research nor in parental mediation research. In fact, family communication and parenting style research, which is discussed in subsequent sections, has demonstrated that the strength of the relationship between a parent and a child is different across different parent-child pairs (Baumrind, 1971; Darling and Steinberg, 1993; McLeod and Chaffee, 1972). Some parents are more highly involved in childrearing and more often communicate with children, while others keep distance from their children. Therefore, it is expected that there is substantial variation in the degree of perceived closeness between

parents and children. In other words, some parents may perceive their children (or one of the children) as more distant and different from themselves while others feel a stronger sense of attachment to their children.

Depending on this perceived closeness/distance, parents' perceptions of media influence on their children may be different. As the third-person effect research indicates, parents would perceive less media influence on their child when they perceive their relationship with the child as close. When parents feel that their child is distant from them, on the other hand, they may be more likely to presume stronger influence on their child, as they are less likely to perceive their child as similar to themselves.

How such perceptions lead to parental mediation behaviors is open to questions. For instance, it is possible that a parent practices a higher level of parental mediation when she feels that her relationship with her child is close enough to effectively intervene with the child's media consumption behavior. However, it is equally possible that a parent may feel that it is unnecessary to practice parental mediation when her relationship with the child is quite close. That is, if the child is already very close to the parent, the parent may feel that the child understands what his/her parent wants, and thus, conforms to the parent's expectations without resistance. This will make a purposeful intervention less necessary. Also, a parent may feel that her child is under her protection when the child is perceived to be close to her. In that case, the parent is likely to perceive that the child is safe from any harmful media effects. This perception may lead the parent to practice less parental mediation. Altogether, there are competing possibilities.

(2) Parenting Style

Parenting style refers to “a constellation of attitudes toward the child that are communicated to the child and create an emotional climate in which the parent’s behaviors are expressed” (Darling and Steinberg, 1993, p. 493). It is also defined as overall parenting environment and parents’ pervasive socialization tendencies displayed across a wide range of parent-child interactions (Carlson, Grossbart, and Stuenkel, 1992; Darling and Steinberg, 1993; Steinberg et al., 1994). Parenting style has been examined as an important predictor of parents’ childrearing practices and developmental and social outcomes in children (Baumrind, 1971; Glasgow et al., 1997; Grusec and Davidov, 2007; Steinberg et al., 1991). However, its role in parental mediation has received less research attention. Considering that parenting style is expressed through various parenting practices (Darling and Steinberg, 1993), parental mediation is likely to be one of the many behaviors influenced by parenting style. Therefore, parenting style deserves research attention as a potential antecedent of parental mediation.

Demandingness and responsiveness have been examined as two underlying dimensions of parenting styles (Baumrind, 1971; Darling and Steinberg, 1993; Glasgow et al., 1997; Spera, 2005; Steinberg et al., 1991, 1992, 1994). Parental demandingness, which is also called parental strictness and supervision, refers to a parent’s willingness to act as a socialization agent through control, supervision, and maturity demands. This parenting style demands children to be integrated into the family and society by conforming to the family and social rules and expectations. Parental responsiveness is defined as a parent’s recognition of the child’s individuality. It is characterized by

parental warmth, acceptance, involvement orientation, and the extent to which the parent is supportive and sensitive to the child's needs (Baumrind, 1971; Darling and Steinberg, 1993; Spera, 2005; Steinberg et al., 1992, 1994).

Frequently used in parenting style research are the fourfold parenting typology created based on the demandingness and responsiveness dimensions: authoritative, authoritarian, permissive, and neglectful (Baumrind, 1971; Carlson, Grossbart, and Stuenkel, 1992; Eastin, Greenberg, and Hofschire, 2006; Glasgow et al., 1997; Steinberg et al., 1991). Authoritative parenting style is characterized by high demandingness and high responsiveness. As high on demandingness, authoritative parents consistently monitor children's behaviors, exert control, value disciplined conformity and tend to be assertive. At the same time, they are also responsive to their children's needs. They encourage bidirectional communication, respect children's point of view and autonomous self-will, and recognize the rights of children. When they impose rules or restrictions on their children, they tend to explain reasons behind the parental policy. When children violate parental rules, authoritative parents prefer non-punitive disciplines to punitive methods.

Authoritarian parenting style is characterized by high demandingness and low responsiveness. Authoritarian parents highly value children's obedience to parents' authority and favor punitive and forceful methods of discipline to curb children's self-will when children's conduct conflicts with parents' idea of appropriate conduct for children. Unlike authoritative parents, authoritarian parents want to control, shape, and

evaluate children's attitudes and behaviors based on a standard set by the parents, without feeling any need to explain the reasoning behind their policies.

Permissive parenting style is defined by low demandingness and high responsiveness, a direct opposite of the authoritarian parenting style. Unlike authoritarian parents, permissive parents exert less control over children's conduct and allow more self-regulation by children. They are lenient and non-punitive and make few demands on their children. Permissive parents are also different from authoritative parents in that they tend to avoid the exercise of control over children's behaviors and do not present themselves as active agents responsible for shaping and controlling children's attitudes or behavior. Finally, a neglectful parenting style is defined by low demandingness and low responsiveness. Neglectful parents are emotionally detached from their child and less concerned about the child's development. They neither seek parental control nor encourage children's autonomous development.

Studies on parenting style have demonstrated that parenting style is associated with various developmental, psychological, and social outcomes in youth. Authoritative parenting, in comparison to other types of parenting styles, has been found to be most closely associated with positive outcomes such as better academic performance among high school students (Steinberg et al., 1991, 1992, 1994), lower level of behavioral dysfunction among teenagers aged 14-18 (Lamborn et al., 1991; Steinberg et al., 1991), development of better psychological coping skills and competencies among college students (Nijhof and Engels, 2007) and high school students (Turkel and Tezer, 2008). Based on a survey with a sample of 10,000 ethnically and economically diverse high

school students in Wisconsin and California, Steinberg et al. (1991) further demonstrated that the positive correlations between authoritative parenting and positive outcomes held across different ethnicity, socioeconomic status, and family structure.

Although parenting style has been examined as a key antecedent of many developmental and social outcomes in the child development and psychology literature, its role in parental mediation and children's consumer socialization has rarely been examined (Eastin, Greenberg, and Hofschire, 2006). As of 2009, only two empirical studies (Carlson and Grossbart, 1988; Eastin, Greenberg, and Hofschire, 2006) have examined the relationship between parenting styles and parental mediation practices. Carlson and Grossbart (1988) demonstrated that authoritative parents, in comparison to permissive, authoritarian, and neglectful parents, were more frequently involved in "media mediation" (measured by control of children's television viewing and discussion about advertising). In addition, permissive parents were significantly more likely than neglectful parents to engage in media mediation. However, permissive parents were not significantly different from authoritative parents in terms of the level of media mediation.

In the context of the Internet, Eastin, Greenberg, and Hofschire (2006) measured four types of parental mediation (active, restrictive, co-surfing, and technical mediation) in a telephone survey with mothers of teenagers (aged 13-18). The researchers found that active mediation and co-surfing were most frequently practiced by authoritative parents, followed by authoritarian and neglectful parents. When it comes to more restrictive forms of parental mediation (i.e., time restrictions and content restrictions of children's Internet use and technical mediation), however, the study found no difference between

authoritative and authoritarian parents. Both authoritative and authoritarian parents, who are high on demandingness, were more frequently involved in restrictive and technical mediation, compared to neglectful parents who are low on demandingness. This study did not analyze permissive parents due to the small number of parents categorized as permissive in the sample.

Although limited in quantity and scope, the existing studies suggest that different types of parenting style would be associated with different forms of parental mediation. Particularly, findings from Eastin et al. (2006) suggest that a demanding parenting style is more closely associated with restrictive forms of parental mediation. Considering that both demandingness and restrictive mediation emphasize children's conformity to parental rules and authority, the observed association makes sense. Although the existing research has not found empirical evidence for a meaningful association between less restrictive forms of parental mediation (active mediation) and parenting style, it seems possible that such a relationship would exist as both responsiveness and active mediation stress parents' responsiveness to children's needs.

(3) Family Communication Patterns (FCP)

Research on consumption-related family communication patterns (FCP) (McLeod and Chaffee, 1972) examines how the quality and types of communication between children and their parents regarding consumption and the marketplace affect consumer socialization processes and outcomes (Bakir, Rose, and Shoham, 2006; Fujioka and Austin, 2002). The role of family communication in children's consumer socialization processes and outcomes has been investigated in a variety of research contexts such as

young consumers' materialism (Carlson et al., 1994; Moschis and Moore, 1979), consumer knowledge and activity (Carlson et al., 1994; Moschis and Moore, 1979; Moschis, Moore, and Smith, 1984), attitudes toward advertising and marketplace (Bush, Smith, and Martin, 1999; Carlson et al., 1994; Moschis, Prahasto, and Mitchell, 1986), skepticism toward advertising (Mangleburg and Bristol, 1998; Moscardelli and Listin-Heyes, 2005), and ad-induced behaviors (Buijzen and Valkenburg, 2005).

McLeod and Chaffee (1972) proposed two broad dimensions of family communication patterns (FCP)—socio-oriented communication and concept-oriented communication patterns based on Newcomb's A-B-X model (1953). Socio-oriented family communication patterns emphasize the "A (child) – B (parent)" relationship. This dimension captures the degree to which a vertical communication style from the parent to the child is stressed. In a high socio-oriented family, the child's deference to parental monitoring and controlling is expected. Such parental expectation of children's conformity stems from a parent's desire for harmonious interpersonal relationship within the family, which often results in parents' inclination to tell children to avoid argument or questioning about parents' consumption-related decisions (Fujioka and Austin, 2002).

The concept-oriented family communication dimension, on the other hand, stresses A–X as well as B –X relationships, which indicate an emphasis on each person having his/her own orientation or opinion toward X. Unlike socio-oriented FCP, concept-oriented FCP fosters a horizontal and open communication between a parent and a child. In the consumption context, a parent whose communication style is concept-oriented tends to encourage his or her child to develop an independent evaluation of consumption-

related issues and to express his or her own view about family members' purchase decisions. A concept-oriented parent also actively solicits the child's inputs in consumption-related discussions and activities.

Rather than assuming that all relationships between A and B, A and X, and B and X are constantly present and equally strong, McLeod and Chaffee (1972) argued that each relation differs in its strength and that the different strength of the relationships can result in different patterns of parent-child communication. Depending on the strength of the concept- and socio-oriented dimensions, McLeod and Chaffee proposed four types of family communication patterns: *laissez-faire*, protective, pluralistic, and consensual.

Laissez-faire parents are low on both socio- and concept-oriented communication and tend to have low levels of parent-child communication. In this communication environment, a child is more likely influenced by external socialization agents such as peers or media than by parents when he/she develops consumption attitudes and beliefs or makes consumption decisions. Protective parents are high on the socio-oriented dimension but low on the concept-oriented dimension. They tend to stress a vertical relationship between parents and children. Children's obedience to parental authority and control is stressed at the expense of developing their own consumer competence and autonomy. Pluralistic parents, low on socio-oriented and high on concept-oriented, value a horizontal relationship between parents and children. They encourage children to explore new ideas and develop consumer competencies without promoting children's conformity to parental expectations. Finally, consensual parents are high on both socio- and concept-oriented dimensions. They encourage children to explore new ideas and

build their own consumer skills and competencies as long as children respect family rules and social harmony (Bakir, Rose, and Shoham, 2006; Carlson, Grossbart, and Tripp, 1990; Clarke, 2008; McLeod and Chaffee, 1972; Moschis, Prahasto, and Mitchell, 1986).

In examining the role of FCP in parental mediation, some researchers used two underlying dimensions (socio-oriented and concept-oriented) (e.g., Fujioka and Austin, 2002; Youn, 2008), while others used the four discrete cells from this typology (e.g., Carlson, Grossbart, and Tripp, 1990; Carlson, Grossbart, and Walsh, 1990; Rose, Bush, and Kahle, 1998). Regardless of the measurement approach, the general insight obtained from the literature is that different family communication patterns are associated with different types of parental mediation. For example, parents' socio-oriented FCP was found to be associated with restrictive parental mediation such as parents' frequent use of the ratings system in television program selection for their children (Fujioka and Austin, 2002) and setting more family rules regarding high school students' Internet use (Youn, 2008). Parents with more protective and consensual FCP, who are high on the socio-orientation dimension, tended to have the highest level of control over their children's television viewing (Carlson, Grossbart, and Tripp, 1990). On the other hand, concept-oriented FCP has been found to be positively associated with active parental mediation such as parents' talking with elementary school-aged children about advertising (Carlson, Grossbart, and Tripp, 1990; Carlson, Grossbart, and Walsh, 1990), having a critical discussion of a variety of issues related to television (Carlson, Grossbart, and Tripp, 1990; Fujioka and Austin, 2002), and having conversations regarding companies' collecting personal information on the Web (Youn, 2008).

These empirical findings are not surprising considering that socio-oriented and concept-oriented FCPs share common characteristics with restrictive mediation and active mediation, respectively. Both socio-oriented FCP and restrictive parental mediation emphasize children's conformity to parental authority, whereas both concept-oriented FCP and active mediation stress a horizontal relationship between parents and children.

While the relationship between socio-oriented communication and restrictive mediation, and between concept-oriented communication and active mediation are clear and consistent, the relationship between co-using and FCP is rather obscure. Previous studies have reported mixed findings. Carlson and colleagues demonstrated that parents high on concept-oriented communication were more likely to be involved in co-viewing of television than those high on socio-oriented communication (Carlson, Grossbart, and Tripp, 1990; Carlson, Grossbart, and Walsh, 1990). They explained that as concept-oriented parents are also high on active mediation, parents high on concept-oriented FCP (consensuals and pluralistics) might use co-viewing as an opportunity to stimulate parent-child conversations and discussions.

However, Fujioka and Austin (2002) provided opposite findings. They found that parents high on socio-oriented FCP were more likely than those high on concept-oriented FCP to co-view television with their children. Fujioka and Austin (2002) argued that co-viewing might reflect a parent's desire for harmonious shared experiences rather than the precondition for critical discussions. As socio-oriented parents tend to pursue harmony within their households rather than welcoming questions or arguments which could bring

controversy or conflict, they may prefer co-viewing which does not necessarily involve parent-child discussions.

(4) Social Structural Factors

Since consumer socialization takes place within a social setting, social structural variables are conceptualized as important antecedent and moderating factors. Social structural variables that have been studied in consumer socialization research include demographic and socioeconomic factors of learners and socialization agents (e.g., age, gender, education, income, ethnicity, social class, etc.) and family settings and compositions of learners (e.g., size of family, both-parents vs. single-parent family, etc.) (Dotson and Hyatt, 2000; Kamaruddin and Mokhils, 2003; Moore and Moschis, 1980; Moscardelli and Liston-Heyes, 2005; Moschis and Churchill, 1978; Singh, Chao, and Kwon, 2006; Ward, Wackman, and Wartella, 1977). Since Moschis and Churchill (1978) proposed a conceptual model of consumer socialization which suggests that social structural variables affect consumer socialization outcomes both directly and indirectly through their influence on socialization processes, consumer socialization researchers have examined social structural variables as key antecedents of both socialization processes and outcomes (e.g., Chan and McNeal, 2006; Dotson and Hyatt, 2005; Kamaruddin and Mokhils, 2003; Moore and Moschis, 1980; Moscardelli and Liston-Heyes, 2005; Singh, Chao, and Kwon, 2006).

As part of consumer socialization, parental mediation research has also investigated the role of social structural variables in parental mediation practices and outcomes. However, most existing parental mediation studies have examined social

structural variables either as (1) determinants (antecedents) of parental mediation (e.g., Austin et al., 1999; Livingston and Helsper, 2008; Mesch, 2009; Warren, Gerke, and Kelly, 2002), or as (2) control variables in testing the relationship between parental mediation and other parental factors such as perceptions of media or involvement in childcare (e.g., Nathanson, 2001a; Nikken and Jansz, 2006; Valkenburg, 1999; Warren, 2001; Warren, Gerke, and Kelly, 2002) or between parental mediation and its outcomes (e.g., Buijzen and Valkenburg, 2005; Moscardelli and Listin-Heyes, 2005).

Possibly because social structural variables have often been treated as control variables, researchers have rarely offered theoretical explanations for the inclusion of specific social structural variables in their analyses. Although some studies have attempted to explain the meaning of social structural variables *after* finding some significant relationships between social structural variables and parental mediation practices and outcomes, such post-hoc explanations have rarely been verified by follow-up empirical studies. As a result, our understanding of how and why certain social structural variables are associated (or not associated) with the levels and types of parental mediation is rather limited.

This section reviews existing research findings on the relationships between parental mediation and four most frequently examined social structural variables in the parental mediation research (i.e., children's age and gender, parents' gender and education), and discusses how the relationships have been explained.

Age of Children

Existing empirical studies examining the direct association between children's age and parental mediation have consistently demonstrated that younger children are more likely than older children to receive higher levels of both restrictive and active parental mediation (Nathanson, 2001a; Valkenburg et al., 1999; Warren, Gerke, and Kelly, 2002). Valkenburg and colleagues (1999) found that parents of younger children (ages 5-8) were significantly more likely to engage in active mediation of television viewing than parents of older children (ages of 9-12). Although the difference between the two groups did not reach the conventional significance level for restrictive mediation, parents of younger children showed slightly higher mean frequency scores than did parents of older children for restrictive mediation ($p = .08$). In co-viewing, there was no significant difference between the two parent groups.

Similar findings were reported by other studies that examined the effects of various demographic variables on parental mediation using regression analyses. Nathanson (2001a) conducted a regression analysis with data from 2nd to 6th graders to determine how parent-child demographic variables (i.e., children's gender and age and parents' education) were associated with parental mediation. The results demonstrated that younger children were more likely than older children to receive both active and restrictive parental mediation regarding their television viewing, but there was no significant association between children's report of parents' co-viewing and children's age.

Warren, Gerke, and Kelly (2002) conducted a survey with parents of children 1 to 17 years old and performed a series of regression analyses to examine associations between parental mediation and various child-parent factors (i.e., demographic factors, parents' involvement in childrearing, and parents' attitudes toward television). One analysis examined the effects of demographic variables (i.e., parents' gender, marital status, and education, and children's gender and age) on three types of parental mediation of children's television viewing. In this analysis, children's age emerged as a negative and significant predictor of both restrictive and active mediation, but not of co-viewing.

The negative association between children's age and more purposeful types of parental mediation (i.e., active and restrictive) can be explained by the fact that parents' role as a socialization agent tends to decline as children get older (Maccoby, 2007). As children grow older, they tend to spend more time with external agents such as peers and mass media and less time with parents (Bukowski, Brendgen, and Vitaro, 2007; Maccoby, 2007). Consequently, external agents become increasingly important in older children's consumer socialization (Moschis and Churchill, 1978). Children's aging also tends to lead to a growing pursuit of autonomy, resulting in greater resistance to parental restrictions (Lwin et al., 2008). According to Grusec and Davidov (2007), older children are less likely than younger children to accept strong parental intervention as fair. Older children's pursuit of autonomy and reactance to parental authority have been found to cause changes in parents' childrearing strategies, leading parents to exercise more subtle interventions rather than obtrusive ones such as punishments (Grusec and Davidov, 2007).

Another possible reason for the negative association between children's age and the level of parental mediation is that parents tend to perceive their children to be more vulnerable to media influence when the children are younger, because younger children have less experience, and thus, have less sophisticated knowledge and understanding of media than older children (John, 1999; Kunkel et al., 2004; Neeley, 2007).

While age is often significantly associated with parental mediation in bivariate analyses, it becomes a less important or non-significant predictor of parental mediation in multivariate analyses. This is especially true when parents' perceptions about media and media effects are included. For example, Valkenburg et al. (1999) performed a hierarchical regression analysis to examine the relationship between parental concerns of television effects on their child and parental mediation. They entered children's age in the first block of predictors as a background variable along with children's gender, television viewing time, and parents' gender and education. Parental concerns about television (i.e., concerns about television-induced aggression, fighting, and sexual content) were entered in the second block as more direct predictors of parental mediation. In this regression analysis, children's age did not emerge as a significant predictor of any of the three types of parental mediation, but parental concerns about television-induced aggression and fighting were found to be significantly related to restrictive mediation. Based on this and additional analyses discussed previously, Valkenburg et al. concluded that parents of younger children were more concerned about television effects on their child than were parents of older children, and that it was these concerns, rather than children's age, that motivated increased mediation, especially restrictive mediation.

Similar findings were reported by Warren, Gerke, and Kelly (2002). Besides the regression analysis described earlier (i.e., entering demographic variables only as predictors of parental mediation), Warren et al. conducted an additional analysis similar to Valkenburg's hierarchical regression. When parental involvement variables (accessibility, domestic engagement, and leisure engagement) and parents' concerns about television effects on their child were entered into a regression analysis along with background variables, the child's age still emerged as a negative and significant predictor of restrictive mediation, but the standardized beta weight was reduced from $-.39$ to $-.12$. The significance level was reduced from the $p < .01$ level to $p < .05$. Unlike the findings from the regression using only demographic variables, the child's age was not a significant predictor of active mediation when parental involvement and concern variables were entered into the regression analysis. Based on the findings, Warren et al. concluded that children's age affects parental mediation but this might happen because parents' involvement in childrearing and concerns about social influence of media on their children change as children age. Warren, Gerke, and Kelley (2002) further demonstrated that parents of younger children had highly negative perceptions about television's effects on children, and that the negative perceptions were positively associated with the level of parental mediation.

Other researchers have provided additional evidence that parental perception variables are more important than children's age when both are examined concurrently. For example, Austin et al. (1999) demonstrated that, while children's age was related to less co-viewing, it did not predict active mediation. The level of parents' distrust in

advertising in general was the only significant predictor of the frequency of parents' talking with their child about negative aspects of television and television advertising. In Nathanson's study (2001a), parents' attitudes toward violent television (i.e., personal affinity for violent programs, perceived utility of violent television on their child, and perceived harm of violent programs on children) explained 35% of variance in restrictive mediation and 19% in active mediation, whereas parent-child demographic variables, which included children's age, accounted for only 4% of variance in restrictive mediation and less than 1% in active mediation.

To sum up, when the relationship between children's age and parental mediation was tested in a bivariate analysis condition, children's age was found to be negatively related to more purposeful types of mediation, such as restrictive and active mediation. However, in a multivariate analysis, many of the studies found that age was not a direct predictor of parental mediation. This suggests that the relationship between children's age and parental mediation may be spurious rather than real.

Gender of Children

When it comes to the impact of a child's gender on parental mediation practices, empirical findings have been mixed. Some studies have found that boys tend to receive more parental mediation than girls (Eastin, Greenberg, and Hofschire, 2006; Hoffner and Buchanan, 2002; Warren, 2003), while others have found the opposite (Austin et al., 1999; Livingstone and Helsper, 2008; Nikken and Jansz, 2006; van der Voort, Nikken, and van Lil, 1992) or no significant gender difference (Nathanson, 2001a; Nikken, Jansz, and Schouwstra, 2007).

Whether boys and girls receive different types of mediation is also unclear. Some have found no gender difference in types of parental mediation practiced (Nathanson, 2001a; Nikken and Jansz, 2006; Warren, Gerke, and Kelly, 2002), whereas others have found significant associations between a child's gender and the use of specific types of parental mediation. For instance, Warren (2001) found that television co-viewing was more frequently reported by parents of elementary school-aged boys than parents of girls at the same age. However, there was no gender difference in restrictive and active mediation. On the other hand, Valkenburg et al. (1999) reported gender differences in restrictive and active mediation (i.e., girls received more of these types of mediation than boys), but not in co-viewing among parents of elementary school-aged children. Another survey with parents of younger children (preschoolers) reported that boys received more restrictive mediation than girls but that there was no gender difference in other types of parental mediation (Warren, 2003). In the context of video game playing, Nikken and Jansz (2006) reported that parents more frequently restricted girls' game playing than boys'.

More troubling than the mixed findings is the fact that few researchers have convincingly explained, or even attempted to explain the theoretical meaning of their findings or interpret them in a broader theoretical context. For example, Nikken and Jansz (2006) argued that their finding that girls received more restrictive game mediation than boys could be because parents tended to be more cautious about their daughters than sons. However, they do not explain why others have not found gender differences or in

what settings such differences will exist. In sum, we have contradictory findings and are lacking a clear understanding of what contributes to the mixed findings.

Gender of Parents (Mothers vs. Fathers)

A number of previous studies have demonstrated that mothers are more likely than fathers to practice higher levels of parental mediation (e.g., Nikken and Jansz, 2006; Nikken, Jansz, and Schouwstra, 2007; Valkenburg et al., 1999; van der Voort, Nikken, and van Lil, 1992). van der Voort, Nikken, and van Lil (1992) found that mothers were more likely than fathers to be involved in parental mediation of children's television viewing in general. Valkenburg et al. (1999) went further by investigating how parents' gender was associated with each type of parental mediation. They found that mothers of 5-12 year olds were more likely than fathers to practice both active and restrictive mediation of children's television viewing. This was true even after controlling for parental concerns about television. Valkenburg suggested that the result might be because mothers are usually primary caregivers, and thus, they are likely to have more opportunities to talk with children about media and set rules about media usage. The same finding was reported for electronic game playing. Nikken and colleagues (Nikken and Jansz, 2006; Nikken, Jansz, and Schouwstra, 2007) found that mothers were more likely than fathers to practice both active and restrictive mediation, even after parents' perceptions about game effects on children were controlled.

However, some studies did not find any significant relationship between parents' gender and parental mediation (e.g., Hoffman and Buchanan, 2002; Warren, 2001).

Warren (2001) found that gender of parents did not emerge as a significant predictor of

any parental mediation types when parental involvement variables (i.e., parent-child recreational activities, parent-child private talks, etc.) were also included as predictor variables. Warren speculated that parental mediation could be a function of parental involvement in childrearing rather than of parents' gender itself.

To determine how the influence of parents' gender on parental mediation is affected by parental involvement variables, Warren and colleagues (2002) conducted another study with parents of children aged 1-17 and performed two separate regression analyses. The first regression analysis included only parent-child demographic variables and children's television viewing time as potential predictors of the three types of parental mediation. From this first analysis, parents' gender and children's age emerged as significant predictors of active mediation. That is, mothers and parents of younger children were more likely than fathers and parents of older children to talk about television with their child. This is consistent with previous research findings (Warren, 2001). However, in the second regression analysis, they added parental involvement variables (i.e., accessibility, domestic engagement, and leisure engagement) to the set of predictors. In this analysis, parents' gender was no longer a significant predictor, whereas all three types of parental involvement and the child's age were found to be significant predictors of active mediation.

The results suggest that the degree to which parents are involved in childrearing plays a more important role in parental mediation than parents' gender. Since most societies assign the primary caregiver role to mothers more than fathers (Valkenburg et al., 1999; Warren, 2003), mothers in general are likely to spend more time with children

and more likely to be involved in childcare. This may explain why mothers practice higher levels of parental mediation than do fathers. Considering that an increasing number of mothers are working outside in many societies and that childrearing is becoming more of a shared responsibility between mothers and fathers, parents' gender may no longer be a meaningful predictor of parental mediation levels and types. A more meaningful factor may be whether the parent is a primary caregiver and who spends the most time with the child and is most involved in childcare. This point is empirically supported by Warren, Gerke, and Kelly (2002) who demonstrated that parental involvement, measured by the number of hours parents spent with their children and the number of activities that parents shared with children, was a stronger predictor of both restrictive and active mediation than was parent's gender or other demographic variables.

Parents' Education

Empirical findings regarding parents' education and parental mediation have been rather mixed. In a survey of Dutch parents of children aged 5-12, Valkenburg et al. (1999) found a positive association between parents' educational level and restrictive mediation of violent television program viewing, even after controlling for parental concerns about violent television effects on their children. A similar finding was reported in the U.S. among parents of 2nd to 6th graders (Nathanson, 2001a). However, neither of these studies found any meaningful association between parents' education level and active mediation or co-viewing. In addition, neither study provided any theoretical explanation for their findings.

Simply citing these previous studies but without any theoretical justification, Nikken and Jansz (2006) predicted a positive association between parents' education and the level of parental mediation in the context of electronic game playing. Contrary to what they expected, they found a negative association between parents' education and both restrictive and active mediation after controlling for parents' perception about game influence on their children. Nikken and Jansz (2006) explained the result by arguing that it might be because parents with lower educational levels spend more time playing electronic games, and therefore, they might feel more confident about practicing restrictive and active mediation. That is, more game experience provides the parents with greater feeling of expertise, making them more confident about practicing mediation. However, this was simply post-hoc speculation and not supported by any empirical evidence.

Nikken and Jansz's reasoning would suggest that personal experience rather than a higher level of education would make parents more confident about mediation. Although Nikken and Jansz's postulation has not been empirically tested, it deserves further research attention, especially when it comes to new media. Unlike television, new media such as electronic games and the Internet require some learning and experience to understand how they work. In games, for example, one may need to understand narrative structures unique in games and the physical control needed for some electronic games. When it comes to the Internet, one first needs to learn how information can be located and searched and what kinds of content are available on the Web. The reality is that not all parents have the same level of experience and competency to master the use of new

media (Livingston and Helsper, 2008). Consequently, some degree of variation in how parents perceive their knowledge of new media is expected. Such different perceptions may affect the way parents supervise and control children's media use.

None of the existing studies have investigated how parents' education and perceived Internet skills differently account for parental mediation of children's Internet use. Although Livingston and Helsper (2008) tested parents' perceived Internet knowledge as a potential predictor of parental mediation, they did not examine parents' educational levels as a predictor. In addition, they did not test the role of parents' perceived Internet knowledge in utilizing different types of parental mediation. Instead of having different mediation styles as separate dependent variables, Livingston and Helsper created a composite scale of parental mediation by averaging scores for all parental mediation strategies (i.e., active, restrictive, technical, and co-using). Nonetheless, it is important to note that this study found a significant association between parents' perceived Internet skills and parental mediation. Parents who used the Internet more and who claimed to have more skills in using it were more likely to engage in a higher level of parental mediation of their children's Internet use.

2.3.2. Parent-Child Agreement on Parental Mediation

Most existing parental mediation studies rely on parent-only (e.g., Austin et al., 1999; Eastin, Greenberg, and Hofschire, 2006; Hoffner and Buchanan, 2002; Mesch, 2009; Nikken, Jansz, and Schouwstra, 2007; Valkenburg et al., 1999; Warren, 2001, 2003; Warren, Gerke, and Kelly, 2002) or child-only (e.g., Buijzen, van der Molen, and Sondij, 2007; Lee and Chae, 2007; Lwin, Stanaland, and Miyazaki, 2008; Nathanson,

2001b; Youn, 2008) responses. Although a few studies gathered data from parent-child dyads, most of them asked parental mediation questions to just the parents (e.g., Buijzen and Valkenburg, 2005; Nathanson, 1999, 2002; Nathanson and Botta, 2003).

Some researchers have suggested that this methodological limitation may mask the full spectrum of parental mediation effects and effectiveness. For example, Fujioka and Austin (2002) argued that incorporating children's perspectives with parental views on parental mediation would help us acquire a better understanding of how parental mediation works. Nathanson (2001a) asserted that it is hard to know whether children even acknowledge parents' efforts to monitor and supervise their media use if the children's perspectives are not examined along with those of the parents'. If a child does not recognize that his or her parents are engaged in parental mediation, the parental intervention efforts are less likely to affect the child's media-related perceptions and behaviors. This is especially true for interventions involving parents' verbal comments on media use in general. As Nathanson (2001a) argued, it is important to survey both parents and children, and compare the two sets of data on parental mediation, because "the key ingredient for determining mediation's success is children's understanding of what mediation messages signify" (p. 204).

Considering that parental mediation is an important facilitator of consumer socialization involving interpersonal communication and interaction between a parent and a child, a dyadic research approach certainly has advantages. Moore-Shay and Lutz (1988) emphasized that it is important to use interpersonal research frameworks because family consumer socialization involves an information exchange and interaction between

two parties—a parent and a child. Socialization research in general also recognizes that parental socialization is a bidirectional interaction process involving parents' and children's interpretations of each other's behaviors and co-creation of meanings out of the interaction experiences (Kuczynski and Parkin, 2007).

When it comes to explaining how two persons perceive the same issue or object differently or similarly within an interpersonal communication situation, Newcomb's A-B-X co-orientation model adopted by McLeod and Chaffee (1972) is considered a useful framework. In the model, A and B refer to two persons and X refers to a set of issues or objects to which A and/or B are oriented. If A and B are in an interpersonal relation and if both A and B are focused on the same set of issues or objects (X), then, the two persons are considered to be co-oriented to one another and oriented to X (McLeod and Chaffee, 1972).

The co-orientation model posits three interpersonal relationship structures—agreement, congruency, and accuracy. Agreement is the degree to which A and B evaluate an issue or object (X) in a similar way. To assess agreement, A's cognition toward X can be compared to B's cognition to the same X, with either deviation ($D = A - B$ difference) or correlation measures. Congruency refers to the similarity between A's own evaluation of X and A's perception of B's evaluation of X. If A thinks that his/her evaluation or perception of X is similar to B's evaluation or perception of the same X, congruency occurs. It is purely about A's own intrapersonal perception, regardless of what B actually thinks, and thus, McLeod and Chaffee (1972) stated that congruency is not truly a co-orientation variable. Finally, accuracy is the degree to which A's estimation

of B's perception of X matches B's actual perception. It is about whether one person accurately estimates what the other person thinks about a given issue or object.

Among the three interpersonal relationship structures of the co-orientation model, the concept of agreement is particularly relevant to the research inquiry asking whether children acknowledge and understand what parental mediation signifies. A few researchers have compared parents' and children's reports on parental mediation in order to examine to what extent parent-child dyads agree about parental mediation. Applying the co-orientation model, a parent and a child can be considered A and B, and parental mediation can be conceptualized as X, the issue that both A and B think about.

Although the research literature is limited, one of the key findings from existing studies is that parent-child agreement tends to be higher on more obtrusive form of parental mediation (i.e., restrictive mediation) than on more subtle ones (i.e., active mediation). For example, Nathanson (2001a) surveyed parents and their second- through sixth-grade children and compared parents' and children's reports on three types of parental mediation (i.e., active, restrictive, and co-viewing) of violent television viewing. With parent reports of parental mediation as predictors and child reports of parental mediation as dependent variables, Nathanson performed a series of regression analysis and found that the agreement between parents and children was greater for restrictive mediation (beta weight = .34, $p < .01$) than co-viewing (beta weight = .17, $p < .01$) or active mediation (beta weight = .12, $p < .05$). Regarding this finding, Nathanson explained that certain forms of parental mediation could be more salient than others.

Restrictive mediation based on rule making could be most salient because children deal with it on a daily basis.

Fujioka and Austin (2003) compared parent and child reports on parents' verbal discussion about television without measuring other forms of parental mediation. The authors found no significant difference between children's reports and parents' reports on parents' critical comments on television (e.g., parents' telling that something on television is not okay, things on television are not real, and television ads are not okay). However, there was a significant difference in parents' and children's reports on parents' endorsing comments (e.g., parents' telling that they like a product in the television ad and a person on television, repeating what they heard on television, and agreeing with television). Children's reports on parents' endorsing comments were significantly higher than parents' reports of their own behavior. In other words, parents and children tend to agree more about how frequently parents make negative and critical comments on television, but children perceive parents to make more supportive comments than parents do.

Another study (Bakir, Rose, and Shoham, 2005) demonstrated that the level of agreement among family members was greater on socio-oriented family communication messages (i.e., parents telling the child what things he/she should buy) and restrictive mediation (i.e., parents' restriction on types and times of television programs the child can watch) than on concept-oriented family communication patterns (i.e., parents telling their child that buying things that the child likes is important, even if the parents don't like them). Thus, it appears that parental practices that more strongly prescribe what

children *should* or *should not* do (i.e., socio-oriented family communication patterns and restrictive mediation) tend to be better recognized and more similarly remembered by both parents and children. As a result, parent-child agreement on restrictive mediation, which directly prescribes children's behaviors with rules and forces, is likely to be greater than their agreement on active mediation, which does not necessarily interfere with children during their media consumption.

Adding to this line of research, one recent study examined family communication patterns as a moderating factor in parent-child co-orientation toward parental mediation (Buijzen et al., 2008). The researchers predicted that the agreement between parent and child reports on active mediation would be greater in families high in concept-oriented communication than in families low in this type of communication. As predicted, they found that the correlation between parents' and children's reports on active parental mediation was significantly higher among parent-child pairs high in concept-oriented family communication ($r = .31, p < .01$) than pairs low in family communication ($r = .15, p < .05$).

Although based on just a single empirical study, Buijzen et al.'s (2008) findings provide useful guidance for future research. Concept-oriented family communication encourages open discussions between parents and children. Such discussions can help children understand verbally conveyed parental expectations regarding media consumption. Therefore, it seems logical to expect that concept-oriented communication tendency would be positively associated with the level of parent-child agreement on active mediation. On the other hand, restrictive mediation does not necessarily involve

parent-child mutual communication, and thus, parent-child agreement on restrictive mediation is less likely to be affected by the level of concept-oriented family communication. These postulations will be subject to further empirical exploration in the present study.

2. 3. 3. The Role of Parental Mediation of Children’s Media Use in Consumer Socialization

Child developmental psychologists have suggested that different approaches of parental intervention and disciplines are associated with different outcomes in children’s development (Darling and Steinberg, 1993; Hoffman, 1979, 1994). Therefore, it is plausible that different parental mediation approaches will be associated with different media socialization outcomes. Researchers examining parental mediation have focused on how three different types of parental mediation—active mediation, restrictive mediation, and co-using— are associated with different media socialization outcomes such as children’s media-related understanding, attitudes, beliefs, and behaviors. This section reviews the existing research literature on the effects and effectiveness of each parental mediation approach.

Effects of Active Mediation

Active mediation involves communication between parents and children about media. It is also called “instructive mediation” (e.g., Valkenburg et al., 1999; Warren, 2003; Warren, Gerk, and Kelly, 2002) as parents have intention to teach children how to consume media and how to properly interpret media messages. This type of parental mediation has also been labeled as “evaluative mediation” (e.g., van der Voort, Nikken,

and van Lil, 1992) because parents' commenting on media and media content is often evaluative, especially when parents express their approval or disapproval of a medium or a specific type of content for children (Nikken and Jansz, 2006). While different terms have been used to refer to the communication-oriented parental intervention with the intention of helping children understand the nature of media messages, "active mediation" has been the most widely used term (Buijzen and Valkenburg, 2005; Nikken and Jansz, 2006). Examples of active mediation include parents' explaining that advertising does not always tell the truth and telling children that some products shown on television are not good for children.

Researchers have reported that active mediation via parental comments and critical discussion on media issues is associated with positive socialization outcomes such as children's enhanced understanding of television (Desmond et al., 1985) and lower levels of television-induced aggression (Cantor and Wilson, 2003; Nathanson, 1999). Researchers have also demonstrated that active mediation is superior to the other two forms of mediation—restrictive and co-using mediation—in reducing undesirable media effects on children (Buijzen and Valkenburg, 2005; Buijzen, van der Molen, and Sondji, 2007; Buijzen et al., 2008; Warren, 2001). Buijzen and colleagues (2005, 2008) found that parental explanation about advertising (e.g., "Not all advertised products are of good quality," "Advertising depicts products as better than they really are," etc.) was significantly more effective than parental rule making and co-viewing in reducing undesirable ad effects on children. Specifically, the association between the frequency of children's television advertising viewing and negative ad-induced outcomes (i.e.,

materialistic attitudes, purchase requests, and parent-child conflict resulting from parents' denial of children's purchase requests) was significantly reduced for children whose parents were high on active mediation than on other types of parental mediation (i.e., restrictive and co-viewing). The findings held even after controlling for children's age, gender, and socioeconomic status.

Fujioka and Austin (2003) explained that active mediation is more effective because mediation based on conversation and critical discussion between parents and children is more likely to cultivate critical thinking skills and skepticism in children than are other mediation types. Although restrictive mediation via rule-making allows parents to control children's media use, it does not necessarily encourage children to develop decision-making skills, because restrictive mediation is parent-oriented one-way rules imposed on children without entailing much deliberate explanation about the rules. Similarly, while co-viewing would give parents a chance to monitor their children's media use, co-viewing itself is less likely to stimulate children's critical thinking skills, because co-viewing can be perceived by children as parents' endorsement of television viewing rather than parental intervention (Austin, 1999; Nathanson, 2001a, 2002). Unlike restrictive mediation and co-using, active mediation involves conversations and discussions between parents and children. This will likely provide opportunities for children to ask questions about parents' comments and views on media, and chances for parents to fully explain reasoning behind their instructive and evaluative remarks.

Through this parent-child dialogue, parents can lead children to "a system of mutual reciprocity" (Grusec and Davidov, 2007, p.301) that stimulates children to be

attuned and responsive to what parents expect. This results in children's genuine willingness to comply with parental requests (Grusec and Davidov, 2007). Frequent parent-child reciprocal discussion is also known to promote children's prosocial behaviors because it helps children learn about other people's perspectives and needs (Criss, Shaw, and Ingoldsby, 2003; Hastings, Utendale, and Sillivan, 2007). Furthermore, parent-child mutual discussion allows children to express their own views and become more autonomous regarding their own decisions and behaviors (Grusec and Davidov, 2007). According to self-determination theory, parental practices supporting children's autonomy based on interpersonal involvement facilitate children's perception that their behavior is self-generated and self-determined rather than externally forced. This kind of perception fosters a child's moral internalization that leads him/her to engage in prosocial behaviors, even when a reward for the prosocial behaviors is not clearly present (Grusec and Davidov, 2007).

In sum, the previous research literature has demonstrated that active mediation works better than other forms of mediation and offered some plausible explanations for this. First, active mediation is likely to make children more responsive to parental requests because it leads children to the system of mutual reciprocity. Second, it is likely to make children feel that their behaviors are based on their own will rather than by external force. Through these mechanisms, active mediation facilitates children's internalization of parents' expectations for prosocial behaviors, which is presumably long lasting and resistant to changes.

Effects of Restrictive Mediation

Active mediation is based on parent-child mutual reciprocity that allows children to internalize moral/prosocial behaviors expected by parents and, as a result, be self-determinant and independent in their conduct. On the other hand, restrictive mediation is defined as parents' setting rules to control children's media usage, and thus, does not involve the same level of active participation by children (Mesch, 2009). It is called "restrictive" because it is based on parental decisions to *restrict* children's exposure to media. Unlike active mediation, restrictive mediation does not encourage children's autonomy and self-determination. Restrictive mediation occurs when parents limit how many hours a child can use different types of media, when media use is permitted, and what kinds of media content is allowed to the child. Children are expected to comply with parental rules without questioning (Buijzen and Valkenburg, 2005; Lwin, Stanaland, and Miyazaki, 2008; Mesch, 2009; Nathanson, 2002).

As discussed earlier, restrictive mediation is known to be less effective than active mediation because restrictive mediation is less likely to encourage children to develop critical thinking skills (Fujioka and Austin, 2003). However, if a child complies with his/her parents' rules, it will, at least, decrease the child's chance to be exposed to less desirable media content. Thus, although restrictive parental mediation may not induce children to deeply process parental expectations and to internalize them as a set of long-lasting attitudes or beliefs, it is still likely to affect their immediate *behaviors*.

Some degree of restriction is presumably more beneficial than none or too little restriction. Child development psychologists have demonstrated that very low levels of

parental controls on children's behaviors are associated with various antisocial behaviors such as drug and alcohol use, school misconduct, and delinquency (Lamborn et al., 1991; Steinberg et al., 1994), suggesting that restriction can be beneficial in reducing antisocial behaviors. However, some studies have also revealed that more restriction does not always bring about more desirable results. It has been suggested that too much restriction can backfire (Cantor and Wilson, 2003; Grusec and Davidov, 2007; Hastings, Utendale, and Sullivan, 2007; Lwin et al., 2008; Nathanson, 1999, 2002). Very high levels of restrictive mediation have been found to be associated with less desirable socialization outcomes such as maladjustment (i.e., involvement in delinquency, problems in school, poor relationships with parents and teachers, low self-esteem and depressed mood, etc.), television-induced aggressiveness, and negative attitudes toward parents (Kerr and Stattin, 2000; Nathanson, 1999). Based on a review of the extant literature on parental discipline and children's prosocial behaviors, Hoastons, Utendale, and Sullivan (2007) concluded that strict rules and punishments are generally negatively associated with prosocial behaviors among children. Cantor and Wilson (2003) argued that the negative relationships between restrictive mediation and desired effects might be because too much restriction made children more interested in the restricted media content. They referred to this phenomenon as the "forbidden fruit effect."

It is expected that some degree of restrictive mediation will affect behavioral socialization outcomes (e.g., the amount of television viewing). However, too little or too much restriction can lead to less desirable results. This implies that a moderate level of restriction would produce the best outcome. Nathanson (1999) empirically demonstrated

this in regard to children's general aggressive tendencies. Moderate restrictive mediation of children's exposure to violent television programming was linked to less aggressive tendencies, but both high and low levels of restrictive mediation were associated with higher aggressive tendencies among children aged 8-12.

This proposition, however, has not been extensively tested since Nathanson's study in 1999. Most studies on restrictive mediation have examined either linear relationships between restrictive mediation and socialization outcomes (using zero-order correlations or linear regression analyses) or mean differences between high and low restrictive mediation groups.

Effects of Co-Using

Co-using refers to a shared media experience between parents and children without purposeful instructions or critical discussions (Fujioka and Austin, 2003; Livingstone and Helsper, 2008; Valkenburg et al., 1999). While it is clear that active and restrictive mediation is initiated by parents with intention to educate or restrict children's media use, it is unclear whether co-using is motivated by parental goals to mediate children's media consumption, or simply reflects parents' preference for a certain type of media content or a coincidental occurrence (Austin et al., 1999).

If co-using occurs due to parents' motivation to monitor children's use of media, it can be considered a form of parental mediation. It is plausible that parents watch television together with their child in order to monitor the child's television viewing, because they are concerned about detrimental effects of television on the child. However, empirical studies on co-using, particularly in the context of television viewing, do not

seem to support this proposition. For example, Nathanson (2001a) demonstrated that parent-child co-viewing of violent television programs was positively associated with parents' positive attitudes toward and affinity for violent television programming, whereas active and restrictive mediation was associated with parents' negative attitudes toward violent television programs. Similarly, Warren, Gerke, and Kelly (2002) reported that co-viewing was not associated with parents' negative attitude toward their child's television viewing, while active and restrictive mediation was.

Children also do not seem to perceive co-viewing as parental intervention. Nathanson (2001a) found that children aged 8-12 tended to perceive parents' watching television together as evidence of parents' positive attitudes toward the given type of program (i.e., violent television). In other words, mere co-viewing without any critical commentary is likely to be perceived by children as parental endorsement of specific media materials rather than as parental intervention efforts (Nathanson, 2001a). Consequently, co-viewing has been considered the least effective mediation method compared to active and restrictive mediation, (Fujioka and Austin, 2003; Nathanson, 1999 and 2001a; Warren, Gerke, and Kelly, 2002). Furthermore, several studies have empirically demonstrated that co-viewing can be associated with some negative effects such as increased aggression after watching a violent television program among children in 2nd through 6th grades (Nathanson, 1999), stronger beliefs that television characters are representative of real-world people among 1st, 3rd, and 5th graders (Messaris and Kerr, 1984), and more viewing of television containing violence and sexual content with friends during high school (Nathanson, 2002).

Overall, at least in the context of television, co-using has been found to be less effective than active and restrictive mediation. It is probably because co-viewing is likely to stem from parents' preference for particular programs or genres rather than their concerns about undesirable television effects on children. It is also plausible that co-viewing occurs simply because television viewing experience is easily shared and parents and children happen to be in the same room with a television set (Austin et al., 1999; Nathanson, 2001a, 2002), not because parents are motivated to monitor children's media use. In that case, children are less likely to perceive co-viewing as parental involvement in their media consumption. It has been empirically demonstrated that children tend to think co-viewing as reflection of parents' favorable attitudes toward given programs and parental endorsement to the programs rather than deliberate monitoring efforts. Taking together, existing studies on television co-viewing in general suggest that mere co-viewing without critical comments on media content is less likely to result in socially desirable media-related outcomes.

However, it should be noted that the impact of co-using in the context of television may be attributed to the nature of the medium. As mentioned earlier, it is relatively easy for parents and children to be together and "happen to" watch the same television programs because television viewing experience is often shared within a household. It is also possible that parents may be merely present without paying particular attention to what is on TV. When it comes to more personally-consumed media such as electronic games, mobile devices, or personal computers with Internet connection, however, shared media experience becomes less likely. Considering that

different media are differently used, “co-using” may mean different practices in different media contexts.

Facing the fast changing media environment, especially since the emergence of the Internet, an important question has risen regarding whether or not our knowledge and understanding of effects of different parental mediation practices can be applied to the new media context, particularly to the Internet. To answer this question, examination of the unique characteristics of the Internet is the important first step. The following section provides detailed discussion of changing media environment and the implications of the new online media on parental mediation research.

Changing Media Environment and Parental Mediation Effects

According to Buijzen and her colleagues (2007), parental mediation is considered “the most effective tool in the management of television’s influence on children” (p. 214). Although many households now have multiple television sets and an increasing number of children have a television set in their bedrooms (Rideout, Foehr, and Roberts, 2010), television viewing is still considered a social activity that is easily shared with family members and families often talk about what is on TV (Nikken and Jansz, 2006). Television viewing can be easily monitored with a casual glance at a television screen, making it easier for parents to intervene when they find that their children are exposed to unsuitable programs (Livingston and Helsper, 2008). In addition, monitoring television viewing does not require any extensive technical knowledge or expertise. Considering that today’s parents have also grown up with television, television is not a new medium

for them to learn about. All of these characteristics make television relatively easy for many parents to monitor and supervise.

Unlike television, Internet use cannot be easily shared with others (Livingston and Helsper, 2008; Nikken and Jansz, 2006). Internet use typically takes place using a personal computer or mobile device. The relatively smaller screen size, typical sitting positions, and the very nature of a *personal* computer/mobile device (i.e., used by an individual rather than a group) make it difficult for parents to monitor children's Internet use (Livingston and Helsper, 2008; Nikken and Jansz, 2006; Strasburger and Wilson, 2002). Moreover, children can open multiple windows (browsers) when they surf the Internet, and much Internet content consists of texts and graphics without sound, which makes it even harder for parents to find out what their children really do on the Web, unless they pay close attention to the computer screen (Livingston and Helsper, 2008). Finally, monitoring and commenting on the Internet use requires some understanding of how the Internet operates and what kinds of contents are available on the Web. However, today's children are savvy Internet users who are often more sophisticated and knowledgeable than their parents when it comes to the Internet. According to Livingston and Helsper (2008), parents' lack of technical knowledge of new media may hamper execution and effectiveness of parental mediation.

In addition to the differences in viewing and usage contexts, message presentation and content factors also make the Internet unique and different from television. Particularly with advertising and marketing communications, the way marketing messages are presented on the Internet is different from the way advertising appears on

television in several aspects. First, unlike television advertising where commercials and programming are clearly separated by contextual cues (e.g., voice-over “will be right back”), the distinction between commercial and noncommercial content is rather obscure on the Web because commercial content is often well integrated into noncommercial content, presented as forms of games or brand messages embedded in entertaining editorial content (Ali et al., 2009; Eastin, Yang, and Nathanson, 2006; Moore and Rideout, 2007; Neeley, 2007).

Second, Internet advertising provides children with a plenty of opportunities to interact with brand messages via activities such as advergimes and virtual worlds (American Academy of Pediatrics, 2007; Calvert, 2008; Chester and Montgomery, 2007; Espejo and Glaubke, 2005; Neeley, 2007). Third, while the amount of commercial messages that can be broadcast during children’s television programming is strictly regulated in many countries including Korea and the U.S., such regulation is not applied to online advertising. Thus, it has been argued that a brand or product featured in an advergame or a brand website has a better chance to gain prolonged exposure to children (Gurau, 2008; Mallinkcrodt and Mizerski, 2007; Moore and Rideout, 2007; Neeley, 2007).

Many speculate that all of these features unique to Internet advertising make children more easily persuaded by (or susceptible to) advertising on the Web (Calvert, 2008; ChildrenNow, 2005; Espejo and Glaubke, 2005; Kunkel et al., 2004; Moore, 2006; Moore and Rideout, 2007). Although such speculation has not been fully examined with empirical studies, it is clear that the Internet provides children with more active

interactions with advertising messages in an entertaining way for a prolonged time period than the television environment (Calvert, 2008; Moore, 2006; Moore and Rideout, 2007; Neeley, 2007).

Internet advertising also involves some unique risks to children (Livingston and Helsper, 2008; Palmer and Tuttle, 2008; Strasburger and Wilson, 2002). First, children can be exposed to just any types of commercial content when they are on the Web, including content unsuitable for children. In addition, the interactive nature of the Internet increases the possibility that children will disclose personal information to unknown others (Livingston and Haddon, 2008; Livingston and Helpser, 2008; Lwin et al., 2008; Strasburger and Wilson, 2002; Youn, 2008). This can occur by encouraging users to register for membership or to provide friends' personal contact information in referring them to a webpage or sharing an entertaining web features (Moore, 2006; Strasburger and Wilson, 2005). Children can also encounter strangers in chatting rooms who try to steal personal information of children for less desirable reasons. These are major concerns among parents.

Risks involved in the Internet use such as privacy invasion and easier access to child-inappropriate websites make the Internet a somewhat less safe place than television. These circumstances place more responsibility on parents to actively monitor how their children use the Internet (Livingston and Helsper, 2008; Neeley, 2007; Palmer and Tuttle, 2008). However, it is relatively harder for parents to actively monitor children's online activities due to the nature of the typical Internet use (i.e., using a small screen and opening multiple windows at the same time). More challenging to parents is that

supervision of Internet use requires some levels of technological knowledge and understanding of the Internet. Today's children are born and grow with the Internet (Lindstrom, 2003). They are tech-savvy and confident about their own Internet skills. On the other hand, many parents are still tech-phobic and feel less confident about their Internet skills (Koo, 2010; Strasburger and Wilson, 2002). This whole situation raises a question of whether the same parental mediation strategies used to monitor and supervise children's television viewing would be still effective for supervising children's Internet use and whether such strategies will result in desirable socialization outcomes.

Active Mediation in the New Media Environment

Just a few empirical studies have been conducted to examine the effects and effectiveness of different types of parental mediation on children's online attitudes and behaviors (Lee and Chae, 2007; Lwin, Stanaland, and Miyazaki, 2008; Mesch, 2009; Youn, 2008). Nonetheless, the limited number of studies has suggested that active mediation is likely to lead to more desirable socialization outcomes than restrictive mediation. For example, using a survey with children aged 10-12 residing in Korea, Lee and Chae (2007) demonstrated that active mediation (i.e., parents' recommending good websites) was positively associated with children's Internet use for education, whereas restrictive mediation (i.e., time limits and website restrictions) was not related to such Internet use.

Similar findings were reported by two other studies conducted with preteens and teenagers in the U.S. (Lwin, Stanaland, and Miyazaki, 2008; Youn, 2008). Both studies revealed that active mediation was significantly associated with children's heightened

awareness of online privacy issues. Parents' talking about online privacy issues with children was positively associated with high school students' concerns about online privacy (Youn, 2008), and negatively associated with 10- to 17-year-old children's willingness to disclose personal information on a commercial website requesting personal information (Lwin, Stanaland, and Miyazaki, 2008). However, restrictive mediation was not linked to online privacy concerns among high school students (Youn, 2008), nor to the willingness to disclose personal information among children aged 10-14 (Lwin, Stanaland, and Miyazaki, 2008). Restrictive mediation even caused boomerang effects among older teens, resulting in greater willingness to disclose personal information when a higher level of restriction was imposed on them by their parents (Lwin, Stanaland, and Miyazaki, 2008).

Although limited in number and scope, the findings from these studies mirror those found in television mediation research by showing that active mediation can positively affect children's media-related attitudes and behaviors. Therefore, even in the changing media environment, it is expected that active mediation will work better than other forms of parental mediation, resulting in more desirable socialization outcomes such as more critical attitudes and skepticism toward Internet advertising, less personal information disclosure, and less access to child-inappropriate commercial websites.

Restrictive Mediation in the New Media Environment

While restrictive mediation may be less effective than active mediation in affecting children's attitudes and skepticism toward Internet advertising, restrictions on specific online activities are still likely to impact corresponding online behaviors.

Livingston and Helsper (2008) and Mesch (2009) found that parents' restrictions on their teen children's use of the Internet for interpersonal interaction (e.g., email, chat room, instant messaging, online game uses) was related to children's lowered involvement in such prescribed activities. In addition, such restrictive parental mediation predicted a lower level of overall risks online (i.e., the level of exposure to pornographic content and hostile/hateful people online, personal information disclosure online, contacting someone that they have only talked to online).

Lwin, Standaland, and Miyazaki (2008) found that while restrictive mediation was less effective than active mediation, it still worked better than non-mediation in reducing the disclosure of personal information on the Web among children aged 10-14. While it is not clear whether and how restrictive mediation affects Internet-related attitudes or beliefs, it seems clear that specific restrictions targeting specific activities (e.g., limiting email use) would be directly associated with the corresponding prescribed behavioral outcomes (e.g., reduced email use).

Co-Using in the New Media Environment

Parental mediation studies focusing on television show that co-viewing is less effective than active and restrictive mediation in producing positive socialization outcomes. Co-viewing is also considered by children as a form of parental endorsement of television programs (Nathanson, 2001a). As described in the previous section, the findings on co-viewing effects are primarily attributed to the fact that television viewing tends to be a social activity that can be easily shared with multiple family members. On the other hand, the Internet is a solitary medium mostly used by an individual. Thus, it is

hard for parents to monitor what their children do on the Internet, unless they pay special attention to children's Internet use. Therefore, unlike co-viewing, co-surfing (co-using of the Internet) is more likely to be motivated by a desire to protect children from potentially harmful Internet effects. Since both active and restrictive mediation result in better socialization outcomes than does non-mediation, co-surfing is also expected to result in some positive socialization outcomes.

A couple of recent studies have empirically demonstrated this. Co-surfing was found to be effective in leading high school students to be more concerned about online privacy issues (Youn, 2008). Additionally, in an investigation of the motivations associated with the three parental mediation strategies, Livingston and Helsper (2008) found that items assessing parents' active mediation (e.g., parents talking to children about Internet use), restrictive mediation (e.g., parents having rules about time spent online and children not being allowed to give personal information/buy anything online), and co-surfing (e.g., parents sitting with children when online and parents staying nearby when children are online) were grouped together into a single factor. This suggests all three strategies co-occur and may, therefore, be similarly motivated.

Technical Mediation

Besides the three traditional forms of parental mediation, technical mediation can also be used with the Internet. Technical mediation is defined as parents' installing a filter or computer software that monitors children's Internet use and prevents children from visiting specific websites (Eastin, Greenberg, and Hofschire, 2006; Livingston and Helsper, 2008). In a sense, technical mediation is similar to restrictive mediation in that

both strategies help parents prevent children from visiting unsuitable websites. For that reason, Eastitin, Greenberg, and Hofschire (2006) argued that technical mediation is simply a sub-form of restrictive mediation.

Although technical mediation presumably prevents children from visiting undesirable websites, a couple of recent studies question its effectiveness by showing that it was not associated with reduced online risks (i.e., less exposure to child-inappropriate content, personal information disclosure, and experiencing cyberbullying) among teenagers (Livingston and Helspe, 2008; Mesch, 2009). This ineffectiveness is likely due to the fact that teenagers' Internet access is not limited to the home. Since an increasing number of teenagers have mobile devices and use the Internet outside the home (Pew Internet & American Life Project, 2009), technical mediation performed at home may not be effective for teenagers. Nonetheless, technical mediation may still play an important role in Internet use for younger children.

CHAPTER 3

HYPOTHESES AND RESEARCH QUESTIONS

Antecedents of Parental Mediation (H1~H3 and RQ1~RQ5)

Parents' Perceptions of Media and Content

Parental mediation literature informs that what parents think about media is an important antecedent of parental mediation. One of the consistent findings from the television and electronic game mediation studies is that parents who have negative attitudes or beliefs regarding a given medium or media content are more likely to be involved in active and restrictive mediation than are parents with more positive attitudes or beliefs. Although the relationship between parental mediation and parents' perception about online advertising has never been investigated, accumulated findings from both the television and electronic game contexts make it plausible to expect that both active and restrictive mediation will be associated with parents' negative attitudes and beliefs about the Internet, advertising in general, and online advertising targeting children.

In the Internet context, technical mediation reflects parents' intention to monitor and control children's Internet use. If parents are not concerned about children's use of the Internet or have positive attitudes toward the Internet, they are less likely to install monitoring software or a filter in computers that their children use. Thus, like other purposive forms of parental mediation (e.g., active and restrictive mediation), technical mediation is also expected to be predicted by parents' negative perceptions of the

Internet, advertising in general, and online advertising targeting children. Thus, the following hypotheses are posed.

H1. Parents' perceptions about the Internet, advertising in general, and online advertising targeting children will be associated with the levels of active, restrictive, and technical mediation.

H1a. Parents' attitudes toward the Internet, advertising in general, and online advertising targeting children will be negatively associated with active mediation, restrictive mediation, and technical mediation.

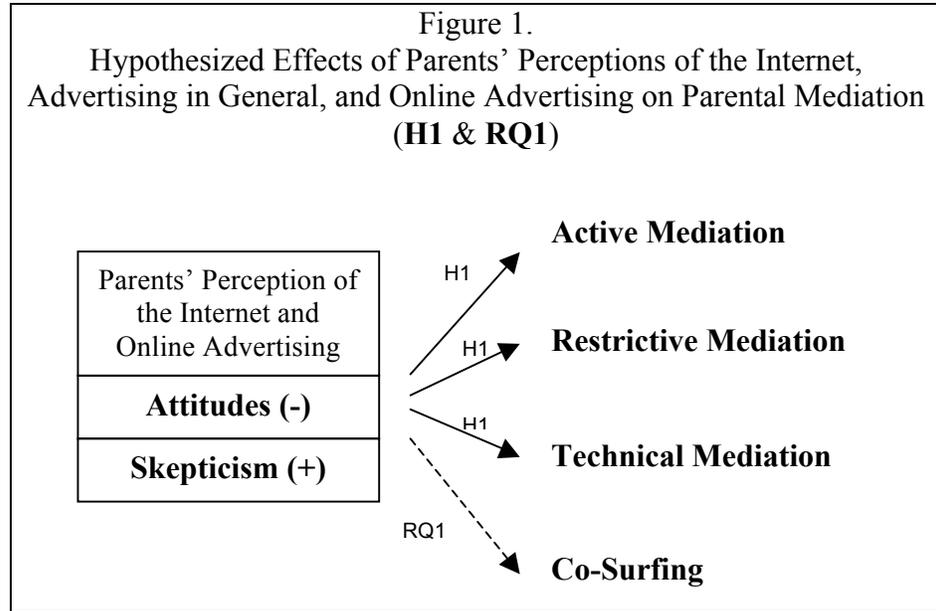
H1b. Parents' skepticism toward online advertising targeting children will be positively associated with active mediation, restrictive mediation, and technical mediation.

It is not clear whether co-surfing is motivated by parents' positive perceptions or negative perceptions of the Internet or online advertising targeting children. Some parents may surf the Internet and play online games with their children primarily because they are truly concerned about Internet effects on their children. However, it is also possible that parents co-surf simply because they like spending time with their children and sharing the Internet experience with them. Therefore, the relationship between co-surfing and parents' perception of the Internet and online advertising is addressed as the following research question.

RQ1. How is co-surfing associated with parents' attitude and beliefs about the Internet, advertising in general and online advertising targeting children?

Figure 1 illustrates hypothesized effects of parents' perceptions on parental mediation. Hypothesized relationships for **H1** are indicated with solid lines. As the

relationship between co-surfing and parents' perceptions is addressed as a research question (**RQ1**), the association between the two variables is expressed with a dotted line.



The literature on third-person effects and on self suggests that not only parental perception of media but also parental perception of their own child can be a significant antecedent of parental mediation (Aron et al., 1991; Aron, Aron, and Smollan, 1992; Chapin, 2000; Cohen et al., 1988; Duck and Mullin, 1995; Greenwald, 1980; Gunther, 1995; Hoffner and Buchanan, 2002; Meirick et al., 2009; Peiser and Peter, 2000; Rose and Sicol, 1979; Scharrer, 2002). Specifically, parents who feel closer to their child are less likely to perceive their child to be vulnerable to media influence, because the child is under the guidance of “good parents.” On the other hand, parents who feel less close to their child are more likely to believe that their child is susceptible to media, as the child is not under their protection.

However, it is not clear how parents' perceived closeness to their child will affect parental mediation behaviors. As discussed in the literature review section, there are competing possibilities. Parents who believe they have a close relationship with their child may practice lower levels of parental mediation because they feel that the child understands parental expectations. However, it is equally possible that parents may practice higher levels of parental mediation as they feel that their relationship with their child is close because they can more easily supervise the child's media use. With competing possibilities, this relationship is best addressed with a research question.

RQ2. How is parent-child closeness perceived by parents associated with the levels of different types of parental mediation?

Parenting Style

Empirical studies examining the relationships between parenting styles and different types of parental mediation have been rare. Nonetheless, research in the field of child development and logical assumptions make it plausible to predict an association between parenting styles and parental mediation. Specifically, it is expected that a responsive parenting style would be associated with parental mediation based on parent-child mutual reciprocity (e.g., active mediation), and a demanding parenting style would lead to more restrictive types of parental mediation (e.g., restrictive mediation and technical mediation). A responsive parenting style is characterized by parents' warmth, support, and acceptance of children's individuality (Baumrind, 1971; Darling and Steinberg, 1993; Spera, 2005). Considering that active mediation is based on parent-child

mutual reciprocity that allows children to express their opinions (Fujioka and Austin, 2002; Grusec and Davidov, 2007), active mediation is expected to be closely associated with a responsive parenting style.

On the other hand, a demanding parenting style emphasizes children's conformity to parental authority. Demanding parents, such as authoritarians, value children's obedience to parental control, supervision, and standard set by parents (Baumrind, 1971; Darling and Steinberg, 1993; Spera, 2005). Taking into account that restrictive mediation is often based on rules set by parents and that the main goal of restrictive mediation is to limit (or restrict) children's media use, the association between a demanding parenting style and restrictive mediation is plausible. Like restrictive mediation, technical mediation is used by parents to monitor and limit children's media use. It does not necessarily involve parent-child discussion regarding media use. Therefore, technical mediation is also expected to be associated with a demanding parenting style rather than a responsive parenting style.

The association between parenting style and co-surfing is more difficult to predict. The literature suggests that co-surfing is likely to be motivated by parents' intention to monitor and supervise children's Internet use (Livingston and Helsper, 2008; Youn, 2008). Such parental motivation and effort might stem from responsiveness, which is characterized by parents' involvement orientation (Darling and Steinberg, 1993; Spera, 2005; Steinberg et al., 1992, 1994). However, if the main purpose of co-surfing is to control children's Internet use, it is equally possible to expect a positive association

between co-surfing and a demanding parenting style. Therefore, following hypotheses and research question are posed.

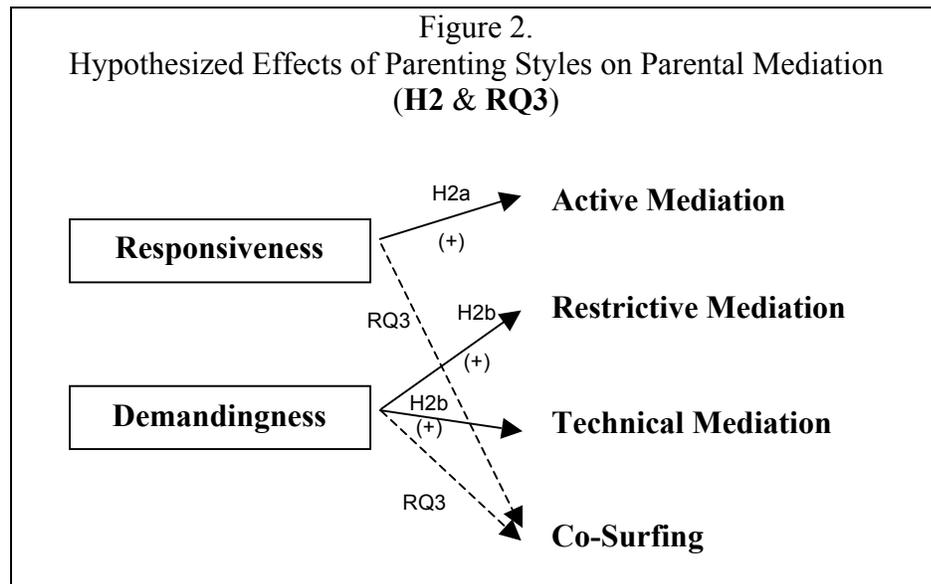
H2. Different types of parenting styles will be associated with different types of parental mediation.

H2a. A responsive parenting style will be positively associated with active mediation.

H2b. A demanding parenting style will be positively associated with restrictive mediation and technical mediation.

RQ3. How are parenting styles associated with co-surfing?

Figure 2 illustrates general patterns of expected findings for **H2** and **RQ3**.



Family Communication Patterns (FCP)

For both television and the Internet, the literature suggests that different FCPs are associated with different types of parental mediation. Specifically, concept-oriented FCP was found to be more strongly associated with active mediation than with other types of parental mediation. This finding has been explained by the fact that both concept-oriented FCP and active mediation stress a horizontal relationship and bi-directional communication between parents and children. On the other hand, socio-oriented FCP has been found to be more strongly associated with restrictive mediation because both socio-oriented FCP and restrictive mediation emphasize children's conformity to parental authority and one-way, top-down communication from parents to children (Carlson, Grossbart, and Tripp, 1990; Fujioka and Austin, 2002; Youn, 2008).

When it comes to co-using, there have been mixed findings. Some studies have found that the association between co-viewing of television and concept-oriented FCP is stronger than the association between co-viewing and socio-oriented FCP (e.g., Carlson, Grossbart, and Tripp, 1990; Carlson, Grossbart, and Walsh, 1990), while others have found the opposite relationship (Fujioka and Austin, 2002; Youn, 2008). Considering that co-surfing is a shared experience with children, co-surfing may be more closely related to concept-oriented FCP that stresses horizontal relationship between parents and children. However, it is also possible that co-surfing may be more closely related to socio-oriented FCP if the primary purpose of co-surfing is to monitor and control children's online activities. With mixed previous findings and two competing possibilities, the relationship between co-surfing and FCP is posed as a research question.

Finally, the relationship between technical mediation and FCP has not been empirically tested. Nonetheless, considering that the goal of technical mediation is to monitor and control children’s Internet use, technical mediation does not seem to be closely associated with concept-oriented FCP that values children’s autonomy and independent judgment. Instead, technical mediation is more likely to be associated with socio-oriented FCP that emphasizes children’s conformity to parents’ rules. Thus, the following hypotheses and research question are posed.

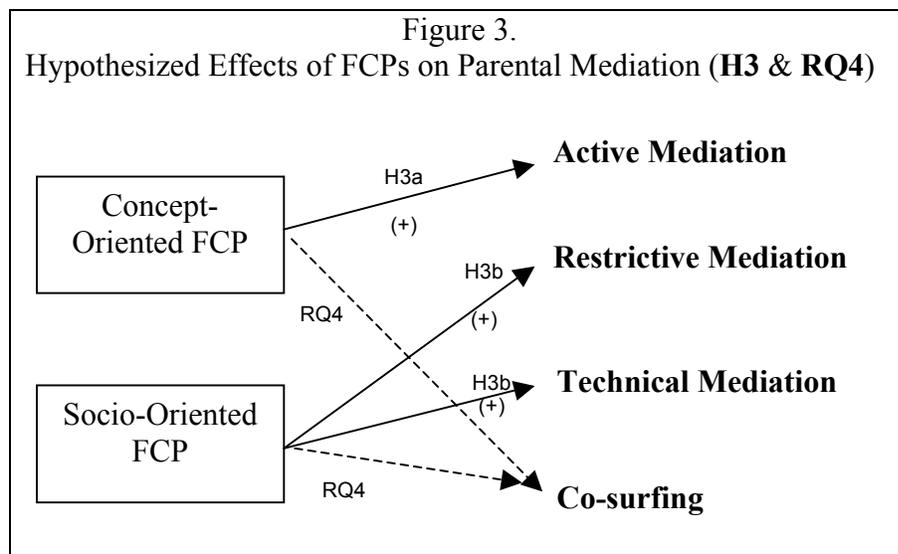
H3. Different FCPs will be associated with different types of parental mediation.

H3a. Parents’ concept-oriented FCP will be positively associated with active mediation.

H3b. Parents’ socio-oriented FCP will be positively associated with restrictive and technical mediation.

RQ4. How is co-viewing associated with different types of FCPs?

Figure 3 visualizes general patterns of expected findings for **H3** and **RQ4**.



Social Structural Variables

A review of previous parental mediation studies reveals that social structural variables are significant in bivariate analyses. However, they are not significant predictors of parental mediation when examined in multivariate analyses (Austin, 1999; Nathanson, 2001a; Valkenburg et al., 1999; Warren, 2001, 2003; Warren, Gerke, and Kelly, 2002). Consequently, the present study examines children's age and gender, and parents' gender as control variables rather than as main predictors of parental mediation.

Parents' education, however, is worth further examination as a potential main predictor of parental mediation of children's Internet use and interactions with online advertising. If perceived Internet skills are affected by parents' education levels, one can postulate a link between education and the level of parental mediation. According to a Pew Internet and American Life Project report (2010), highly educated people are more likely to use the Internet than less educated people. If greater Internet experience leads to higher perceived expertise, and if perceived skills and expertise lead to a higher level of parental mediation as found by Livingstone and Helsper (2008), it is reasonable to expect a positive association between parents' education levels and the levels of parental mediation.

However, this expectation is directly opposite to what Nikken and Jansz (2006) found in the context of electronic gaming. In addition, even if an association between parents' education and the level of parental mediation were found in a bivariate condition, it would not be clear whether the relationship will still hold when parents' perceived Internet skills and the amount of time parents spend on the Internet are

controlled. It is possible that parental mediation is more a function of parents' perceived Internet skills or Internet experience (indicated by the amount of time spent on the Internet) rather than education levels. In that case, the relationship between parental mediation and education would be spurious rather than real.

Another possibility is that level of education may affect perceived Internet skills, which in turn, affect the levels of parental mediation. If that is the case, parents' perceived Internet skill would function as a mediator between parents' education and the levels of parental mediation. The following research questions test these possibilities.

RQ5. How are parents' education and parental mediation levels associated?

RQ5a. If parents' education is associated with parental mediation, is parents' education a direct predictor of parental mediation, even when parent's perceived Internet skills and the amount of time parents spend on the Internet are controlled for?

RQ5b. If parents' education is a direct and significant predictor of parental mediation, does parents' perceived Internet skill function as a mediator between parents' education and the levels of parental mediation?

Parent-Child Agreement on Parental Mediation (H4 and H5)

Restrictive mediation, which is a more intrusive and salient form of parental mediation, has a better chance to be recognized by children than active mediation (Bakir, Rose, and Shoham, 2005; Fujioka and Austin, 2003; Nathanson, 2001a). Therefore, it is predicted that parent-child agreement on restrictive mediation will be greater than active mediation.

The literature, however, also suggests that this relationship can be affected by concept-oriented family communication patterns (FCP) (Buijzen et al., 2008). While this is true for active mediation, parent-child agreement on restrictive mediation is not likely to be affected by concept-oriented FCP. This is because restrictive mediation does not fit with the characteristics of concept-oriented FCP—horizontal and open communication between parents and children. Thus, the following two hypotheses are posed.

- H4.** Overall, parent-child agreement on restrictive mediation will be greater than on active mediation.
- H5.** Parent-child agreement on active mediation will be greater among families high on concept-oriented FCP than among those low on this communication orientation.

Parental Mediation and Consumer Socialization Outcomes (H6~H7 and RQ6~RQ7)

Active mediation has been found to be associated with various positive socialization outcomes, both in traditional (i.e., television) and new media (electronic games and the Internet) contexts (e.g., Cantor and Wilson, 2003; Desmond et al., 1985; Lee and Chae, 2007; Nathanson, 1999). One plausible reason for this is that active mediation is based on parent-child discourse (Fujioka and Austin, 2003; Grusec and Davidov, 2007). Mutual discourse is known to enhance children's understanding of what their parents expect from them (Grusec and Davidov, 2007). Scholars in socialization research also suggest that such parent-child reciprocity is likely to cultivate critical thinking skills and media skepticism in children and to result in children's genuine willingness to comply with

parental requests (Criss, Shaw, and Ingoldby, 2003; Hastings, Utendale, and Sullivan, 2007).

Although television co-viewing has been found to be less effective compared to active and restrictive mediation (Fujioka and Austin, 2003; Nathanson, 1999, 2001a; Warren, Gerke, and Kelly, 2002), Internet co-surfing is expected to result in positive socialization outcomes for the following reasons. First, since the Internet is a more individually-used medium, co-surfing is less likely to occur by chance. Instead, co-surfing is more likely to signify to children that their parents know what they are doing on the Web and that they are monitored by parents. If children think their parents are monitoring their Internet use, they are less likely to be involved in socially undesirable online activities. As a result, co-surfing is more likely to be effective as parental mediation than is co-viewing of television.

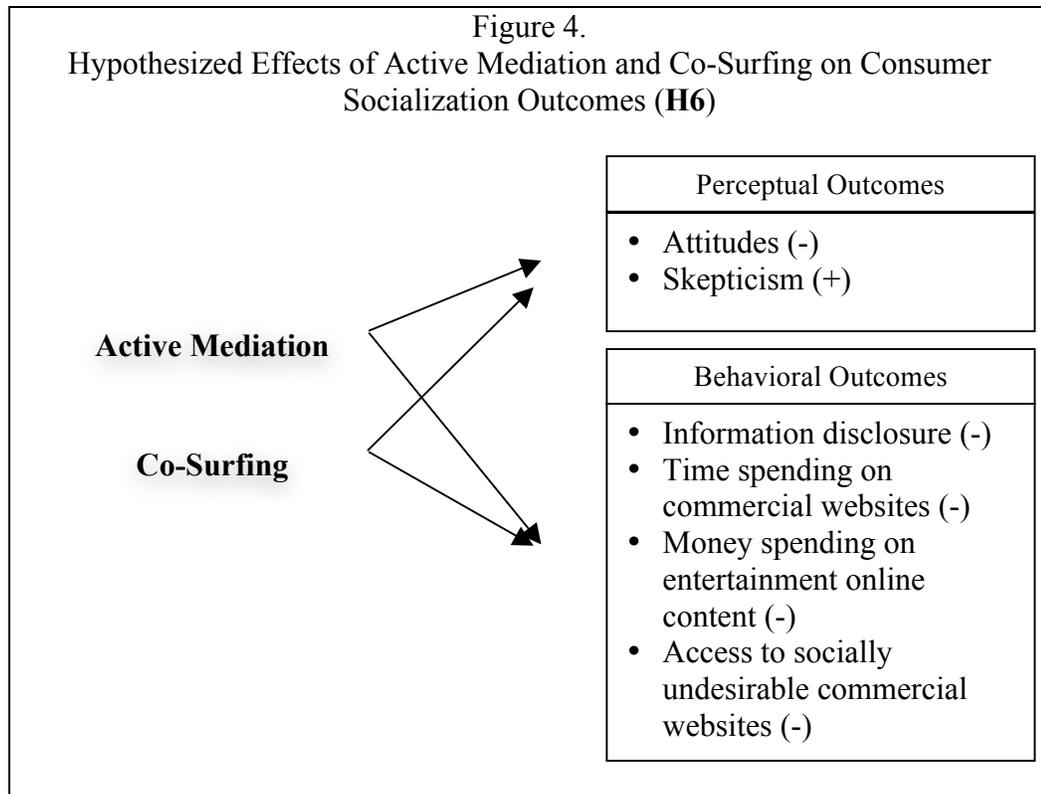
Second, co-surfing is about parents' spending time with children and sharing the Internet experience, and this activity may entail parent-child discussion as Livingston and Helsper (2008) have argued. In this way, co-surfing may be more similar to active mediation than restrictive mediation, affecting both perceptual and behavioral socialization outcomes in children. Therefore, the following hypotheses are posed.

H6. Active mediation and co-surfing will be associated with positive consumer socialization outcomes in the online advertising context.

H6a. Active mediation and co-surfing will be negatively associated with children's attitudes toward online advertising and positively associated with children's skepticism toward online advertising.

H6b. Active mediation and co-surfing will be negatively associated with (1) children’s personal information disclosure to online advertisers; (2) time spending on commercial websites; (3) money spending on entertainment online content; and (4) access to socially undesirable commercial websites.

Figure 4 visualizes expected patterns of findings for **H6**.



Through restrictive mediation, parents affect what children do with media rather than how they think and comprehend media-related issues. Therefore, restrictive mediation tends to work well in affecting children’s media-related behaviors, but not in influencing more internalized attitudes or beliefs.

In making predictions about restrictive mediation effects, it should be noted that previous studies have suggested too much parental restriction can cause boomerang

effects. Child development psychologists have suggested that excessive restriction tends to make children more interested in prescribed subjects and resist to parental authority (Grusec and Davidov, 2007; Hastings, Utendale, and Sullivan, 2007). Very high levels of parental restriction have been found to be associated with less desirable socialization outcomes such as television-induced aggressiveness, negative attitude toward parents, and poor relationship between parents and children (Kerr and Stattin, 2000; Nathanson, 1999). Therefore, the relationship between restrictive mediation and Internet outcomes could be curvilinear (inverted U-shape) rather than linear. That is, moderate restrictive mediation is likely to be more effective than low or high levels of restrictive mediation in inducing socially desirable behaviors in children on the Web. However, because only a very limited amount of empirical evidence demonstrating a curvilinear relationship between restrictive mediation and socialization outcomes exists, it is not clear whether and how restrictive mediation is associated with online-advertising-related consumer socialization outcomes. Therefore, the following research question will examine the association between restrictive mediation and socialization outcomes related to children's interactions with online advertising.

RQ6. How is restrictive mediation associated with children's consumer socialization outcomes on the Web?

The effects and effectiveness of technical mediation of children's Internet use have rarely been examined in the previous literature. Technical mediation directly interferes with children's access to undesirable online content. Therefore, technical

mediation is presumed to be effective in affecting behavioral consumer socialization outcomes on the Web.

The two existing studies described in the literature review section (Livingston and Helsper, 2008; Mesch, 2009), however, did not find results supporting the aforementioned hypothesis. This might be due to the fact that these studies examined teenagers whose Internet access is not limited to the home. If the Internet is frequently used outside home, technical mediation may have less impact on children's general online behaviors. Unlike these previous studies, the current study investigates younger children whose Internet use is more likely to be bound to the home. Therefore, it is predicted that technical mediation will be associated with children's online ad-induced behaviors.

When it comes to perceptual outcomes, it is not clear whether technical mediation would affect children's attitude and skepticism toward online advertising targeting children. Technical mediation alone does not entail parent-child discussions, which are known to develop critical thinking skills and skepticism in children (Grusec and Davidov, 2007). Thus, the relationship between technical mediation and attitude/belief outcomes is posed as a research question.

H7. Technical mediation will be negatively associated with (1) children's personal information disclosure to online advertisers; (2) time spending on commercial websites; (3) money spending on entertainment online content; and (4) access to socially undesirable commercial websites.

RQ7. How is technical mediation associated with children's attitude and skepticism toward online advertising targeting children?

Figure 5 illustrates general patterns of expected findings for **H7** and **RQ7**.

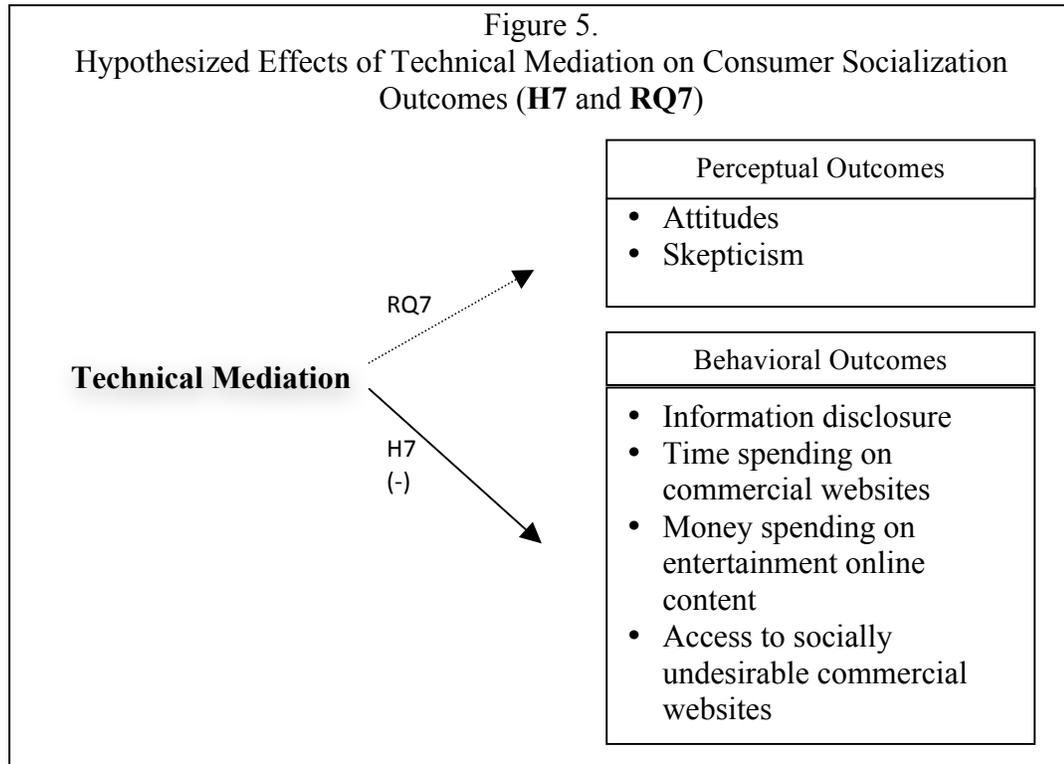
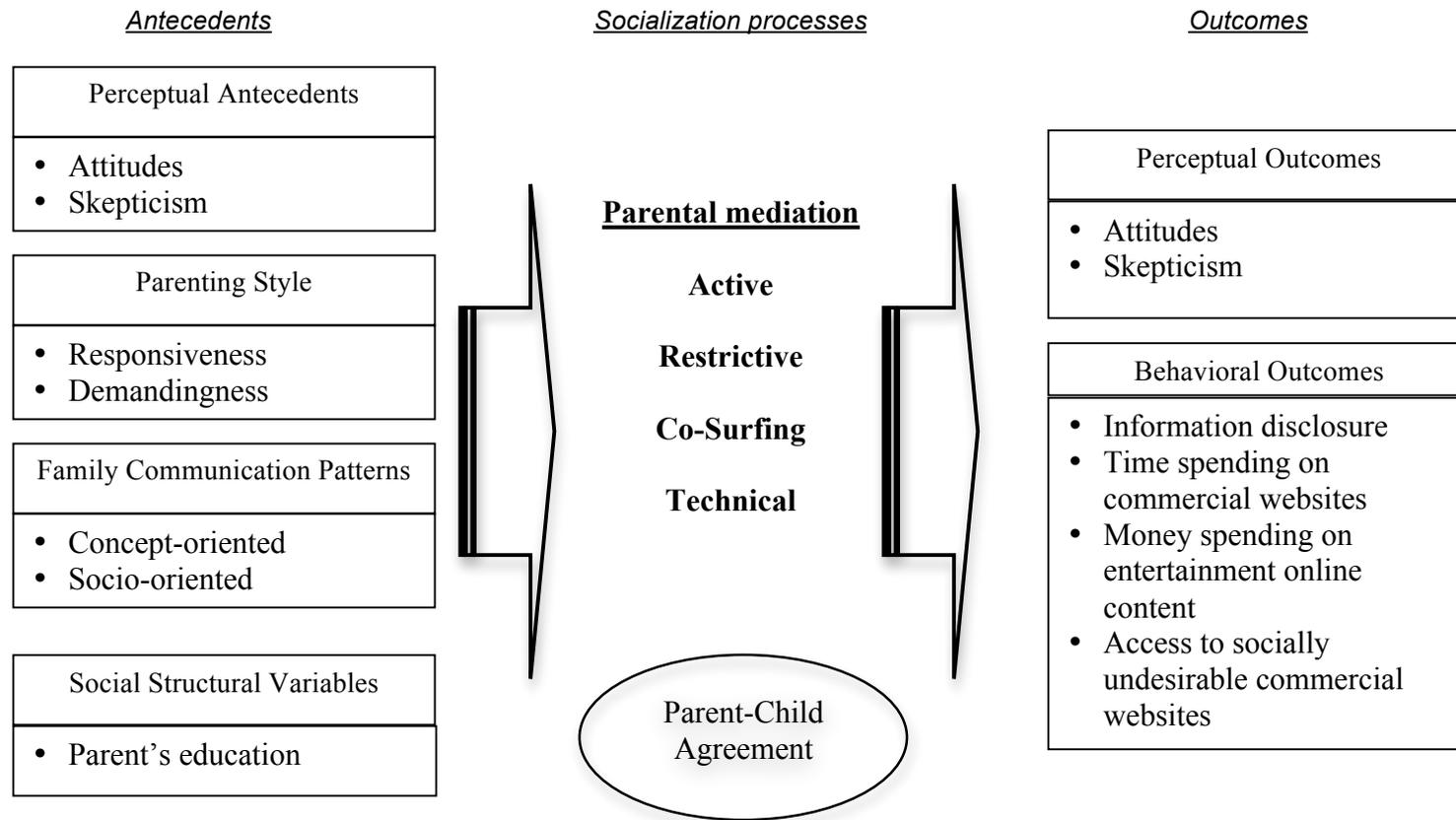


Figure 6 presents the overall research model of this study.

Figure 6. Overall Research Model



CHAPTER 4 METHODOLOGY

To examine the hypotheses and research questions posed by this study, surveys were conducted with children aged 9-12 (4th to 6th graders) and their parents/primary caregivers in South Korea. South Korea was selected as a survey site because (1) the country's Internet penetration rate is one of the highest in the world; and (2) Korean children are increasingly targeted by various forms of online marketing and advertising. As mentioned earlier, almost all elementary school students (99.9%) in Korea use the Internet (National Internet Development Agency of Korea, 2009). The top 10 sites that are most popular among Korean children include portal sites, online game sites, chatting/social networking sites, and shopping sites, which often display advertisements targeting children (Shim, 2007). The average number of daily pageviews (page impressions) of *Junior Naver*, the most popular portal site among children in Korea, reached 70 millions in 2009 (Naver.com).

YMCA in Seoul, a major consumer advocate organization in Korea, examined the most popular websites among Korean children in 2006. These include seven portal sites (Daum, Naver, Yahoo, Paran, Empas, Hanafos, and Sayclub), two game sites (Nexon and Freestyle), two music sites (Soribada and Bugs), and two chatting sites (Buddybuddy and Cyworld). The analysis revealed that most of these sites require children to purchase cybercash to fully enjoy the content (for game playing, music downloading, and virtual

goods purchase for avatar decoration), and spending money on these sites was prevalent (Newswire, 2006b).

Several reasons led to the decision to survey 4th, 5th, and 6th graders (ages 9-12). First, they are active Internet users. As discussed earlier, not only do children in this age range spend a considerable amount of time on the Web but also they are engaged in a variety of online activities such as emailing, social networking, instant messaging, online gaming, and online shopping (National Internet Development Agency of Korea, 2009). Second, children aged 9-12 in the elementary school system are young enough to be substantially affected by parents in regard to consumer socialization, especially compared to adolescents in middle or high school who have been found to be increasingly resistant to parental authority and more strongly influenced by external socialization agents like peers than parents (Bukowski, Brendgen, and Vitaro, 2007; Grusec and Davidov, 2007; Maccoby, 2007). At the same time, 4th to 6th graders are mature enough to understand the questionnaire items of the present study. The majority of them are able to read, understand, and answer the survey instructions and questions. Children of this age range are also familiar with the format of the survey questionnaire that is similar to their regular school exams.

When recruiting the parent sample, the present study specifically requested the parent or primary caregiver who spent the most time with the child to fill in the parent questionnaire. This was to control for parental involvement in childcare when assessing the main effects of parental demographic variables (especially gender) on parental mediation. As discussed in the literature review section, studies have shown that the

gender of a parent tends to emerge as a significant predictor of the level of parental mediation when parental involvement in childcare is not controlled for—i.e., mothers practicing a higher level of parental mediation than fathers (e.g., Nikken and Jansz, 2006; Nikken, Jansz, and Schouwstra, 2007; Valkenburg et al., 1999; van der Voort, Nikken, and van Lil, 1992). When parental involvement was controlled, however, the gender variable did not emerge as a significant predictor of parental mediation (Warren, 2001; Warren, Gerke, and Kelly, 2002). Warren and his colleagues argued that parental mediation is more a function of parental involvement in childrearing rather than a parent's being a mother or father. Most existing studies, however, did not control for parental involvement. Instead, they recruited 'any parent' available to answer the survey questionnaire, with only a few exceptions (Buijzen and Valkenburg, 2005; Buijzen et al., 2008). In an attempt to enhance the validity of the responses, the present study intentionally recruited primary caregivers regardless of their gender since they would be most knowledgeable about childrearing practices, including parental mediation.

Subject Recruitment

The children and parents in the sample were recruited from six elementary schools (14 classes) in five cities in South Korea. Although schools were chosen on a convenience basis through personal acquaintances of the researcher, various geographic locations were selected and no more than three classes per school were recruited in order to yield a sample of children and parents from different socioeconomic groups and types of communities. Table 1 lists schools and cities from which participants were recruited and the number of subjects from each school who completed questionnaires.

Table 1. Breakdown of Total Child Sample by Participating School

Cities	Schools	Number of Respondents
Anyang	Hwachang Elementary School	64 4 th graders x 2 classes
Bundang	Hansol Elementary School	93 5 th graders x 3 classes
Busan	Yeonseo Elementary School	88 4 th graders (28) x 1 class 5 th graders (30) x 1 class 6 th graders (30) x 1 class
Gwangmyeong	Guangmyungseo Elementary School	37 6 th graders x 1 class
Yong-In	E-Hyun Elementary School	59 4 th graders x 2 classes
Yong-In	Eondong Elementary School	104 5 th graders x 1 class (34) 6 th graders x 2 classes (70)

To recruit children for this study, the researcher first contacted teachers at each participating school. After explaining the nature of the study and getting their permission to conduct a survey in their classrooms, the author sent a parental consent form to teachers asking them to send the form to the parents of the children in their class prior to the scheduled in-class survey date. Teachers were allowed to make subtle edits in the form (e.g., format and language) as long as it did not change the meaning conveyed.

The parental consent form explained the purpose of the research and asked parents whether they would agree to have their child participate in an in-class survey. To obtain parental consent, *passive informed consent procedure* (i.e., a procedure that informs parents regarding the research but does not require active written consent or signature in order for children to participate in research) was used. Previous studies suggested that standard active consent procedures in research on minors and their families are likely to result in sampling biases that overrepresent children and families

with certain characteristics (i.e., well-functioning families, more involved parents, etc.) (Steinberg et al., 1992, 1994). Considering that one of the goals of this study is to examine the relationship between parental mediation and various parenting styles, which include a neglectful parenting style, it was important to use a passive information consent procedure. It is likely that active consent procedure would bias the parent sample toward more involved parents who are likely to be more engaged in active intervention/mediation of their children's Internet use.

Additionally, in Korea, active parental consent is an uncommon practice for paper-and-pencil surveys conducted in school under the supervision of class teachers. Through discussions with teachers in participating classes, it was learned that teachers in Korea tend to send a written notification to parents or post a notification on an online class discussion board when a survey takes place in class. However, they rarely ask parents to send back a signed consent form to school, especially when research involves no physical/mental harm or risks to children. Considering the cultural difference between Korea and the USA as well as the nature of the research method and the goal of the present study, employing a passive informed consent procedure was considered a more practical and appropriate option. The reasoning described above was explained to the Institutional Review Board (IRB) at the University of Minnesota, and the IRB permitted the author to employ the passive informed consent procedure.

The passive informed consent procedure allowed parents not to do anything unless they disagreed with their children's participation in the in-class survey after reading the description of the survey. If parents did not want their children to participate,

they were encouraged to send the signed consent form back to school or contact the researcher via email or phone. No parent expressed disagreement with their children's participating in the survey before or after the survey was conducted.

Data Collection Procedures

On each scheduled survey date, an in-class survey was administered with children in their regular classrooms. The principal investigator of this study visited each classroom and handed out to each student a consent form, a questionnaire (for children), and a sealed envelope containing a parent questionnaire. Before filling out the survey questionnaire, the purpose of the survey was explained to students in attendance. Children were then asked to sign the consent form if they wanted to participate in the study. The consent form stated that their participation was entirely voluntary, and thus, if they did not want to be in the study, they did not have to sign the form. It also stated that no one would be angry at them even if they did not sign the form and decided not to participate in the study or change their mind later. No student decided not to participate or withdrew during or after the survey, although one student had to go to a nurse's office in the middle of the survey.

Once the consent form was read and signed, students opened the survey questionnaire. Each question in the questionnaire was read by the researcher, and students were encouraged to ask questions if they had any. The researcher made sure that the students read, understood, and answered each question before proceeding to the next question. After children filled out the survey questionnaire, they were asked to take the sealed envelope containing a parental questionnaire home. All participating students were

rewarded with a pair of pencils with the University of Minnesota logo. The survey sessions took from 25 to 40 minutes (i.e., about 25 minutes for 6th graders and 40 minutes for 4th graders).

The parent questionnaire that children took home was accompanied by a cover letter explaining the purpose of the study and asking the parent or primary caregiver who spent the most time with the child to complete the questionnaire. A return envelope and a gift (a pen with the University of Minnesota logo) were also included in the questionnaire. Parents were given between 1 and 5 days to return the questionnaire to the child's teacher. Due dates for returning parental questionnaires were set by class teachers.

Questionnaires for both parents and children did not ask any personally identifiable information such as name or contact information. To ensure each child's questionnaire matches his/her parent's survey form, a unique identification number was assigned to each child-parent pair, and the number was placed on the top of each pair of questionnaires as well as the parental questionnaire return envelope.

Survey Instruments and Measures

Both questionnaires for parents and children began with an explanation of the purpose of the study and each question was accompanied by an instruction. Both questionnaires included measures for parental mediation, attitude toward the Internet, attitude toward advertising in general, attitude toward online advertising to children, online advertising skepticism, and control variables such as time spent online and perceived Internet skill. In addition to the common measures, the questionnaire for children included measures for behavioral outcomes of consumer socialization, and the

questionnaire for parents included measures for parenting styles, family communication patterns, and perceived closeness to the child. Demographic information of participating parents and children were also collected to assess the effect of social structural factors on consumer socialization. The following section provides detailed description of each measure.

Parental Mediation of Online Advertising

Parental mediation measurement items were constructed based on an extensive review of previous literature on parental mediation of children's use of online and offline media (i.e., Buijzen and Valkenburg, 2005; Cho and Cheon, 2005; Eastin, Greenberg, and Hofschire, 2006; Lee and Chae, 2007; Pew Internet & American Life Project, 2006; Valkenburg et al., 1999; Youn, 2008). The items used in this study were adopted to reflect four types of parental mediation (i.e., active, restrictive, co-using, and technical mediation) directly relevant to the Internet and online advertising. Two versions of the parental mediation measurement battery were created: A longer version for parents and a shorter version for children.

The parental mediation measurement battery used for parents consisted of seven items assessing active mediation, six items for restrictive mediation, three items for co-surfing, and two items for technical mediation. The first three types of parental mediation (i.e., active, restrictive, and co-surfing) were measured by asking parents to rate how often they employed each type of mediation strategies on a 5-point scale, anchored on "never" (1) to "always" (5). Technical mediation was measured by asking parents to indicate whether the computer the child (who brought the questionnaire) used at home

had a filter that keeps the child from visiting certain types of websites and/or monitoring software that records what the child does online, with “yes,” “no,” and “don’t know” options.

The parental mediation battery given to children consisted of three items for active mediation, two items for restrictive mediation, two items for co-surfing, and two items for technical mediation. The parental mediation battery used for children was shorter than the battery used for parents for the following reason. The pretest revealed that children felt exhausted when the questionnaire was lengthy with a full list of parental mediation items. Considering children’s relatively shorter attention span and slower reading speed in comparison to adults in general, a questionnaire used for children should be shorter and simpler. Thus, parental mediation perceived by children was assessed with a shorter version of the parental mediation battery. Additionally, fewer scale points were given to the children (i.e., 4-point scales for active, restrictive, and co-surfing mediation). Following Nathanson’s practice, children’s perception of parental mediation was assessed by items carefully selected to capture children’s “global awareness or perception of mediation rather than their recall of specific strategies” (Nathanson, 2001a, p. 209). For active, restrictive, and co-surfing mediation, children were asked to rate how often *the parent or primary caregiver who spent the most time with them at home* practiced each parental mediation strategy, on a 4-point scale, anchored by “never” (1) to “always” (4). For technical mediation, the same measurement that was used for parents was employed.

Table 2 presents the parental mediation measurement items used for parents and children.

Table 2. Parental Mediation Items: Active, Restrictive, and Co-Surfing Mediation

Mediation Types	Items for Parents	Items for Children
Active	<ul style="list-style-type: none"> • I tell my child that the Internet depicts products as better than they really are. • I tell my child that advertising on the Internet does not always tell the truth. • I tell my child that the purpose of advertising and marketing messages on the Web is to sell products. • I tell my child that not all products appearing on the Internet are of good quality. • I tell my child that some products appearing on the Internet are not good for children. • I try to help my child understand the intention of ads on the Internet. • I talk to my child about the ways that companies collect and use personal information (e.g., name, phone number, etc.) online. 	<ul style="list-style-type: none"> • My parent/guardian tells me that the Internet depicts products as better than they really are. • My parent/guardian tells me that products appearing on the Internet can be different from what the products really are. • My parent/guardian talks to me about the ways that companies collect and use personal information (e.g., name, phone number, etc.) online.
Restrictive	<ul style="list-style-type: none"> • I limit the amount of time that my child can stay on commercial websites. • I limit the time of the day my child can go to commercial websites. • I forbid my child to go to certain commercial websites. • I specify in advance the websites that my child may visit. • I tell my child to stop using the Internet when he/she is on a child-inappropriate commercial website. • I limit the kinds of personal information my child can disclose on commercial websites. 	<ul style="list-style-type: none"> • My parent/guardian determines which commercial websites I can or can't visit. • My parent/guardian limits the amount of time that I can stay on commercial websites.
Co-surfing	<ul style="list-style-type: none"> • I surf the Internet with my child. • I participate in online activities (e.g., game, chatting, etc.) with my child while he/she is online. • I watch my child when s/he is online. 	<ul style="list-style-type: none"> • My parent/guardian watches me when I am online. • My parent/guardian surfs the Internet with me.

Attitudes toward Advertising in General and Online Advertising Targeting Children

Both parents/guardians and children were asked to rate their attitudes toward advertising and commercial websites targeting children, using four 5-point semantic differential scales (good-bad, beneficial-harmful, useful-not useful, and informative-uninformative). The items were adopted from research on attitude toward advertising in general (Muehling, 1987).

Attitude toward the Internet

Attitude toward the Internet was measured for both parents and children. Five items were adopted from Ducoffe (1996), Moon and Kim (2001), Venkatesh and Davis (2000), and Yang (2004). Examples of items include “The Internet is valuable source of information I need” and “The Internet is fun to use.” For parents, 5-point scales were used, anchored on “strongly disagree” (1) to “strongly agree” (5). For children, 4-point scales were used.

Online Advertising Skepticism

Skepticism was measured for both parents and children. Respondents were asked to think about commercial websites targeting children and indicate to what extent they agreed or disagreed with items assessing online advertising skepticism. Seven 5-point scales, anchored on “strongly disagree” (1) to “strongly agree” (5), were adopted from the advertising skepticism measurement developed by Obermiller and Spangenberg (1998). Examples of items include “We can depend on getting the truth in most commercial websites,” “I am accurately informed by most commercial websites,” and “Most commercial websites provide consumers with essential information.”

Online Behaviors

In addition to the attitudinal and perceptual outcomes of parental mediation, the present study also assessed four types of behaviors related to online advertising as potential outcome variables: Personal information disclosure on commercial websites, money spent on commercial websites, time spent on commercial websites, and access to socially desirable (e.g., education) and undesirable content (e.g., games involving violence/fighting).

Regarding personal information disclosure, both behavioral intention (i.e., the willingness to provide personal information when information disclosure was requested by marketers or advertisers on the Web) and actual disclosing behaviors (i.e., the degree to which children disclose personal information on their personal websites/blogs) were assessed. Children's willingness to disclose personal information to online marketers was assessed by asking the following question: "Think about websites that you or your friends may visit. Some websites want you to provide your personal information for registration, membership, or other different reasons. Overall, what kinds of information are you willing to provide to those websites?" Fifteen items that were adopted from Pew Internet & American Life Project's *Parents and Teens 2006 Survey* were listed. Children were asked to check all that applied.

To assess the actual disclosure of personal information, children were first asked to indicate whether they had their own personal websites, profiles, blogs, or café. For those who reported to have their own personal space on the Web, 10 items corresponding to different categories of personal information (e.g., a photo of yourself, your first name,

your school name, your cell phone number, etc.) were listed, and children were requested to indicate whether they made each type of personal information visible to anyone (coded as “3”), visible to some (coded as “2”), or visible to no one (coded as “1”). If a given item was not on their websites, respondents were told to mark the “not included in my website” option (coded as “0”).

Children were also asked how much money they spent on the Web during the last month and where the money was spent. Money spent online was measured by 5-level scale—ranging from “spent nothing” to “spent 50,000 Won or more” (equivalent to US\$50). Then, those who reported spending money last month were asked where the money was spent. Eight options were given: Online gaming; buying music, movie, or other entertainment clips; buying cell phone related features; using educational service websites; buying education-related products (books, software, or other school supplies), buying things other than education-related goods or services; decorating their personal blogs and websites; and “others” if a child bought something that did not fit into items listed above. Respondents were asked to check all that applied.

Time spent on commercial websites was measured by asking children to indicate how long they spent on each different type of commercial websites (i.e., online game sites, personal blogs/websites, online communities, Internet shopping sites, and brand sites promoting products or services) per day, using 4-point scales, anchored by “almost none” (1), “1-2 hours a day” (2), “3-4 hours a day” (3), and “5 hours or more a day” (4).

Finally, children were requested to indicate how often they visited various types of websites. The listed website types were (1) websites where they can play games

involving action, fighting, or war; (2) websites that they can sell or purchase game items; (3) websites that help them study or do homework; and (4) portal or news sites providing news or information on current issues. The first two were conceptualized as “less desirable websites for children” and the last two as “more desirable websites for children” in this study. The items were measured with 4-point scales, anchored on “never or rarely” (1) to “almost every day” (4).

Family Communication Patterns (FCP)

Family communication patterns (FCP) were measured with just parents. Parents/guardians rated how they communicated with their children regarding consumption and the marketplace in general, using eight 5-point scales, anchored on “never” (1) to “always” (5). Four items measured concept-oriented FCP (e.g., “I let my child decide what things he/she should or shouldn’t buy”) and four items were for socio-oriented FCP (e.g., “I tell my child what things he/she should or shouldn’t buy”). The items were adopted from Moschis, Moore, and Smith (1984).

Parenting Styles

Parents were asked to report their parenting styles, using ten 5-point scale items, anchored on “strongly disagree”(1) to “strongly agree” (5). The items were adopted from the Parenting Style Index developed by Steinberg et al. (1992, 1994). The measurement consisted of five items to assess parental responsiveness (e.g., “I help my child if he/she doesn’t understand something or he/she has some kind of problem.”) and five items to gauge demandingness (e.g., “My child should come home by the time that I set.”).

Perceived Closeness to the Child

Inclusion of Other in the Self (IOS) Scale (Aron, Aron, and Smollan, 1992) was adopted to gauge parents' perception of their relationship with their children. IOS is a single-item pictorial measure that lists seven different Venn-like diagrams. Each diagram consists of two circles, where one circle represents "self" and the other represents "other." The degree to which the two circles overlap signifies one's sense of interpersonal connectedness with the other. That is, the more the two circles overlap, the more a person perceives the other to be close to him/herself. The scale has been proven to be a reliable and valid measure of interpersonal closeness that significantly taps into "felt closeness" (Aron, Aron, and Smollan, 1992). In this study, parents were asked to indicate their relationship with the child who brought the survey questionnaire home by choosing one of seven sets of two overlapping circles. The choices ranged from 1 (completely separated circles with no overlap) to 7 (almost completely overlapping circles). Higher number indicates a closer relationship with the child perceived by the parents.

Perceived Internet Skills

Perceived Internet skills were measured for both parents and children. The perceived Internet skill items were adopted from Cho and Cheon (2005). Three items used in the present study were "I am skilled at using the Internet," "I consider myself knowledgeable about the Internet," "I know how to find what I am looking for on the Internet."

Demographic/Background Characteristics

Children were asked to indicate their gender, the number of family members living with them, and the amount of monthly allowance. Each child also indicated whether he/she lived with his/her mother and/or father, and whether each parent was employed (“full-time,” “part time,” or “stay-home”). Children reported whether they had a computer that they were allowed to use at home and whether that computer was connected to the Internet. Finally, children reported their technology device ownership by indicating whether there were any of the listed devices (i.e., desktop, laptop, cell phone, MP3, portable multimedia player, video game consoles connected to television sets, and hand-held game consoles) at home and whether any of these devices were their own.

Parents reported their relationship to the child respondent (“mother,” “father,” “grandmother,” “grandfather,” “other”), age (open-ended), education levels (6-level ordinal scale, listed from “less than high school” to “post graduate training”), and monthly household income (7-level ordinal scale, listed from “less than 1 million Won” to “10 million Won or more”). They were also asked to estimate the amount of time their children spent on the Web per day (weekdays and weekend separately). Both parents/guardians and children were asked to indicate time spent online and watching television with open-ended questions.

Pretest

The questionnaire for children was pretested with a small sample of elementary school students ($n = 10$). Children who participated in the pretest were asked to express their opinions about the questionnaire after filling it in. They made suggestions regarding wordings, the length, and the level of difficulty of the survey instrument. The questionnaire for children was also reviewed by participating class teachers in order to confirm that children in the participating classes could understand the wording of the questions. The questionnaire for parents was pretested with a small sample of parents of elementary school-aged children ($n = 6$). Those parents were also encouraged to make suggestions about the questionnaire. Based on the comments and suggestions provided by children, parents, and teachers, revisions were made.

On the final version of both questionnaires, the term “commercial websites” was used to refer to online advertising for the following reasons. Talking with child participants during the pretest, the researcher learned that children would have a hard time understanding what online advertising meant. Online advertising takes many different forms, and thus, the term can be considered fairly abstract, making children think of many different types of online advertising and marketing communication practices. Some thought about brand websites only, while others thought about display advertising, when they were asked to think about “online advertising.” To avoid confusion, this study defined online advertising as commercial websites containing marketing and advertising messages with the purpose of promoting or selling products or services. Thus, any websites in which children are likely to be exposed to advertising and

marketing messages were considered to be online advertising. The following definition of commercial websites was added to the questionnaires for both children and parents:

“Commercial websites refer to websites with advertising and marketing messages promoting products, brand websites created by companies, Internet shopping sites, auction sites, online gaming sites and all other types of websites involving cybermoney/cash transaction in exchange for real or virtual products.”

Survey Return Rates

Four-hundred-forty-five children completed the in-class survey questionnaire. Each of those 445 children was asked to take a parent survey home. Of these, a total of 380 usable questionnaires were returned, resulting in a response rate of 85.4%.

CHAPTER 5

RESULTS

5. 1. Descriptive Data Analyses

Sample Characteristics

The final sample consists of 445 children and 380 parents. The child sample is comprised of 240 boys (53.9%) and 201 girls (45.2%). Four children did not indicate their gender. Nine out of ten child respondents (89.7%) reported that they had computers that they can use at home, and 98% of those computers were connected to the Internet. About 57% of children had their own personal websites or blogs, but the majority of them (83.8%) spent none or less than 10,000 Won (equivalent to US\$10) per month on the Web. The average online time spending was 42 minutes per weekday and 81 minutes per weekend day.

The majority of the parent sample were mothers (82.4%). The average age of the parent sample was 40.5. Six out of ten adult respondents had college degrees, and about 40% reported earning 3-5 million Won (equivalent to US\$3,000-5,000) per month. On average, they spent 64 minutes per weekday and 49 minutes per weekend day online. Parents estimated that their children were online 49 minutes each weekday and 97 minutes each weekend day.

Tables 3 and 4 display sample characteristics.

Table 3. Sample Characteristics: Children ($N=445$)

		n	%
School grades	4 th graders	151	33.9
	5 th graders	157	35.3
	6 th graders	137	30.8
Gender	Boys	240	53.9
	Girls	201	45.2
	Missing	4	0.9
Have a computer that they can use at home	Yes	399	89.7
	No	43	9.7
	Missing	3	0.7
Home computer connected to the Internet (among those who have computer at home)	Yes	391	98.0
	No	8	2.0
Computer location (among those who have computer at home)	Living room	132	33.1
	The child's room	128	32.1
	Parent's room	57	14.3
	Sibling's room	40	10.0
	Other	33	8.2
	Missing	9	2.3
Having own personal website	Yes	253	56.9
	No	190	42.7
	Missing	2	0.4
Money spent on the Web last month	Did not spend money	279	62.7
	Less than 10,000 Won*	94	21.1
	10,000-29,999 Won	38	8.5
	30,000-49,999 Won	7	1.6
	50,000 Won or more	8	1.8
	Missing	19	4.3
Average Minutes using the Internet per day	Weekday: 42.0 minutes ($N = 441$, $Min = 0$, $Max = 360$, $SD = 50.22$)		
	Weekend: 80.6 minutes ($N = 439$, $Min = 0$, $Max = 600$, $SD = 75.69$)		

*Korean Currency Won: 10,000 Won is about US\$11 as of 2009.

Table 4. Sample Characteristics: Parents ($N=380$)

		n	%
Relationship to the Child	Mother	313	82.4
	Father	60	15.8
	Grandfather	1	*
	Grandmother	4	1.1
	Other (Aunt)	1	*
	Missing	1	*
	Education	None or grades 1-8	10
High school graduate		125	33.0
Some college, but no degree		15	3.9
College graduate, 2-year degree		59	15.5
College graduate, 4-year degree		151	39.7
Post-graduate training		16	4.2
Missing		4	1.1
Monthly household income	Less than 1 million Won**	7	1.8
	1 million - under 2 million Won	30	7.9
	2 million - under 3 million Won	80	21.1
	3 million - under 5 million Won	154	40.5
	5 million - under 7 million Won	71	18.7
	7 million - under 10 million Won	21	5.5
	10 million Won or more	7	1.8
	Missing	10	2.6
Average age	40.5 ($N = 364$, $Min = 27$, $Max = 70$, $SD = 4.59$)		
Average minutes using the Internet per day	Weekday: 63.9 ($N = 377$, $Min = 0$, $Max = 510$, $SD = 71.60$) Weekend: 48.7 ($N = 377$, $Min = 0$, $Max = 490$, $SD = 59.15$)		

* Less than 1%

**Korean Currency Won: 1 million Won is about US\$1,100 as of 2009.

Descriptive Measures for Key Variables

Parental Mediation

Scales for active, restrictive, and co-surfing mediation reported by parents and children were summated and averaged after assessing each measure's internal reliability (Cronbach's alpha). Parents reported a mean score of 2.68 ($SD = .77$, $\alpha = .88$) for active mediation, 3.63 ($SD = 1.05$, $\alpha = .86$) for restrictive mediation, and 2.55 ($SD = .74$, $\alpha = .74$) for co-surfing, based on a 5-point scale ranging from "never" (1) to "always" (5). These scores were compared to each other, using a series of paired-sample t-tests. The t-tests revealed that the restrictive mediation score was significantly greater than the active mediation and co-surfing scores, and the active mediation score was significantly greater than the co-surfing score.

Average scores for the three types of parental mediation reported by children were 1.77 ($SD = .69$, $\alpha = .66$) for active mediation, 2.30 ($SD = 1.06$, $\alpha = .70$) for restrictive mediation, and 1.72 ($SD = .65$, $\alpha = .66$) for co-surfing, based on a 4-point scale ranging from "never" (1) to "always" (4). Using children's reports, restrictive mediation was significantly greater than the scores for active mediation and co-surfing. However, active mediation and co-surfing did not differ significantly.

As described in the methodology section, technical mediation was assessed with dichotomous scales, with "yes," "no," and "don't know" options. Thirty-two percent of children and 33% of parents in the sample indicated that the computers the child respondents used at home were installed with one or more monitoring devices. When it

comes to the “don’t know” option, however, parents and children showed a discrepancy. While about a half of the child sample indicated that they did not know whether their computers were installed with filter (56.2%) or monitoring software (48.8%), most parents knew if their computers had such devices, with less than 10% of parents indicating that they did not know (filter – 8.3% and monitoring software – 9.4%). This suggests that children are aware of technical mediation when it did exist, but were uncertain when it likely was not there.

To form a summated score for technical mediation, “yes” was coded as “1” and “no” as “0,” and the scores were added. As there were two items to assess technical mediation, the maximum score that a respondent could get was 2 and the minimum was 0. The summated scores for technical mediation were .58 ($SD = .77$) among parents and .51 ($SD = .73$) among children.

Attitudes toward Advertising and Online Advertising

Using five-point semantic differential scales, anchored by bad (1) – good (5), not beneficial (1) –beneficial (5), not useful (1) –useful (5), and uninformative (1) – informative (5), both parents and children provided answers for their advertising attitudes and online advertising attitudes. The summated scores for parents’ advertising attitude and online advertising attitude were 3.04 ($SD = .59$, $\alpha = .84$) and 2.25 ($SD = .74$, $\alpha = .90$), respectively. The average scores for children’s advertising attitude and online advertising attitude were 2.77 ($SD = .84$, $\alpha = .88$) and 2.44 ($SD = .95$, $\alpha = .89$), respectively.

Attitudes toward the Internet

As described in the methodology section, the same items were used for both parents and children to assess their attitudes toward the Internet. However, 5-point scales, ranging from “strongly disagree” (1) to “strongly agree” (5), were used for parents, and 4-point (1-4) scales for children. The scales were summated by averaging item scores to form Internet attitude scores for parents ($M = 3.23$, $SD = .70$, $\alpha = .85$) and children ($M = 2.77$, $SD = .68$, $\alpha = .82$).

Online Advertising Skepticism

Skepticism scales, measured on 5-point scales ranging from “strongly disagree” (1) to “strongly agree” (5) were constructed for both parents and children. The mean skepticism scores were 3.56 ($SD = .51$, $\alpha = .84$) for parents and 3.68 ($SD = .73$, $\alpha = .88$) for children.

Online Ad-Induced Behaviors

Willingness to disclose personal information on the Web

To assess children’s willingness to disclose personal information on the Web, 15 personal information items were listed and children were asked to check items that they thought they could disclose when requested. The number of items that each child checked were counted and used as an indicator of the degree to which children were willing to disclose personal information on the Web. On average, 3.24 items were checked by children ($SD = 2.68$). The most frequently selected items were “my name” (59.8%), followed by “my birthday” (38.9%), and “ my school name” (34.8%). The least

frequently selected items were their parents' occupation (5.8%), their social security numbers (6.1%), and the contact information for their friends (6.1%).

Actual disclosure of personal information on their own websites

Children were asked to indicate to what extent they disclosed their personal information on their own websites on a 4-point scale, anchored on "not included on my website" (0) to "visible to anyone" (3). The scores for the ten items were summated as an indicator of the degree of children's personal information disclosure. The mean summated score was 1.41 ($SD = .57$, $\alpha = .77$).

Access to more socially desirable vs. less desirable websites

Summated scores for children's access to *more socially desirable sites* (i.e., education and news-related sites) and *less socially desirable sites* (i.e., violent game sites and game item purchase sites) were computed by averaging the two corresponding items for each type. The score for more socially desirable site access was 2.17 ($SD = .74$), and the score for less socially desirable site access was 1.46 ($SD = .64$) on a 4-point scale anchored on "never or rarely" (1) to "almost everyday" (4).

Money spent on entertainment vs. education

Children who reported spending money on the Web in the past month were asked to indicate where the money was spent. For analysis purpose, spending on games, entertainment materials, cell phone features, blog decoration, and anything other than education-related product/service purchase was categorized as "spending money on entertainment." Spending money on education service websites and education-related products was categorized as "spending money on education." Scores for these two types

of spending were computed by counting the corresponding items checked for each type. The maximum score one could get on “spending money on entertainment” was 5 as there were five items corresponding to the category. The mean score was fairly low at .93 ($SD = .62$). As for “money spending on education,” the maximum score one could get was 2 as there were two items. The mean score was .27 ($SD = .52$).

Time spent on commercial websites

Children were asked to indicate how long they spent on five types of commercial websites per day, using a 4-point scale anchored on “never or rarely go” (1) to “5-hours a day” (4). Children’s time spending on commercial websites was computed by averaging the scores of the five items, and thus could range from 1 to 4. The average score was fairly low ($M = 1.16$, $SD = .19$), indicating that children in the sample did not spend much time on these specific types of commercial websites. This might have resulted from the way this variable was measured. The scales used in this measure include “never or rarely go” (coded as 1), “1-2 hours a day” (2), “3-4 hours a day” (3), and “5-hours a day” (4). Children were instructed to check “never or rarely go” if they spent less than one hour on each type of commercial websites. Considering that children in the sample spent an average of 42 minutes per day (weekday) and 86 minutes (weekend), it is not surprising that the most responses to this measurement fell into the “never or rarely go” category.

Among the five types of commercial websites, online game sites attracted children the most. Thirty-seven percent of the respondents reported spending more than an hour on online gaming. However, only 4% and 2% of the respondents reported that they spent more than an hour on shopping websites and product/brand websites,

respectively. The alpha for the five items was just .40. Given this low internal reliability, a principal component of factor analysis was performed with all five time spending items using a Varimax rotation method to determine the internal structure of the measurement. It was found that the items loaded on two factors and explained 54% of the variance. Time spending on game sites loaded on one factor (factor loading = .88). Time spending on personal blogs/websites, online communities, and Internet shopping sites loaded on the other factor, with factor loading scores ranging from .62 to .75. The “time spent on product/brand websites” item also loaded more heavily on the second factor, but the factor loading was .47. Thus, this item was excluded from the analysis.

Based on the factor analysis, there seemed to be two types of time spending on commercial websites—Game-related and non-game-related. Three items loaded on the non-game related factor (the second factor) were averaged to form money spending on non-game commercial websites ($M = 1.12$, $SD = .23$, $\alpha = .51$). The average score of time spending on game-related commercial websites was 1.41 ($SD = .56$).

Family Communication Patterns (FCP)

FCP items were measured on a 5-point scale ranging from “never” (1) to “always” (5). Reliability (Cronbach’s alpha) for the four items measuring concept-oriented FCP was .63 ($M = 3.18$, $SD = .65$). Although low, this was considered acceptable. However, the alpha for the four items measuring socio-oriented FCP was just .46. Given this low internal reliability, a principal component factor analysis was performed with all eight FCP items using a Varimax rotation method to further determine the internal structure of the measurement.

The factor analysis revealed that the items loaded on three factors and explained 62% of the variance. The four concept-oriented FCP items loaded on one factor, with factor loading scores ranging from .61 to .78. However, the socio-oriented FCP items loaded into two factors. One factor consisted of two items: “I tell my child that I know what’s best for him/her and the child shouldn’t question me” (factor loading = .86) and “I complain when I don’t like something that my child bought” (factor loading = .75). The other factor consisted of two items: “I tell my child things he/she should or should not buy” (factor loading = .72) and “I want to know what my child does with his/her money” (factor loading = .70).

Based on the reliability test and factor analysis, there seemed to be two types of socio-oriented FCP—forceful and direct one (the first two) and mild and indirect one (the last two). The corresponding items loading on each of the factors were averaged to form summated scores for two types of socio-oriented FCP: forceful socio-oriented FCP ($M = 2.29$, $SD = .67$) and mild socio-oriented FCP ($M = 3.54$, $SD = .72$).

Parenting Styles

Parenting style items for each dimension were measured on a 5-point scale ranging from “strongly disagree” (1) to “strongly agree” (5) and averaged to form an overall responsiveness score (5 items, $M = 3.53$, $SD = .60$, $\alpha = .79$) and a demandingness score (5 items, $M = 3.82$, $SD = .64$, $\alpha = .80$).

Parents' Perceived Closeness to the Child

The average score of parent-child closeness perceived by parents was 5.72 ($SD = 1.20$) on a 7-point scale. Here, 7 represented being extremely close and 1 was the least close relationship.

Perceived Internet Skills

For parents, 5-point Likert scales were used, anchored on “strongly disagree” (1) to “strongly agree” (5) to assess their perceived Internet skills. For children, 4-point Likert scales were used. The summated perceived Internet skills scores were 2.98 ($SD = .85$, $\alpha = .91$) for parents and 2.43 for children ($SD = .74$, $\alpha = .85$).

Table 5 displays descriptive statistics of the key measures.

Table 5. Descriptive Statistics for Key Variables

	Scale	Valid N	Mean	SD
Parental mediation				
Reported by parents				
Active mediation ($\alpha = .88$)	1-5	369	2.68	.77
Restrictive mediation ($\alpha = .86$)	1-5	361	3.63	1.05
Co-surfing ($\alpha = .74$)	1-5	373	2.55	.74
Technical mediation*	Dichotomous (2 items)	359	.58	.77
Reported by children				
Active mediation ($\alpha = .66$)	1-4	423	1.77	.69
Restrictive mediation ($\alpha = .70$)	1-4	424	2.30	1.06
Co-surfing ($\alpha = .66$)	1-4	376	1.72	.65
Technical mediation*	Dichotomous (2 items)	386	.51	.73
Attitude toward advertising				
Parents ($\alpha = .84$)	1-5	368	3.04	.59
Children ($\alpha = .88$)	1-5	435	2.77	.84
Attitude toward online advertising				
Parents ($\alpha = .90$)	1-5	355	2.25	.74
Children ($\alpha = .89$)	1-5	435	2.44	.95
Attitudes toward the Internet				
Parents ($\alpha = .85$)	1-5	373	3.23	.70
Children ($\alpha = .82$)	1-4	441	2.77	.68
Online advertising skepticism				
Parents ($\alpha = .84$)	1-5	359	3.56	.51
Children ($\alpha = .88$)	1-5	439	3.68	.73
Online ad-induced behaviors (Children)				
Willingness to disclose personal information*	Dichotomous (15 items)	444	3.24	2.68
Actual information disclosure ($\alpha = .77$)	0-3	242	1.41	.57
Access to socially desirable websites**	1-4	437	2.17	.74
Access to socially undesirable websites**	1-4	440	1.46	.64
Money spent on entertainment content*	Dichotomous (5 items)	153	.93	.62
Money spent on education*	Dichotomous (2 items)	153	.27	.52
Time spent commercial websites: Games	1-4	440	1.41	.56
Time spent on commercial websites: Non-game ($\alpha = .51$)	1-4	434	1.12	.23
FCP (Parents)				
Concept-oriented FCP ($\alpha = .63$)	1-5	372	3.18	.65
Forceful socio-oriented FCP*	1-5	373	2.29	.67
Mild socio-oriented FCP*	1-5	371	3.54	.72
Parenting style dimensions (Parents)				
Responsiveness ($\alpha = .79$)	1-5	369	3.53	.60
Demandingness ($\alpha = .80$)	1-5	369	3.82	.64
Perceived closeness to the child (Parents)				
	1-7	369	5.72	1.20
Perceived Internet skills				
Parents ($\alpha = .91$)	1-5	373	2.98	.85
Children ($\alpha = .85$)	1-4	442	2.43	.74

* Dichotomous measurement (0=No, 1=Yes): The number of "Yes" (1) was counted to form the scores for the measurement.

** Cronbach's alpha was not computed as the measurement consisted of only two items.

5. 2. Findings for Hypotheses and Research Questions

This section reports findings for hypotheses and research questions. It consists of three parts. The first part presents results on how four antecedent variables (parents' perceptions on media and children, parenting style, FCP, and parents' education and Internet competency) are associated with each type of parental mediation. The second part shows whether and to what extent parent-child pairs agreed on the level of active and restrictive mediation, and whether the agreement was affected by parents' concept-oriented FCP. The third part reports findings on the relationship between parental mediation and children's consumer socialization outcome variables.

Part 1. Antecedents of Parental Mediation (H1~H3 and RQ1~RQ5)

The first three hypotheses (**H1 ~ H3**) and five research questions (**RQ1 ~ RQ5**) were posed to examine the relationships between parental mediation reported by parents and four types of antecedents of parental mediation: (1) Parents' perceptions about media (**H1** and **RQ1**) and their children (**RQ2**); (2) Parenting style (**H2** and **RQ3**); (3) Parents' family communication pattern (FCP) (**H3** and **RQ4**); and (4) Parents' education level and perceived Internet skill (**RQ5**).

Before testing the hypotheses and research questions, correlations among four types of parental mediation reported by parents were examined to assess the degree of overlap in different forms of parental mediation. If the correlation between two particular measures were found to be strong (i.e., $r > .7$), that would indicate that one has much in common with the other variable and that they do not necessarily provide unique information (Howell, 2002). In that case, combining the two or using one of two would

be a better analytical approach to take. As shown in Table 6, none of the correlation coefficients was high. This suggests that each measure assessed different types of parental mediation. Still, the correlation coefficients between active, restrictive, and co-surfing mediation are at the moderate level (.30 ~ .40). Therefore, the present study used all four types of parental mediation, as well as the *summated parental mediation* score obtained by averaging the active, restrictive, and co-surfing mediation summated scores ($M = 2.95$, $SD = .65$), to address the hypotheses and research questions in Part I.

Table 6. Correlations among Parental Mediation Measures

Parental Mediation	1	2	3	4
1. Active		.39 **	.30 **	.18 **
2. Restrictive			.34 **	.08
3. Co-Surfing				.07
4. Technical				

* $p < .05$, ** $p < .01$

Antecedent 1: Parents' Perception about Media and Their Children (H1, RQ1, and RQ2)

H1 predicted that parents' perceptions about Internet, advertising in general, and online advertising (commercial websites) targeting children would be associated with their use of active, restrictive, and technical mediation. To be specific, parents' attitudes toward the Internet, advertising, and commercial websites were predicted to be negatively associated with active, restrictive, and technical mediation (**H1a**), whereas parents' skepticism toward commercial websites targeting children was expected to be positively associated with the three types of parental mediation (**H1b**). **RQ1** was posed to examine

the relationship between the perception variables and co-surfing. While **H1** and **RQ1** were to explore the role of parents' perceptions of *a medium* and *content* in parental mediation, **RQ2** was to investigate how parents' perceptions about *their child* were associated with different types of parental mediation.

To test the hypothesis and research questions, a series of linear regression analyses were performed with four types of parental mediation and the summated parental mediation as dependent variables and five types of parental perceptions as predictor variables. Before performing the linear regression analyses, correlations among the perception variables were assessed first to detect if there was multicollinearity in the dataset. As shown in Table 7, no issue of multicollinearity arose. The parental perception variables were rather weakly associated with each other. Thus, all five variables were used as predictors using an enter method to test **H1**, **RQ1**, and **RQ2**. The regression results are presented in Table 8.

Table 7. Correlations among Perception Antecedents

Perceptual Antecedents (parents)	1	2	3	4	5
1. Attitude toward the Internet		.24 **	.19 **	-.17 **	-.05
2. Attitude toward advertising			.28 **	-.39 **	.03
3. Attitude toward commercial websites				-.48 **	.01
4. Skepticism toward commercial websites					-.04
5. Perceived closeness to the child					

* $p < .05$, ** $p < .01$

Table 8. Regression Analyses for Predicting Parental Mediation by Parental Perceptions

Criteria	Summated P. M. *** (N = 318)	Active mediation (N = 332)	Restrictive mediation (N = 327)	Co-surfing (N = 335)	Technical mediation (N = 321)
Predictors (parents)	Beta	Beta	Beta	Beta	Beta
Attitude toward the Internet	.28**	.28**	.18**	.19**	.04
Attitude toward advertising	-.01	-.04	.01	.02	.06
Attitude toward commercial websites	-.16*	-.07	-.20**	-.09	-.00
Skepticism toward commercial websites	-.03	.01	-.02	-.08	-.01
Perceived closeness to the child	.10	.02	.06	.16**	-.01
<i>Adjusted R²</i> (<i>F, p</i>)	.07 (6.07, .00)	.06 (5.08, .00)	.04 (4.01, .00)	.05 (4.55, .00)	.01 (.64, .67)

* $p < .05$, ** $p < .01$

*** Summated parental mediation (the average of the summated active, restrictive, and co-surfing mediation scores)

The regression analyses presented in Table 8 revealed that parents' attitude toward the Internet is a positive predictor of active and restrictive mediation, but not of technical mediation. Parents' attitude toward commercial websites was found to be a negative predictor of restrictive mediation, but unrelated to active and technical mediation. However, neither attitudes toward advertising in general nor skepticism toward commercial websites in particular were associated with any forms of parental mediation. In addition, the adjusted R-squares are quite small, indicating that perception

variables do not account for much variance in the dependent variables. Therefore, **H1** was, at best, weakly supported.

Table 8 also presents the relationship between co-surfing and perceptual antecedents, answering **RQ1**. Co-surfing was significantly and positively related with parents' attitude toward the Internet. However, it should be noted that the adjusted R-square is quite small (.05). Results for **RQ2** are also presented in Table 8. Parents' perceived closeness to their child was associated with co-surfing only.

The summated parental mediation score reflecting active, restrictive, and co-surfing mediation was found to be positively associated with parents' attitude toward the Internet and negatively associated with attitude toward commercial websites. According to the adjusted R-square value, 7% of the variance in the summated parental mediation was explained by the perceptual variables.

To find out whether the conclusions drawn from the linear regression analyses still hold even after controlling for parents' background information variables, four separate hierarchical regression analyses were performed for active, restrictive, co-surfing, and summated parental mediation. Technical mediation was not subject to the hierarchical regression analysis because it was not found to be associated with any of the five perceptual antecedents. In each hierarchical regression analysis, eight demographic and Internet use and competency variables (i.e., children's age, children's gender, parents' gender, parents' education, household income, the amount of time parents spend on the Internet on a weekday and a weekend day, and parents' perceived Internet skills) were entered into the first block as control variables using an enter method. The

perception predictors that were found to be significantly associated with each form of parental mediation (reported in Table 8) were entered in a second block. Like the perception variables, control variables were also subject to a correlation analysis to detect any possible multicollinearity problem in the dataset. No multicollinearity issue emerged, as the variables were not strongly correlated with each other. Tables 9 - 12 report the hierarchical regression analysis results.

Table 9. Hierarchical Regression for Predicting Active Mediation by Parental Perceptions ($N = 347$)

	Predictors	Beta
Model 1	Parents' Internet use (weekend)	.13*
	Parents' perceived Internet skills	.14*
<i>Adjusted R² = .05</i>		
<i>df = 8, MS = 1.74, F = 3.12, p = .00</i>		
Model 2	Parents' Internet use (weekend)	.12*
	Parents' attitude toward the Internet	.15*
<i>Adjusted R² = .06*</i>		
<i>df = 9, MS = 1.94, F = 3.53, p = .00</i>		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

+ Note: 2nd block - entering "parents' attitude toward the Internet" only.

Table 9 shows that parents' attitude toward the Internet remains a significant and positive predictor of active mediation, even after controlling for the parent background variables. However, the regression model explained only 6% of the total variance in the dependent variable. In addition, the introduction of the attitude variable increased only 1% of the total variance. Finally, when the background variables were controlled for, the beta coefficient of parents' attitude toward the Internet dropped almost in half, from .28 (Table 8) to .15 (Table 9). Altogether, parents' attitude toward the Internet appears to be a weak predictor of active mediation.

Table 10. Hierarchical Regression for Predicting Restrictive Mediation by Parental Perceptions ($N = 325$)

	Predictors	Beta
Model 1	Household income	.19**
	Children's age	-.11
		<i>Adjusted R</i> ² = .07
		<i>df</i> = 8, <i>MS</i> = 3.95, <i>F</i> = 3.86, <i>p</i> = .00
Model 2	Household income	.18**
	Children's age	-.12*
	Parents' attitude toward commercial websites	-.17**
		<i>Adjusted R</i> ² = .09**
		<i>df</i> = 10, <i>MS</i> = 4.25, <i>F</i> = 4.26, <i>p</i> = .00

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

+ Note 1: In Model 1, children's age was not a significant predictor ($p = .06$).

Note 2: 2nd block - entering "parents' attitude toward the Internet" and "parents' attitude toward commercial websites" only.

Table 10 shows that parents' attitude toward commercial websites remains a significant and negative predictor of restrictive mediation, even when the background variables were controlled. However, parents' attitude toward the Internet did not emerge as a significant predictor. Unlike active mediation, restrictive mediation was predicted by household income and children's age, along with parents' attitude toward commercial websites. That is, parents of younger children, from higher income households, and with more negative attitudes toward commercial websites targeting children were more likely to be engaged in higher levels of restrictive mediation.

Table 11. Hierarchical Regression for Predicting Co-Surfing by Parental Perceptions ($N = 342$)

	Predictors	Beta
Model 1	Children's age	-.16**
	Parents' perceived Internet skills	.16**
	Adjusted $R^2 = .08$ $df = 8, MS = 2.36, F = 4.72, p = .00$	
Model 2	Children's age	-.16**
	Parents' perceived Internet skills	.13*
	Parents' perceived closeness to the child	.17**
	Adjusted $R^2 = .11^{**}$ $df = 10, MS = 2.51, F = 5.18, p = .00$	

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

+ Note: 2nd block - Entering "parents' attitude toward the Internet" and "parents' perceived closeness to the child" only.

As Table 11 demonstrates, parents' perceived closeness to the child remained a significant and positive predictor of co-surfing even after controlling for the background variables. Children's age and parents' perceived Internet skills were also found to be significant predictors of co-surfing. The three variables explained 11% of the total variance in co-surfing. However, introduction of the attitude variable increased the total variance by only 3% (R-square increment from .08 to .11).

Table 12. Hierarchical Regression for Predicting Summated Parental Mediation by Parental Perceptions ($N = 314$)

	Predictors	Beta
Model 1	Children's age	-.13*
	Household income	.14*
	Parents' perceived Internet skills	.19**
	Adjusted $R^2 = .08$ $df = 8, MS = 1.64, F = 4.48, p = .00$	
Model 2	Children's age	-.14**
	Household income	.13*
	Parents' attitude toward the Internet	.16*
	Parents' attitude toward commercial websites	-.13*
	Adjusted $R^2 = .11$ ** $df = 10, MS = 1.66, F = 4.65, p = .00$	

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

+ Note: 2nd block - Entering "parents' attitude toward the Internet" and "parents' attitude toward commercial websites" only.

Finally, for the summated parental mediation variable, parents' attitudes toward the Internet and commercial websites remained significant negative predictors after controlling for the background variables. Children's age also emerged as a negative predictor and household income was found to be a positive predictor of the summated parental mediation (Table 12).

In sum, the regression analyses conducted to test the relationship between parents' attitudes and beliefs and parental mediation suggest that different types of parental mediation are predicted by different perceptual antecedents. Active mediation was predicted by parents' attitude toward the Internet, whereas restrictive mediation was better explained by parents' attitude toward commercial websites targeting children. Unlike active and restrictive mediation, co-surfing was more closely related to parents' perception about their child rather than the perceptions about the medium or content. That

is, parents engaged in co-surfing not so much because they have certain attitudes toward the Internet or online advertising, but more because they feel close to their child.

When active, restrictive, and co-surfing mediation scores were considered together in the summated parental mediation variable, it was found that both attitude toward the Internet and attitude toward commercial websites accounted for the degree to which parents practice parental mediation, along with children's age and household income. This result suggests that parents using a higher degree of parental mediation tend to have positive attitude toward the Internet and negative attitude toward commercial websites. They are also more likely to be parents of younger children, with higher household income. However, based on the beta coefficients presented in Table 12, none of the attitudinal and demographic variables seemed to be particularly strongly associated with the summated parental mediation.

When interpreting the results, caution needs to be taken because the associations between the perceptual antecedents and parental mediation appear to be weak. Before the background variables were controlled, perceptual antecedents explained only 1% to 7% of the total variance of parental mediation (Table 8). When the background variables were controlled, the adjusted R-square increments (Tables 9 - 12) indicate that perceptual antecedents did not contribute much to the total explained variance of parental mediation. Introduction of the perception variables increased the total explained variance in parental mediation by only 1% to 3%.

Antecedent 2: Parenting Style (H2 and RQ3)

H2 predicted that different parenting styles would be associated with different types of parental mediation. Specifically, it was hypothesized that a responsive parenting style would be positively associated with active mediation (**H2a**), whereas a demanding parenting style would be positively associated with both restrictive and technical mediation (**H2b**). The association between parenting style and co-surfing is addressed as a research question (**RQ3**).

To test the hypotheses and research question, a series of linear regressions was performed with parental mediation as criteria and parenting styles as predictors. Before testing the hypothesis and research question, correlations among the antecedent variables were examined to detect multicollinearity in the dataset. Although the correlation between demandingness and responsiveness was not very strong, it reached a moderate level ($r = .45, p = .00$). In addition, the interaction term (demandingness x responsiveness), which was entered into the regression analysis along with the main effect terms (demandingness and responsiveness), was strongly correlated with each main effect term ($r = .83$ with demandingness and $r = .85$ with responsiveness), as it is the product of the two main effect terms. To control for multicollinearity among the moderately to highly related predictor variables and to maximize predictive power of the regression model (DeLome, Huh, and Reid, 2006; Hair et al., 2010), a stepwise method was used when entering the three predictor variables into the regression analyses.

The regression results demonstrate that the various forms of parental mediation were predicted by different parenting styles (see Table 13). As hypothesized, active

mediation was predicted by a responsive parenting style, whereas restrictive mediation was predicted by a demanding parenting style. However, technical mediation was not predicted by any of the parenting styles. Therefore, **H2a** was supported and **H2b** was partially supported.

Co-surfing was predicted by the interaction term, which suggests that the relationship between a parenting style and co-surfing is moderated by the other parenting style. To be specific, the association between a parenting style and co-surfing becomes stronger when the other parenting style is high, but the association becomes weaker when the other parenting style is low. Which parenting style is a moderator is not clear, though. Statistically speaking, either one of the two parenting styles could act as a moderator unless there is a theoretical reason to make one a moderator. Nonetheless, a clear implication from the result is that co-surfing is a function of both demanding and responsive parenting styles. Figure 7 presents the relationship between two parenting styles and co-surfing.

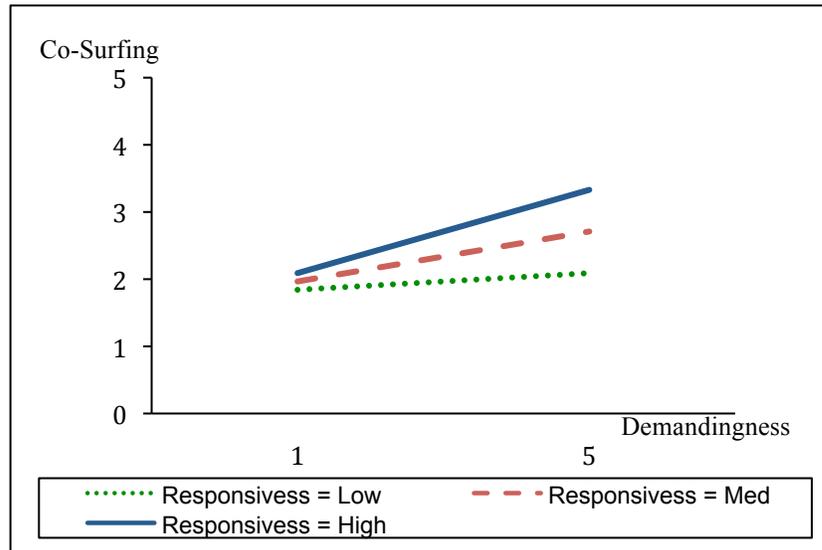
Like co-surfing, summated parental mediation was found to be a function of the interaction between responsive and demanding parenting styles. Technical mediation, however, was not predicted by any of the parenting styles. Thus, the results for technical mediation are not presented in Table 13.

Table 13. Regression Analyses for Predicting Parental Mediation by Parenting Styles

Dependent variables	Predictors	Beta
Active mediation (N = 356)	Responsiveness <i>Adjusted R</i> ² = .10 <i>df</i> = 1, <i>MS</i> = 21.03, <i>F</i> = 37.90, <i>p</i> = .00	.31**
Restrictive mediation (N = 348)	Demandingness <i>Adjusted R</i> ² = .13 <i>df</i> = 1, <i>MS</i> = 52.00, <i>F</i> = 53.74, <i>p</i> = .00	.37**
Co-surfing (N = 359)	Demandingness x Responsiveness <i>Adjusted R</i> ² = .09 <i>df</i> = 1, <i>MS</i> = 18.54, <i>F</i> = 37.13, <i>p</i> = .00	.31**
Summated parental mediation (N = 337)	Demandingness x Responsiveness <i>Adjusted R</i> ² = .16 <i>df</i> = 1, <i>MS</i> = 23.46, <i>F</i> = 65.57, <i>p</i> = .00	.41**

* *p* < .05, ** *p* < .01

Figure 7. Graphic Illustration of Interaction (Demandingness x Responsiveness) on Co-Surfing



Note: The chart was drawn based on the regression equation,
 $Co-Surfing = 1.718 + 0.062x (Demandingness \times Responsiveness)$,
 from the regression analysis described on pp. 141-142.
 In this graph, responsiveness was treated as a moderator.
 (Responsiveness low = 1, medium = 3, high = 5)
 However, demandingness can also be treated as moderator and responsiveness as
 an independent variable. The same graph as above will be produced.

To examine whether the findings presented in Table 13 still hold after controlling for the parent background variables, three separate hierarchical regression analyses were conducted with active, restrictive, and co-surfing mediation as dependent variables. The same demographic and Internet use and competency variables used to test the perceptual antecedent hypotheses and research questions were entered into the first block as control variables using an enter method. Parenting style variables—demandingness, responsiveness, and the interaction term (demandingness x responsiveness) were entered into the second block using a stepwise method to control for multicollinearity among the predictors. The results are presented in Tables 14 - 17.

Table 14. Hierarchical Regression for Predicting Active Mediation by Parenting Styles (N = 336)

	Predictors	Beta
Model 1	Parents' Internet use (weekend)	.13*
	Parents' perceived Internet skills	.15*
<i>Adjusted R² = .05</i>		
<i>df = 8, MS = 1.73, F = 3.02, p = .00</i>		
Model 2	Parents' Internet use (weekend)	.13*
	Parents' perceived Internet skills	.12*
	Responsiveness	.27**
<i>Adjusted R² = .12**</i>		
<i>df = 9, MS = 3.14, F = 5.93, p = .00</i>		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 15. Hierarchical Regression for Predicting Restrictive Mediation by Parenting Styles ($N = 330$)

	Predictors	Beta
Model 1	Household income	.19**
	Children's age	-.12*
Adjusted $R^2 = .07$ $df = 8, MS = 4.26, F = 4.17, p = .00$		
Model 2	Household income	.15**
	Children's age	-.11*
	Demandingness	.31**
Adjusted $R^2 = .16**$ $df = 9, MS = 7.46, F = 8.10, p = .00$		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 16. Hierarchical Regression for Predicting Co-Surfing by Parenting Styles ($N = 339$)

	Predictors	Beta
Model 1	Children's age	-.15**
	Parents' perceived Internet skills	.18**
Adjusted $R^2 = .08$ $df = 8, MS = 2.41, F = 4.73, p = .00$		
Model 2	Children's age	-.15**
	Parents' perceived Internet skills	.16**
	Demandingness x Responsiveness	.29**
Adjusted $R^2 = .16**$ $df = 9, MS = 3.77, F = 8.08, p = .00$		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 17. Hierarchical Regression for Predicting Summated Parental Mediation by Parenting Styles ($N = 320$)

	Predictors	Beta
Model 1	Children's age	-.14*
	Household income	.13*
	Parents' perceived Internet skills	.17**
<i>Adjusted R² = .07</i>		
<i>df = 8, MS = 1.74, F = 4.59, p = .00</i>		
Model 2	Children's age	-.14**
	Household income	.11*
	Parents' perceived Internet skills	.14*
	Demandingness x Responsiveness	.36**
<i>Adjusted R² = .21**</i>		
<i>df = 9, MS = 3.39, F = 10.40, p = .00</i>		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

The results from the four hierarchical regression analyses (Tables 14 - 17) confirm the findings reported in Table 13. Different forms of parental mediation were predicted by different parenting styles, and the association between each corresponding parenting style and parental mediation held significant even after controlling for various parent background variables. In addition, parenting styles were found to be the strongest predictors in all four hierarchical regression models based on the beta coefficients. The significant increments of adjusted R-squares after introducing parenting style variables into equations further indicate that introduction of parenting style variables significantly increased the predictive power of the regression models.

Additionally, household income and children's age were found to be significant predictors of restrictive mediation (Table 15), whereas children's age and parents' perceived Internet skills were significant predictors of co-surfing (Table 16). In active

mediation, parents' Internet-related variables appear to be more important than demographic variables. Table 14 shows that the amount of time parents spend on the Internet and their Internet competency were significantly associated with active mediation, whereas no parent or child demographic variables were found to predict that type of parental mediation.

When active mediation, restrictive mediation, and co-surfing were considered together in the summated parental mediation variable (Table 17), it was found that high levels of parental mediation was a function of both demographic (children's age and household income) and Internet competency variables, along with parenting style. Specifically, parents high on parental mediation in general are more likely to be parents of younger children with higher household income and Internet competency.

Antecedent 3: Family Communication Patterns (H3 and RQ4)

H3 predicted that different family communication patterns (FCPs) would be associated with different types of parental mediation. Specifically, concept-oriented FCP was predicted to be positively associated with active mediation (**H3a**), whereas socio-oriented FCP was expected to be positively associated with both restrictive and technical mediation (**H3b**). The association between FCPs and co-surfing was addressed as a research question (**RQ4**).

As stated in the methodology section, two types of socio-oriented FCPs were identified in the present study: Forceful and mild socio-oriented FCPs. Thus, the present study tested the effects of three types of FCPs: One type of concept-oriented FCP and two types of socio-oriented FCP. To address the hypothesis and research question, a

series of linear regressions was conducted with four types of parental mediation as dependent variables and FCPs as predictor variables. Both main effect terms (concept-oriented FCP, forceful socio-oriented FCP, mild socio-oriented FCP), and interaction terms (“concept x forceful socio” and “concept x mild socio”) were entered as predictors.

To detect multicollinearity in the dataset before entering the predictors into the regression analyses, correlations among FCP terms were examined first. As shown in Table 18, correlation coefficients among the three FCPs were fairly low. However, the interaction terms were highly correlated with main effect terms. To control for multicollinearity, the predictor variables were entered using a stepwise method. The regression results are presented in Table 19.

Table 18. Correlations among FCPs

FCPs	1	2	3	4	5
1. Concept-oriented FCP		-.13*	.19*	.47**	.77**
2. Forceful socio-oriented FCP			.15*	.79**	-.02
3. Mild socio-oriented FCP				.24**	.75**
4. Concept x Forceful socio					.45**
5. Concept x Mild socio					

* $p < .05$, ** $p < .01$

Table 19. Regression Analyses for Predicting Parental Mediation by FCPs

Dependent variables	Predictors	Beta
Active mediation (<i>N</i> = 358)	Concept-oriented FCP x Mild socio FCP <i>Adjusted R</i> ² = .12 <i>df</i> = 1, <i>MS</i> = 26.15, <i>F</i> = 49.49, <i>p</i> = .00	.35**
Restrictive mediation (<i>N</i> = 353)	Mild socio-oriented FCP <i>Adjusted R</i> ² = .11 <i>df</i> = 1, <i>MS</i> = 43.92, <i>F</i> = 44.28, <i>p</i> = .00	.34**
Co-surfing (<i>N</i> = 362)	Mild socio-oriented FCP <i>Adjusted R</i> ² = .05 <i>df</i> = 1, <i>MS</i> = 10.01, <i>F</i> = 19.08, <i>p</i> = .00	.22**
Summated parental mediation (<i>N</i> = 341)	Mild socio-oriented FCP <i>Adjusted R</i> ² = .15 <i>df</i> = 1, <i>MS</i> = 21.88, <i>F</i> = 60.66, <i>p</i> = .00	.39**

* *p* < .05, ** *p* < .01

+ Note: Technical mediation is not listed because it was not predicted by any predictors.

As shown in Table 19, both restrictive and co-surfing were predicted by mild-socio FCPs. However, technical mediation was not predicted by any of the FCPs. While active mediation was expected to be associated with concept-oriented FCP, this study found that active mediation was predicted by the concept x mild socio FCP interaction term. This indicates that the association between active mediation and concept-oriented FCP is moderated by mild socio-FCP. Altogether, **H3** was partially supported.

These findings were confirmed by the subsequent hierarchical regression analyses that controlled for parents' background variables. Demographic and parents' Internet use and competency variables were entered into the first block using an enter method, and FCP variables were entered into the second block using a stepwise method. As Tables 20-

23 present, the FCP predictors reported in Table 19 remained significant predictors even after controlling for the background variables.

Table 20. Hierarchical Regression for Predicting Active Mediation by FCPs ($N = 336$)

	Predictors	Beta
Model 1	Parents' perceived Internet skills	.15*
	Parents' Internet use (weekend)	.13*
	Children's gender (girls)	.11*
<i>Adjusted R² = .07</i>		
<i>df = 8, MS = 1.79, F = 3.21, p = .00</i>		
Model 2	Parents' perceived Internet skills	.13*
	Parents' Internet use (weekend)	.13*
	Children's gender (girls)	.13*
	Concept-oriented FCP x Mild Socio-oriented FCP	.36**
<i>Adjusted R² = .17**</i>		
<i>df = 9, MS = 4.27, F = 8.81, p = .00</i>		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 21. Hierarchical Regression for Predicting Restrictive Mediation by FCPs ($N = 333$)

	Predictors	Beta
Model 1	Household income	.18**
	Children's age	-.11*
<i>Adjusted R² = .07</i>		
<i>df = 8, MS = 4.05, F = 3.96, p = .00</i>		
Model 2	Household income	.17**
	Mild socio-oriented FCP	.27**
<i>Adjusted R² = .14**</i>		
<i>df = 9, MS = 6.43, F = 6.79, p = .00</i>		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 22. Hierarchical Regression for Predicting Co-surfing by FCPs ($N = 339$)

	Predictors	Beta
Model 1	Children's age	-.16**
	Parents' perceived Internet skills	.16**
Adjusted $R^2 = .08$ $df = 8, MS = 2.35, F = 4.66, p = .00$		
Model 2	Children's age	-.15**
	Parents' perceived Internet skills	.15*
	Mild socio-oriented FCP	.19**
Adjusted $R^2 = .11$ ** $df = 9, MS = 2.81, F = 5.80, p = .00$		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 23. Hierarchical Regression for Predicting Summated Parental Mediation by FCPs ($N = 321$)

	Predictors	Beta
Model 1	Children's age	-.14*
	Household income	.13*
	Parents' perceived Internet skills	.18**
Adjusted $R^2 = .08$ $df = 8, MS = 1.72, F = 4.63, p = .00$		
Model 2	Children's age	-.12*
	Household income	.14*
	Parents' perceived Internet skills	.15**
	Mild socio-oriented FCP	.35**
Adjusted $R^2 = .20$ ** $df = 9, MS = 3.25, F = 10.04, p = .00$		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Through the four hierarchical regression analyses (Tables 20 – 23), it was confirmed that different forms of parental mediation were associated with different types of FCPs, and the association between each corresponding FCP and parental mediation held significant even after controlling for various parent background variables. Based on the beta coefficients, FCPs were the strongest predictors among the variables entered into the regression in all four hierarchical regression models. The significant increments of

adjusted R-squares after introducing FCP into the models suggest that introduction of FCP variables significantly increased the predictive power of the regression models.

As observed in hierarchical regression analyses by other types of parental antecedents (perceptions and parenting styles) as predictor variables, household income and children's age emerged as significant predictors of restrictive mediation, whereas children's age and parents' perceived Internet skills were found to be significant predictors of co-surfing. Also consistent with the aforementioned hierarchical regression analysis results, parents' Internet-related variables emerged as significant predictors of active mediation. When active mediation, restrictive mediation, and co-surfing were taken together as the summated parental mediation, it was found that high levels of parental mediation were a function of both demographic (children's age and household income) and Internet competency variables, along with mild socio-oriented FCP.

Antecedent 4: Parents' Education Levels and Perceived Internet Skills (RQ5)

RQ5 was posed to investigate the association between parents' education levels and parental mediation. It further asked whether parents' education is a direct predictor of parental mediation after controlling for parents' Internet use time and competency (**RQ5a**); and if education is a direct predictor of parental mediation, whether parents' Internet competency functions as a mediator between parents' education and the level of parental mediation (**RQ5b**).

To answer the research question, it was examined whether there was any association between parental mediation and education. As the correlation matrix shows

(Table 24), parents' education was positively but weakly associated with technical mediation but not with other types of parental mediation.

Table 24. Correlations between Parents' Education and Parental Mediation (Pearson's r)

	Summated P. M.	Active mediation	Restrictive mediation	Co-surfing	Technical mediation
Parent's education	.10	.09	.10	.07	.15**

* $p < .05$, ** $p < .01$

To further investigate whether the education remains a significant predictor of technical mediation when parents' perceived Internet skills and the amount of time spent on the Internet were controlled (**RQ5a**), a hierarchical regression was conducted with technical mediation as a dependent variable. Parents' perceived Internet skills and the amount of time spent on the Web were entered into the first block as control variables and education was entered into the second block. None of the three variables emerged as a predictor of technical mediation in the final model. As education was not found to be a significant predictor of technical mediation, testing of **RQ5b** was not performed.

Post-Hoc Analyses of the Antecedents

Through the hypothesis and research question tests reported earlier, the association between *each* type of antecedents and parental mediation was examined. While such analyses provide information about the role of each type of antecedents in parental mediation, they do not inform what particular antecedents, in comparison to others, are more strongly associated with different forms of parental mediation.

To provide more comprehensive understanding of factors predicting different types of parental mediation, a series of post-hoc hierarchical regression analyses was conducted with active, restrictive, co-surfing, and summated parental mediation as dependent variables (criteria), and antecedent and control variables significantly associated with each type of parental mediation as independent variables (predictors). To identify independent variables that were significantly associated with each parental mediation, correlations between potential predictors (IV) and each type of parental mediation (DV) were first examined. Table 25 lists IVs that were found to be significantly associated with each type of parental mediation at $p < .05$. Only those listed IVs in Table 25 were included in the hierarchical regressions shown in Tables 26 - 29. When entering the predictors into regression analyses, the background variables were entered using an enter method because they were not strongly correlated with each other, eliminating the multicollinearity problem. The parental antecedent variables were entered using a stepwise method to control for multicollinearity, since some multicollinearity issues raised due to the interaction terms, as described earlier in this chapter.

Technical mediation was excluded from the regression analyses because it was not found to be associated with any of the key antecedent variables (i.e., parents' perceptions, parenting styles, and parents' FCPs).

Table 25. Variables Significantly Associated with Each Form of Parental Mediation

	Summated P. M.	Active mediation	Restrictive mediation	Co-surfing
Background information	Children's age (-.17**) Household income (.16**) Parents' Internet use (weekday) (.13*) Parents' perceived Internet skills (.24**)	Parents' Internet use (weekday) (.13*) Parents' Internet use (weekend) (.15**) Parents' perceived Internet skills (.20**)	Children's age (-.14**) Household income (.22**) Parents' perceived Internet skills (.16**)	Children's age (-.18**) Parents' Internet use (weekday) (.17**) Parents' Internet use (weekend) (.16**) Parents' perceived Internet skills (.22**)
Parental Antecedents	<u>Parents' perceptions</u> Parents' attitude toward the Internet (.22**) <u>Parenting styles</u> Demandingness (D) (.36**) Responsiveness (R) (.35**) D x R (.41**) <u>FCP orientation</u> Concept (.13*) Mild socio (.39**) Concept x Forceful socio (.15**) Concept x Mild socio (.33**)	<u>Parents' perceptions</u> Parents' attitude toward the Internet (.22**) <u>Parenting styles</u> Demandingness (D) (.19**) Responsiveness (R) (.31**) D x R (.29**) <u>FCP orientation</u> Concept (.26**) Mild socio (.30**) Concept x Forceful socio (.21**) Concept x Mild socio (.35**)	<u>Parent's perceptions</u> Parents' attitude toward the Internet (.12**) Parents' attitude toward commercial websites (-.17**) <u>Parenting styles</u> Demandingness (D) (.38**) Responsiveness (R) (.23**) D x R (.33**) <u>FCP orientation</u> Mild socio (.33**) Concept x Forceful socio (.11*) Concept x Mild socio (.23**)	<u>Parent's perceptions</u> Parents' attitude toward the Internet (.19**) Parents' perceived closeness to the child (.15**) <u>Parenting styles</u> Demandingness (D) (.25**) Responsiveness (R) (.28**) D x R (.31**) <u>FCP orientation</u> Mild socio (.23**) Concept x Mild socio (.18**)

Note: Numbers in parentheses represent Pearson's *r* correlation coefficients (* $p < .05$, ** $p < .01$).

Table 26. Hierarchical Regression for Predicting Active Mediation: Post-Hoc Analysis ($N = 341$)

	Predictors	Beta
Model 1	Parents' perceived Internet skills	.19**
	Parents' Internet use (weekend)	.13*
	Adjusted $R^2 = .05$ $df = 2, MS = 6.08, F = 10.46, p = .00$	
Model 2	Parents' Internet use (weekend)	.11*
	Parents' attitude toward the Internet	.14*
	Responsive parenting style	.15**
	Concept-oriented FCP x Mild socio-oriented FCP	.27**
	Adjusted $R^2 = .20^{**}$ $df = 5, MS = 8.71, F = 17.68, p = .00$	

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 26 demonstrates that active mediation is a function of the amount of time parents spend on the Internet, attitude toward the Internet, parenting styles, and FCP. To be specific, parents who: 1) spend more time on the Internet, 2) have positive attitudes toward the Internet; 3) prefer a responsive parenting style to a demanding parenting style, and 4) are high on both concept-oriented and socio-oriented FCP are most likely to be engaged in conversation and discussion with their children about online advertising practices. Parents' and children's demographic characteristics such as age, gender, education, and household income did not emerge as significant predictors of active mediation. Among the predictors in the final model, the concept-oriented FCP x mild socio-oriented FCP interaction term was found to be the strongest predictor ($\beta = .27$). The final model explains 20% of the total variance of active mediation. The substantial and significant R-square increment (from .05 in Model 1 to .20 in Model 2) indicates that

parental antecedents play an important role in explaining parents' active mediation in comparison to the background variables.

Table 27. Hierarchical Regression for Predicting Restrictive Mediation: Post-Hoc Analysis ($N = 319$)

	Predictors	Beta
Model 1	Children's age	-.12*
	Household income	.21**
Adjusted $R^2 = .08$		
$df = 3, MS = 9.86, F = 9.65, p = .00$		
Model 2	Children's age	-.11*
	Household income	.16**
	Parents' attitude toward commercial websites	-.14**
	Demanding parenting style	.24**
	Mild socio-oriented FCP	.19**
Adjusted $R^2 = .23^{**}$		
$df = 6, MS = 14.20, F = 16.65, p = .00$		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 27 shows that restrictive mediation is predicted by a quite different set of independent variables from those predicting active mediation. Unlike active mediation, restrictive mediation is a function of: 1) some demographic factors (children's age and household income); 2) attitude toward commercial websites directed to children; 3) a demanding parenting style instead of a responsive parenting style; and 4) socio-oriented FCP rather than concept-oriented FCP alone or concept-oriented x socio-oriented interaction terms. The regression equation demonstrates that parents of younger children from higher income households are more likely to be involved in restrictive mediation. However, restrictive mediation was not associated with parents' Internet use time and competency. Instead, parenting style and communication pattern appear to be the most

important factors explaining restrictive mediation. Demandingness was the strongest predictor of restrictive mediation ($\beta = .24$). Restrictive mediation was also predicted by socio-oriented FCP ($\beta = .19$) that emphasizes children's deference to parents' authority. The substantial and significant R-square increment (from .08 to .23), along with the beta coefficients, imply that parental antecedent variables, especially parenting style and FCP, play a more important role in explaining restrictive parental mediation than background variables.

Table 28. Hierarchical Regression for Predicting Co-Surfing: Post-Hoc Analysis ($N = 342$)

	Predictors	Beta
Model 1	Parents' perceived Internet skills	.18**
	Children's age	-.17**
	Parents' Internet use (weekend)	.12*
	Adjusted $R^2 = .09$ $df = 3, MS = 5.79, F = 11.42, p = .00$	
Model 2	Children's age	-.16**
	Parents' Internet use (weekend)	.13**
	Parents' perceived Internet skills	.14**
	Demandingness x Responsiveness parenting style	.28**
	Adjusted $R^2 = .16^{**}$ $df = 4, MS = 8.01, F = 17.23, p = .00$	

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 28 shows regression results for predicting co-surfing. The final regression equation revealed children's age, parents' Internet use time and competency, and parenting style as significant predictors. Co-surfing was most strongly predicted by the demandingness x responsiveness interaction term ($\beta = .28$). Parents who are high on both demanding and responsive parenting style are more likely to be engaged in co-surfing.

Unlike active and restrictive mediation, however, none of the FCP variables emerged as a significant predictor. The result is plausible in that co-surfing does not necessarily involve communication. No attitude variable was found to be a predictor of co-surfing, either. Overall, co-surfing appears to be driven by parents' Internet use and competency and general parenting style rather than attitudes toward specific media or content or communication styles.

Table 29. Hierarchical Regression for Predicting Summated Parental Mediation: Post-Hoc Analysis ($N = 320$)

	Predictors	Beta
Model 1	Children's age	-.16**
	Household income	.12*
	Parents' perceived Internet skills	.18**
	Adjusted $R^2 = .09$ $df = 4, MS = 3.5, F = 9.25, p = .00$	
Model 2	Children's age	-.13**
	Household income	.10*
	Parents' perceived Internet skills	.14**
	Demandingness x Responsiveness	.25**
	Mild socio-oriented FCP	.22**
	Concept-oriented FCP x Forceful socio-oriented FCP	.10*
Adjusted $R^2 = .27^{**}$ $df = 7, MS = 5.52, F = 18.22, p = .00$		

* $p < .05$, ** $p < .01$ (for adjusted R-square indicates significance of R-square increments)

Table 29 indicates that summated parental mediation reflecting active, restrictive, and co-surfing parental mediation is mainly a function of parenting style, FCP, perceived Internet skills, and demographic factors. However, none of the attitude/belief factors emerged as a predictor of the summated parental mediation.

Part II. Parent-Child Agreement on Parental Mediation (H4 and H5)

Part II discusses findings related to parent-child agreement on active and restrictive mediation. **H4** predicted that parent-child agreement on restrictive mediation would be greater than on active mediation. **H5** expected parent-child agreement on active mediation to be greater among families high on concept-oriented FCP than among those low on this communication orientation. To test the two hypotheses, it was first examined whether “the primary caregiver who spent the most time with the child” as reported by each child matched the adult respondent who actually filled out the parent questionnaire. As stated in the methodology section, each child respondent was asked to report who spent the most time with him or her at home (among adults aged 18 or above) and to think about that person when answering parental mediation questions. Then, the child took a parent survey home. The instructions for the parent survey questionnaire stated that the questionnaire should be filled out by the primary caregiver who spent the most time with the child. The parent survey also asked the parent respondent to indicate his/her relationship with the child who brought the survey questionnaire home.

It was found that 273 parent questionnaires were actually completed by the person that the child respondents reported as the primary caregiver. Thus, the 273 out of 380 pairs (72%) were named “the matching sample,” and **H4** and **H5** were tested with this matching sample only.

To test **H4** and **H5**, zero-order correlations were conducted between parent- and child-reported active and restrictive mediation measures for the total matching sample

(H4) as well as low versus high concept-oriented communication groups (H5). Low versus high concept-oriented FCP was determined by the mean score of the FCP style ($M = 3.19$). If the concept-oriented score of a parent in a pair was lower than the mean score 3.19, the pair was defined as a low concept-oriented FCP pair. If a score was 3.19 or higher, the respondent was categorized as having high concept-oriented FCP. None of them scored 3.19. Table 30 presents correlation coefficients between parent- and child-reported active and restrictive parental mediation scores.

Table 30. Agreement between Parent- and Child-Reported Measures of Active and Restrictive Parental Mediation

	Pearson's r for parent and child report
Active mediation	
Total matching sample (N = 261)	.20**
Low concept-oriented FCP (N = 122)	.21*
High concept-oriented FCP (N = 135)	.17
Restrictive mediation	
Total matching sample (N = 255)	.17**
Low concept-oriented FCP (N = 116)	.06
High concept-oriented FCP (N = 135)	.28**

* $p < .05$, ** $p < .01$

To test if the correlation coefficients are significantly different, correlation coefficients presented in Table 30 were compared, using Fisher's r to z transformation

formula below (see Buijzen et al., 2008). A z-value was computed for each corresponding r pair. Then, p was obtained for the computed z score.

$$Z = \frac{r_1' - r_2'}{\sqrt{\frac{1}{n_1 - 3} + \frac{1}{n_2 - 3}}}$$

Computations revealed that the correlation between parent and child reports on active mediation in the total matching sample ($r = .20$) was not statistically different from the correlation between parent and child reports on restrictive mediation ($r = .17$) ($z = .35, p = .73$), rejecting **H4**.

To test **H5**, concept-oriented FCP subgroups were compared. Between high and low concept-oriented FCP subgroups, parent-child agreement on active mediation (.21 vs. .17) did not differ by communication orientation ($z = .35, p = .73$). Thus, **H5** was not supported. The correlation between parent and child reports of restrictive mediation appeared to be stronger in families high on concept-oriented FCP ($r = .28$) than families low on this communication orientation ($r = .06$) ($z = -1.78, p = .08$). However, p did not reach the traditional significance level .05.

Part III. Parental Mediation and Consumer Socialization Outcomes (H6 ~ H7 and RQ6 ~ RQ7)

This part reports findings for hypotheses and research questions on the relationships between parental mediation and children's perceptual and behavioral consumer socialization outcomes. **H6** predicted that active mediation and co-surfing would be associated with both perceptual and behavioral outcomes. Specifically, it was

expected that both types of parental mediation would be negatively associated with children's attitude toward commercial websites and positively associated with children's skepticism toward commercial websites (**H6a**). The two types of parental mediation were also expected to be negatively associated with the following behavioral outcomes: (1) children's personal information disclosure to online advertisers; (2) time spent on commercial websites; (3) money spent on entertainment online content; and (4) access to socially undesirable commercial websites (**H6b**).

Restrictive mediation was expected to be more strongly associated with behavioral outcomes than with perceptual outcomes. However, whether the association between restrictive mediation and outcomes would be linear or curvilinear was an open question. Thus, the relationship between restrictive mediation and consumer socialization outcomes was addressed as a research question (**RQ6**). Technical mediation was expected to be negatively associated with behavioral outcomes (**H7**), but the association between technical mediation and perceptual outcomes was posed as a research question (**RQ7**).

To find out whether there were associations between parental mediation and consumer socialization outcomes, correlations between parental mediation variables (independent variables) and consumer socialization outcome variables (dependent variables) were examined. As the correlation matrix demonstrates (Table 31), neither active mediation nor co-surfing was found to be significantly associated with perceptual outcomes, rejecting **H6a**. In fact, none of the parental mediation measures was associated

with perceptual outcomes. Active mediation was not associated with any of the behavioral outcomes, either. Although co-surfing reported by children was found to be negatively associated with time spending on game-related commercial websites and money spending on entertainment on the Web, the correlation coefficients were fairly small (-.17 and -.22, respectively). Thus, **H6b** was generally not supported. Answering **RQ7**, it was found that technical mediation was not associated with any of the perceptual outcomes. Technical mediation was not associated with any of the behavioral outcomes except for time spending on game-related commercial websites. This correlation coefficient was, however, quite small. Overall, **H7** was rejected.

Table 31. Correlation between Parental Mediation and Children’s Consumer Socialization Outcomes

	Summated parental mediation		Active mediation		Restrictive mediation		Co-surfing		Technical mediation	
	P	C	P	C	P	C	P	C	P	C
Perceptual outcomes										
Attitude toward commercial websites	.04	.09	.10	.05	.02	.03	.00	.07	.06	.01
Skepticism toward commercial websites	-.06	-.04	.02	.04	-.08	-.04	-.07	-.01	-.06	.01
Behavioral outcomes										
Willingness to disclose personal information	-.04	.05	-.03	.07	-.06	-.01	-.03	-.02	.01	.05
Actual personal information disclosure on the Web	.04	.07	.02	.04	.01	.05	.09	.05	.03	.11
Time spent on game-related commercial websites	-.08	-.10	.03	.03	-.11**	-.09	-.02	-.17**	.11*	.02
Time spent on non-game-related commercial websites	-.10	.05	.01	.09	-.11**	.03	-.07	-.02	.03	.03
Money spent on entertainment on the Web	-.10	-.16	.00	-.05	-.12	-.12	-.07	-.22**	-.04	.07
Access to socially undesirable Web content	.04	-.10	.02	-.04	-.04	-.10*	-.07	-.09	.10	.02

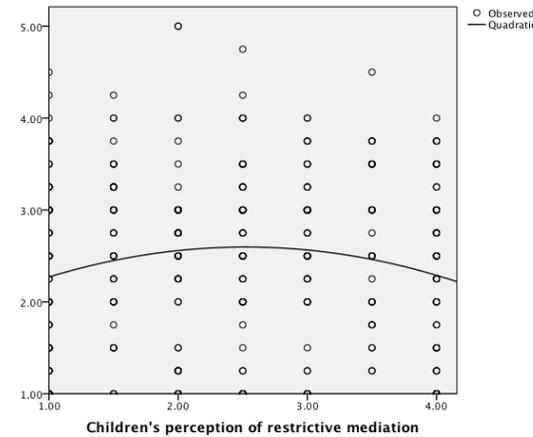
Note: P: Parents’ report, C: Children’s report

* $p < .05$, ** $p < .01$

As displayed in Table 31, the relationships between restrictive mediation and outcome variables do not appear to be linear. It was found that restrictive mediation reported by parents was negatively associated with children's time spending on commercial websites. In addition, restrictive mediation reported by children was negatively associated with children's access to socially undesirable online content. Nonetheless, the correlation coefficients were quite small, at -.14 and -.10, respectively.

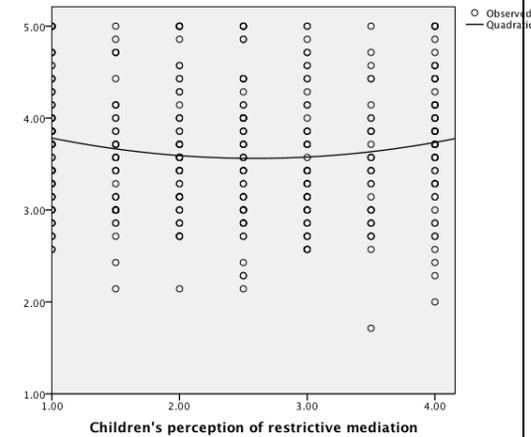
To more fully examine the possible relationship between restrictive mediation and outcome variables, potential curvilinear (quadratic) associations between restrictive mediation and consumer socialization outcomes were also examined. This was conducted using a general linear model (GLM) and a curve estimation function in SPSS. None of the behavioral outcomes were found to be associated with restrictive mediation measures in a curvilinear way. When it comes to the association between restrictive mediation and perceptual variables, neither children's attitude nor skepticism toward commercial websites was associated with restrictive mediation reported by parents. However, restrictive mediation reported by children was found to be associated with their attitude and skepticism toward commercial websites in a curvilinear fashion at the $p < .05$ level. Figures 8 and 9 display quadratic trends between the two attitude variables and restrictive mediation reported by parents and accompanying formula and relevant statistics.

Figure 8. Curvilinear Relationship between Restrictive Mediation (Reported by Children) and Children's Attitude toward Commercial Websites



Quadratic equation:
 $Y = 1.67 + .75X - .15X^2$
 where Y = Children's attitude toward commercial websites, X = Restrictive mediation reported by children,
 1.67 = Constant
 Adjusted $R^2 = .02$
 ($df = 2, MS = 4.21, F = 4.85, p = .00$)

Figure 9. Curvilinear Relationship between Restrictive Mediation (Reported by Children) and Children's Skepticism toward Commercial Websites



Quadratic equation:
 $Y = 4.16 - .48X + .09X^2$
 where Y = Children's skepticism toward commercial websites, X = Restrictive mediation reported by children,
 4.16 = Constant
 Adjusted $R^2 = .01$
 ($df = 2, MS = 1.72, F = 3.37, p = .04$)

Figures 8 and 9 show that children who reported receiving moderate levels of restrictive mediation tended to feel more positive and less skeptical about commercial websites. However, the adjusted R-squares from two regression analyses indicate that the curvilinear models do not explain much of the total variance in children's attitude and skepticism. Only 2% and 1% of the total variance of children's attitude and skepticism were explained by restrictive mediation in a curvilinear way. In other words, the attitude and skepticism are quite weakly associated with restrictive mediation in a curvilinear fashion.

CHAPTER 6

GENERAL DISCUSSION

Parents are known as one of the key influencing factors in children's consumer socialization, especially prior to adolescence. As primary caregivers and socialization agents, parents affect children's consumer learning both directly and indirectly. Directly, they transmit consumer knowledge and skills through modeling, reinforcement, and social interactions. Indirectly, they monitor and supervise children's interactions with other socialization agents.

Parental mediation research focuses on this indirect role of parents in children's consumer socialization. It acknowledges that media are important socialization agents affecting children's attitudes, beliefs, and behaviors, but also that such media effects can be "mediated" by the extent to which parents are involved in restricting, instructing, and monitoring children's media consumption. A substantial body of parental mediation research has demonstrated that parents are engaged in various mediation strategies, and such efforts influence the impact media has on children.

Recently, the Internet has become an important socialization agent as an increasing number of children are on the Web. Children's prevalent Internet use has led advertisers to actively utilize the unique nature of the Internet by using a variety of marketing communication tactics and interactive features. Current online advertising practices targeting children, however, have raised such concerns as children's over-

exposure to commercial messages and marketers' information collection practices directed to children. Among concerns about online advertising targeting children is a lack of government regulations or specific guidelines to provide children with a safer online environment.

This current situation places greater responsibility on parents to actively supervise and educate their children regarding Internet use, particularly their interactions with online advertising. Consequently, interest in parental mediation practices and effects in this new media context has been heightened. However, most existing research has focused on parental mediation of children's exposure to television, and research related to new media has been limited. Especially lacking is research on parental mediation of children's interactions with advertising in new media.

Due to unique characteristics of the Internet and the fact that children's knowledge and experience with the Internet often exceed those of their parents, parental mediation online may work differently from how it works with traditional media. In an attempt to address the lack of research examining parental mediation of online communication, the present study examined parental mediation of Korean children's exposure to and interactions with online advertising. Specifically, this study focused on (1) determining antecedents of various types of parental mediation, (2) examining parent-child co-orientation (agreement) to different forms of parental mediation, and (3) exploring the relationship between parental mediation and children's attitudes, beliefs (skepticism), and behaviors related to online advertising.

6. 1. Summary of Main Findings and Discussion

Antecedents of Parental Mediation

Parenting Style

Parenting style was found to be an important factor in explaining parental mediation of children's exposure to online advertising. It emerged as a significant and strong predictor of active, restrictive, and co-surfing mediation, as well as the summated parental mediation. In fact, parenting style was the only significant predictor for all three forms of parental mediation, and it was the strongest predictor of the summated parental mediation. This seems to suggest that parenting style, which is defined as parents' general and pervasive socialization tendencies (Darling and Steinberg, 1993), is well reflected in the way parents monitor and supervise children's interactions with online advertising.

As expected, a demanding parenting style was found to be associated with restrictive mediation, and a responsive parenting style was associated with active mediation. A demanding parenting style is characterized by parental control, supervision, and maturity demand. It emphasizes children's deference to parental authority. Considering that restrictive mediation also stresses children's conformity to parents' rules, the association between demandingness and restrictive mediation makes sense. Likewise, a responsive parenting style and active mediation are similar in that both encourage bi-directional communication, respect children's point of view, and underscore a horizontal relationship between parents and children.

Particularly interesting is that co-surfing was strongly associated with the “demandingness x responsiveness” interaction term. This indicates that demandingness (or responsiveness) affects the association between co-surfing and responsiveness (or demandingness) as a moderator. In other words, when demandingness (or responsiveness) is high, the association between co-surfing and responsiveness (or demandingness) becomes stronger. This pattern also suggests that co-surfing will most likely take place when parents are high on both demandingness and responsiveness. According to the parenting style literature (Baumrind, 1971), parents high on both parenting style dimensions (commonly known as “authoritative parents”) are most actively involved in children’s learning experience and social development, in comparison to parents characterized by other types of parenting styles. The positive association between co-surfing and the parenting style interaction term seems to suggest that co-surfing stems from parents’ motivation to actively monitor and supervise children’s interactions with online advertising, rather than a simple co-occurrence of media use or parents’ preference of the medium or media content.

This differentiates co-surfing from co-viewing of television. Co-viewing of television has been found to be associated with parents’ positive attitude toward television or a specific television genre or program (Nathanson, 2001a; Warren, Gerke, and Kelly, 2002). Thus, co-viewing has often been considered parents’ endorsement of television rather than deliberate monitoring efforts. However, the current study found no association between parents’ attitudes toward the Internet or online advertising, in

addition to finding a significant association between co-surfing and the demandingness x responsiveness interaction term.

One of the factors differentiating co-surfing from co-viewing may be different media usage patterns between the Internet and television. Television viewing experience is easily shared, and thus, co-viewing is fairly easy. It is not hard to imagine that much of co-viewing simply “happens” without entailing parents’ intention to monitor children’s television viewing. On the contrary, co-surfing requires parents’ conscious efforts because most Internet use takes place via personally-consumed media such as personal computers or mobile devices. Without parents’ intention and motivation to monitor children’s Internet use, co-surfing is less likely to occur.

Altogether, like active mediation and restrictive mediation, co-surfing seems to be driven by parents’ motivation to supervise and monitor children’s Internet use. Perhaps, co-surfing may be the most active form of parental mediation in the context of the Internet because it involves parents’ “proactive acts” rather than simply talking about Internet issues or setting rules.

FCPs

Co-surfing was not associated with any forms of FCPs. Considering that co-surfing does not necessarily involve verbally-conveyed parental rules or instructions, the result makes sense. As expected, restrictive mediation was associated with a socio-oriented FCP, but in a more mild form. FCP was the strongest predictor of active

mediation. Taking into account that active mediation is a communication action, the strong association between FCP and active mediation seems intuitive.

However, active mediation was found to be more strongly associated with the interaction of concept-oriented FCP and mild socio-oriented FCP rather than concept-oriented FCP alone. That is, the association between active mediation and concept-oriented FCP was contingent upon parents' mild socio-oriented FCP, with the relation becoming stronger when parents are high on mild socio-oriented FCP. This indicates that socio-oriented FCP also plays an important role in explaining active mediation.

This result is somewhat different from findings reported by previous studies. Previous parental mediation studies have demonstrated that active mediation is a function of concept-oriented FCP, not of socio-oriented FCP (e.g., Carlson, Grossbart, and Tripp, 1990; Carlson, Grossbart, and Walsh, 1990; Fujioka and Austin, 2002; Youn, 2008). A possible explanation for the difference here is that previous studies did not test the interaction term and simply compared and contrasted the role of concept-oriented vs. socio-oriented FCPs in parental mediation.

Perceptions, Internet Use, and Demographic Factors

Compared to parenting styles and FCPs, parents' perceptual and demographic variables were found to be weakly associated with parental mediation. Nonetheless, different parental mediation was associated with different perceptual and demographic factors, providing valuable insight into what motivate parents to practice different types of parental mediation.

Active mediation and co-surfing were associated with parents' Internet-related perceptions and experiences. Specifically, active mediation was predicted by parents' positive attitude toward the Internet and time spent on the Internet, and co-surfing was predicted by parents' time spent on the Internet and perceived Internet skills. That is, parents who like the Internet and have more Internet experience and competency are more likely to talk about issues related to online advertising and use the Internet with their children, regardless of their own or children's demographic background. On the other hand, restrictive mediation was not predicted by any of the Internet-related factors. This seems to imply that restrictive mediation may not stem from parents' own experience or perceptions about the Internet. It seems more driven by parents' general childrearing and communication styles.

A unique pattern found from a series of regression analyses was that household income kept emerging as a positive predictor of restrictive mediation. Household income has received little or no attention in parental mediation research. Thus, the finding of the current study was unexpected and intriguing.

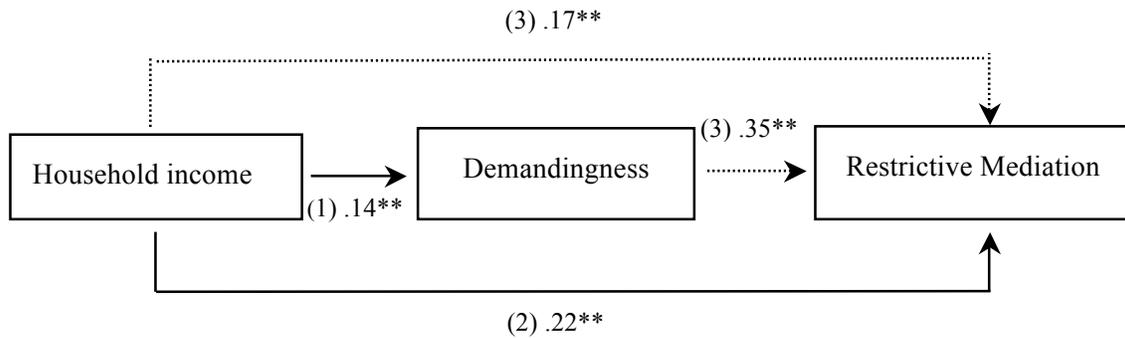
One possible explanation is that household income could be associated with a demanding parental style, the strongest predictor of restrictive mediation. Due to the Confucian tradition, the Korean society has long valued young people's deference to older people, and children have been expected to obey and respect their parents' opinions and authority (Kim et al., 2000; Kim and Hoppe-Graff, 2001; Schwarz et al., 2006). Thus, the dominant parenting style in Korea has been more demanding and authoritarian

rather than responsive (Choi and La Ferle, 2004). Although the modern parent-child relationship has been shifted to be more horizontal due to the influence of Western culture and industrialization (Kim et al., 2000; Kim and Hoppe-Graff, 2001; Schwarz et al., 2006), economically better-off families might still have more traditional values and parenting practices. That is, income might affect parenting style, specifically demandingness, which in turn, might affect restrictive mediation. In other words, parents' demandingness may operate as a mediator, and income may affect restrictive mediation through its link to demanding parenting style.

To test this hypothesis, a mediation analysis was performed, guided by Baron and Kenny (1986). The decision rules were that (1) the independent variable (income) must affect the mediator (demandingness) when the mediator was regressed on the independent variable; (2) the independent variable (income) must affect dependent variable (restrictive mediation) when the dependent variable was regressed on the independent variable; (3) the mediator (demandingness) must affect the dependent variable (restrictive mediation) when the dependent variable was regressed on both the independent variable and the mediator; and (4) if all the conditions hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. The resulting beta coefficients found in each step are presented in Figure 10. All conditions listed above were met, supporting the proposition. However, the drop from $\beta = .22$ (2) to $\beta = .17$ (3) is not very great.

Altogether, it seems that household income partially mediates restrictive mediation through its association with parents' demandingness.

Figure 10. Demandingness as a Mediator between Household Income and Restrictive Mediation



Household income also emerged as a significant predictor of the summated parental mediation variable. Summated parental mediation was also predicted by the child's age. Specifically, parents of younger children were more likely to be involved in higher levels of parental mediation. The negative association between parental mediation and child's age observed in this study is consistent with previous findings from research on parental mediation of children's television viewing. As Garnier and Stein (1998) suggested, as children get older parents tend to practice less mediation for the children's mass media use. This negative association between parental mediation and child's age may stem from parents' changing perception about media influence on children by age. Younger children tend to be perceived to be more vulnerable to media influence (John, 1999; Kunkel et al., 2004; Neeley, 2007), and this perception might lead parents of

younger children to be more engaged in parental mediation to protect their vulnerable children from online advertising influence. Empirical studies (e.g., Hoffner and Buchanan, 2002; Warren, Gerke, and Kelly, 2002), in fact, have demonstrated that child's age is negatively associated with parents' concerns about media influence on children in the television context.

Drivers of Technical Mediation

Technical mediation was not associated with any of the hypothesized parental antecedents such as parenting styles, parents' FCPs, and attitudes and skepticism toward online advertising. Instead, based on zero-order correlation tests, technical mediation was found to be associated with parents' educational level ($r = .15, p = .00$) and perceived Internet skills ($r = .13, p = .02$). In fact, along with parent gender ($r = .11, p = .04$), parent education and perceived Internet skills were the only variables that were significantly associated with technical mediation. However, the magnitude of the correlation coefficients for those three variables was quite small.

Nonetheless, considering that technical mediation was the only form of mediation that was found to be associated with parents' education level, and that none of the examined potential predictors was found to be strongly associated with technical mediation, further examination of the relationship between parents' education and technical mediation is warranted. In an attempt to explore the role of parents' education in technical mediation, the author re-examined parents' perceived Internet skills, the only variable associated with both education and technical mediation. It was found that

parents' perceived Internet skills was moderately associated with education ($r = .41, p = .00$), and this made the author wonder whether the "education - technical mediation" relation was moderated by perceived Internet skills. To test this moderation hypothesis, a stepwise regression was conducted with technical mediation as a criterion, and education, perceived Internet skills, and the "education x perceived Internet skills" interaction term as predictors.

The regression analysis supported the moderation hypothesis. Neither education nor perceived skills emerged as a significant predictor of technical mediation. However, the interaction term emerged as a significant and positive predictor ($\beta = .17, p = .00$). This suggests that the "education-technical mediation" relation is contingent upon parents' perceived Internet skills. When parents perceive their Internet skills to be high, highly educated parents are more likely to be engaged in technical mediation. When parents' Internet competency is low, however, education is less likely to play a role in parents' decision to practice technical mediation.

Caution needs to be taken in interpreting this result since the regression equation explained only 3% of variance in technical mediation ($df = 1, MS = 5.62, F = 9.84, p = .00$). This suggests that the interaction term is a weak predictor of technical mediation. The present dataset did not allow any further exploration of potential antecedents of technical mediation, since technical mediation was not associated with any of the potential antecedent variables.

It should be noted that only about 30% of parent respondents reported practicing technical mediation (either a filter or monitoring software). This number seems to be small, especially when compared to the percentage of American parents practicing technical mediation. According to a nationwide survey conducted with parents of teenagers in the USA in 2006 (Pew Internet & American Life Project, 2006), about 50% of parents reported practicing technical mediation, either by having a filter to prevent children from visiting certain websites (53%) or installing software to monitor children's online activities (45%). The lower level of technical mediation in the present study seems to imply that technical mediation is not yet broadly used or recognized as parental mediation in Korea. That might make technical mediation different from other types of parental mediation in Korea. Questions like "what motivate parents to install a filter or software to monitor and control children's online activities" and "whether such technical mediation is considered a type of parental mediation by parents" deserve further empirical investigation.

Parent-Child Agreement on Parental Mediation

Weak Agreement on Restrictive Mediation

It was hypothesized that parent-child agreement on restrictive mediation would be greater than on active mediation. However, this study's results did not support this hypothesis. Moreover, parents and children within each family did not highly agree on any types of parental mediation examined in the study. The correlation coefficients

between parent and child reports on restrictive mediation and active mediation were only .17 ($p = .01$) and .20 ($p = .00$), respectively.

The weak correspondence between parent and child reports of parental mediation is comparable to findings in previous parental mediation studies conducted in the similar setting (i.e., in-class survey with children and separate survey with parents at home) (e.g., Buijzen et al., 2008; Fujioka and Austin, 2003; Nathanson, 2001a). However, the result that parent-child agreement on restrictive mediation was not higher than the agreement on active mediation is somewhat different from findings of the existing parental mediation literature.

Fujioka and Austin (2003) claimed that a weak parent-child agreement on parental mediation might be due to a social desirability bias in parents' responses. That is, parents may tend to overestimate parental mediation practices because parents' active involvement in children's media use is often considered socially desirable. To find out whether this social desirability bias can account for the observed results in the current study, parental mediation scores among the matching sample were re-examined.

First, the scores on parental mediation in the matching sample were compared to the mid-point of each measurement scale using a one-sample t-test. It was found that active, co-surfing, and technical mediation were below the mid-point in both parents' and children's reports. On the other hand, parents' report on restrictive mediation ($M = 4.1$, $SD = 1.16$) was significantly higher than the mid-point 3 ($p = .00$), whereas children's report on the same type of mediation ($M = 2.41$, $SD = 1.07$) stayed at the mid-point 2.5 (p

= .16). This discrepancy could be explained by parents' overestimating restrictive mediation in order to appear to be doing the socially desirable thing. Given that the child respondents in this study are relatively young, and that restrictive mediation has often been found to be a preferred mediation method among parents of younger children (before reaching adolescence) (Warren, 2003; Warren, Gerke, and Kelly, 2002), restrictive mediation might have been considered by the parents as a practice that should be employed by "good" parents. Also taking into account that the traditional parenting value in Korea is more geared toward demandingness and authoritarianism, restrictive mediation is likely to be viewed as a more desirable form of parental intervention than other forms of mediation by the respondents.

Another possible explanation for the findings on parent-child agreement is that the parent-child agreement is higher on more obtrusive forms of parental mediation than for less obtrusive forms (Bakir, Rose, and Shoham, 2005; Fujioka and Austin, 2003; Nathanson, 2001a). Though not reported in the result section, the correlation between parent and child reports on co-surfing was moderate ($r = .32$) and stronger than those for active ($r = .20$), technical ($r = .19$), and restrictive mediation ($r = .17$). As argued earlier, the Internet is a personally-used medium, and therefore, sharing the Internet would be less likely to occur unless parents are strongly motivated to do so. Thus, parents' co-surfing is more likely to be recognized by children, and this may make co-surfing the most obtrusive form of parental mediation compared to verbally conveyed rule-settings or instructions. Although this study did not find the hypothesized parent-child agreement

difference between restrictive versus active mediation, the observed pattern in general is consistent with findings from earlier studies demonstrating higher parent-child agreement on more salient forms of parental intervention.

The Role of FCPs in Active Mediation Agreement

This study also hypothesized that parent-child agreement on active mediation would be greater among families high on concept-oriented FCP than among those who were low on this communication pattern. However, the findings did not support this hypothesis. This could be because active mediation was not strongly associated with concept-oriented FCP in this study. As stated earlier, the present study demonstrated that active mediation of children's exposure to online advertising was not a function of concept-oriented communications but a function of the concept-oriented and socio-oriented FCP interaction term. Consequently, the degree to which parents and children agreed upon active mediation might have been less likely to be affected by concept-oriented FCP alone.

So far, only one study (i.e., Buijzen et al., 2008) examined the association between FCPs and parent-child agreement on parental mediation, particularly active mediation of children's television viewing. Thus, our current knowledge of the relationship between FCPs and parent-child co-orientation to parental mediation is fairly limited. It is possible that the association between FCPs and parent-child agreement on parental mediation is affected by types of media or other parent and child characteristics.

Further exploration of this issue will enhance our understanding of the role of FCPs in parent-child co-orientation to parental mediation.

Parental Mediation and Socialization Outcomes

Parental Mediation and Behavioral Outcomes

Potentially disappointing to parents may be the weak or no associations found between parental mediation and behavioral outcomes of children's consumer socialization. This is especially true for restrictive mediation and technical mediation which are meant to restrict children's access to the Internet and online advertising and, thus, presumed to affect children's online behaviors. These were not found to be strongly associated with any of the behavioral outcomes. The same pattern was observed for active mediation as well as the summated parental mediation. Although co-surfing reported by children was found to be negatively associated with children's time spending on game-related commercial websites and money spending on entertainment content online, these associations were rather weak.

The weak relationships between parental mediation and children's behaviors on the Web call for further empirical research. Descriptive analyses revealed that children participating in this study were not deeply engaged in any of the presumably negative online behaviors: (1) personal information disclosure; (2) time spending on commercial websites; (3) money spending on entertainment content; and (4) access to socially undesirable content—which were expected to be associated with parental mediation. Specifically, children in the study sample were willing to disclose only about 3 types of

personal information to advertisers ($SD = 2.68$) on average out of 15 types of personal information examined. In addition, the summated scores for time spent on commercial websites and access to socially undesirable websites were just 1.16 ($SD = .19$) and 1.46 ($SD = .64$), respectively, on 4-point scales. Finally, the majority of the children (84%) reported that they did not spend money (63%) or spent less than \$10 on the Web (21%) when they were asked how much money they spent in a prior month. These low levels of children's engagement in socially undesirable/negative online behaviors substantially diminished variability in the four behavior variables tested and reduced the chances of finding a relationship between parental mediation and behavioral outcomes.

The seemingly low levels of children's involvement in socially undesirable online behaviors might be attributable to the age of the survey respondents. Compared to teenagers who are often found to be inclined to challenge social norms and parental authority, children before reaching adolescence are more conforming to what is considered socially desirable (Grusec and Davidov, 2007). Also, parent respondents in this study were found to be restrictive and demanding in general, and this overall parental climate might have led children to be less involved in socially undesirable behaviors on the Web. Thus, although children in this age range are known to be engaged in a variety of online activities, they may not be deeply involved in socially undesirable online behaviors.

To examine whether parental mediation is associated with other types of online behaviors than socially undesirable ones, a socially desirable behavioral outcome

(children's visiting news and educational content), which was not investigated as part of the hypothesis tests, was examined. First, a summated score for the socially desirable behavior measures was computed. The mean value of the summated score was 2.17 ($SD = .74$) on a 4-point scale (1 = never or rarely, 2 = sometimes, 3 = often, and 4 = almost everyday). The score indicates that children in the sample were more frequently involved in this type of activity compared to the negative online activities examined as part of hypothesis testing in this study. Next, zero-order correlations between parental mediation reported by parents and children and children's access to news/education content were performed. The correlation analysis revealed that this behavioral variable was significantly and positively associated with all types of parental mediation reported by children (Pearson's r : active mediation .25 ($p = .00$); restrictive mediation .10 ($p = .05$); co-surfing .24 ($p = .00$); and technical mediation = .14 ($p = .01$)), as well as with the summated parental mediation reported by children ($r = .25, p = .00$), and technical mediation reported by parents ($r = .17, p = .00$). Although correlation coefficients are not big, the result demonstrates a unique pattern (i.e., a behavioral outcome associated with all forms of parental mediation) that was not present with socially undesirable behavioral outcomes.

Especially important is the relatively stronger associations between access to news/education content and active mediation ($r = .25$) and co-surfing ($r = .24$), in comparison to restrictive ($r = .10$) and technical mediation ($r = .14$). This suggests that parents' active involvement in conversation with their child and shared Internet

experience can encourage children to more frequently consume news/educational content. However, caution is necessary because only one type of socially desirable outcome was tested. The finding cannot be generalized as evidence for the superiority of active and co-surfing mediation to other types. Different types of online behaviors need to be further examined.

Parental Mediation and Perceptual Outcomes

The null finding for the “parental mediation – perceptual outcomes” relationship hypotheses cannot be adequately explained with the diminished variability account, because there was sufficient variability in children’s online ad attitude and skepticism. Children in this study were also found to have ‘some’ ideas about online advertising. Specifically, they were negative and skeptical about commercial websites targeting themselves or children of their age. However, these perceptual variables were not found to be associated with any forms of parental mediation, including active and co-surfing mediation, which were hypothesized to be related to them.

The findings suggest that parental mediation alone may not play an important role in children’s perceptions about online advertising. Then, an important question is “where do children’s attitude and skepticism toward online advertising stem from?” They can be shaped by children’s interactions with other socialization agents such as peers or media. To test this postulation, the relationship between children’s perception about online advertising and their media use patterns (i.e., the amount of time spent on Internet use and television viewing and ownership of personal websites) was explored. Since the

present study did not assess children's relationship with peers, peer influence cannot be tested.

Table 32 displays correlations between children's media use time and two perceptual outcomes (indicated with Pearson's *rs*). The independent t-test presented in Table 33 compared children with and without personal websites. The results show that children's attitude toward online advertising is positively associated with their media use. Specifically, children with positive attitude toward commercial websites tended to be heavier media users and are more likely to have their own presence on the Web (by having their own personal websites or blogs). However, skepticism was not significantly associated with children's online and offline media consumption.

Table 32. Correlations between Children's Media Use and Perceptual Variables

	Internet use (weekday)	Internet use (weekend)	Television viewing (weekday)	Television viewing (weekend)
Attitude toward commercial websites	.17**	.16**	.15**	.23**
Skepticism toward commercial websites	-.02	-.05	-.04	-.14**

Table 33. Comparisons of Perceptual Variables between Children with a Personal Website vs. Children without a Personal Website

	Having website	Not having website	Mean difference	<i>t</i>	<i>p</i>
Attitude toward commercial websites	2.58	2.26	.32	3.58	.00
Skepticism toward commercial websites	3.63	3.73	.10	-1.30	.19

Altogether, media experience appears to play a meaningful role in shaping children's attitudes toward online advertising. However, it does not contribute much to the belief system (skepticism) that is known to help children critically assess advertising messages on the Web. Thus, it seems that media have some, albeit limited, influence on children's consumer socialization, especially, when it comes to children's attitude toward online advertising targeting children. Still, this conclusion should not be over-generalized as the correlations between attitude toward commercial websites and media use in Table 32 are not very strong.

6. 2. Contributions

This study contributes to advancing the research literature on parental mediation and children's consumer socialization. As one of the first studies to examine how parental mediation works in online advertising, this study adds new knowledge of parental mediation effects and effectiveness to the body of parental mediation research, using consumer socialization as a theoretical framework. Consumer socialization research suggests that children's acquisition of consumption skills and understanding is a function of social interplays with various socialization agents as well as cognitive development. In consumer socialization research, parents are considered one of the most important socialization agents of children's consumer socialization because parents are primary caregivers transmitting consumer knowledge and skills to children and influencing children's interactions with other socialization agents such as mass media.

While a substantial body of parental mediation research has investigated how parents affect children's acquisition of media consumption knowledge and skills and what drives such parental practices, most existing research has been focusing on parents' intervention of children's television viewing. Taking into consideration that today's children are the major consumer of new media, more research efforts on and interest in the issues related to new media and children are needed, and this study responds to the impending need.

This study focuses on both antecedents and consequences of parental mediation to provide a comprehensive understanding of how parental mediation works. Most previous parental mediation studies have examined either antecedents or consequences, but seldom both. In addition, most previous studies have focused on a limited number of antecedents such as FCPs or parents' attitudes toward media. Bearing in mind that parental mediation is a multi-dimensional parental conduct that can be explained by myriad of social, psychological, and demographic factors, this study examined a wide variety of parental factors. The current study demonstrated that different forms of parental mediation were associated with different perspectives on online advertising (attitude and skepticism), parenting practices (parenting styles and FCP), media use (the amount of Internet use and Internet competency), and demographic factors. In addition, this study investigated both perceptual and behavioral outcomes related to children's interactions with online advertising, taking into account that parental socialization efforts can result in various socialization outcomes.

This study demonstrated the importance of parenting styles in explaining the levels and types of parental mediation behaviors. Compared to other antecedent variables, parenting styles have received less research attention as a potential antecedent of parental mediation, although parenting styles have been found to be associated with many developmental and social outcomes (Eastin, Greenberg, and Hofschire, 2006). To examine the role of parenting style in parental mediation, this study used two underlying dimensions of parenting styles (demandingness and responsiveness), which are continuous variables, instead of employing the more commonly used fourfold typology (authoritative, authoritarian, permissive, and neglectful). By utilizing two continuous measures, this study was able to retain important information about parenting styles that could be lost by creating nominal variables from continuous variables (Eastin, Greenberg, and Hofschire, 2006). The present study found that parenting styles significantly and strongly affect the way parents monitor and supervise children's interactions with online advertising.

Another finding deserving further research attention and potentially contributing to our understanding of parental mediation is the association between the FCP interaction term and active mediation. By examining each FCP dimension as well as their interaction, this study demonstrated that active parental mediation was a function of the interaction of two types of FCPs (concept-oriented x mild socio-oriented), not a function of concept-oriented FCP alone. The current study's data seem to imply that the association between active mediation and concept-oriented FCP is moderated by mild

socio-oriented FCP. This result is different from findings reported by most previous studies, which revealed that active mediation is a function of concept-oriented FCP, not socio-oriented FCP.

It is not clear whether the discrepancy is due to the methodological differences, though. Most previous studies examining the role of FCPs in parental mediation have not investigated how those two dimensions interact with each other to account for parental mediation. Some studies tested the four categories of FCPs (consensual, protective, pluralistic, and laissez-faire) created by two dimensions of FCPs (concept-oriented and socio-oriented FCP) in an attempt to examine the impact of the combination of different FCPs on parental mediation. However, testing the influence of FCP's impacts on parental mediation with categorical variables can result in a loss of important information that can be captured only by continuous variables and make it hard to examine the true FCP interaction effects on parental mediation. This study tried to overcome the methodological limitations of the previous studies by keeping the two continuous dimensions as well as examining interaction terms of different types of FCPs. Nonetheless, whether the current results were affected by the different methodological approach is subject to further investigation.

Another important contribution of this study is that it advances the current body of parental mediation literature by examining parental mediation and children's consumer socialization in a non-Western culture. Most existing research on parental mediation has been conducted in Western countries such as the USA, the Netherlands, and the UK.

Although media use among children is prevalent in many countries, our knowledge of parental mediation has been limited to the Western context.

This study found that parental mediation, especially restrictive mediation, was a function of household income. It was an unexpected finding as household income has rarely been examined in previous parental mediation research and was seldom found as an important factor to explain parental mediation. Facing this unexpected result, the present study further examined the role of demandingness, a traditionally dominant parenting style in Korea, as a mediator between income and parental mediation, presuming that economically better-off families would more likely adhere to traditional values. The current data support the prediction. It suggests that cultural value systems, which have been underexplored in consumer socialization and parental mediation research, can play an important role in the way parents socialize their children. Considering that parental mediation and children's Internet use are universal phenomena around the world, but that each country has different culture and values, understanding the cultural context of research subjects will enhance our knowledge of parental mediation.

One of the practical contributions of this study is that findings from this study help advertisers targeting children better understand parents. Parents are important stakeholders for advertisers targeting children because parents affect the way children use media and interact with advertising messages. On the Internet, they limit the time that children can interact with various forms of online advertising and control the amount and

types of information their children can disclose to advertisers. Parents also control the amount of money children can spend on the Web, since they are the primary source of money for younger children. To affect children with advertising messages on the Web, therefore, it is important for advertisers to understand what parents think and do regarding children's exposure to and interactions with online advertising.

Findings from the present study also offer meaningful insight into what possibly drive different forms of parental intervention when it comes to online advertising. The data from this study demonstrated that restrictive mediation is more prevalent than other forms of parental mediation, at least in the Korean context. This form of parental mediation was found to be affected by a demanding parenting style, the traditional parenting style in Korea. Understanding parents' general attitudes toward online advertising directed to children is also important for advertisers. The current study demonstrates that parents' attitude toward online advertising was negatively associated with restrictive mediation. Advertisers' efforts to enhance parents' attitudes toward online advertising in general would help advertisers effectively appeal to children. Responsible advertising practices and public relations efforts may help shift parents' online advertising attitudes toward a more positive direction.

6. 3. Limitations and Suggestions for Future Research

This study utilized a cross-sectional survey. As a result, it is difficult to determine the causal direction of the observed relationships. When interpreting the results for the antecedents and parental mediation variables, and between parental mediation and potential outcomes, necessary caution needs to be taken. For example, it makes sense that parents' negative attitude toward online advertising affects parental mediation, which in turn, influences children's online behaviors. However, it is also plausible that children's behaviors influence parents' perceptions about online advertising, especially when the parents do not have much experience with or understanding of online advertising targeting children. With a cross-sectional survey, it is not possible to determine which is the case. In other words, bi-directional relationships between variables are quite possible in many relationships.

In addition, this study was conducted in one country with a narrow age range of children (age 9-12). Therefore, generalizations should be limited to just this restricted age range and research context. To apply results from this study to other situations, one needs to carefully examine the sample characteristics, cultural context, research setting, and media type.

Furthermore, this study focused on only one particular type of consumer socialization agents – parents, although the roles of other types of socialization agents are also important in children's consumer socialization. This limited focus made it difficult to explain some unexpected findings. For example, the weak association between parental

mediation and perceptual and behavioral outcomes cannot be explained with the data gathered here. Since the respondents are school-aged children and spend much time with peers, peer influence on their perceptions and behaviors related to online advertising may be an important factor that should be considered. The role of educational institutions, another important consumer socialization agent, should also be considered because much Internet education is offered in school. A future study examining a wide range of different socialization agents and their interactions may help to better determine how those agents influence each other.

Finally, although this study examined a variety of behavioral outcomes associated with children's online advertising experience, it placed more focus on socially undesirable outcomes than desirable outcomes. However, it turned out that children participating in this study were not particularly likely to engage in the examined undesirable online behaviors. This made it difficult to adequately investigate the relationship between parental mediation and behavioral outcomes. While children's excessive exposure to online advertising can result in negative consequences, it can also lead children to be more knowledgeable about brands, advertising and the marketplace in general. Examining a wider range of behavioral outcomes, including both positive and negative ones, would be useful in future studies.

Future research should also utilize diverse research methods. Experimental research that can directly test causal relationships between and among variables is especially encouraged. Most existing parental mediation studies have been conducted

using a survey method. This makes it difficult to infer the causal directions of relationships. Additionally, we do not know much about long-term consequences of parental mediation and children's exposure to online advertising. Longitudinal research will certainly bring an important insight into parental mediation research in both traditional and new media contexts.

Another interesting area to explore is consumer socialization directed from children to parents. The main premise of consumer socialization research is that children acquire consumption knowledge and skills through "interactions" with various socialization agents. The term "interaction" implies that children can also affect parents, as parents affect children. Nonetheless, most consumer socialization studies investigated unidirectional influence from parents to children, not the other way. In many circumstances, it makes sense that parents transmit consumption norms to children and teach children what and how to think about consumption since parents have greater knowledge and experience. However, with the Internet, it is possible that children's knowledge and experience exceeds that of their parents. In that case, parents can be socialized as new media consumers through interactions with their children. In other words, parents can be the learners and children can be socialization agents. This "reverse" form of consumer socialization process deserves further research attention.

This study, like other previous studies, found weak levels of parent-child agreement on parental mediation. Considering that children's recognition and understanding of what parental mediation signifies can be a key ingredient for predicting

and understanding effects and effectiveness of this intervention (Nathanson, 2001a), further exploration of parent-child co-orientation may enhance our understanding of how parental mediation works.

Future research should also examine younger children's (e.g., preschoolers or kindergarteners) consumer socialization on the Web. Perhaps due to the methodological difficulties associated with data collection with younger children, most existing studies on parental mediation have investigated older children and adolescences. However, since Internet use is prevalent among younger children, and given that parental influence on young children's consumer socialization would be greater than on older ones, research on younger children may bring much needed insights about how parents can impact children's Internet use and their interactions with online advertising.

Finally more research should focus on the influence of culture. Most existing parental mediation research reflects Western consumers' views and behaviors. Findings of the present study, however, suggest that cultural values may affect the way parental mediation operates. Further investigation of the role of culture in parental mediation is expected to bring useful insight, particularly in the new media context. The Internet is a global medium. That is, as long as one has an access to the Internet, geographic boundaries do not matter much. Global advertisers have multiple websites with different language options to appeal to children in different parts of the world. No matter where children are, they can play *Club Penguin* and post on *Facebook*, and see and interact with the same brand messages as children in different countries. However, each country has a

different culture and value systems, which presumably affect online advertising effects along with parental mediation practices and effectiveness. More studies conducted in non-Western parts of the world and comparative research conducted in two or more countries with different cultures will further advance our knowledge and understanding of parental mediation in the emerging media environment.

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APPENDIX

Questionnaire for Children (In-Class Survey)

Hello everyone!

I am a graduate student studying Mass Communication at the University of Minnesota, USA. I am conducting a study to learn about how elementary school students use and think about the Internet.

I am going to ask you to answer some questions about the Internet. For example, you will be asked what you think about various types of commercial websites and how you use the Internet in general. I will also ask what your parents do regarding your Internet use.

You can ask me questions that you might have about this study. The questions are only about what you think. There are no right or wrong answers because it is not a test. Your response is anonymous: You are not asked to provide your name or student ID. Your answer will be used only for a research purpose and remain strictly confidential. So please be honest.

Signing this paper means that you have read this or had it read to you and that you want to be in the study. If you don't want to be in the study, don't sign the paper. Remember, participation in the study is up to you, and no one will be mad if you don't sign this paper or even if you change your mind later.

Signature of Participant _____ Date _____

Signature of Investigator _____ Date _____

First, I will ask how you use the Internet.

1. On a typical day, about how much time do you spend doing the following?

<u>Weekday</u>	Using the Internet	()	hour(s)	()	minutes
	Watching television	()	hour(s)	()	minutes
 <u>Weekend</u>	Using the Internet	()	hour(s)	()	minutes
	Watching television	()	hour(s)	()	minutes

2. Followings are the websites that you may or may not visit sometimes. Please indicate about how long you spend on each type of websites on a typical day, using O.

	Never or rarely go	1-2 hours a day	3-4hours a day	5 hours or more a day
Online game sites	()	()	()	()
Personal blogs/websites	()	()	()	()
Community sites	()	()	()	()
Internet shopping sites	()	()	()	()
Product/brand websites	()	()	()	()

3. How often do you visit the following types of websites? Use O to indicate your answer.

	Never or rarely	Sometimes	Often	Almost everyday
Games involving action, fighting, or war	()	()	()	()
Websites that you can sell or purchase game items	()	()	()	()
Websites that help you study or do homework	()	()	()	()
Portal or news sites providing news or information on current issues (Naver, Daum, etc.)	()	()	()	()

4. Do you have Cyworld minihompy or other personal blogs/websites/café that other people can visit?

- ① Yes → Go to Question 5
- ② No → Go to Question 6

5. What kinds of information are visible to other people on your blog or Cyworld minihompy? Please check all that apply.

	Visible to anyone	Visible to some	Not visible to anyone	Not included in my blog
A photo of myself	()	()	()	()
My name	()	()	()	()
My school name	()	()	()	()
My cell phone number	()	()	()	()
My home phone number	()	()	()	()
My Internet ID	()	()	()	()
My email address	()	()	()	()
My home address	()	()	()	()
My diary	()	()	()	()
My birthday	()	()	()	()

6. Thinking about your activities on the Web during the last month, about how much money did you spend on the Web?

- ① I did not spend any money on the Web → Don't answer Question 7. Skip to Question 8.
- ② Spent some but less than 10,000 Won a month
- ③ 10,000 - 29,999 Won a month
- ④ 30,000 - 49,990 Won a month
- ⑤ 50,000 Won or more
- ⑥ I spent some, but I don't remember the amount of money that I spent.

(Note for readers: 1,000 Won = US\$1~1.1)

7. Last month, you spent money on... (Check all that apply)

- ① Online gaming (cash, gamemoney)
- ② Buying music, movie, or other entertainment clips
- ③ Buying cell phone related features
- ④ Using educational service websites
- ⑤ Buying education-related products (books, software, or other school supplements)
- ⑥ Buying things other than education-related goods or services
- ⑦ Decorating my personal blogs and websites
- ⑧ Other: Please specify _____

8. Think about websites that you or your friends may visit. Some websites want you to provide your personal information for registration, membership, or other different reasons. Overall, what kinds of information are you willing to provide to those websites? Please check all that apply.

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> My name | <input type="checkbox"/> School name | <input type="checkbox"/> Cell phone number | <input type="checkbox"/> SSN |
| <input type="checkbox"/> Home phone number | <input type="checkbox"/> Internet ID | <input type="checkbox"/> Email address | <input type="checkbox"/> Home address |
| <input type="checkbox"/> Age | <input type="checkbox"/> Birthday | <input type="checkbox"/> My friends' names | <input type="checkbox"/> My friends' contact information |
| <input type="checkbox"/> My parents' names | <input type="checkbox"/> My parents' occupations | <input type="checkbox"/> My parents' contact information (cell phone numbers, email address, etc.) | |

The following questions ask what you think about the Internet in general.

9. In general, how much do you like or dislike using the Internet? Choose a number between 1 and 5 and circle the number.

Dislike it very much 1 : 2 : 3 : 4 : 5 Like it very much

10. How do you feel about the Internet? Use O to indicate your answer.

	Strongly disagree	Disagree	Agree	Strongly agree
1) The Internet is a valuable source of information I need.	()	()	()	()
2) The Internet is useful.	()	()	()	()
3) The Internet is interesting.	()	()	()	()
4) The Internet is fun to use.	()	()	()	()
5) The Internet is pleasing.	()	()	()	()

11. Please indicate to what extent you agree or disagree with each of the following statement about your Internet knowledge.

	Strongly disagree	Disagree	Agree	Strongly agree
1) I am skilled at using the Internet.	()	()	()	()
2) I consider myself knowledgeable about the Internet.	()	()	()	()
3) I know how to find what I am looking for on the Internet.	()	()	()	()

Next questions ask about commercial websites.

☞ **“Commercial websites” refer to websites with advertising and marketing messages promoting products, brand websites created by companies, Internet shopping sites, auction sites, online gaming sites and all other types of websites involving cybbermoney/cash transaction in exchange for real or virtual products.**

**12. Overall, how do you feel about commercial websites you or your friends often visit?
Choose a number between 1 and 5 and circle the number.**

Bad	1	:	2	:	3	:	4	:	5	Good
Harmful	1	:	2	:	3	:	4	:	5	Beneficial
Not useful	1	:	2	:	3	:	4	:	5	Useful
Uninformative	1	:	2	:	3	:	4	:	5	Informative

13. The following lists some statements about commercial websites that you or your friends may visit. For each statement, please indicate how much you agree or disagree by choosing a number between 1 and 5.

1) We can depend on getting the truth in most commercial websites.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

2) The aim of commercial websites is to inform the consumer.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

3) Commercial websites are informative.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

4) Commercial websites are reliable sources of information.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

5) I am accurately informed by most commercial websites.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

6) Most commercial websites provide consumers with essential information.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

7) Commercial websites generally present a true product picture.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

18. Thinking about the computer you use at home, does that computer have the following device?

1) A filter that keeps children from going to some types of Internet websites.

- ① Yes ② No ③ Don't know

2) Monitoring software that records what children do online.

- ① Yes ② No ③ Don't know

Next questions are about a primary caregiver who spends the most time with you.

19. Among the grown-ups living with you at home, which parent or guardian spends the most time with?

- ① Mother
- ② Father
- ③ Grandfather
- ④ Grandmother
- ⑤ Other: Please specify _____

20. How old is the parent or guardian who spends the most time with you at home? (If you don't know or are not sure, check the space next to "Don't know.")

_____ years Don't know: _____

21. This question asks how your parent/guardian (indicated on Question 19) talk to you about the Internet. Thinking about the parent or guardian who spends the most time with you at home, please indicate how often your parent or guardian is doing the following things.

1) My parent/guardian tells me that the Internet depicts products as better than they really are.

- ① Never ② Sometimes ③ Often ④ Always

2) My parent/guardian tells me that products appearing on the Internet can be different from what the products really are.

- ① Never ② Sometimes ③ Often ④ Always

3) My parent/guardian talks to me about the ways that companies collect and use personal information (e.g., name, phone number, etc.) online.

- ① Never ② Sometimes ③ Often ④ Always

22. Thinking about “commercial websites” that you or your friends may visit, please indicate how often your parent or guardian who spend the most time with you at home is doing the following things.

☞ **“Commercial websites” refer to websites with advertising and marketing messages promoting products, brand websites created by companies, Internet shopping sites, auction sites, online gaming sites and all other types of websites involving cybermoney/cash transaction in exchange for real or virtual products.**

1) My parent/guardian determines which commercial websites I can or can't visit.

- ① Never ② Sometimes ③ Often ④ Always

2) My parent/guardian limits the amount of time that I can stay on commercial websites.

- ① Never ② Sometimes ③ Often ④ Always

23. Thinking about the parent or guardian who spends the most time with you at home, please indicate how often your parent or guardian is doing the following things.

1) My parent/guardian watches me when I am online.

- ① Never ② Sometimes ③ Often ④ Always
⑤ Don't use the Internet at home

2) My parent/guardian surfs the Internet with me.

- ① Never ② Sometimes ③ Often ④ Always
⑤ Don't use the Internet at home

Finally, I am going to ask a few questions about yourself.

Gender ① Male ② Female **Age and school grade** () years () th grade

Average allowance per month () **Number of family members including me** ()

Please indicate whether your parents live with you and whether your parents work.

	Living with you?		Working? (Besides homemaking)		
	Yes	No	Yes: Almost all day from Monday through Friday	Yes: Sometime works. Not everyday, though.	No: Staying home
Mother					
Father					

Which of the following devices do you have? (Check all that apply)

	Have it at home?		Personally own?	
	Yes	No	Yes	No
A desktop computer (that you can't carry)				
A laptop computer (that you can carry)				
A cell phone				
MP3 player				
PMP (portable multimedia player)				
Game console like Wii, Playstation, or X-Box that you connect to television				
PSP/NDS (Nintendo) that you can carry				

Thank you very much for your participation.

4. Thinking about the child who brought this questionnaire to you, please indicate how often you are involved in the following activities.

- 1) I surf the Internet with my child.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always
- 2) I participate in online activities (e.g., game, chatting, etc.) with my child while he/she is online.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always
- 3) I watch my child when s/he is online.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

The next question asks whether you talk to your child about the Internet, and if so, what you talk to your child.

5. Thinking about the child who brought this questionnaire to you, please indicate how often you are involved in the following activities, using O.

- 1) I tell my child that the Internet depicts products as better than they really are.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always
- 2) I tell my child that advertising on the Internet does not always tell the truth.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always
- 3) I tell my child that the purpose of advertising and marketing messages on the Web is to sell products.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always
- 4) I tell my child that not all products appearing on the Internet are of good quality.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always
- 5) I tell my child that some products appearing on the Internet are not good for children.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always
- 6) I try to help my child understand the intention of ads on the Internet.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always
- 7) I talk to my child about the ways that companies collect and use personal information (e.g., name, phone number, etc.) online.
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

Now, I am going to ask you about your behaviors regarding your child's use of commercial websites.

6. Thinking about "commercial websites" that your child or children at your child's age may visit, please indicate how often you are involved in the following activities.

☞ "Commercial websites" refer to websites with advertising and marketing messages promoting products, brand websites created by companies, Internet shopping sites, auction sites, online gaming sites and all other types of websites involving cybermoney/cash transaction in exchange for real or virtual products.

When you answer the questions, please think about the child who brought the questionnaire.

- 1) I limit the amount of time that my child can stay on commercial websites.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

- 2) I limit the time of the day my child can go to commercial websites.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

- 3) I forbid my child to go to certain commercial websites.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

- 4) I specify in advance the websites that my child may visit.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

- 5) I tell my child to stop using the Internet when he/she is on a child-inappropriate commercial website.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

- 6) I limit the kinds of personal information my child can disclose on commercial websites.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

The following questions ask what you think about the Internet in general.

7. In general, how much do you like or dislike using the Internet? Choose a number between 1 and 5, using O.

Dislike it very much 1 : 2 : 3 : 4 : 5 Like it very much

8. How do you feel about the Internet? Use O to indicate your answer.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1) The Internet is a valuable source of information I need.	()	()	()	()	()
2) The Internet is useful.	()	()	()	()	()
3) The Internet is interesting.	()	()	()	()	()
4) The Internet is fun to use.	()	()	()	()	()
5) The Internet is pleasing.	()	()	()	()	()

9. Please indicate to what extent you agree or disagree with each of the following statement about your Internet knowledge.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1) I am skilled at using the Internet.	()	()	()	()	()
2) I consider myself knowledgeable about the Internet.	()	()	()	()	()
3) I know how to find what I am looking for on the Internet.	()	()	()	()	()

The next question asks about advertising in general.

10. In general, how do you feel about advertising appearing on mass media such as television, magazines, newspapers, and the Internet? Please choose a number between 1 and 5, using 0.

Bad	1	:	2	:	3	:	4	:	5	Good
Harmful	1	:	2	:	3	:	4	:	5	Beneficial
Not useful	1	:	2	:	3	:	4	:	5	Useful
Uninformative	1	:	2	:	3	:	4	:	5	Informative

Questions 11 and 12 regard commercial websites.

☞ **“Commercial websites” refer to websites with advertising and marketing messages promoting products, brand websites created by companies, Internet shopping sites, auction sites, online gaming sites and all other types of websites involving cybermoney/cash transaction in exchange for real or virtual products.**

11. Overall, how do you feel about “commercial websites” your child or children at your child’s age may visit?

Bad	1	:	2	:	3	:	4	:	5	Good
Harmful	1	:	2	:	3	:	4	:	5	Beneficial
Not useful	1	:	2	:	3	:	4	:	5	Useful
Uninformative	1	:	2	:	3	:	4	:	5	Informative

12. The following lists some statements about commercial websites that your child or children at your child's age may visit. For each statement, please indicate how much you agree or disagree by circling your choice.

1) We can depend on getting the truth in most commercial websites.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

2) The aim of commercial websites is to inform the consumer.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

3) Commercial websites are informative.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

4) Commercial websites are reliable sources of information.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

5) I am accurately informed by most commercial websites.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

6) Most commercial websites provide consumers with essential information.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

7) Commercial websites generally present a true product picture.

① Strongly disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly agree

Now, I am going to ask about your child's consumption habit and use of allowance.

13. Thinking about the child who brought the questionnaire home, please indicate how often you are involved in the following things.

1) I ask my child for advice about buying things.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

2) I tell my child that buying things he/she likes is important even if others don't like them.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

3) I let my child decide what things he/she should or shouldn't buy.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

4) I let my child decide him/herself how to spend his/her own money.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

5) I tell my child that I know what is best for him/her and he/she shouldn't question me.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

6) I complain when I don't like something that my child bought.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

7) I tell my child what things he/she should or shouldn't buy.

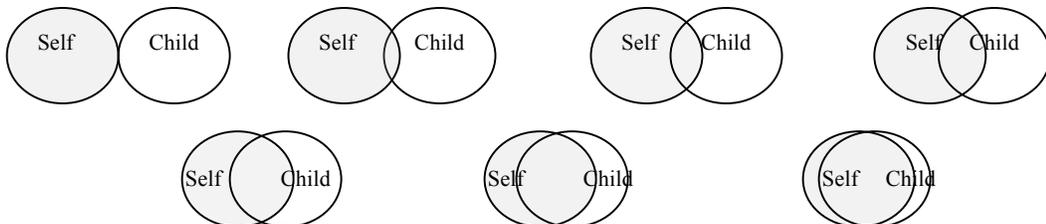
① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

8) I want to know what my child does with his/her money.

① Never ② Rarely ③ Sometimes ④ Often ⑤ Always

Next question asks how you feel about the relationship between you and the child who brought the questionnaire to you.

14. Please circle the picture below which best describes your relationship with the child who brought this questionnaire.



The following question regards your parenting style.

15. Thinking about the child who brought the questionnaire home, please indicate how much you agree or disagree.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1) I try to know what my child does with his/her free time.	()	()	()	()	()
2) I try to know where my child is most afternoons after school.	()	()	()	()	()
3) I know exactly what my child does with his/her free time.	()	()	()	()	()
4) I know exactly where my child is most afternoons after school.	()	()	()	()	()
5) My child should come home by the time that I set.	()	()	()	()	()
6) I help my child if he/she doesn't understand something or he/she has some kind of problem.	()	()	()	()	()
7) When my child gets a poor grade in school, I encourage my child to try harder.	()	()	()	()	()
8) I do many things with my child.	()	()	()	()	()
9) When I want my child to do something, I explain why.	()	()	()	()	()
10) I spend time just talking with my child.	()	()	()	()	()

**Finally, I am going to ask more about yourself.
Again, your response is anonymous. Your answer will be used only for a
research purpose and remain strictly confidential.**

16. You are...

- ① Mother
- ② Father
- ③ Grandfather
- ④ Grandmother
- ⑤ Other: Please specify your relationship with the child_____

17. Your age: () years

18. Education

- ① None or grades 1-8
- ② High school graduate
- ③ Some college, but no degree
- ④ College graduate, 2-year degree
- ⑤ College graduate, 4-year degree
- ⑥ Post-graduate training

19. Monthly household income

- ① Less than 1 million Won
 - ② 1 million – under 2 million Won
 - ③ 2 million – under 3 million Won
 - ④ 3 million – under 5 million Won
 - ⑤ 5 million – under 7 million Won
 - ⑥ 7 million – under 10 million Won
 - ⑦ 10 million Won or more
- (Note for readers: 1 million Won = US\$1,000~1,100)

20. On a typical day, about how much time do you spend doing the following?

Weekday Using the Internet () hour(s) () minutes
 Watching television () hour(s) () minutes

Weekend Using the Internet () hour(s) () minutes
 Watching television () hour(s) () minutes

21. How many hours do you think the child who brought this survey questionnaire spends using the Internet per day? (Please do not ask the child. Indicate the amount of time based on your own guess)

Weekday: () hour(s) () minutes

Weekend: () hour(s) () minutes

Thank you very much for your participation.

Please have your child bring this survey to the teacher by xx (date) as indicated in the instruction.