

August 2015

Parents' Television Viewing and the Cultivation of Materialism Among Families With Young Adult Offspring

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<https://doi.org/10.7275/6962132.0> https://scholarworks.umass.edu/dissertations_2/398

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PARENTS' TELEVISION VIEWING AND THE CULTIVATION OF MATERIALISM
AMONG FAMILIES WITH YOUNG ADULT OFFSPRING

A Dissertation Presented

by

LARAS SEKARASIH

Submitted to the Graduate School of the University of Massachusetts Amherst in partial
fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

MAY 2015

DEPARTMENT OF COMMUNICATION

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A Dissertation Presented

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DEDICATION

To my parents and sister, for their relentless encouragement, understanding, and support.

ACKNOWLEDGMENTS

Some people say that doctoral dissertation is a culmination of graduate training. As part of the final steps in finishing the program, this dissertation owes its completion to many people for many reasons. First, I would like to thank Dr. Michael Morgan for all his advice, support, and assistance throughout my doctoral training. I am forever grateful for his encouragement and patience in guiding me throughout the progress of my study. I thank him for challenging me and always asking me “questions to think about”, particularly on this dissertation, but also in other research projects that I have engaged in during my time in the program. I will miss seeing him and his open-door office.

I am also thankful to Dr. Erica Scharrer, who, besides becoming a member of the dissertation committee, has taken me under her wings as part of the Media Literacy research/outreach initiative that she supervises. The involvement in the Media Literacy group not only has given me the avenue to learn invaluable scholarly skills of conferencing and publishing, as well as opened professional networks for me. It also has provided the opportunity to make media scholarship have a direct impact beyond the academy by working with local communities.

This dissertation would not materialize had it not been for the directions on the statistical analyses from Dr. Aline Sayer. I would like to thank her for the opportunity to learn Structural Equation Modeling in her class back in Spring 2011, for her willingness to become one of my committee members despite her busy teaching schedule and serving on multiple theses and dissertation committees, and for her time to patiently reteach me the statistical techniques I needed when I was at the stage of analyzing the data for this

dissertation. I would also like to express my appreciation for Dr. Emily West for her insight on consumer culture. I am fortunate to have Emily not only as a committee member, but also as the instructor in the qualitative method course in my first year. Although this dissertation does not employ qualitative approach, the knowledge on qualitative method has enabled me to produce several published works.

My training at UMass became richer since I started working at the Institute for Social Science Research, through which I had the chance to work with individuals from various disciplines to apply what I have learned in statistics and method classes. Particular to this dissertation project, I am grateful for the assistance from the current ISSR Research Methodologist Dr. Waylon Howard, for his patience and the time he spent to discuss data analyses issues and help me troubleshoot technical problems.

I would be remiss not to thank friends and colleagues in the program. In this acknowledgement, I would like to thank Greg Blackburn, who helped me set up the distribution of the online questionnaire for this dissertation and my other research projects, and Wendy Pringle for the technical support. I am also grateful for having Christine Olson as a great officemate and collaborator in the Media Literacy program, and Nadezhda Sotirova, for the company and friendship during our time in the program. With camaraderie like theirs, achievements taste sweeter, and challenges feel more bearable.

Finally, I would like to thank my parents and my sister. I am privileged to have a family who teaches me the virtue of education, hard work, and achievement. Lastly, I would like to thank Jeffrey Wijaya for all things we have been through.

ABSTRACT

PARENTS' TELEVISION VIEWING AND THE CULTIVATION OF MATERIALISM IN FAMILIES WITH YOUNG ADULT OFFSPRING

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Employing cultivation theory as a guiding framework, and utilizing online survey responses from 303 young adults aged 18 to 25, this study examined how parents' television viewing cultivates materialism among parents and young adult offspring, as well as offspring's social comparison and life satisfaction. In lieu of access to direct measure of parents' television viewing and materialism, children's reports on their parents' television viewing and materialism were used as a proxy of parents' media consumption and material values. The assessments on the psychometric attributes of the measures used in the study were conducted using confirmatory factor analyses, and path analyses were conducted for hypotheses testing and examining of research questions. Path analyses revealed an evidence for intergenerational cultivation through parents' materialism for the success and happiness dimensions of materialism. For the two dimensions, parents' general television viewing positively predicts their own materialism, which in turn is positively associated with their children's materialism. The analysis on the centrality

dimension of materialism suggest that parents' general television viewing predicts stronger materialism among parents, and children's television viewing is positively associated with the materialism of theirs, yet parents' materialism is not correlated with children's centrality dimension of materialism. Analyses on genre-specific viewing revealed that drama, sitcom, sports, and reality shows predict intergenerational cultivation of the success and/or happiness dimensions of materialism. Multi-group SES-based analyses demonstrate that intergenerational cultivation of materialism is more pronounced among individuals whose parents are wealthier and have higher educational attainment.

All three dimensions of materialism are negatively correlated with life satisfaction, yet it was found that the success and centrality dimensions of materialism positively predicts downward social comparison. In contrast, the happiness dimension of materialism negatively predicts downward social comparison. Results from SES-based analyses indicate the positive association between materialism and downward social comparison that was found in the success and centrality dimensions of materialism is stronger among individuals from higher-SES families. In contrast, the negative relationship between the happiness dimension of materialism and downward social comparison emerged among individuals from less advantaged SES.

Keywords: cultivation theory, television, materialism, media and family, young adults, the Millennials

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CHAPTER 1

INTRODUCTION

Normal is . . . getting dressed in clothes that you buy for work, driving through traffic in a car that you are still paying for, in order to get to the job that you need so you can pay for the clothes, car and, especially, the house that you leave empty all day in order to afford to live in it. (Ellen Goodman, 1993)

For the first time in decades, emerging adults in the United States will have lower socioeconomic status than their parents (Taylor, 2014). The recession and “dot com bubble burst” in the early 2000’s, followed by the 2007 mortgage crisis and prolonged recession, which culminated in the 2008 market crash, have put the current generation of young adults, those who were born roughly between 1980 and 1995, casually addressed as “The Millennials,” into precarious economic livelihood. As they enter adulthood, this cohort is burdened by college debt, job insecurity, and underemployment. At the same time, however, The Millennials are also known for their optimism for their financial future, and show more affinity and endorsement towards consumer goods compared to their parents’ generation, the Baby Boomers (Taylor, 2014; Twenge & Kasser, 2013).

Despite the Millennials’ optimistic view on the future economy, the concern about their financial stability seems to be salient among their parents. A 2011 Pew Charitable Trust study indicates that less than half of American parents believed that their children would have a better standard of living than they (the parents) currently do, which marked a new low since the question regarding parents’ confidence in their children’s likelihood to financially succeed was first asked in 1981 (Pew Charitable Trust, 2011). The findings of the Pew study suggest that financial success is a form of accomplishment not only for

children, but also for parents, who as they get older tend to live vicariously through the lives of their children (Feibleman, 1975).

On the one hand, the recent economic downturn in the U.S. has raised the question of whether the country's emerging adults are able to lift themselves for upward social and financial mobility, which is still a tangible parameter of the fulfillment of the American Dream (Hanson & Zogby, 2010; Lee and Solon, 2009; Piketty & Saez, 2003). The expectation for financial success, whether expressed as a personal aspiration or as a hope for the next generation, is by itself reasonable, as it provides avenues to engage in activities that raise the standard of living, as well as further and fulfill various personal goals (Csikszentmihalyi & Rochberg-Halton, 1981; Richins, 1995). However, on the other hand, the desire to be materially successful may unhealthily go beyond merely wanting a reasonably comfortable life to living an affluent lifestyle. Putting a stronger importance on material success over accomplishments in other domains of life can pose unintended yet problematic consequences. Materialism, an overemphasis on the ownership and acquisition of wealth and money, has received scholarly attention for decades due to its potential deleterious consequences to individuals and society. Individuals with high material values are more likely to have lower self-esteem (Kasser & Ryan, 1993), lower life satisfaction (Roberts & Clemens, 2006; Sirgy et al., 1998), as well as physical health problems (Ryan & Dziurawiec, 2001). The salient importance of wealth may also lead individuals to engage in "mindless accumulation", where one keeps working beyond what is financially needed, not because of the enjoyment from laboring, but because of the notion that having more would never hurt (Hsee, Zhang, Cai, & Zhang, 2013).

At the macro level, societies that promote materialism also tend to suffer from lower levels of public concern and participation on environmental and social issues (Banerjee & McKeage, 1994; Easterlin & Crimmins, 1991; Kasser, 2002; Kilbourne & Pickett, 2008). Additionally, materialism may also induce the feeling of relative deprivation that can even lead individuals to commit crimes (Hirschman, 1991). The aspiration to be able to afford more consumer goods has pushed individuals to spend more time at work – as opposed to spending time with family and building community, and, ironically, accruing more consumer debt (Schor, 1991, 1998). In addition, materialism is also associated with less prosocial behavior and altruism, while positively linked to more prejudicial attitudes (Duriez, Vansteenkiste, Soenens, & De Witte, 2007; Piff, Kraus, Côté, Cheng, & Keltner, 2010; Piff, Stancato, Côté, Mendoza-Denton, & Keltner, 2012a, 2012b; Rucker, Galinsky, & Dubois, 2012; Sheldon & McGregor, 2000; Vohs, Meade, & Goede, 2006). In other words, while the aspiration to attain a reasonably comfortable life is understandable, even a healthy expectation, once accumulation of wealth becomes the central drive in one's life, the pursuit of material possessions can be “counterproductive” at individual and societal levels.

The adoption of materialism in individuals' value system has been linked to the environmental influences people receive throughout their lives. Scholars have recognized various factors that contribute to the acquisition of materialism, including macroeconomic condition, the media, educational and religious institutions, as well as family members and peers (Feij, 1998; Inglehart & Abramson, 1994; Kilby, 1993, cf. Giddens, Aitken, & Schermer, 2009). The national-level economic situation that one cohort experiences during their formative years plays a role in shaping the perceived

importance of material goods in their life. People who reached their adolescence during bad economic periods, such as the Great Depression or the 1970's stagflation, tended to be more materialistic than those who enjoyed a more prosperous economy, such as the Baby Boomers. The stronger materialism among cohorts who grew up during macroeconomic adversity was seen as an overcompensation for the economic deprivation they experienced during youth (Inglehart & Abramson, 1994, cf. Johnson, Sage, & Mortimer, 2012). Data from the national multiyear cross-sectional survey *Monitoring the Future* showed that the Millennials, who witnessed the 2000 "dot com burst" and 2008 economic collapse, are indeed more materialistic than the Baby Boomers (Park, Twenge, & Greenfield, 2013; Twenge and Kasser, 2013).

Studies also suggest the influence of family as an environmental factor in promoting or impeding the acquisition of materialism. Children and adolescents whose parents highly value possessions and money tend to embrace material values more strongly than children who come from less materialistic families (Chaplin & John, 2010; Flouri, 1999; Goldberg, Gorn, Peracchio, & Bamossy, 2003; John, 1999; Kasser, Ryan, Zax, & Sameroff, 1995). Existing works suggest three possible mechanisms of the role of family in the development of materialism among children and adolescents: emulation, non-nurturant childrearing, and self-esteem. First, through the emulation "route," materialist parents would communicate the importance of money and wealth to children, who then would incorporate material values into their own personal value system (Goldberg et al., 2003; Kasser et al., 1995). Second, children whose parents are less caring and fail to construct a nurturing relationship with them are also more likely to seek out material possessions to compensate for the sense of emotional security of which they

are deprived (Flouri, 1994; Kasser et al., 1995). Third, parents may promote the development of children's materialism indirectly by hurting the child's self-esteem. Chaplin and John (2010) argued that parents with high material values would constantly communicate the association between self-worth and wealth to their children more so than communicating the importance of achievement, family, and friends. The internalization of this message would make children assess their self-worth through the material possessions they have, which is likely to result in low self-esteem. Children would then rely on material goods in order to compensate for their low self-esteem.

Individuals learn about material values not only from interpersonal interactions with families and friends, but also from cultural messages in mass media. Media stories across genres and decades are inundated with narratives and "lessons" about material success, wealth, and affluent lifestyles (e.g., DeFleur & DeFleur, 1964; Lichter & Lichter, 1994; Signorielli & Kahlenberg, 2001). Empirical studies have demonstrated the role of exposure to media messages on individuals' material values: higher exposure to media messages is associated with stronger material values (e.g., Buijzen & Valkenburg, 2003a, 2003b; Gorn & Florsheim, 1985; Shrum, Burroughs, & Rindfleisch, 2005; Shrum, Lee, Burroughs, & Rindfleisch, 2011; Twenge & Kasser, 2013; Ward & Wackman, 1971). However, most studies on media and the perpetuation of materialism were conducted with an exclusive focus on either children or adults, and less likely to look into the role of media in the family context. Research that includes the family in examining media and materialism tends to analyze the role of parents in mitigating the negative effects of media messages, especially advertisements, on children (e.g., Buijzen & Mens, 2007; Buijzen & Valkenburg, 2005; Ward & Wackman, 1971) or how family

communication style predicts children's media consumption (e.g., Moschis & Moore, 1981), but not on how parents' own media consumption promotes materialism in the family.

Three exceptions are studies conducted by Buijzen and Valkenburg (2003), Meirick, Sims, and Gilchrist (2009), and Chia (2010). Buijzen and Valkenburg (2003) found that children's exposure to advertising might lead to more frequent parent-child conflict through higher materialism and more frequent requests to purchase items that appear or are promoted on television. Meirick and colleagues (2009) incorporated parents' materialism in their investigation of the influence of parental third-person perceptions of advertising on children, which revealed that on average parents reported that commercials are more likely to affect other children than their own. Perception about the effects of ads was also associated with stronger parental mediation. Parents who believed that exposure to advertisements would have a negative influence on their children were more likely to discuss the contents of ads, to express their disapproval towards commercial messages, as well as to restrict the amount of time and the types of television programming that their children could watch. However, the researchers did not find any relationship between parents' materialism and perception about effects of television on their children's materialism.

Chia (2010) found an indirect relationship between Singaporean adolescents' exposure to advertising and their materialism through interpersonal communication with parents and peers about consumption issues. Specifically, exposure to advertising was associated with more interpersonal communication with parents, which, in turn positively predicted adolescents' perception of their parents' materialism and their own materialism,

respectively. Likewise, viewing commercial messages was correlated with more discussion about consumption behaviors with friends, which in turn predicted stronger perceptions of the friends' materialism, which then predicted adolescents' own materialism. Additionally, exposure to advertising also positively predicted adolescents' perceptions about their friends' viewing of commercials, which was also positively correlated with the friends' perceived materialism and their own materialism, respectively.

The focus on children's media exposure and their materialism has provided evidence for the role of media in fostering materialism among young audiences; however, at the same time, it also suggests that scholars might have overlooked the possible problematic relationship that adults in the house – parents – have with media. As demonstrated through a vast body of media effects empirical studies, adults are not "invulnerable" to media messages. Indeed, higher media consumption has been associated with higher materialism among adults (e.g., Richins, 1987; Shrum et al., 2005; Shrum et al., 2011; Yang & Oliver, 2010). Additionally, parents' media habits have been found to "trickle down" to their children (Notten, Kraaykam, & Konig, 2012; Yang & Huesmann, 2013). Therefore, if media contribute to the acquisition of materialism among adults, would adults as parents "pass on" material values they "learn" from media to their children? If so, what would be the possible mechanism? Would children learn about materialism by modeling their parents' media use, or by emulating parents' material values, which, parents learn from the media? Unfortunately, evidence on this more complex relationship is scant. The aforementioned study on the perceived social influence on adolescents' materialism (Chia, 2010) was the only study that took parents'

media consumption into account in examining materialism in the family context. The current study attempts to investigate the role of parents' media consumption, particularly television viewing, in promoting material values, social comparison, and life satisfaction among emerging adults children.

This study employed cultivation theory as the guiding theoretical framework. The core premise of cultivation theory lies in the notion that individuals who spend a great deal of time watching television will be more likely to perceive the world in resemblance with television's stories (Gerbner & Gross, 1976; Morgan, Shanahan, & Signorielli, 2009). Founded in the 1970s, cultivation has become an established theory and one of the most influential communication theories (Bryant & Miron, 2004; Neumann & Guggenheim, 2010). Despite the presence of the Internet as the new "new media," television remains the most broadly shared medium among American households, as 98 percent of American households report having at least one television set, with national average ownership of 3.6 television sets per household (Nielsen Company, 2010). The most recent American Time Use Survey also still lists watching television as the main leisure activity among Americans, averaging at 2.8 out of 5.4 hours of leisure time (Bureau of Labor Statistics, 2013). According to a recent Nielsen study, Americans on average spend approximately 4 hours a day watching television, mostly using a traditional television set as opposed to watching programming and content through Internet streaming (Nielsen Company, 2012).

Several studies using cultivation theory have identified the role of television stories in perpetuating materialism and life dissatisfaction (Shrum et al., 2005; Shrum et al., 2011; Sirgy et al., 1998; Yang & Oliver, 2010). However, there are only a few works

that have tested cultivation theory in the family context, particularly testing parents' television viewing. Existing studies that examine parents' television viewing, which evidenced that parents' television viewing can influence what is communicated in the family, are focused on perceptions of crime and how they predict precautionary acts towards their children (Busselle, 2003; Martins & Wilson, 2011; Wilson, Martins, & Marske, 2005). Utilizing survey data from 303 young adults, this study attempts to extend cultivation research by examining the role of parents and television in cultivating materialism in the family. Specifically, this study will examine how perceived parents' television viewing predicts young adults' material values, social comparison, and life satisfaction.

CHAPTER 2

MATERIALISM: DEFINITION, IMPLICATIONS, AND THE ROLES OF FAMILY AND MEDIA

While generating a significant body of literature, studies on materialism and human well-being in the last 40 years have also yielded mixed results. Numerous studies suggest that materialism, commonly defined as overemphasis on wealth, money and tangible possessions, can have deleterious impacts at individual as well as at societal levels. Nevertheless, findings from several other studies have led scholars to also question the adverse consequences of materialism, particularly whether the association between materialism and lower subjective well-being applies to individuals across demographic groups. Additionally, several researchers have also challenged the notion that materialism by itself is detrimental, from which these scholars embarked to look into the underlying motives of individuals' high valuation of the pursuit of material wealth and its association with individuals' well-being.

2.1 Defining and Measuring Materialism

Currently, there are two definitions of materialism that are widely used among scholars: as trait or as value. Conceptualizing materialism as a trait, Belk (1984) operationalized materialism as “the importance a consumer attaches to worldly possession” (p. 291). Belk argued that individuals who gravitate towards material goods tend to rely on tangible possessions for their contentment with life. Belk (1985) further constructed a materialism scale, in which materialism is defined as a combination of three

traits: possessiveness – a tendency to hold on to one's possessions; non-generosity – reluctance to share possessions with others; and envy – displeasure with others' possessions. People who scored high on the overall materialism scale and the envy subscale also expressed negative expectations of how helping others will be received: according to them, helping other individuals would not result in appreciation. Meanwhile, possessive individuals expressed more positive attitudes towards helping others, but it was because they perceive helping as a reciprocal behavior. In other words, instead of helping others on the basis of altruism, people who scored high in Belk's scale possessiveness dimension reported a stronger perception that helping others is an "investment" for future benefits.

Besides assessing the validity and reliability of his scale, Belk (1985) also tested intergenerational differences in materialism. Belk found among his participants that materialistic parents were also more likely to associate their children's happiness and gratitude with receipt of birthday presents. Additionally, using his scale to examine materialism across three generations, Belk found that individuals in the second generation in a family – age 31 to 58 with mean 40.3 years – scored higher compared to the youngest (age 13 to 26, mean age = 21.1 years) and oldest (age 55 to 92, mean age = 68.3) generations. The oldest generation scored the lowest among the three cohorts. Although Belk attributed this difference to age factors rather than cohort due to the lack of association between age and materialism within one generation, he did not close the possibility of the presence of cohort effects. Considering Belk's sample size ($n = 99$) and the cross-sectional nature of his study, a replication preferably using intergenerational

and longitudinal design would be needed in order to completely disentangle the competing arguments regarding the influence of age versus cohort on material values.

While Belk proposed materialism as a trait, Richins and Dawson (1992) argued that materialism would be more robust if conceptualized as a value, thus a materialist is a person “who places a high value on material possessions and their acquisition” (p.307). Raising concerns on the psychometric attributes in the previously developed materialism scales – including Belk’s scale – Richins and Dawson argued that the tendency of materialists to put goods ownership and acquisition at the center of their lives over other matters and to use it to navigate their behaviors suggests that materialism should be measured as a value. In Richins and Dawson’s scale, materialism as a value is measured through three dimensions: success – how strongly a person values material goods as a symbol of success in life, centrality – the valuation of material possession and acquisition in general, and happiness – belief in the importance of consumer goods in fulfilling happiness. Richins (2004) later developed a short-version of the 18-item Richins and Dawson’s materialism scale. Belk’s and Richins and Dawson’s scales are widely used in studies on materialism, depending on how researchers approach materialism in their study.

2.2 Materialism as Maladaptive Attribute

Studies on materialism have generated a vast corpus of literature on the topic (see, e.g., Burgoyne & Lea, 2006, or, Wright & Larsen 1993 for reviews). For example, raising a concern regarding the overemphasis on material goods as an “inadvertent” consequence of the pursuit of the American Dream, Kasser and Ryan (1993) studied the association

between individuals' centrality of financial success and their psychological well-being. On average, in both student and non-student adult samples, individuals who prioritized accomplishment in the financial domain relative to other domains of life reported a lesser sense of self-actualization and vitality. While this association is open to a "reverse causality" explanation – it is possible that students who reported a lower sense of self-actualization might think or hope that having more wealth would make them happier – Kasser and Ryan's study illuminated what overemphasis on financial success might lead individuals to.

The negative relationship between materialism and psychological well-being did not only appear in U.S.-based studies. A study that involved college students from 41 countries yielded negative relationships between individuals' emphasis on monetary success and life satisfaction (Diener & Oishi, 2000). Chan and Joseph (2000) found aspiration for financial success to be a predictor of a lesser sense of happiness among college students in England. Conducting a similar study among business school students in Singapore, Kasser and Ahuvia (2002) reported that individuals who focused on attaining goals that pertained to money, image, and popularity had lower level of self-actualization, vitality, and happiness, and reported higher level of anxiety, discontentment, and physical health problems. Similarly, a study involving Australian adults also suggests that materialism does not only correlate with lower satisfaction with life in general, but also different domains of life, such as satisfaction with family life, amount of fun and enjoyment, housing, accomplishment in life, physical health, and not surprisingly, standard of living (Ryan & Dziurawiec, 2001). A meta-analysis that analyzed studies on materialism and psychological well-being showed a moderate but

significant negative association between materialism and individuals' happiness (Wright & Larsen, 1993), although it is important to note that the meta-analysis only included a total of 7 studies with 35 data points.

To mitigate the reverse causality explanation between materialism and life satisfaction, Kasser, Rosenblum, Sameroff, Deci, Niemec, & Ryan et al., (2013) conducted longitudinal studies in the United States and Iceland. The studies varied on the time frames: 12 years and 2 years for the U.S. participants, and 6 months for the Icelandic participants. The U.S. samples included young adults recruited through the university psychology clinic and college students in the northeastern region of the country, whereas the Icelandic participants were recruited online (details of recruitment method were not reported). The analyses revealed that even after controlling for household income, those who developed stronger orientation towards financial success over the course of 12 years were more likely to develop mental health problems, although their materialism at the initial stage of the study was not associated with mental health issues. Conversely, those who oriented themselves less towards financial success experienced a decrease in mental health problems. Somewhat similarly, U.S. college students who put a great importance of financial success relative to other life goals during their senior year reported lesser psychological well-being two years later compared to those who did not emphasize as strong financial aspiration.

Among Icelandic participants, however, different results emerged: materialism at the initial point of study (Time 1) was *positively* correlated with the subjective well-being at the end of the study (Time 2), although the materialism at Time 2 was associated with lesser subjective well-being. The researchers attributed the results in the Iceland study to

the fact that the participants' income that was higher than the average income in Iceland. Secondly, the Iceland study was conducted during an economic collapse in the country, which might have led participants to engage in "dissonance-reduction mechanisms (i.e., "I've lost my savings; wealth isn't that important anyway")" over time in order to preserve their psychological well-being (p. 11). Finally, drawing from Grouzet, Kasser, Ahuvia, Fernandez-Dols, Kim, Lau et al. (2005), the researchers argued that what constitutes "material goods" might differ from one economic circumstance to another. Materialism might correspond to physical health and safety during an economic crash, as opposed to image and affluence that tend to be more commensurate to a more prosperous economy.

However, economic upturn does not guarantee reduction of materialism either. Results from a nationally representative sample of Switzerland residents (Stutzer, 2004) suggest that raising income was "ineffective" in increasing happiness. Utilizing data from a national survey in Switzerland that involved over 4000 respondents with an average annual household income of approximately \$48,000, Stutzer found that higher income does not increase individuals' reported life satisfaction, and higher income aspiration predicted lower life satisfaction. Furthermore, Stutzer's study also suggests that aspiration for earning higher income might be insatiable, as individuals' aspired income consistently appeared as a function of their previous income, although not surprisingly, the smallest average gap between aspired and actual income was found among the wealthy. Therefore, one may argue that at least for most people, once a higher level of earnings is reached, the utility derived from it would eventually wear off and be replaced

by a desire for more money, which creates again the actual-aspired income discrepancy. This illustrates that having more money does not necessarily lead to better well-being.

Beyond individuals' well-being, materialism also has possible negative effects at the societal level. For example, Banerjee and McKeage (1994) found a negative correlation between materialism and environmental concerns, which provided evidence for the researchers' argument that materialism and environmentalism are competing values. Similarly, Kilbourne and Pickett (2008) analyzed the relationships among materialism, environmental beliefs, environmental concern, and environmentally responsible behaviors. Responses from participants confirmed the researchers' hypothesis: individuals with high material value reported lesser belief in environmental problems (e.g., pollution, global warming, and species extinction), which then predicted lesser environmental concern, and lower likelihood to engage in behaviors that help conserve the environment, such as purchasing environmentally friendly products and contacting legislative policy maker to express concern on environmental issues.

Since individuals who embrace materialism tend to pay more attention to their personal possessions and less to the consequences of their material consumption, having more materialistic individuals in a society may contribute to the acceleration of environmental damage. In a study on the life values of a nationally representative sample of American college students in the 1980s Easterlin and Crimmins (1991) found that individuals with higher material values were more likely to major in business, which is associated with lucrative careers upon graduation, versus for example majoring in education, where students gear towards public-service careers (see also Vohs et al., 2006) on the difference across majors in cooperating with others versus pursuing self-interest).

In addition, these college students reported aspirations to pursue careers in lucrative fields, as opposed to thinking about having a job in the public service domain, which might raise a concern over whether the society will have enough individuals to serve in the public sector.

Drawing from discourse on the responsibility of wealthy and powerful individuals in causing or exacerbating national or regional economic crashes in different historical periods, Piff, et al. (2012a, cf. Francis, 2012; Piff et al., 2012b) conducted a series of experiments to examine social class and the engagement in ethical behaviors. The researchers found that individuals from upper socioeconomic class (measured by income, educational status, and occupational prestige) were more likely to engage in unlawful or unethical decisions. For example, compared to individuals from lower SES, those from upper SES were more likely to break traffic laws (cut in front of other vehicles at an intersection and fail to yield to pedestrians at the crosswalk), or lie in a hypothetical workplace negotiation. Furthermore, individuals' favorable attitudes towards greed, which was positively correlated with social class, was found to mediate the relationship between social class and ethically questionable actions.

In explaining their findings on upper-SES individuals' propensity to engage in morally dubious choices, Piff and colleagues argued that people from more privileged SES were used to having more privacy in their daily lives, thus were less cognizant about the consequences of their unethical behaviors as well as other people's judgments towards their acts. Furthermore, should they get caught for committing unlawful behaviors, individuals from higher SES would have the resources to avoid possible legal or ethical repercussions. The positive association between social class and favorable

attitudes towards greed was linked to the economic culture that emphasizes self-interest and sense of entitlement that might not only rationalize but also justify the decision to “bypass” ethical behaviors. Drawing from the study, one may argue that overvaluing the pursuit of financial success might lead people to be less conscious about the ethical aspect of their acts and the implications for the environment.

Piff et al.’s (2012a) findings on social class and ethical behaviors was consistent with previous works on the role of money, wealth, and social capital and altruism. Also through a series of experiment, Vohs, Mead, & Goode (2006) found that priming individuals with money would lead to stronger persistence in laboring in a difficult task without asking help from others. However, the self-sufficiency that the idea of money induced also made people less likely to cooperate with others, less altruistic, and instead make decisions based on their self-interest. The results from the aforementioned works illustrate the possible danger beyond individual-level psychological welfare (see also Rucker, Galinsky, & Dubois, 2012 for a review about social power and consumer behavior). In sum, scholarly works have reflected and demonstrated the concerns and the negative implications of the overemphasis on wealth and money on the individual as well as societal levels.

2.3 Materialism and Life Dissatisfaction

The association between materialism and life dissatisfaction might stem from frustration due to unattained ambition in acquiring money and material goods. Sirgy (1998) defined materialism as “a condition in which the material life domain is considered to be highly salient relative to other life domains” (p. 243). Based on that

definition, Sirgy contended that a materialist would perceive wealth, possessions, and money as more important than other aspects of or domains in life. The emphasis on possessions and money matters lead a materialist to set unrealistic goals in regard to the acquisition and/or accumulation of wealth. Ironically, despite being overly focused on money, materialists tended to have problems saving money. Since individuals with high material value have a need to signify possession of material goods, these individuals are more likely to engage in excessive spending relative to what they earn, which in turn creates perception of constant financial struggle to fulfill basic needs. Furthermore, the salience of material goods also makes a materialist constantly compare his/her standard of living to the livelihoods of others, especially people who earn and/or possess more (also Sirgy et al., 2012). The likely unattainable aspiration, combined with the upward comparison, would lead the individual to become “overly critical” in evaluating his/her current livelihood, which subsequently would induce dissatisfaction with a materialist’s own standard of living. Sirgy argued that the discontentment in the lifestyle one is able to afford would extend to other domains of life, and eventually lead to dissatisfaction with life itself.

This argument is consistent with Festinger’s (1954) theory of social comparison. According to the theory, humans possess the drive to evaluate their own opinions and abilities by engaging in comparison with other individuals’ performances. If a discrepancy between one’s own opinions or abilities and others’ is found, individuals would make an effort to close the gap by changing their own position and/or shifting the stance of the reference groups. This act is more likely to take place if the dissimilarity is present on the domains that the individuals consider important. Subsequently, Festinger

also contended that the perceived attractiveness of the reference groups plays an important role in the social comparison process: the more attractive a group is, the more likely that group becomes a benchmark in assessing opinions and skills. Upon self-evaluation, individuals would then reduce the disparity that they found through exerting efforts to change their position, and, if possible, the individuals in the reference group. Additionally, social comparison theory also postulates that in making self-evaluations, individuals are also bound by the cultural context they live in. For example, Festinger contended the values in Western culture pose pressures to its individuals to keep achieving high, which arguably leads them to engage in upward comparison. In the context of material values, therefore, one may argue that individuals in a culture that puts a significant importance on the acquisition of wealth would be more likely to evaluate their material possessions against others' ownership of wealth and consumer goods.

Festinger himself never elaborated his argument on the significance of cultural values in the social comparison process. However, a study reported evidence that corroborates Festinger's hypothesis. Utilizing the data from 8,326 U.S. residents from 311 standard metropolitan statistical areas (SMSAs) who participated in the General Social Survey (GSS) in the survey's 1989 thru 1996 iterations, Hagerty (2000) investigated the relationship between individuals' absolute income as well as income distribution within a community and subjective well-being. It was found that one's own income predicted higher subjective well-being, controlling for demographic variables, yet at the same time, the data also revealed a negative association between the maximum income in a community and individuals' subjective well-being. Furthermore, the skewness of the income distribution within a community also positively correlated with

individuals' happiness. That is, in a community where only a few individuals earn higher income than their neighbors, the more likely people in the area feel happy with their lives. In other words, areas with more economic equality tended to have happier residents than areas with income inequality. Hagerty contended that better subjective well-being in the communities where the distribution of income forms a positively skewed distribution is due to the fact that in such community most people earn a similar amount of income. Therefore, the social comparison would result in finding oneself quite equal to others in terms of the ability to earn money.

Besides through social comparison, the negative association between materialism and life satisfaction can also be explained by the emotions that result from materialists' interactions with consumer products (Richins, 2013). Through cross-sectional and longitudinal studies, Richins found that having stronger affinity towards the acquisition and accumulation of consumer goods, materialists would experience stronger elevation of pleasures *prior* to making a purchase. Unfortunately, the pre-purchase contentment would not last; instead, it would diminish and be accompanied by negative feelings of anxiety and fear that would last for weeks after the purchase takes place. The evocation of negative emotions was also found to be stronger for products that materialists deemed important. To summarize, materialists may be more prone to dissatisfaction with life due to the repeated experience of diminishing enjoyment that followed the acquisition of consumer goods.

2.4 Critiques and Extension: Is Materialism Really Deleterious?

Despite evidence that suggests negative psychological and societal implications of materialism, several researchers have questioned whether putting high relative importance on financial success is really detrimental to subjective well-being. In a study that included participants from the United States, nine European countries, and Japan, Easterlin (1994) found that within a country at a given time, individuals with higher income reported higher levels of happiness. Similarly, an analysis of thirty years of research on subjective well-being suggests a positive relationship between income and happiness (Diener, Suh, Lucas, & Smith, 1999). Several empirical studies also tested whether materialism generates “adverse consequences” across demographic groups. For example, using Belk’s materialism scale, La Barbera and Gürhan (1997) found a negative relationship between materialism and subjective well-being, holding several control variables (age, education, income, marital status, religious importance, and religious attendance) constant. However, they also found two-way interactions between materialism and income as well as materialism and education in predicting subjective well-being. Materialists with low income reported significantly lower subjective well-being than materialists with high income. Similarly, individuals with high materialism and low educational attainment appeared to suffer more from lower subjective well-being compared to their more educated counterparts. Explaining the possible mechanism of the interactions they found, the researchers inferred that individuals with lower income might experience a wider aspiration-actual wealth gap than individuals with higher income, which explained why the former were less happy than the more affluent material individuals. The interaction between socioeconomic status and materialism is parallel

with the work on intergenerational difference on material values, where individuals who witness macroeconomic scarcity in their formative years – for example the cohort who grew up during the Great Depression – are more likely to be more materialistic than those who enjoyed an economic upturn in their childhood – for instance the Baby Boomer generation (Inglehart & Abramson, 1994, cf. Belk, 1985; Yang, 2008).

Nickerson, Schwarz, Diener, and Kahneman (2003) analyzed longitudinal data from The College and Beyond database, which contained responses from over 10,000 full-time employed graduates of 21 academically selective higher institutions – 4 large public and 17 private colleges and universities – that participated in the survey. Participants of The College and Beyond survey entered colleges in 1976, and the data used in the Nickerson et al.'s study were collected from 1995 to 1997. Although strong valuation on financial success in general predicted lower overall life satisfaction, the negative relationship between the importance of financial achievement and life satisfaction diminished as individuals' personal income increased. This interaction between financial goals and earned income in predicting life satisfaction held up after controlling for parental income and individuals' happiness. Looking into the relationship between financial goals and satisfaction in specific life domains, emphasis on financial success did not predict individuals' satisfaction with their housing condition, nonworking activities, and family life; the interaction between valuation on financial success and personal earnings appeared again in estimating satisfaction with friendship, job, and health, in which the relationship between financial goals and domain-specific satisfaction was more pronounced among individuals with lower personal income than their more well-off counterparts.

Based on the results, Nickerson et al. seconded the conclusion of La Berbera and Gürhan's (1997) study. Specifically, they argued that the possible psychological implications of materialism might not be as detrimental as previous research had suggested. That is, any life dissatisfaction that materialism induces might vary across members of different demographic groups. However, as Nickerson and colleagues also admitted, the findings from the College and Beyond study still have to be interpreted with caution, since it only included individuals from elite institutions who came from middle-class or affluent families with educated parents. Participants of the College and Beyond survey overall were also financially well-off themselves, so that it is possible that they in general had higher life satisfaction than individuals who were not as successful. The characteristics of College and Beyond survey participants therefore might limit the generalizability of the results of the Nickerson et al. study. In addition, as in many other studies that used secondary databases, Nickerson and colleagues were constrained with having only one question to measure financial goals. In the study, participants rated on a 4-point scale (1 = not important, 2 = somewhat important, 3 = very important, 4 = essential) "the importance to you personally of being very well off financially" (Nickerson et al., 2003, p. 532).

While some researchers have challenged the claim regarding the pervasive "effects" of materialism, several other researchers have contended that the lower psychological well-being associated with materialism should be attributed to the underlying motives for acquiring and accumulating material goods (Carver & Baird, 1998; Csikszentmihaly & Rochberg-Halton, 1981; Srivastava, Locke, & Bartol, 2001). For example, Csikszentmihalyi and Rochberg-Halton (1981) proposed two kinds of

materialism: instrumental and terminal. Instrumental materialism refers to the importance of wealth that one holds in order to achieve other personal goals in life, while terminal materialism refers to wanting to have more possessions for the sake of acquiring wealth itself. According to Csikszentmihalyi and Rochberg-Halton, materialism becomes dangerous only when it has no other purpose beyond wanting to possess more goods itself (see Richins & Dawson, 1987 for a critique of the concepts of instrumental and terminal materialism).

Responding to the aforementioned Kasser and Ryan study's (1993) results – that relative high valuation of financial aspiration predicted lesser psychological well-being – Carver and Baird (1998) argued that the underlying reasons for pursuing financial goals are more important than the aspiration itself. Studying open-ended responses from student samples, Carver and Baird identified two groups of reasons for wanting to be financially successful: intrinsic reasons, such as “because it would be satisfying to have a job that pays well” (p. 291) and external-induced reason, for example “because it will make my family proud of me” (p. 291). The analysis of the association between the relative importance of financial aspirations and self-actualization provided partial support for Carver and Baird's argument: extrinsically induced reasons for financial success, such as to make family proud, to gain respect from others, to fulfill what is socially accepted, were negatively correlated with a sense of self-actualization. Conversely, intrinsically-identified reasons for pursuing financial goals predicted a stronger sense of self-actualization. However, when the two groups of underlying reasons were combined in order to form a measure of general financial aspiration, the negative relationship between financial goal and self-actualization that emerged in Kasser and Ryan's study reappeared.

Regarding these conflicting results, Carver and Baird posited that putting the importance of financial success over other types of achievement in life indeed may come at the cost of psychological well-being, but it is also important to explore and examine the range of underpinning reasons for pursuing financial goals.

Srivastava et al. (2001) conducted a study that also explored the types of motivation that drive individuals to strive for financial success more than for accomplishment in other domains of life and their associations with psychological well-being. Consistent with results from Kasser and Ryan, greater importance placed on money predicted lower subjective well-being; however, there was no relationship between wanting more money itself with psychological well-being. Among the three categories of motivation that drive individuals to pursue financial goals generated from a factor analysis that the researchers conducted – positive motive, negative motive, and freedom of actions – it was negative motives (e.g., wanting to feel superior to others, overcoming self-doubt resulting from the pressure of others) that correlated with lower subjective well-being. On the contrary, what were defined as positive motives (e.g., meeting life necessities, using money as a measure for self-achievement) predicted higher subjective well-being, while freedom of action motives (e.g., having money to give to charity, being able to splurge in consumption, being able to do anything one wants) yielded no correlation with individuals' reported psychological well-being. In addition, negative motives were also the only underlying drive associated with emphasis on financial success; positive and freedom of action motives did not predict relative financial aspiration. Having these results hold among students and entrepreneur participants alike, Srivastava and colleagues contended that putting importance on financial success itself,

even when it is relative to success in other domains of life, is not harmful. Instead, one should be cautious of the reasons that make financial success salient. Specifically, individuals whose reasons for prioritizing financial success reflect a lack of the virtue of self-autonomy are more likely to have their subjective well-being compromised.

Sirgy and associates (2013) contended that not all materialists are “vulnerable” to life dissatisfaction. Instead, materialism is detrimental to life satisfaction only if individuals assess their current standard of living based on unrealistic expectations – aspiring towards “the ideal life” without factoring in its attainability, which would make one get “fixated” on assessing their satisfaction with current standard of living, which in turn would lead them to lower life satisfaction. On the contrary, those who evaluate their livelihood using “ability-based” references (e.g., education, skills), which according to Sirgy and colleagues is more realistic, would be more likely to attain their expectation, which in turn would lead to a better life satisfaction. Sirgy and colleagues subsequently tested the aforementioned associations among materialism, evaluation of standard of living, and life satisfaction. Using clustered probability samples from seven major cities each in Australia, Bosnia/Herzegovina, Germany, Egypt, South Korea, Turkey, and the USA, the researchers found support for their hypotheses. That is, although materialistic individuals in general are more likely to engage in the assessment of their standard of living, only those with unrealistic expectations tended to report lower life satisfaction. Individuals who based their aspiration on their merit tended to have their materialism fuel efforts to improve their livelihoods, and were more likely to report higher life satisfaction.

Based on the model and their finding, the researchers recommended that policymakers reinforce a meritocratic system, where individuals are assessed based on achievements and ability as opposed to factors that are ascribed to individuals such as family connection. This recommendation, while appealing, is arguably challenging to implement. In the United States, where the notion of meritocracy is ingrained in the society (Hanson & Zogby, 2010), there is evidence that suggests that in reality, the role of historical factors, such as parents' socioeconomic status, that lie beyond one's control cannot be dismissed too quickly. For example, Lee and Solon (2009) found a positive and significant role of intergenerational transfer of wealth in predicting individuals' socioeconomic status, which illustrates the leverage that individuals with high socioeconomic origins enjoy.

In summary, studies show that materialism and overemphasis on financial success might come at the cost of one's subjective well-being. However, scholars differ on whether the desire to be financially well-off would bring the same consequences to individuals across different demographic attributes. In other words, researchers differ on whose subjective well-being is actually vulnerable from the "excessive desire" to own material possessions or to be financially successful. In addition, researchers have also proposed different arguments regarding whether it is the relative importance placed on financial success or the motivations behind it that is psychologically more detrimental to individuals. Therefore, based on the scholarly contentions on the possible negative consequences of materialism on individuals' well-being, it is important to take into account demographic variables, such as education and income, in the model.

2.5 The Role of Family in Promoting Materialism

Research in psychology and consumer behavior suggests that the family plays an important role in the acquisition and development of materialism. In general, existing studies suggest the passing of materialism from parents to children through modeling and/or the abrasion of children's self-esteem (also see Giddens, Aitken Schermer, & Vernon, 2008 for the presence of genetic factors in the acquisition of materialism). Subsequent to the aforementioned Kasser and Ryan (1993) study, which evidenced that high valuation of financial achievement – relative to self-acceptance, community belongingness, and affiliation with others – is associated with lower self-reported well-being, Kasser, Ryan, Zax, and Sameroff (1995) investigated the possibility of family as one of the environmental factors that may contribute to adolescents' high orientation of financial success. Assessing 140 18-year-olds and their mothers in Rochester, New York, Kasser and colleagues found mother-child consistency of personal values configuration. Children whose mothers reported a strong preference for financial success over self-acceptance were inclined to mirror their mothers' high valuation on financial accomplishment, which suggests the presence of mother-child value transmission. The researchers also found that mothers who valued financial success more highly than self-acceptance were less nurturing than those who did not show such preference. Additionally, a strong orientation towards financial success relative to accomplishments in other areas was more pronounced among mother-child pairs who came from less advantaged socioeconomic backgrounds.

Based on the results, Kasser and colleagues inferred three paths to the adoption of material values. First, children might acquire material values by emulating what their

parents believe and appreciate; material parents would convey the importance of possessions and wealth in life to their children, who in turn would embrace the value to guide their own lives. Second, parents can indirectly instill materialism by failing to provide a non-supportive environment that makes children turn to material success as an alternative source for their sense of self-worth. Finally, taking socioeconomic status as a macro-environmental factor into account, Kasser et al. argued that economic deprivation might also contribute to the acquisition of materialism. Since economic disadvantage creates a feeling of insecurity, financial success as a tangible external reward might serve to “reinstate” the sense of self-worth, which might come at a cost of overlooking the values and importance of prosocial values and non-material individual growth.

A study conducted by Flouri (1999) in the U.K. yielded results similar to the findings in Kasser et al.’s study. In Flouri’s study, which involved college students aged 16 to 23 years, higher levels of materialism were found among youths who had materialistic mothers, which indicates the evidence for parent-child value identification and perhaps, value transmission. Additionally, youths with high material values tended to express discontentment with their mothers, which supports Kasser et al.’s argument on the role of non-supportive environments for the development of children’s material values.

In a U.S. national study involving children and adolescents age 9 to 14 that examined youth materialistic values and their implications in family contexts, Goldberg, Gorn, Peracchio, and Bamosi (2003) found that highly materialistic adolescents tended to have materialistic parents. Children and teenagers who reported high material values also tended to come from families with low socioeconomic status, which is consistent with

Kasser et al.'s (1995) aforementioned result in their study on mother's materialism and financial aspirations among children from economically struggling families. In addition, highly materialistic children in general also had a stronger influence on family purchase decisions and were perceived as product experts by their parents. Another U.S.-based study yielded a negative association between having father as a role model and adolescents' materialism, controlling for the gender, age, and race of the children (Clark, Martin, & Bush, 2001), which suggests that parents might not only promote children's materialism but can also play a role in inhibiting their children's acquisition of material values.

As mentioned, children might adopt materialism when the environment – including family – where they live in does not provide enough support for their sense of security and/or self-worth. Flouri (2004) conducted a study among 2218 secondary school students in the U.K. to examine the relationship between parents' involvement, inter-parental conflict, and materialism. The results of the study showed no significant relationship between child-reported father's or mother's involvement and materialism; however, an interaction between child's perception of parenting and peer support in predicting materialism was found. More specifically, children who perceived a lack of parental involvement and peer support were more likely to report a stronger belief in and preference for material goods. In addition, although family structure – living in a one or two-parent household – was not correlated with childhood materialism, children who reported more frequent inter-parental conflicts tended to report higher material values for themselves. Flouri admitted that the mechanism of how parental involvement and inter-parental conflict might lead to higher childhood materialism was left unexamined in the

study. However, drawing from previous work on materialism, one may argue that lack of parental involvement and father-mother conflict might threaten the child's sense of security, which then leads the child to adopt material values to reinstate the low sense of security and/or self-esteem.

Chaplin and John (2010) further explored the role of child's self-esteem in parent-child transmission of materialism. Building on previous work on the relationship between self-esteem and materialism, which suggests that individuals use material possessions to compensate for low self-esteem (Chang & Arkin, 2002; Chaplin & John, 2007; Richins & Dawson, 1992), the researchers demonstrated the role of self-esteem in explaining how the family may instill or perpetuate childhood materialism. According to Chaplin and John (2010), parents' overemphasis on material ownership might convey a message to their children that an individual's worth can be assessed through the quantity of material goods s/he acquires or owns. This communicated importance of wealth would erode children's self-esteem, which consequently would lead children to adopt material values to compensate for their low self-esteem. In other words, according to the study, a child's self-esteem serves as a mediator that explains how parents' materialism "trickles down" to their children. Through their study, Chaplin and John (2010) demonstrated that overall parental support was positively associated with the child's self-esteem, which in turn predicted the child's materialism, where higher self-esteem predicted lower materialism.

To summarize, existing work suggest three possible mechanisms of how the family plays its role in children's acquisition of materialism. First, children might embrace materialism through parent-child value transmission. Parents who put ownership and acquisition of material goods highly in their value system would introduce it to their

children, who in turn will emulate and adopt it to their personal value sets. Second, family might “catalyze” children’s development of materialism by not providing nurturing relationship with children, which leads children to turn to material goods to secure their self-esteem. The third route combines the aforementioned two possible mechanisms: parents with high material values tend to constantly communicate the importance of material possessions for one’s self-worth to their children. The incessant association conveyed to the children would send a message that one’s self-worth, including their own, is contingent upon wealth and money. This false association would in turn hurt the children’s self-esteem, and children eventually would pick up material values as a way to cope with their low sense of self-worth. Additionally, family socioeconomic status may moderate the role of parents in children’s acquisition of material value. Economic deprivation may increase the likelihood of the acquisition of material values as a “coping strategy” to restore or generate a sense of security that is lacking due to the day-to-day struggle that low-SES families face in order to make ends meet.

2.6 Materialism, Family, and the Media

The role of the family as an agent of socialization of values has also been analyzed in conjunction with other environmental factors including mass media, which themselves have long received attention from scholars for their role in promoting materialism among children and youth. In this line of research, the family is often situated on its function of mitigating the potential negative effects of media messages on children. Additionally, in general, studies of materialism that investigate the concurrent

role of family and media have been driven by concerns regarding the pervasiveness of advertising as a type of media message. Therefore, the dynamic among media (i.e., commercial messages), family, and children is situated in the context of consumer socialization. This line of research started with examinations of testing the competing or complementary role of family and media as sources of consumer information for children (e.g., Churchill & Moschis, 1979; John, 1999; Wackman & Ward, 1971; Ward, 1974) and later on looked into the efficacy of parental mediation in reducing the effects of children's media consumption, specifically advertising exposure, on children's purchase intents, attitudes toward advertisements, and materialism (Buijzen & Valkenburg, 2005).

The role of parents as a source of information for children and adolescents' economic decisions has been noted since the 1950s (Parsons & Bales, 1956; Riesman & Roseborough, 1955), and started to obtain supporting empirical evidence in the 1970s (e.g., Churchill & Moschis, 1979; Moore & Stephens, 1975; Wackman, Wartella, & Ward, 1977). Findings from more contemporary research also evidence the impact parental perceptions and attitudes have on child and adolescent consumer behavior (Bush, Martin, & Clark, 2001; Carlson, Grossbart, & Walsh, 1990; Carlson, Walsh, Laczniak, & Grossbart, 1994; Moschis, 1985). For example, parents may directly affect their children's brand and store preferences and their skills in approaching and interpreting advertisements, as well as teaching children the motivations for consumption. Furthermore, parents might also provide "consumer training" for their children through enacting parent-child conversation about consumption and giving positive reinforcements for certain consumer behavior, as well as providing opportunity for vicarious learning so that children can model parents' consumer values and behaviors.

However, the influence of parents may come in a less direct manner. Instead of engaging in overt consumption behaviors such as shopping or talking about consumer goods, parents can affect their children's consumer values through childrearing style. Moore and Moschis (1981) found that parents with a "socio-orientation" communication style (p. 43), which encourages obedience and harmonious parent-child conversation as opposed to facilitating children to develop their own worldview (which is referred as "concept-orientation" communication style), were more likely to watch television and reported higher levels of materialism. Further analysis showed that children from socio-oriented families also used television as a source of knowledge to learn socially desirable consumer behaviors, such as to find out which products had good quality or to learn what products could make a good impression upon other people. Families with a socio-orientation family communication style were more reliant on television to build a wide range of activities, from keeping time, to starting conversations, even to social learning (Lull, 1980). In other words, families that emphasize conformity to other people's expectations as opposed to developing a sense of self-autonomy might inadvertently promote the adoption of material values among their children. Among those socio-oriented families, media serve as an agent that socializes acceptable consumer values and behaviors, including materialism.

The role of parents is not limited to being a "midpoint" between children and media, or "policing" children's media consumption and reducing the negative effects of media messages. Sometimes children's exposure to media messages, particularly advertisements, can also put parents in an odd position, which then would inflict parent-child disagreement on the child's consumption intent (Buijzen & Valkenburg, 2003a,

2003b; for a review of the state of research on family, children, and the unintended effects of advertising, see Buijzen & Valkenburg, 2003a). For example, a study in the Netherlands that involved 360 parent-child dyads showed that advertising exposure was positively associated with children's materialism, which in turn predicted more frequent parent-child conflict (Buijzen & Valkenburg, 2003b). The association between materialism and parent-child conflict might also emerge indirectly through a higher frequency of child's purchase requests. Children who had higher exposure to advertising tended to ask their parents for the promoted products, which when turned down would prompt parent-child conflict. Additionally, the relationship between children's purchases and parent-child family friction was more pronounced among participants from lower socioeconomic backgrounds. Consistent with previous studies on family communication and advertisement-induced materialism, Buijzen and Valkenburg also found the role of parental mediation in mitigating the association between advertising exposure and materialism. Although advertising exposure still significantly predicts children's materialism, the relationship was weaker among families with stronger active parental mediation (e.g., highlighting that the primary purpose of advertising is selling products, or pointing out that advertising does not always tell the truth).

Subsequent research on the effectiveness of parental mediation suggests that compared to totally curbing children's exposure to advertisements, talking with children about advertising and making comments or critiques when seeing commercials with children is more effective in reducing materialism, intention to purchase, and parent-child conflict (Buijzen & Valkenburg, 2005). Additionally, Buijzen and Valkenburg's study (2005) also yielded some evidence that preference towards obedience and harmony over

autonomy might lead to higher child materialism, intent to purchase, and parent-child conflict, which reinforces what Moore and Moschis (1981) found in their study.

As mentioned, most research that has examined the relationship between media consumption and materialism in family contexts has been particularly driven by scholarly concerns regarding the negative effects of media messages on children. As of today, there are only two studies that have taken parents' media exposure and materialism into account. In their study on parental third-person perceptions, Meirick et al. (2009) tested whether parents' materialism predicted the perceived effects of television on their own children and other people's children. Drawing from the premise of the third-person perception theory which posits that individuals tend to think they would be more likely to get influenced by messages they favor, the researchers originally proposed that materialistic parents would perceive that their own children are more easily influenced by commercial messages compared to other children, since advertising ultimately promotes ownership of material goods. Consistent with the third-person perception theory, parents in general perceived other people's children to be more vulnerable to watching television and its commercial content. However, the researchers did not find the expected relationship between parents' materialism and perception of how easily influenced children are – their own or children from other families – by television content.

Meirick et al.'s study is one of a very few that incorporated parents' own materialism in studying material values in family contexts. However, in formulating the expected relationship between parents' materialism and their perception of how persuadable their children are by ads, the researchers seem to have overlooked the idea that advertising in general is not a favorable media genre; people in general would guard

themselves from getting persuaded by commercial messages. In other words, one should be careful not to conflate materialism with vulnerability from commercial messages. Furthermore, while people with high material values might embrace their pride for their possessions, they might not easily admit advertisements' influence on themselves or their children. In fact, studies have found positive relationships between materialism and self-monitoring or need for approval (Chan & Prendergrast, 2007; Rose & DeJesus, 2007), which actually would predispose them to perceive, or at least report, themselves (and their children) as less vulnerable to promotional messages.

Chia (2010) tested the role of parents' and peers' advertising exposure in promoting materialism among Singaporean adolescents. Using adolescents' perceptions of their parents' and peers' exposure to commercials in lieu of the direct measurement for the actual advertisement viewing, the researcher found that parents' materialism itself was positively correlated with their children's materialism. However, the hypothesized relationship between parents' advertisement exposure and materialism did not emerge. Chia's work solely focused on advertising exposure, as opposed to different kinds of media messages. While advertising is a genre of media content that explicitly encourages consumption, depictions of affluence and opulent lifestyles appear in various types of media content. Moreover, one may raise a question of whether it is possible to isolate exposure to advertising to media exposure in general.

In summary, previous research illustrates that parents play an important role of socializing consumer values to their children. Research also suggests that parents can mediate then mitigate the effects of media, but the communication structure among family members can also perpetuate the undesired consequences of exposure to media

messages, including the adoption of material values among children and adolescents. However, there is as yet no empirical study that investigates where parents learn materialistic values, and whether it translates into what a value that their children also embrace. If children are prone to learning material values from media, how about parents? This current study attempts to examine how parents' television viewing cultivates their materialism and life satisfaction, and turn predicts their children's materialism, life satisfaction, and financial aspiration. The study will use cultivation theory as a guiding framework, which will be discussed in the following chapter.

CHAPTER 3

CULTIVATION THEORY: CONCEPTS, CRITIQUES, AND RESEARCH ON MATERIALISM AND FAMILIES

3.1 Premise and Assumptions in Cultivation Theory

Cultivation theory posits that individuals who spend a great deal of time watching television tend to view the social world in resemblance with television stories. Founded by George Gerbner in the 1970s, cultivation theory focuses on individuals' lifetime immersion in television stories as opposed to examining the short-term effect of specific content on individuals' behavior. In cultivation, the wide penetration of television makes the medium not merely a source of information and entertainment that delivers pieces of messages but instead "the central cultural arm of American society," and thus should be studied as "a force for enculturation" (Gerbner & Gross, 1976, p. 175). Being the storyteller of contemporary society that disseminates, teaches, and preserves societal norms and values, television holds a similar role to other cultural institutions such as family, school, and religion (Morgan, 2009; Morgan, Shanahan, & Signorielli, 2009; Shanahan & Morgan, 1999). Through images and storylines that appear in various genres of programming, television constructs and perpetuates narratives that in turn become pertinent to the psyche of a society.

The development of cultivation theory was initiated with message system analysis, which began to examine the content of U.S. television programming in the late 1960s to early 1970s. This systematic, large-scale content analysis reflected Gerbner's observation and concern with the commercial nature of the U.S. broadcasting landscape with its profit-generating motive that serves the economic elites in the country (Gerbner

& Gross, 1976; Shanahan & Morgan, 1999). Investigating the prevalence of violence in media content, Gerbner noted that the “demography” of the television world was heavily distorted from real-world facts. For example, leading characters in television stories were more likely to be American affluent males than females or persons of color. Unlike male characters, female characters were less “versatile” and more frequently depicted as vulnerable individuals and appeared mostly within storylines that involve family, romantic, or sexual relationships.

Furthermore, Gerbner’s message system analysis also found that violence – although operationally limited to physical violence – did not exclusively belong to programming such as action series. In fact, in the aggregate, violent acts appeared more frequently in weekend children’s programming than in family hour and late-night time slots (Gerbner & Gross, 1976; Gerbner, Gross, Eleey, Jackson-Beeck, Jeffries-Fox, & Signorielli, 1977; Gerbner, Gross, Jackson- Beeck, Jeffries-Fox, & Signorielli, 1978; Gerbner, Gross, Signorielli, Morgan, & Jackson-Beeck, 1979). Gerbner recognized the commercial aspect of media violence that may explain why aggressive behaviors appear frequently in television entertainment programming. Violence is arguably a low-cost and effective element to be added to a story for creating instant dramatic effect that makes the story or programming more interesting and exciting. Pointing out the reliance of U.S. broadcast industry on the commercial enterprise, especially advertisements, cultivation disputes the idea that violence is prevalent in U.S. television is due to audiences’ preferences (Gerbner & Gross; 1976; Shanahan & Morgan, 1999). Instead, taking the same stance as scholars in political economy of communication, Gerbner contended that the programming is not the commodity of U.S. television industry. It is true that

television producers have to create programs that attract and hold audiences' attention; however, viewership eventually serves more as an intermediary for generating advertising revenue. That is, appealing to a substantial number and/or niche of audiences is crucial to providing an incentive for corporate America to air advertisements during television programming. In other words, instead of "selling" programming to audiences, television ultimately sells audience to advertisers. Furthermore, in the global media industry, violence, especially physical violence, is translatable across different cultures, making global syndication of television programming easier, which in turn generates additional, or even larger profit for the television industry.

In regard to the argument over the possible detrimental role of media violence in society, cultivation diverges from the notion of modeling or imitation of aggressive behaviors. Classic social learning theory predicts that exposure to violent media content would increase the likelihood of reproducing the aggressive behavior in the real world (Bandura, 1977) or affect how individuals would be desensitized to violence (Lazarus & Alfert, 1964). Somewhat contrary, Gerbner and Gross (1976) contended that what most people primarily "learn" from "witnessing" violence acts committed in television is not how aggression can be a rewarding instrument to solve a problem or accomplish a mission. Instead, frequent exposure to violent stories would rather facilitate a perception that the world is a dangerous place, that one cannot be too careful in dealing with others, and that people in general would try to look out for themselves and take advantage of others in interpersonal relationships. Through the aforementioned message system analysis, Gerbner found that victims consistently outnumbered perpetrators in television stories. Additionally, "villains" are often portrayed as having certain, or peculiar,

characteristics, whereas targets are usually depicted as average individuals, to whom most audiences are more likely to identify themselves with (Shanahan & Morgan, 1999). Therefore, instead of “learning” how to become perpetrators of crime in the real world, people are more likely to position themselves as the likely targets of aggression or crime. This premise was subsequently supported through a series of studies examining the association between television viewing and perceptions about violence. Individuals who spend a great deal of time watching television, or heavy viewers, tend to be concerned that they constantly face dangers from other people and report stronger needs to take precautionary acts to protect themselves (Gerbner & Gross, 1976; Gerbner et al., 1977; Gerbner et al., 1978; Gerbner et al., 1979). This adoption of the idea about the grim and scary social world was later on referred as “the mean world syndrome” (Gerbner, Gross, Morgan, & Signorielli, 1980, p. 17), which then became a “landmark” in the initial development of cultivation theory.

In the 1980s, cultivation underwent further development with the conceptualization of the “mainstreaming” and “resonance” patterns of cultivation (Gerbner et al., 1980, p. 15). Both mainstreaming and resonance are interactions between television viewing and demographic attributes in predicting individuals’ worldviews. “Mainstreaming” refers to a pattern where the difference among individuals from different demographic groups (e.g., low versus high educational attainment, conservative versus liberal political views) diminishes among heavy viewers. In other words, unlike light viewers, among whom the difference of perceptions or attitudes reflects people’s social origins, heavy viewers tend toward similarity in their worldview regardless of their demographic background. In contrast, resonance occurs when individuals live in an

environment that poses conditions that resemble what they see in television stories. That is, the consistency between television messages and real-world situation “boosts” the cultivation of television stories. For example, an individual who is a heavy viewer *and* lives in a neighborhood that has a high crime rate would be more likely to report higher estimates of crime than a heavy viewer who lives in a safer neighborhood, due to the real potential danger the environment poses in addition to the cultivation from television stories.

Initially developed for examining the prevalence of violence in television programming and the association between exposure to violent content and individuals’ perception of the world, cultivation theory has been used in various research topics ranging from television and gender roles (Signorielli, 1989), to the environment and science (Brossard & Shanahan, 2003; Good, 2007; Shanahan, Morgan, & Stenbjerre, 1997), to racial attitudes (Ramasubramanian, 2010, 2011), and also materialism (e.g., O’Guinn & Shrum, 1997; Shrum, O’Guinn, & Wyer, 1998; Yang & Oliver, 2010). Today, cultivation has become not only a major but also one of the most influential communication theories (Bryant & Miron, 2004; Neumann & Guggenheim, 2010).

3.2 Critiques of Cultivation

Throughout its development, cultivation has also received criticisms, some of which culminated in acrimonious debates of Gerbner and his colleagues versus scholars who raised their objections regarding the assumptions and/or findings of cultivation research that were generated in the 1980s and 1990s. In his “humanistic critique” of cultivation, Newcomb (1978) argued that cultivation theory had overlooked the notion of

media texts' polysemy. According to Newcomb, cultivation theory should take into account the possible different interpretations of television stories – violence, which was the main focus of cultivation research in the 1970s – that audience members might come up with. In other words, Newcomb questioned whether television stories eventually conveyed the same message to all viewers, considering that a single message can always be read in various directions. Related to his concern regarding the exclusion of audiences' idiosyncratic interpretations, Newcomb also criticized cultivation's tradition of solely employing quantitative methods, which by their nature, will only capture a general picture of the relationship between television viewing and audiences' perceptions and attitudes. Responding to Newcomb's critique, Gerbner and Gross (1979) agreed that audience members might differ in their interpretations of a television message, yet the notion of personal reading of television stories does not invalidate the possibility of common interpretation among audiences. From a methodological standpoint, the fact that the correlation coefficients yielded in cultivation research, which tend to be significant but rather small – around .10 according to the meta-analysis of cultivation research (Morgan & Shanahan, 1997) – implied that audiences might engage in different readings of television messages (Shanahan & Morgan, 1999).

Failing to replicate the relationship between television viewing and perceptions of violence among British audiences, Wober (1978; Wober & Gunter, 1982) attributed the findings of his study to two possibilities: first, while cultivation may be useful in explaining the role of television in U.S. society, the theory might not apply in the U.K. context. Second, the lack of supporting evidence in his research also brought up Wober's question on the robustness of cultivation theory. In their response to the critique, Gerbner

et al. (1979) argued that the lack of evidence of cultivation in Wober's study might result from the different method he used in measuring the prevalence of violence in television content as well as in measuring people's perception about the likelihood of being victimized in the real world. Furthermore, the difference between U.S. and U.K media systems might have also contributed to the inability to reproduce Gerbner and Gross' U.S.-based study results in the U.K. (Shanahan & Morgan, 1999). In the 1970s, contrary to the commercially-funded U.S. television industry, U.K. television operated under the country's public-funded broadcasting system, which arguably allowed for more diversity in its programming (Shanahan & Morgan, 1999), and provided more room for viewing less violent television content (Pingree & Hawkins, 1981).

Around the same time, Doob and MacDonald (1979) attempted to replicate cultivation research on individuals' perception of crime. Conducting survey in four areas in Toronto, Canada – urban and suburban areas each with high and low crime rates – Doob and MacDonald tested the association between television viewing and individuals' fear of crime. The researchers found a small but significant correlation in the pooled sample ($r = .18, p < .001, n = 300$); however, breaking down the sample into four groups based on areas of residence and crime rate, the positive correlation between television viewing and fear of crime only appeared among individuals who lived in urban areas with high crime rate. This finding led Doob and MacDonald to come up with a plausible alternate explanation that would refute the premise of cultivation. Doob and MacDonald contended that the findings in cultivation research conducted by Gerbner and Gross (1976) might have been spurious in nature. Doob and MacDonald's critique, while based on a methodologically weak approach, since dividing the total sample into four groups

would reduce the statistical power within each group, as well as their decision to include correlation coefficients that were obtained from averaging the coefficients from the four neighborhoods, contributed to the advancement of cultivation. Specifically, the aforementioned concepts of mainstreaming and resonance patterns were conceptualized subsequent to the publication of Doob and MacDonald's study. This result of Toronto research to some extent fueled Gerbner's team to develop the aforementioned concept of "resonance": the positive association between television viewing and perception of crime among Toronto urban dwellers illustrated how television might have "augmented" the fear of crime that was already prevalent among individuals who reside in a big city with high crime rate (Shanahan & Morgan, 1999).

Subsequent critiques of cultivation theory pertained to the measurement method employed in the theory that became the basis to validate the premise and assumption of cultivation. Among documented criticisms on cultivation, the most heated debate regarding the theory was the exchanges between Gerbner and associates and Michael Hughes and Paul Hirsch in the 1980s. In a series of critiques based on reanalyses of Gerbner and colleagues' data (Hirsch, 1980a, 1980b, 1981a, 1981b; Hughes, 1980), both Hirsch and Hughes argued that the relationships between television viewing and individuals' inaccurate perceptions about the world yielded in the studies conducted by Gerbner's team were spurious due to the lack of rigor in the analyses due to not imposing control variables simultaneously through multiple regression. In addition, critiques of cultivation also raised a question of the possibility for non-linear pattern of cultivation (e.g., Potter, 1991, 1993). The critiques that were addressed to cultivation theory were not without merit, as the analytical techniques employed in cultivation research at that time

were indeed not as refined; numerous contemporary works on cultivation that are conducted with more advanced statistical analyses have demonstrated the robustness of the theory. In many cases, the relationship between television viewing and individuals' perception and attitudes remains, whether the association is direct or indirect or mediated through other variables. In sum, the critiques of cultivation theory, although they sparked some acrimonious arguments among media effects scholars, have also contributed to the advancement and refinement of the theory (Shanahan & Morgan, 1999).

3.3 The psychological mechanism of cultivation

As cultivation theory developed, media scholars also inquired into the psychological process of cultivation. Investigation on *how* cultivation actually works can be traced back to Hawkins and Pingree's (1982, p. 244) concepts of "demographic" and "value-system" measures, which later on were referred by Gerbner and associates as "first-order" and "second-order" cultivation, respectively. While Gerbner himself was not interested in examining the underlying cognitive process of cultivation, based on the assertion that the process of learning from television should not differ from learning from other environmental stimuli (Morgan, 2012; Morgan, Shanahan, & Signorielli, 2012), Hawkins, Pingree, and Adler (1987) contended that knowledge about the cognitive mechanisms of cultivation would only refine and enhance the validity of the theory. Several possible cognitive mechanisms were proposed and tested not only to illuminate how heavy viewers acquire beliefs and perceptions that resemble television stories, but also to address the critiques of cultivation theory that raised the question of how

cultivation can rule out the possibility of spuriousness or reversed causal relationships between television viewing and social perceptions, beliefs, and attitudes.

Mares (1996) proposed that the resemblance between individuals' perception about the social world and television stories might result from audience confusion in differentiating facts (e.g., news) from fiction as the source of information. Twenty-four clips containing specific events served as the stimuli in the experiment: 8 events came from news, 8 from movie trailers, and the remaining came from neither news nor movie trailers. The researcher created two sets of the 24 events, manipulating the similarity of the visual presentation between the news and fictional clips. Half of the participants were asked to identify the source of each event (news, movie trailer, neither, or "don't know") immediately after seeing the clips, and the remaining half were asked to do the same task one week later.

Consistent with the hypotheses, Mares found that visual similarity and time lapse contributed to individuals' source confusion. Participants who were exposed to news and movie trailer clips that were similar to each other were more likely to confuse factual from fictional events. Likewise, individuals who were tested one week later tended to commit more source confusion than those who were tested immediately after seeing the clips.

Participants' responses also suggested the role of source confusion in their approximation of social realities. More source confusion (i.e., more frequently mistaken factual from fictional events or vice versa) was associated with the overestimation of the likelihood of violence, and the overestimation on the proportion of individuals with high-status jobs. Similarly, source confusion also positively predicted mean-world belief.

Furthermore, the positive associations between fiction-to-news source confusion (i.e., incorrectly identified fictional event as factual) and the three aforementioned estimates of social reality were accentuated by individuals' confidence in their source identification. Among individuals who committed more source confusion, those who were confident with the accuracy of their identification were more likely report higher estimates of violence, high-status occupations, and stronger mean-world belief. In contrast, participants' certainty on their choice attenuated the news-to-fiction source confusion (i.e., incorrectly identified factual event as fiction). Within those who committed more source confusion, individuals who reported high certainty with their answers reported lower estimates of the three social realities compared to those who were uncertain with their responses. Based on the results, Mares argued that over time, the accumulation of television viewing would lead individuals to incorrectly identify the source of the information that they use as a reference, which results in distorted social reality judgments

Conducting a series of experiments, Shrum and colleagues proposed two different dominant mechanisms that each explains the primary cognitive process that happens in first and second-order cultivation (Shrum, 2009; Shrum & Lee, 2012). While Mares (1996) argued for source confusion as the underlying mechanism of first-order cultivation, which pertains to individuals' estimates of the prevalence of social phenomenon (e.g., the probability of being targeted in crime or the proportion of people who live affluently) in relation to the amount of time individuals spend watching television, Shrum and colleagues contended that first- order cultivation, takes place through the mechanism of a memory-based availability heuristic. Frequent exposure to

television stories would keep television's formulaic themes and storylines more salient therefore more accessible in heavy viewers' memory. Consequently, heavy viewers are more likely to retrieve television stories from their cognitions when they need to estimate the prevalence or likelihood of a phenomenon or incidence. In addition, a memory-based heuristic is arguably the predominant cognitive mechanism in first-order cultivation because individuals would only come up with estimates when they are asked to appraise certain phenomena. In order to come up with an estimate, individuals would look for exemplars in their memory, and make their assessment based on those exemplars.

Contrary to first-order cultivation, second-order cultivation, or the relationship between television viewing and individuals' social beliefs, attitudes, and opinions (as opposed to estimation of the prevalence of a social phenomenon) occurs predominantly through online processing (Shrum, 2004, 2009; Shrum & Lee, 2012; Shrum, Lee, Burroughs, & Rindfleisch, 2011). In online processing, information is processed at the same time as an individual faces a stimulus (Hastie & Park, 1986). In the context of cultivation, unlike first-order cultivation, where one's judgment about the social world – in the form of estimates – is formed only when the assessment of the prevalence of a certain social incidence is elicited, second-order cultivation takes place *during* television watching itself. In other words, as an individual receives television messages, s/he also forms certain social attitudes and beliefs. Shrum (2004, but see also Shrum, 1999) argued the role of memory in the mechanism of second-order cultivation is significantly smaller or even disappears, since individuals form their judgment (i.e., beliefs, values, or attitudes) based on what they see at that moment. As Shrum (2004) phrased it, in second-order cultivation individuals “will typically recall their previously formed, on-line

judgment and report it, rather than re-computing their judgment” (p. 330). That is, as an individual watches television programming, s/he would form certain social beliefs and/or attitudes that are informed by what s/he sees on television.

Since in the content of television programming certain kinds of portrayals are more dominant than others, more time spent watching television would reinforce social beliefs and attitudes that are consistent with television stories. Shrum et al. (2011) argued that first-order cultivation is more likely to happen in a research or lab setting (since it is rare in the real world for someone to be asked to have to make a prevalence approximation of social issues) or when individuals are faced with specific goals in mind to accomplish. On the other hand, second-order cultivation is more likely to occur in people’s daily lives in the forms of attitudes and values. Shrum et al. (2011) argued that while watching television, individuals would engage cognitively and emotionally with the narrative conveyed in the television story they are watching. This “absorption” into the world depicted in television would facilitate second-order cultivation, which pertains to the formation of attitudes, values, impression formation, and stereotypes. In relation to the current study, therefore, the cultivation of materialism is an example of second-order cultivation. Although this study does not focus on the examination on the underpinning cognitive and/or emotional mechanism of the cultivation of materialism, drawing from Shrum and colleague’s works, the cultivation of the value might take place through individuals’ engagement with the positive associations among wealth, affluent lifestyles, and happiness that appear in television stories.

3.4 Overall versus Genre-specific Cultivation

Hawkins and Pingree's (1981) argument on whether cultivation "effects" vary across exposure to different types of television programming initiated the discussions on overall versus genre-based television viewing that still stands today. Challenging cultivation's assumption of the homogeneity of depictions and messages across genres, Hawkins and Pingree contended that the amount of violence might differ across genres. In addition, Hawkins and Pingree also opened the discussion on the validity of cultivation's assumption that watching television is a nonselective and habitual activity; they argued that it is possible for an individual to become a heavy viewer of only a certain show (e.g., soap opera) that had less violence, and therefore he/she might be less "prone" to the cultivation of fear and perception of insecurity. The findings in Hawkins and Pingree's study suggest that some television programming, such as crime adventures, game shows, cartoons, and drama, might have more "contribution" than other types of programming (e.g., news, sports, or documentaries) to people's perception of violence and their belief in the world as a mean world. Similarly, Potter and Chang (1990) contended that compared to overall television viewing, measuring overall time spent watching specific genres might serve as a more powerful measure for cultivation research. In a study that attempted to reassess the linearity assumption of cultivation (i.e., the more time a person spends watching television the more likely his/her social perception is consistent with television stories), Potter (1991) asked his respondents how much time they spent watching each of twelve different genres per week.

Gerbner refuted this idea of assessing the role of genres of television content instead of adhering to using overall daily television viewing in conducting cultivation

research (Morgan, 2009; Morgan, 2012; Morgan & Shanahan, 2010; Morgan, Shanahan, & Signorielli, 2009, 2012). Gerbner argued that the nonselective nature of television viewing makes heavy viewers spend a great deal of time across the board watching various kinds of television programming (Morgan, 2009, 2012). Furthermore, cultivation was intended to examine television as an institution with an “organic system of stories, in which different types of program complement each other in terms of settings, casting, social typing, actions, and outcomes” (Morgan, 2012, p.150), therefore overall television viewing should be used as the measure of exposure to television stories. In addition, the proliferation of cable channels and the Internet as the “new” new media does not negate the fact of U.S. broadcast system’s reliance on commercial enterprise which results in formulaic television content and messages (Morgan, 2009), a concern that generated the founding of cultivation in the first place. Therefore, from the point of view of “traditional” cultivation, studies that examine the relationship of genre-specific viewing and individuals’ views about the world do not belong to the cultivation tradition (Morgan & Shanahan, 2010). In addition, one may also raise the question on how particular a genre should be defined in genre-specific cultivation research. Should a researcher look into “television drama,” or should different types of television dramas (e.g., courtroom dramas, medical dramas, criminal investigation dramas) get more attention?

Nevertheless, despite the objection, numerous cultivation studies that focus on the role of specific genres of television programming have been conducted, for example examining the relationship between watching dramas, sitcoms, news, and the probability for different racial groups to achieve socioeconomic success (Busselle & Crandall, 2002), whether television drama cultivates the belief in a just world (Appel, 2008), and the

association between watching makeover surgery reality show and intentions to undergo cosmetic procedure (Nabi, 2009), to name a few. The presence of hundreds of television channels – as opposed to three network channels when cultivation was founded – due to the penetration of cable and satellite and Internet television into U.S. households has made cultivation’s classic non-selectivity assumption worth revisiting. In today’s media environment, it is possible for a person to become heavy viewer of one genre without exposing him/herself to other types of programming. Bilandzic and Busselle (2012) argued that genre is an important element of television programming worth further investigation because genre reflects what producers expect audience members to “read,” and on the opposite end, determines what audiences anticipate to find in terms of characters, settings, and plots. Furthermore, acknowledging that further theoretical explication of genre-based cultivation is still much needed, Bilandzic and Busselle assert that investigating the role of genre in predicting individuals’ perception is not inconsistent with the fundamental premise of cultivation:

Why do genre-specific studies not alter the basic cultivation logic? Any theory of genre-specific cultivation must provide a connection between the content and the audience’s world views. It is clear that cultivation is not a simple, unidirectional effect, but an interacting among exposure to content, effects, and repeated exposure fueled by effects. Nonetheless, there is an effects component. Considering this, genre-specific investigations only make the logic of research more specific; they do not fall outside of cultivation. (Bilandzic & Busselle, 2012, p. 280, emphasis in original)

In order to resolve the contentions over the “validity” of genre-based cultivation, conducting a systematic content analysis across channels and genres of programming seems to be the only way to test whether television programming still conveys a homogeneous overarching message. Additionally, it also becomes critical to empirically

assess audiences' genre-based television consumption in order to test whether heavy viewers today watch everything or pick specific genres in their television consumption. Those two research, while tedious and demanding, would be the only way to obtain empirical evidence for the homogeneity, or heterogeneity, of today's television content and viewing habits. Bilandzic and Busselle (2012) argued that quantitative content analysis might not be enough, since it would be difficult to analyze narrative, ideology, and/or grand messages, which calls for an innovative method for analyzing the content of television programming that combines quantitative and interpretive approaches. Empirical work on cultivation and specific genres of television programming has been conducted and will continue to receive attention from media scholars (see Morgan & Shanahan, 2010, also Morgan, Signorielli, & Shanahan, 2012 for reviews). At the same time, discussions on whether genre-based cultivation research is aligned with the premise and assumptions of the "original" cultivation theory also stand, which pose challenges for communication theorists and researchers to ponder on whether and/or how genre-specific viewing relates (or not) to individuals' overall television viewing.

In the context this study, one may argue that depictions of wealth can be seen in different genres of programming. However, there is also a possibility that certain types of television programming portray images of affluence more frequently than other kinds of programming do. Given the absence of empirical evidence of either homogeneity or heterogeneity of messages across genres, this study will include overall television viewing as well as several specific genres that have been examined in previous studies on materialism (e.g., Carlson, 1993; Yang & Oliver, 2010), such as primetime drama, sitcom/comedies, daytime soap opera, movie, music/celebrity shows, game shows, news,

sport, and reality shows. Including both overall television viewing and genres of programming will allow the examination of whether watching specific genre(s) cultivate materialism more strongly than other genres do.

3.5 Cultivation Research on Materialism

3.5.1 U.S.-based cultivation research on perception of affluence and materialism

Scholars have pointed out the prevalence of affluence and comfortable lifestyles in television stories across various types of programming. Individuals with white-collar jobs and high earnings are overrepresented while the lives of blue-collar individuals are rarely seen in the television world (e.g., DeFleur, 1964; Lichter, Lichter, & Rothman, 1994; Signorielli & Kahlenberg, 2001). The portrayal of affluence, which in real life can only be attained by a small fraction of individuals, can be seen a quick way to enhance excitement in a story in order to attract large numbers of viewers, whereas depicting the mundane aspects of life in media is not a cost-efficient strategy to utilize the expensive airtime (Richins, 1995). However, while idealized images of life might be appealing to audiences, they may also make individuals feel deficient about their own livelihoods, which, in turn, create an aspiration to possess more material goods in order to live the affluent lifestyles as depicted in media and therefore be happy (Richins, 1991, 1995).

The depictions of social class in television stories across genres and decades arguably also suggest a “justification” to evaluate people based on wealth and material possessions. For example, a content analysis of 60 hours prime-time network programs in the 1980’s revealed the prevalence of hard work, righteousness, and cleverness as an important element in more than 80 percent of the analyzed television stories (Selnow,

1986). Furthermore, it was also found that most problem-solving subplots involved characters who held white-collar jobs, and only 15 percent of television characters with blue-collar occupations in the stories were engaged in resolving the problem. Similarly, the stories of popular sitcoms in the early 1990's also suggest self-reliance and industriousness as the key factors in pursuing upward mobility (Freeman, 1992).

Kendall (2011) argued that American television shows, ranging from news to reality shows, often feature the inspirational stories of atypical individuals, who are able to ascend themselves from humble economic background to affluence. Even in the stories the upward social mobility happened by pure luck (e.g. by winning a lottery), media still highlight the virtue of hard work that make the person deserve the fortune. In sum, television stories implied an overarching message of positive associations among affluence, intelligence, and morality.

Unlike studies on violence and fear of crime, the line of cultivation research that examines the role of television viewing in cultivating materialism did not flourish until the past two decades, but the earliest cultivation research on perceptions about wealth, a construct that relates to material value, was actually conducted almost at the same time as the early development of cultivation theory. Fox and Philiber (1978) were the first scholars who conducted research on perceptions of affluence using cultivation as the theoretical framework. Surveying residents of Hamilton County, Ohio, Fox and Philiber examined the association between television viewing and people's estimates of the prevalence of affluence in the country, for example the percentage of Americans who own built-in swimming pools, luxury cars, or homes, or belong to a country club. Fox and Philiber's analysis showed a moderate relationship between the amount of time

watching television and estimates of affluence among individuals, but the association disappeared once participants' educational attainment was taken into account, and when educational attainment and income level were simultaneously controlled. Based on this finding, the researchers raised the question of whether the relationship posited in cultivation theory was actually spurious and would become insignificant once demographic variables such as socioeconomic status are taken into account (for a critique of Fox and Philiber's study, see Shanahan & Morgan, 1999).

Carlson (1993) retested Fox and Philiber's examination of the relationship between television viewing and people's estimates of affluence in the U.S. Surveying registered voters in Providence, Rhode Island, Carlson did not find a simple association between overall television viewing and perceptions of affluence. However, analyzing the relationship within different demographic groups, he found that television viewing was related to higher perceptions of affluence among individuals ages 18 to 29 and 30 to 54, but not among individuals who were 55 years or older. Among individuals whose family income was less than \$25,000 or whose family earned more than \$55,000 – in 1990 dollars – television did not cultivate higher approximation of Americans' affluence; however, a positive association between television and estimates of affluent lives in the country was found among individuals with family income between \$25,000 and \$55,000 – the middle income group in the sample. Additionally, television viewing did not predict the estimates of affluence among individuals without a college degree, yet college graduates who reported spending more time watching television on average also reported higher estimates of luxury goods ownership in the U.S. Looking into specific genres of

television programming, watching sitcoms and news were associated with stronger perceptions of affluence.

Conducting a state-level survey in Illinois, O'Guinn and Shrum (1997) tested the associations among educational attainment, income level, individuals' direct experience with luxury goods, television viewing, and individuals' perceptions of affluence. The results showed that individuals who spend a great deal of time watching television tended to overestimate the percentage of people who could afford luxurious lifestyles. Moreover, the study also yielded a direct negative association between educational level and estimates of affluence, as well as an indirect relationship between education, television viewing, and estimates of affluence in society. That is, highly educated individuals were less likely to watch television, which in turn predicted lower estimates of the prevalence of affluence in society.

Furthermore, the findings also suggested that television might serve as a substitute for direct experience with affluence as a basis for individuals in approximating the proportion of wealthy individuals. Not surprisingly, individuals with higher income were more likely to have firsthand encounters with luxury consumer goods and services, but spend less time watching television compared to their lower income counterparts, presumably because they have more financial resources to participate in leisure activities other than watching television. In contrast, individuals with lower income on average reported higher average time of television viewing and lower likelihood to live a luxurious life. Interestingly, both direct experience *and* television viewing were positively correlated with individuals' estimates of affluence in society, which suggests that people without direct experience used television as a proxy for constructing

perceptions about affluence in society. Findings from O'Guinn and Shrum's 1997 study were reinforced in a subsequent study that yielded a positive association between television viewing and estimations about the percentage of people who hold high-paying jobs, such as doctors, lawyers, and scientists (Shrum, Wyer, & O'Guinn, 1998). In addition, it was also found that on average, heavy viewers had lower response time than light viewers did in retrieving their estimates of affluence, suggesting the salience of television stories in heavy viewers' cognitions (O'Guinn & Shrum, 1997; Shrum, 1996; Shrum & O'Guinn, 1993; Shrum et al., 1998).

The aforementioned studies initiated a line of research that looks into television and wealth, which provides evidence on the role of television in cultivating overestimation of wealth in society among heavy viewers as well as extending the literature of cultivation beyond the topic of the perceptions and fear of crime and violence. However, since the studies focus on perceptions, which are generated through a memory-based heuristic, they say little about the cultivation of personal values, which drive individuals in making judgments in their daily lives (Shrum et al., 2005). This gap in the literature has led researchers to examine how television viewing cultivates materialism as a value among individuals.

Utilizing secondary data from the Simmons Market Research Bureau (SMRB) Study of Media and Markets (SMM) collected between 1993 and 1994, and data from various years from 1972 to 1996 of the General Social Survey (GSS), Harmon (2001) tested the relationship between television viewing and materialism. In each survey, the researcher used various items in the surveys as proxies of material values (e.g., "Like other people to think I'm rich," "Sacrifice time with family to get ahead," "Money is the

best measure of success” in the SMRB SMM; “Important to have nice things,” “Importance of high income,” “How often think about finances” in the GSS). The analyses of the SMRB SMM data yielded no correlation between television viewing (measured in quintiles of primetime, daytime, and cable TV viewing) and materialism, whereas some strong associations appeared in the analyses of the GSS data. For example, individuals who put importance on having nice things tended to be heavy viewers. The study employed large samples ($N > 14,500$ in SMRB SMM and $N > 1000$ in the GSS), which reinforces the reliability of the results. However, none of the analyses included control variables or interaction terms that would have enabled the researcher to test the aforementioned concepts of mainstreaming and resonance in cultivation theory. This problem, as Harmon also noted, could have been handled by using multiple regression. In addition, the validity of the measures, or at least whether the items used in the research measured a single underlying construct, was not tested. All items from both surveys were tested separately as individual measures, as opposed to as indices or composites, of materialism. Several items, such as “Money is the best measure of success” in the SMRB SMM, seem to reflect material values well, yet several other items, for instance “Worth paying extra for quality goods” in the same survey, are arguably ambiguous to be used as instruments for assessing materialism. Additionally, the use of single measures might have compromised the reliability of the measurement.

Through a national survey, Shrum and colleagues (2005) tested the association between television viewing and materialism – measured using the 15-item Richins’ Materialism Value Scale (Richins, 2004) – in which they found that more time spent watching television predicted higher levels of materialism, even after controlling for

demographic variables, social desirability, and other media usage (radio, newspapers, magazines, and the Internet). Furthermore, the researchers also found 2-way interactions between television viewing and reported level of attention when watching television, as well as individuals' reported need for cognition. More specifically, the analyses yielded a stronger positive relationship between television viewing and materialism among individuals who reported higher engagement when watching television than it was for individuals with lower reported level of engagement. Likewise, compared to the relationship between television viewing and materialism among individuals who were low in need for cognition, television viewing predicted materialism more strongly among individuals who reported high need for cognition. In other words, among heavy viewers, those who put more thought into the programming they see are more likely report higher levels of materialism than their "less thoughtful" counterparts.

Drawing from theories and empirical findings on materialism, scholars have also extended their inquiries to examining television-cultivated materialism as a maladaptive set of values. As mentioned, scholars have argued that materialism leads individuals to life dissatisfaction (e.g., Kasser & Ryan, 1993; Richins & Dawson, 1992; Sirgy, 1995). If television viewing is associated with a higher level of materialism, then this deep immersion in the television world might eventually lead individuals to lower satisfaction with life and lesser subjective well-being. Conducting a multinational study that included participants from the United States, Australia, Turkey, China, and Canada, Sirgy et al. (1998) tested the relationships among television viewing, materialism, evaluation of one's standard of living, and life satisfaction. Evaluation of standard of living consisted of specific and their general evaluations of standard of living; in measuring the former,

participants were asked how they compared their material or financial situation to what they typically saw on television, whereas in assessing individuals' general evaluation of standard of living, Sirgy and colleagues asked whether participants were satisfied with their livelihood or income. The analysis of the pooled responses from all participants confirmed the researchers' hypothesis, that television predicted materialism, which in turn was negatively associated with specific and general evaluations of the standard of living, as well as with life satisfaction. Analyzing participants' responses from each of the five countries separately, materialism and life satisfaction were negatively associated among participants in every country. In addition, the association between television viewing and higher levels of reported materialism remained among participants across different countries, with the exception of participants from Turkey, where television viewing and materialism did not yield any relationship.

However, as Sirgy and colleagues noted, the results yielded from these separate analyses are not sufficient for making cross-cultural inferences, as the representativeness of the samples was limited. Except for the United States, where the participants were students or members of a consumer panel, participants from other countries were recruited through probability sampling of a town or city (e.g., Wollongong in Australia, Istanbul in Turkey), but *not* drawn from the national population. In addition, in the separate analyses, some items in the scales used for measuring materialism, life satisfaction, and evaluation of living standards had to be dropped from the specific countries to increase the reliability of the scales, and those items differed across countries. For example, in conducting the analysis *within* the Chinese population, one item from each materialism and evaluation of living standards, and three items from life

satisfaction scales were dropped; on the other hand, *within* Australian participants, two items from each scale were removed, which made the data incomparable for cross-country analyses.

Following up their 1998 study, Sirgy and colleagues (2012) examined the relationships among television viewing (particularly advertising), materialism, and life satisfaction. Testing different possible psychological mechanisms, the researchers failed to find the hypothesized relationship between television viewing and individuals' perception of materialism-related attributes (e.g., whether the commercials they saw reflected high/low status, glamorous/non-glamorous, affluent/non-affluent). However, the data supported the researchers' subsequent hypotheses. That is, they found a positive association between the perceived materialism-related elements in advertising and individuals' materialism, which, subsequently positively predicted how strongly they were concerned about their standard of living. In other words, materialists tended to be more likely to think that their livelihood was less than ideal, less than what they deserved, or what they should have accomplished in order to maintain a certain lifestyle. Consequently, the anxiety about current livelihood was negatively associated with the feeling of satisfaction with the standard of living, which, in turn, predicted lesser satisfaction with life in general.

Yang and Oliver (2010) and Shrum, Lee, Burroughs, & Rindfleisch (2011) separately conducted research that also tested the role of materialism as a mediator between television viewing and life dissatisfaction. Yang and Oliver (2010) investigated the complex relationships among general and genre-specific television viewing, materialism, estimates of others' affluence, perceived social comparison gaps,

dissatisfaction with social equality, and dissatisfaction with personal life. A convenience sample of U.S. northeastern town residents ($n = 225$) was surveyed. Through path analysis, they found associations between general television viewing and higher material values, estimates of other people's affluence, and general perception of wider social discrepancy. Furthermore, individuals' material values in turn predicted higher dissatisfaction with personal life. Similarly, individuals' perceptions of social gaps were positively associated with dissatisfaction with current social equality as well as with their personal lives. Looking into the role of television genres, Yang and Oliver found that watching movies on television predicted a higher level of materialism and higher estimates of other people's affluence. Similarly, soap operas and music or celebrity show programming were also associated with stronger perceptions of the prevalence of wealth. On the contrary, watching news negatively predicted material values.

Further analysis suggested that those relationships were moderated by income levels. Among individuals with lower incomes, general television viewing was associated with stronger material values and perceived social discrepancies, but not with individuals' approximation of other people's affluence. Material values and perceptions about social discrepancies each in turn predicted dissatisfaction with personal life and dissatisfaction with observed social equality, respectively. On the contrary, among individuals with higher income, general television viewing was linked to higher estimates of others' affluence, but was not associated with either material values or individuals' perception about social comparison. Yang and Oliver (2010) and O'Guinn and Shrum (1997) reported that financially well-off individuals are more likely to experience first-order cultivation – estimates of other people's wealth – whereas economically deprived

individuals are more “prone” to second-order cultivation – higher material values and wider perceived social gaps.

The results on the relationships among television viewing and materialism, social comparison, and life satisfaction that varied among individuals from lower and higher income levels corroborates Richins’ (1991, 1995) arguments, that exposure to media, including television, would lead audiences to engage in upward social comparison. According to Richins (1995), audiences are more likely to compare themselves with successful individuals that appear in media, than to engage in downward comparison with media characters who seem to struggle with their lives. Richins argued that audiences would distance themselves from less successful individuals by discounting the relevance of stories about modest lives to their own livelihood. Instead, audiences tend to differentiate themselves by thinking that they possess different attributes (e.g., they are more educated, intelligent, hardworking) from the modest individuals they see in media. On the other hand, not relating oneself to a successful media character is arguably more difficult. The idealized depictions of daily lives in television stories, which do not correspond with what most people in the real world can afford, may serve as a benchmark for heavy viewers in evaluating their livelihood. At the same time, engaging in such upward comparison would make oneself constantly fall short, and feel less worthy and discontent.

In sum, U.S.-based cultivation research has illuminated the relationships among television viewing, individuals’ perceptions of affluence, material values, and life satisfaction, as well as the underpinning psychological mechanism behind it. Specifically,

studies have yielded some evidence on television's cultivation of higher estimates of wealth, stronger material values, and lower life satisfaction.

3.5.2 The cultivation of the perception of affluence and material values outside the U.S.

The evidence for television's role in promoting higher estimates of affluence, materialism or life dissatisfaction is not only found among Americans. Conducting a study among Israeli high school students, Weimann (1984) found that participants who spent a great deal of time watching U.S.-produced television programming tended to overestimate the percentage of Americans who are employed in high-status jobs, the earnings of male workers, and the presence of high-technology gadgets and appliances among U.S. households. Also using cultivation theory as a framework in examining the relationship between television viewing and adolescents' materialism in Hong Kong, Cheung and Chan (1996) noted that materialism and violence are the two dominant themes, and often appear in conjunction with each other, in Hong Kong television programming. Cheung and Chan argued that the concurrent prevalence of affluence and violence in television stories is responsible for more permissive attitudes regarding crime as well as higher distrust of people, and also leads individuals to put higher emphasis on the ownership of material goods. Their hypothesis was confirmed: among Hong Kong adolescents, more television watching was correlated with higher levels of materialism and more tolerance of violence through stronger mean world beliefs. Cheung and Chan further asserted that audience immersion in the violent television world might cultivate

normalization of violence, which would facilitate tolerance to acquire material goods by any means, including through criminal acts.

However, one may note that Cheung and Chan's assertion of what violent television cultivates in relation to materialism is distinct from Gerbner's conceptualization of the mean world syndrome. According to Cheung and Chan, television may perpetuate materialism through the trivialization of violent acts as an instrument to accumulate wealth, which is inconsistent with Gerbner's argument on the "effect" of frequent exposure to violent content. As mentioned earlier, "mean world syndrome" refers to heavy viewers' perception of the world as a dangerous place where nobody can be trusted because of the perceived constant threat of getting harmed and taken advantage from by others. Therefore, heavy viewers' immersion in the violent television world would "amplify" their perception of crime and violence in the real world, as opposed to "desensitize" them as Cheung and Chan proposed.

While Gerbner and his research team never specifically examined the cultivation of materialism, one may actually make an argument for a possible psychological mechanism of how the mean world syndrome mediates television viewing and materialism, especially among individuals who live in culture with high consumerism like the U.S. Several researchers have linked materialism to the concept of mortality salience – the awareness of the eventual death of human being. Based on the models and findings from this line of research, exposure to the idea of mortality would remind them of the certainty of human inevitable death, and would make them more likely to conform to values in their culture in order to maintain the psychological self-worth. For members of a capitalistic society, where wealth and monetary success are highly valued, inducing

mortality salience may lead them to put higher importance on material values (e.g., Arndt, Solomon, Kasser, & Sheldon, 2004; Kasser & Sheldon, 2000; Rindfleisch, Burroughs, & Wong, 2009; Sheldon & Kasser, 2008; cf. Ferraro, Shiv, & Bettman, 2007; Jonas, Schimel, Greenberg, & Pyszczynski, 2002). Adopting this premise to a cultivation framework, heavy viewers' mean world syndrome would make individuals' more aware of their mortality, which would facilitate the cultivation of material values.

Contrary to previous work on the cultivation of materialism in international contexts, Yang, Ramasubramanian, and Oliver (2008) did not find consistent results on the role of viewing U.S. television programming on materialism or estimates of Americans' affluence among Indians and South Koreans using a convenience sampling technique to recruit participants. Participants in India were recruited in the cities of Cochin, Chennai, Pune, and Hyderabad ($n = 333$), whereas South Korean participants ($n = 352$) were residents of Gwangju City. Among Indian audiences, the researchers' analysis only yielded *direct* associations between watching U.S. television and dissatisfaction with personal life as well as with dissatisfaction with society, net of income, education, gender, age, and direct experience with the U.S. There was no relationship between television viewing and participants' perception of affluence in the United States. Among South Koreans, watching U.S. television was associated with higher estimate of Americans' affluence, which in turn predicted dissatisfaction with society. In other words, materialism did not emerge as a mediator between watching U.S. television and dissatisfaction with society. The researchers concluded that the ubiquity of affluent lifestyles and hyper-consumerism that are depicted in U.S. television content might have led individuals to compare the television version of the livelihood in the U.S.

to their society, which in turn instilled a perception of deprivation towards one's own society. Regarding the failure to demonstrate materialism as a mediating variable between television viewing and dissatisfaction with personal life and society, Yang and colleagues contended that compared to television, other environmental factors, such as living adjacent to affluent people, might have a stronger role in promoting material values among Indians and South Koreans.

As previously discussed, researchers have investigated the interaction between material values, income, and subjective well-being. Utilizing data from the World Values Survey (1980-1982, 1990-1991, 1995-1997, and 1999-2001 waves) that included over 90,000 respondents from 55 countries, Bruni and Stanca (2006) found a positive correlation between income and financial satisfaction as well as life satisfaction, net of demographic characteristics (e.g., gender, occupation, education, and age), self-reported personal characteristics (e.g., health, freedom of choice), and perceived importance of other domains in life (e.g., religion, friends, politics). In other words, based on the analyses, higher income does facilitate individuals' life and financial satisfaction. Nevertheless, the researchers also found negative interactions between television viewing and life and financial satisfaction. Subsequent analyses showed the positive association between income and life and financial satisfaction was significantly weaker among heavy viewers than among light viewers. The researchers then argued that television viewing depreciates the benefits of subjective well-being that additional income generates. In order to check for the robustness of the result from a reversed causality explanation – that it might have been low income that would lead individuals to watch more television, which then result in low subjective well-being – a separate analyses between high and

low-income individuals were conducted. The pattern of the interaction between television viewing, income, and life and financial satisfaction that appeared within the two classes of income resembled the aforementioned findings: even among individuals with high financial resources, heavy viewers reported lesser association between income and life satisfaction. In other words, based on Bruni and Stanca's study, television viewing seems to "disrupt" the positive relationship between income and subjective well-being.

Hyll and Schneider (2013) conducted a study from which they drew a causal inference on the influence of television viewing on consumption, income, and hedonistic aspiration among individuals in the former German Democratic Republic (GDR, or East Germany) region. Prior to the reunification of the two former countries in 1990, the difference between GDR and Federal Republic of Germany (FRG, or West Germany) could be seen in their television programming. As a result of communism, GDR television was free from advertising. In addition, using the Soviet model of broadcasting, GDR television programming did not offer portrayals of an affluent world. Conversely, FRG television programming had commercials and content that might promote material values, including some syndicated programming from the U.S. such as *Dallas*.

In order to garner support for "Western" ideology as well as dampen public support for communism in GDR, FRG built television signal transmitters along GDR-FRG borders, so that GDR viewers had access to FRG television programming. The topography and proximity to the borders caused variation in the strength of the reception of FRG television programming in different areas in GDR. For instance, residents of Erfurt, which is located closer to the former GDR-FRG border, received stronger

transmission signal than individuals in Dresden, which is closer to the GDR-(former) Czechoslovakia border.

This variation of signal reception of FRG television broadcast was exploited as an identification instrument. In other words, the differences in the quality of FRG broadcast transmission in the neighboring GDR towns and cities served as the independent variable. Residents of different cities and towns were “randomly assigned” to different levels of the quality of FRG television signal reception, thus it was assumed that GDR residents with better signal reception would watch FRG television more so than residents with poor signal. The study qualified as a natural experiment, which enabled the researchers to make a causal inference on the role of television in promoting the centrality of material possession among viewers.

Data from over 2,300 GDR residents were collected between the end of 1988 and the beginning of 1989, or one year before Berlin Wall was demolished and the reunification of the two former countries into the current Federal Republic of Germany, respectively. Demographic attributes, such as gender, age, education, income, religious affiliation, marital status, presence of children in the household, social origins (measured through respondents’ father’s occupation), and the size of the municipality where the respondents lived, were included as control variables. Respondents were also asked how often they watched FRG television programming, with the options of response ranged from “never” to “daily.” Supporting the researchers’ hypotheses, individuals who watched more FRG television reported stronger emphasis on the acquisition of material possession, money, and luxurious lifestyles. Hyll and Schneider’s work is the first study that demonstrated a causal relationship regarding the role of long-term exposure to the

images of wealth and affluence on television in promoting materialism among its viewers.

The cultivation of materialism was not only found among adult audiences. Hoffner, Levine, and Toohey (2008) found no relationship between general television viewing and late adolescents' intrinsic (e.g., personal development) and extrinsic (e.g., income, prestige) work values, as well as the desire for easy work. However, the researchers found positive associations between adolescents' dependence on television in obtaining work-related information and their intrinsic and extrinsic work values, as well as their aspiration to generate earnings easily. The finding is consistent with Richins' (1995) argument on the lack of media portrayals of the routine, non-dramatic, or dull elements of work life that even individuals with high-earning jobs have to endure. Furthermore, Hoffner et al. also found that late adolescents' perceptions of their favorite television characters' extrinsic work values (e.g., prestige, income) resembled their own extrinsic work values. Additionally, the affinity towards characters that were less frequently shown working in the shows' storylines positively predicted adolescents' desire to earn money by doing easy work.

Through longitudinal surveys of children aged 8 to 11 in the Netherlands, Oprea, Buijzen, van Reijmersdal, and Valkenburg (2014) reported that exposure to commercial messages (measured through participants' viewership of Dutch children's television programming that had the highest volumes prior, during, and after the shows) was associated with stronger materialism a year later. The researchers also examined the possible psychological mechanism that underpinned the increase of materialistic values

among participants, through which they found the role of advertising in increasing the desire to acquire consumer goods, which in turn generated materialism.

In sum, in spite of some inconsistencies across studies, the body of literature that examines the cultivation of individuals' perceptions of affluence as well as the relationship between television viewing and material values has been growing. Existing studies suggest that heavy viewers tend to overestimate the prevalence of affluence in society. More television viewing has also been associated with stronger materialism among individuals. This study attempts to extend previous work by testing the cultivation "effect" on materialism, social comparison, and life dissatisfaction, in the family context, more specifically in terms of parents' aspiration for their children.

3.6 Cultivation Research in the Family Context

In today's literature of media studies, one can find a plethora of empirical works on "direct" cultivation and individuals' perceptions, beliefs, attitudes, or opinions. Likewise, as previously discussed, numerous studies in the media-effects tradition have tested the effects of media messages on family relationships (e.g., Buijzen & Valkenburg, 2003) as well as the role of the family in diminishing the possible adverse effects of media content (e.g., Moschis & Moore, 1982). However, there are only a few studies that have examined cultivation in an interpersonal context, particularly the family. With the emergence of mobile communication technology, which enables individuals to access or stream television programming from their handheld devices, some might view that watching television today is more of an individual than a family activity (Livingstone & Helsper, 2008; Valkenburg, Piotrowski, Hermanns, & de Leeuw, 2013).

At the same time, some studies suggest a positive association between parents' and children's media consumption. For example, Notten, Kraaykamp, and Konig (2012) analyzed the data from the Family Survey of the Dutch Population to examine the relationship among socioeconomic origin and media socialization activities in the family, particularly on parents' and children's preference for highbrow and lowbrow reading material and television programs. The data suggest that children's taste for reading (literature, novels in foreign language, and popular science for highbrow reading; detective, science fiction, war, and romantic novels for lowbrow reading) and television programs (informative programs and cultural-artistic programs as the proxies for highbrow shows; talk shows, crime programs, reality shows, and soap operas for lowbrow programs) differed across parents' educational attainment and occupational prestige levels. Families whose parents were highly educated and held high-status jobs were more likely to consume highbrow reading and television shows. In contrast, children whose parents had lower educational attainment and held less prestigious occupations tended to read lowbrow books and watch lowbrow television programs.

Similarly, through a longitudinal study, Yang and Huessmann (2013) found a positive association between the amount of television viewing among parents at age 30 and the number of hours their children spent watching television 18 years later, controlling for offspring gender, socioeconomic status, and intellectual achievement. Additionally, while no longitudinal correlation was found between parents' and children's viewing of violent content, parents' current violent television shows viewing also predicted children's viewing of the same genre.

To date, there are only a few empirical cultivation studies that have looked into the relationship between television viewing and individuals' worldviews in the interpersonal and family contexts. Using a nationally representative sample of adolescents, Rothschild and Morgan (1987) found that the cultivation of attitudes on family-issues among adolescents is contingent upon family-cohesion and parental mediation practices. The strongest cultivation was found among adolescents who received little parental control and experienced low family cohesion. The research also revealed that adolescents who frequently co-view the content of television programming with their parents showed higher cultivation on questions about family-issues such as maternal custody and perception of divorce. This finding is parallel with subsequent studies on parental mediation, which show that adolescents may misinterpret co-viewing as an endorsement for the messages conveyed in television programming (Guo & Nathanson, 2011; Nathanson, 2002).

Wilson, Marske, and Martins (2005) investigated perceptions about crime, an issue that has been tested since the initial development of cultivation, among mothers of school-age children. They reported that parents who watch television dramas or reality shows that involved stories about missing persons tended to overestimate the prevalence of child kidnapping and were more likely to take precautionary actions such as enhancing home security, purchasing security tracking devices or ID kits for their children, or having role plays with their children to "prepare" the children so they know what to do if approached by strangers. Watching television news did not predict parents' estimates of kidnapping or preemptive behaviors. However, in a separate study conducted by Martins and Wilson (2011) that examined parents' reaction to stories about kidnapping, parents

who were heavy viewers of television news were *not* more likely to warn their children about kidnapping or take precautionary action. Instead, they were more likely to assure their children that abduction was rare and unlikely to happen to them.

Prior to those two aforementioned studies, Busselle (2003) examined the cultivation of fear of crime in the family, which until today remains the only study that has directly examined the role of television in family communication. Analyzing 187 pairs of parents and their college-age children, Busselle found that parents' viewing of crime television programming, such as local news and crime dramas, predicted their estimates of criminal acts in the real world, which in turn positively correlated with the frequency of precautionary warnings about crime they issued to their young adult children, especially daughters. Parents' estimates of crime, as well as the cautions they conveyed to their children, were then received by children, and in turn predicted children's own estimates of crime prevalence, suggesting that children adopted their parents' "cultivated" social perceptions. Busselle's study suggests that television might not only cultivate certain perceptions about the world among its "first-hand" viewers. Instead, the cultivation might "trickle down" to other individuals within the viewers' immediate social circle.

Stepping outside the family context, McCullough (2014) reported a positive association between co-viewing television programs with peers and college students' materialism, particularly when it came to watching sitcoms, dramas, music television, and talk shows. The researcher attributed the relationship to the possibility of having co-viewing as an indicator of what kind of television shows were accepted among peers, which in turn increased the exposure to the programs and eventually cultivated

materialism. Another possible explanation that the researcher offered is the discussion among participants and their peers about the shows that might have happened during or after watching television, although the data did not allow for empirical tests on either of the aforementioned possibilities. Although not conducted in the context of parent-child relationship, McCullough's research to some extent corroborates with previous studies on cultivation in the interpersonal context.

To summarize, in spite the fact that cultivation in the family is still understudied, existing research shows that television can cultivate perceptions and values among family members. Additionally, previous cultivation studies on television and crime have found that exposure to television stories may cultivate fear and perceptions of crime among parents, which in turn was translated into precautionary acts towards their children. The current study attempts to contribute to this body of research by testing the cultivation of material values, upward comparison, life satisfaction among parents, as well as how it cultivates parents' aspiration for affluent lifestyle for their children, and in whether children embrace such values and aspiration into their own personal value and life goals.

CHAPTER 4

HYPOTHESES, RESEARCH QUESTION, AND METHODS

4.1 Hypotheses and Research Question

Previous studies on materialism suggest the detrimental implications of material values on individuals' well-being. Materialism leads individuals to engage in constant upward comparison, which in turn makes individuals more likely to suffer from dissatisfaction with life (e.g., Roberts & Clemens, 2006; Sirgy, 1998). Scholarly empirical evidence has also illustrated the role of the family in the development of individual material values (Flouri, 1999, 2004; Goldberg et al., 2003; Kasser et al., 1995). Additionally, a study by Kasser and colleagues (1995) found that mothers who valued financial success more highly than achievement in other life areas are more likely to have children who embrace material values. Along with family, media have also received scholarly attention for their role in instilling material values in their audiences. Within cultivation research, studies show that television viewing positively correlates with materialism, and may lead to more negative evaluation of one's own livelihood and lower life satisfaction (Shrum et al., 2005; Shrum et al., 2011; Sirgy et al., 1998; Yang & Oliver, 2010). While most cultivation studies have not examined the role of television viewing in the family context, several studies found consistency between television stories, parents' television viewing, and what parents communicate to their children (Busselle, 2003; Martins & Wilson, 2011; Wilson et al., 2005).

Drawing from existing studies on materialism and cultivation research, the current study will test the following hypotheses:

- H1:** Parents' television viewing positively predicts their own materialism controlling for the association between parents' television viewing and children's television viewing; the more time a parent spends watching television, the stronger valuation they put on material possessions.
- H2:** Parents' materialism positively predicts children's materialism, controlling for the association between parents' television viewing and parents' materialism, and the association between parents' television viewing and children's television viewing and the association between children's television viewing and children's materialism.
- H3:** Parents' television viewing positively predicts children's television viewing, controlling for the association between parents' television viewing and parents' materialism.
- H4:** Children's television viewing positively predicts their materialism, controlling for the association between parents' television viewing and parents' materialism, the association between parents' materialism and children's materialism, and the association between parents' television viewing and children's television viewing.
- H5:** Children's materialism negatively predicts their life satisfaction, controlling for the association between parents' television viewing and children's materialism through parents' materialism, and the association between parents' television viewing and children's materialism through children's television viewing; those with stronger materialism on average will report lower life satisfaction.

H6: Children's materialism negatively predicts downward social comparison, controlling the relationship between parents' television viewing and children's materialism through parents' materialism, and the relationship between parents' television viewing and children's materialism through children's television viewing; those who are more materialistic will be less likely to perceive themselves as economically better off than other people.

H7: Children's downward social comparison positively predicts life satisfaction, controlling for the relationship between parents' television viewing and children's social comparison through parents' materialism and children's materialism, and the relationship between parents' television viewing and children's social comparison through children's television viewing and children's materialism; those who perceive themselves as having a better livelihood than other people will be more likely to feel satisfied with their life.

The conceptual model and hypothesized relationships among variables are depicted in Figure 4.1. Of note, each path was predicted controlling for all other paths in the model. In the analyses, the t -value of ± 1.96 was used as a cut-off to determine the significance of each path.

Previous work on cultivation as well as on materialism also suggests that individuals who are economically deprived are more "prone" to cultivation (O'Guinn & Shrum, 1997; Yang & Oliver, 2010) and to the negative effects of material values (Kasser et al., 1995; La Barbera & Gürhan, 1997; Nickerson et al., 2003). Yang and Oliver (2010) found that the association between television viewing and materialism was significant

among participants with lower income, and was not significant among participants with higher annual income. In light of those existing studies, this study will test whether the aforementioned hypotheses are more pronounced among individuals with economic disadvantages:

H8: Family socioeconomic status moderates the relationships among television viewing, materialism, upward comparison, and life satisfaction; families of lower socioeconomic status will tend to manifest stronger associations among television viewing, materialism, perception of affluence, and life satisfaction.

In light of existing studies that examined genre-based cultivation, this study raised the following research question:

RQ1: How do different genres of television programs contribute to the cultivation of materialism in the family?

Previous studies on intergenerational transmission of materialism tended to focus on the role of mother (e.g., Flouri, 1999; Kasser et al., 1995). Bush et al. (2001) found that adolescents who had their fathers as a role model reported lower level of materialism, while having mothers as the role model had no relationship with individuals' materialism. Therefore, this study asked:

RQ2: Does the cultivation of materialism in the family differ across parents' and children's gender?

4.2 Data Collection

An online survey was distributed to young adults aged 18 to 25 through Amazon's Mechanical Turk (MTurk). Amazon's MTurk is an online crowdsourcing

platform for performing various tasks that requires human intelligence, ranging from matching pictures, to searching for information, to responding to surveys and experiments. In MTurk, participants, also called “workers” or “Turkers,” and people who post the Human Intelligence Tasks (HIT) are called “requesters.” Each worker has an MTurk anonymous identity. Workers receive a small monetary amount of reward upon completing a HIT. The amount of money awarded is small, averaging at around \$2 per hour (Ross, Irani, Siberman, Zaldivar, & Tomlinson, 2010). Prior to paying the workers, requesters can check the quality of the work, and can refuse work that is considered subpar. Only workers whose works receive requesters’ approval will receive the reward. Workers that have received at least 95% approval in the tasks they have participated in earn the status “Master Workers”. Requesters pay workers through Amazon by depositing a certain amount of money, depending on the reward they offer per worker in a task, using credit card. Amazon receives a commission of 10% of the cost of a HIT if the task does not require Master Workers, and 15% if the task requires Master Workers. For example, a task with 50 cents that require 200 non-master workers will cost \$110: \$100 for paying the workers and \$10 for Amazon’s commission. MTurk has been gaining popularity among social science researchers due to its cost efficiency and effectiveness, and diversity of sample (Buhrmester, Kwang & Gosling, 2011), although the platform has also received criticisms, including those that are related to the reliability and validity of the responses (e.g., Chandler, Paolacci, & Mueller, 2013).

Data collection for this study was conducted in Summer 2014. The online questionnaire was constructed on Qualtrics, an online survey software, which was linked to the researcher’s MTurk account. The research procedure and survey questions were

reviewed and approved by the Department of Communication Human Subject Review. Four hundred participants were recruited through MTurk. In the survey invitation, the survey was described as an “Academic Study on Public Opinion among individuals age 18-25”. Of course, due to the anonymity of the workers, there is no way to directly verify the real age of each worker. Workers were encouraged to answer the question about age honestly, and they were paid full for their work regardless of the age they reported. A consent page appeared at the beginning of the questionnaire, in which participants were told about the broad purpose of the study (i.e., “a study on attitudes and opinions among Americans across generations”), the approximate time needed to complete the survey (i.e., approximately 10 minutes), and that there are no right or wrong answers in the study to encourage them to provide honest responses. They were also told that they might skip any questions and were allowed to leave at any point. At the end of the consent page, participants were asked to confirm that they are at least 18 years old and agree to participate in the study. The set-up of Amazon’s MTurk automatically made participants’ responses anonymous, as their “worker identification” consisted of combinations of random numbers, letters, and characters.

Fifty-seven out of 400 recruited workers stated that they were older than 25. The average time for finishing the survey was 9 minutes and 50 seconds. In order to check whether the participants were attentive when responding to the survey, a “calibration” item was created: On one of the survey questions, participants were asked to choose ‘Disagree’ for the question (i.e., “Please answer ‘Disagree’ for this item.”). Out of 400 workers, seven responded with other than “Disagree”, making their responses considered invalid; however, these individuals also received full payment. Therefore, sixty-four

individuals were removed from the dataset because their reported age was not between 18 and 25 or that they did not answer “Disagree” in the aforementioned calibration item, reducing the sample size from 400 to 336. Subsequently, another 33 individuals were dropped due to incomplete responses on the indices, therefore the final number of participants in this study was 303 individuals. All analyses in this and the next chapters were based on 303 participants. All tables in this chapter are provided within the text, and the figures are located at the end of this chapter.

4.3 Measures

Several measures were included in this study. Measures for materialism (Richins, 2004), social comparison (Solberg, Diener, Wirtz, Lucas, & Oishi, 2002), life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985), and general television viewing (Shrum et al., 2011) have been tested for their validity and reliability, and used in previous empirical studies. In addition to receiving questions about their own television viewing, materialism, social comparison, life satisfaction, participants also received questions about how they perceived their parents’ television viewing and materialism. All data analyses in this study were performed using IBM SPSS version 22 and LISREL version 8.80. Since all measures in this study, except for genre-specific viewings and demographic attributes, were existing indices, the assessments of the indices’ unidimensionality were conducted using confirmatory factor analyses (CFA). The covariance matrices that were used in the CFA can be seen in the Appendix.

In lieu of access to direct measure of parents’ television viewing and materialism, children’s reports of how much their parents watch television and materialism were used

as a proxy of parents' media consumption and material values. In the studies that involves family units, asking children about their parents can generate more insightful data than asking parents about their children (Fujioka & Austin, 2003; Nathanson, 2001; Schaefer, 1965). Measuring children's perception of their parents' media exposure and materialism to estimate parents' actual media consumption and material values was used by Chia (2010) in a study on the influences of parents and peer on adolescents' materialism. Therefore all "parents' television viewing", in this study, whether it is general or genre-specific viewing, refers to children's perception of their parents' television viewing.

Since the study involves participants' perceptions about their parents' television viewing and materialism, it was necessary to take into account the possible different behaviors and personal values between participants' mother and father as well as to increase the clarity of the items for the participants. Therefore, participants were asked to focus on one parent only, by asking them to think about the parent whose birthday came next when responding to the items about parents' television viewing and materialism (Meirick et al., 2009; Salmon & Nichols, 1983). Additionally, participants were also asked about the age of the parent. Out of 303 participants, 173 or 42.9 percent had their father's birthday comes next, and 130 or 57.1 percent of participants had their mother's birthday comes next. The reported age of parents averaged at 53.63 (SD = 6.59).

4.3.1 Television viewing

Overall television viewing and genre-specific viewing were both measured in this study. The "Television Viewing Scale" developed by Shrum and colleagues (Shrum &

Rindfleisch, 2005; Shrum et al., 2011) was used to measure participants' own television viewing and their perception of their parents' television viewing. The scale consisted of 6 items with 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). The responses to the items were then averaged, with higher score indicating more frequent television viewing. The followings are the items included in the scale:

1. I watch less television than most people I know. (Reversed)
2. I often watch television on weekends.
3. I spend time watching television almost every day.
4. One of the first things I do in the evening is turn on the television.
5. I hardly ever watch television. (Reversed)
6. I have to admit, I watch a lot of television.

For the purpose of measuring participants' perceptions of their parents' television viewing (hereon referred to as "parents' television viewing"), the scale was slightly modified so that the items reflected participants' observation of their parents' behaviors, for example, "I have to admit that I watch a lot of television" was modified into "I have to admit that my parent watches a lot of television".

Confirmatory factor analysis (CFA) on the general television viewing index for participants (children) was conducted using LISREL program. The test showed that the standardized factor loadings of the items in the index ranged from .77 to .88. The model fit indicators yielded a χ^2 value of 32.39 ($df = 9$, $p = .00$, $n = 303$), with RMSEA = .09 (RMSEA Confidence Interval = .06 – .13), CFI = .99 and NFI = .98, which suggests an acceptable model fit to use the index as a single-factor measure (See Figure 4.2). The

composite reliability was calculated using the following formula (Diamantopoulos & Siguaw, 2000, p. 90):

$$\rho_c = (\Sigma\lambda)^2 / [(\Sigma\lambda)^2 + \Sigma(\theta)] \quad (\text{Formula 4.1 Composite Reliability})$$

where ρ = composite reliability

λ = indicator loadings

θ = indicator error variances

Σ = summation of the indicators of the latent variable

Index composite reliability coefficient of .6 or above will be considered satisfactory. Additionally, a complementary measure for the aforementioned composite reliability was also calculated in order to estimate the average variance extracted in an index (Diamantopoulos & Siguaw, 2000, p. 91), using the following Formula 4.2:

$$\rho_v = \Sigma\lambda^2 / [\Sigma\lambda^2 + \Sigma(\theta)] \quad (\text{Formula 4.2 Average Variance Extracted})$$

where Σ , λ , and θ are the same as defined in Formula 4.1. Conceptually, the calculation of the average variance extracted was conducted to estimate how well the index capture the “true” variance in comparison to the variance induced by measurement error. A ρ_v coefficient smaller than .50 suggests that the index captures more variance attributed to measurement error than variance from the latent construct. In this study, the composite reliability of each index were calculated using formulas 4.1 and 4.2. Using Formulas 4.1 and 4.2, children’s general TV viewing index yielded a composite reliability of .93 and the average variance extracted of .69, respectively, which suggests a good reliability of the index. The factor loadings, error variances, composite reliability, and average variance extracted for children’s general television viewing are listed in Table 4.1

Table 4.1 Factor Loadings and Index Reliability of Children's General Television Viewing

Item No	Factor loadings	Error Variances	Composite Reliability	(Factor loading) ²	Average variance extracted
1	.81	.34	.93	.66	.69
2	.76	.42		.58	
3	.88	.22		.77	
4	.77	.41		.59	
5	.87	.24		.76	
6	.87	.24		.76	

The CFA on the perceived general television viewing for parents indicates unidimensionality of the index, with standardized factor loadings ranged between .71 and .91. The χ^2 value for parents' perceived general television viewing was 28.56 ($df = 9$, $p = .00$, $n = 303$), with RMSEA = .09 (RMSEA Confidence Interval = .05 – .12), CFI = .99 and NFI = .99, which is considered acceptable model fit for the index (Hu & Bentler, 1999), especially considering the small degrees of freedom of the model (Kline, 2011) (See Figure 4.3). The composite reliability and average variance extracted calculations yielded satisfactory coefficients of .93 and .68, respectively, for parents' general television viewing index, as listed in Table 4.2.

Table 4.2 Factor Loadings and Index Reliability of Parents' General Television Viewing

Item No	Factor loadings	Error Variances	Composite Reliability	(Factor loading) ²	Average variance extracted
1	.69	.53	.93	.48	.68
2	.74	.45		.55	
3	.91	.18		.83	
4	.83	.31		.69	
5	.90	.20		.81	
6	.87	.25		.76	

In addition to responding to the general television viewing index, participants were also asked to report on a 5-point scale (1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Very Often) how frequently they and their parent watched each of the following television programming genres: news (e.g., local television news, *CNN Newsroom*, *Fox Report*), dramatic programming (e.g., *Grey's Anatomy*, *CSI*, *Homeland*), sitcoms/comedies (e.g., *The Big Bang Theory*, *How I Met Your Mother*, *Two and a Half Men*), sports (e.g., Monday night football, NCAA games), and reality shows (e.g., *American Idol*, *The Biggest Loser*, *Survivor*, *The Bachelor*).

Unlike other cultivation studies, the survey did not ask participants to report how much time they spent watching television on an average day, which prevented this study from providing the baseline or comparison with the national average time spent for watching television viewing. This decision was taken for two reasons. First, since the survey included multiple scales with series of questions in each scale, the question was not included in order to avoid of the questionnaire from becoming too long. In developing the aforementioned 6-item Television Viewing Scale, Shrum and associates (2011) have demonstrated that the scale was highly correlated with participants' self-reported television viewing. Second, this study involved participants' reports of their parent's television viewing, which would make it difficult for participants to come up with reliable estimations of how much time their parent spent watching television, especially if they had to estimate how much their parent watched specific genres. Therefore, the aforementioned Television Viewing Scale was considered sufficient as a proxy for participants' and perceived parents' television viewing.

Participants' responses on their own general television viewing and their reports of parents' television viewing were averaged, yielding two scores for each participant: one for their own television viewing, and another one for their perceptions of parents' television viewing. Descriptive analyses yielded a score of 2.82 (SD = 1.11; Skewness = .07; Kurtosis = -1.07) for participants' own overall television viewing and 3.28 (SD = 1.05; Skewness = -.39; Kurtosis = -.58) for perceived parents' television viewing.

Participants' responses on genre-specific viewing for themselves ranged between 1.90 (Sports) and 2.73 (Sitcom), and 2.33 (Reality Shows) to 3.16 (News) for their parents. (See Table 4.3). The distribution for each genre-based viewing for parents and children are normal, with all skewness and kurtosis values fall within the range of -2 to +2. Reality shows had the highest skewness values for both parents' and children's genre-specific viewing. For parents' the skewness of reality shows viewing was .51, and for the children was 1.02. Sports yielded the highest kurtosis value for children's genre-specific viewing (Kurtosis = -1.21), whereas Drama had the highest kurtosis value for parents' genre-specific viewing (Kurtosis = -1.01).

Participants seemed to perceive that their parent watched television more frequently than them. The discrepancy between children's and parents' general television viewing also appeared in news and reality shows, where participants rated their parent's television viewing higher (i.e., more frequent) than their own television viewing. There was no significant difference between parents and children in watching sitcoms, dramatic programming, and sports.

Table 4.3 Television Viewing Mean Scores and Standard Deviation

Genre	Participants' Mean	Participants' SD	Parents' Mean	Parents' SD	Paired-Sample t-tests
General	2.82	1.11	3.28	1.06	-5.27**
News	2.47	1.03	3.16	1.09	-9.33**
Drama	2.72	1.20	2.08	1.19	-.92
Sitcom	2.73	1.12	2.77	1.21	-.56
Sports	2.43	1.47	2.44	1.34	-.07
Reality Shows	1.90	1.06	2.33	1.26	-5.10**

** $p < .001$

Participants' general television viewing was significantly correlated with the scores for genre-specific viewing. Additionally, participants' genre-specific viewing was also correlated with each other except for sports and drama. The presence of association between general television viewing and genre-specific viewing, as well as the correlations among genres, suggest that those who watched certain type of programming also watched other kinds of television shows as well. Similarly, parents' overall television viewing significantly correlated with their viewing of all programming genres included in the survey. Their consumption of a specific type of programming were also correlated to the viewing of other genres. (See Tables 4.4 and 4.5 for correlation matrices.)

Table 4.4 Correlation Matrix of Children's Television Viewing (n = 303)

	General	News	Drama	Sitcom	Sports	Reality
General	1					
News	.147*	1				
Drama	.464**	.172**	1			
Sitcom	.407**	.184**	.343**	1		
Sports	.153**	.221**	.058	.137*	1	
Reality	.289**	.178**	.260**	.302**	.163**	1

* $p < .05$

** $p < .01$

Table 4.5 Correlation Matrix of Parents' Television Viewing (n = 303)

	General	News	Drama	Sitcom	Sports	Reality
General	1					
News	.255**	1				
Drama	.416**	.145*	1			
Sitcom	.443**	.146*	.515**	1		
Sports	.259**	.210**	.145*	.242**	1	
Reality	.428**	.161**	.388**	.427**	.212**	1

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

4.3.2 Materialism

Materialism was measured using Richins' (2004) 9-item Material Values Scale (MVS). The scale is based on the aforementioned Richins' conceptualization of materialism as a value, which is comprised of three dimensions: success, centrality, and happiness. Each item was presented with a 5-point Likert scale, where 1 equals "Strongly Disagree" and 5 equals "Strongly Agree." The psychometric attributes of the scale have been tested and yielded satisfactory results (Richins, 2004): the scale's Cronbach's Alpha is .84, with good construct and criterion-related validity (validity assessment was conducted using the Possession Value Scale, Belk's Materialism Scale, Burroughs & Rindfleisch's Personal Values Scale, and self-reported windfall expenditures), and is unaffected by social desirability. In addition, the 9-item version of Richins' MVS scale is as reliable as its 18 and 15-item counterparts (as used in the aforementioned study conducted by Shrum et al., 2005), and more reliable than the 6 and 3-item versions (the 6-item version was used in Yang and Oliver, 2010). The 9-item MVS scale is as follows:

Success

1. I admire people who own expensive homes, cars, and clothes.
2. The things I own say a lot about how well I'm doing in life.

3. I like to own things that impress people.

Centrality

1. I try to keep my life simple, as far as possessions concerned. (Reversed)
2. Buying things gives me a lot of pleasure.
3. I like a lot of luxury in my life.

Happiness

1. My life would be better if I owned certain things I don't have.
2. I'd be happier if I could afford to buy more things.
3. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.

Similar to the measurement of television viewing, participants were also asked to report their perception about their parent's materialism. For this purpose, the MVS items were slightly modified, for example, "I admire people who own expensive homes, cars, and clothes" became "My parent admires people who own expensive homes, cars, and clothes." In this study, "parents' materialism" refers to children's perception of their parents' materialism.

Fitting all nine items of children's materialism into one latent variable in the CFA yielded bad model fit, which suggests a non-unidimensional structure of the materialism index ($\chi^2 = 285.59$, $df = 27$, $p < .01$, $n = 303$; RMSEA = .18 (RMSEA Confidence Interval = .16 – .20); CFI = .90; NFI = .88; GFI = .83; SRMR = .08) (See Figure 4.4). The calculation of composite reliability yielded a ρ_c of .87, yet the average variance extracted coefficient of ρ_v only reached .43, which suggests that the 1-factor model contained substantial measurement errors.

Table 4.6 Factor Loadings and Index Reliability of 1-Factor Materialism Index (Children)

Item No	Factor loadings	Error Variances	Composite Reliability	(Factor loading) ²	Average variance extracted
1	.68	.54	.87	.46	.43
2	.70	.52		.49	
3	.66	.56		.44	
4	.46	.79		.21	
5	.67	.55		.45	
6	.74	.45		.55	
7	.62	.61		.38	
8	.66	.57		.44	
9	.66	.57		.44	

Similarly, CFA for perceived parents' materialism indicated that the one-factor measure of materialism did not fit the data ($\chi^2 = 287.85$, $df = 27$, $p < .01$, $n = 303$; RMSEA = .18 (RMSEA Confidence Interval = .16 – .19); CFI = .92; NFI = .92; GFI = .83, SRMR = .07) (See Figure 4.5), with modest reliability ($\rho_c = .90$; $\rho_v = .51$ (See Table 4.7).

Table 4.7 Factor Loadings and Index Reliability of 1-Factor Materialism Index (Parents)

Item No	Factor loadings	Error Variances	Composite Reliability	(Factor loading) ²	Average variance extracted
1	.81	.34	.90	.66	.51
2	.76	.43		.58	
3	.80	.36		.64	
4	.47	.78		.22	
5	.72	.49		.52	
6	.75	.44		.56	
7	.79	.38		.62	
8	.69	.52		.48	
9	.60	.65		.36	

Drawing from Richin's conceptualization of materialism as a three-dimensional construct (i.e., success, centrality, and happiness), another CFA that fitted the nine items into three latent constructs was conducted, which generated a good model fit ($\chi^2 = 36.77$,

$df = 24$, $p = .05$, $n = 303$; RMSEA = .04 (RMSEA Confidence Interval = .01 – .06); CFI = .99; NFI = .98; GFI = .97, SRMR = .03) (See Figure 4.6). The 3-factor index also yielded better composite reliability and average variance extracted compared to the one-factor index, especially for the success and happiness dimensions of materialism (See Table 4.8).

Table 4.8 Factor Loadings and Index Reliability of 3-Factor Materialism Index (Children)

Item No	Factor loadings	Error Variances	Composite Reliability	(Factor loading) ²	Average Variance Extracted	Dimension
1	.74	.45	.78	.55	.54	Success
2	.75	.44		.56		
3	.72	.48		.52		
4	.49	.76	.72	.24	.46	Centrality
5	.72	.49		.52		
6	.80	.36		.64		
7	.84	.30	.85	.71	.65	Happiness
8	.84	.30		.71		
9	.75	.44		.56		

The sample's mean score for children's success dimension of materialism was 3.11 (SD = .91; Skewness = -.17; Kurtosis = -.45), and the scores for the centrality and happiness dimensions were 3.03 (SD = .84; Skewness = -.05; Kurtosis = -.45) and 3.60 (SD = .94; Skewness = -.65; Kurtosis = .02), respectively. The scores indicated a "medium" average level of materialism among children.

Using the same three-dimensional structure, CFA on parents' perceived materialism (hereon referred to as "parents' materialism") yielded an acceptable model fit ($\chi^2 = 68.24$, $df = 24$, $p < .01$, $n = 303$; RMSEA = .08 (RMSEA Confidence Interval = .05 – .10); CFI = .98; NFI = .98; GFI = .95; SRMR = .04). The RMSEA confidence of interval for the parents' perceived materialism exceeded the conventional range of .00 to

.08, which could be attributed to the small degrees of freedom and the modest sample size (Breivik & Olson, 2001; Kline, 2011). The calculations for composite reliability and average variance extracted generated satisfactory coefficients for all three dimensions of materialism (See Table 4.9 below and Figure 4.7 at the end of this chapter).

Table 4.9 Factor Loadings and Index Reliability of 3-Factor Materialism Index (Parents)

Item No	Factor loadings	Error Variances	Composite Reliability	(Factor loading) ²	Average Variance Extracted	Dimension
1	.84	.29	.86	.71	.67	Success
2	.78	.39		.61		
3	.82	.32		.67		
4	.54	.71	.78	.29	.55	Centrality
5	.78	.39		.61		
6	.87	.24		.76		
7	.87	.24	.85	.76	.65	Happiness
8	.83	.32		.69		
9	.71	.50		.50		

The sample's mean score for parents' success dimension of materialism was 3.01 (SD = 1.04), and the scores for the centrality and happiness dimensions were 2.99 (SD = .92) and 3.24 (SD = 1.02), respectively. Therefore, similar to children's materialism, the scores on parents' materialism indicated a "medium" level of the value.

The results of the CFA on Richin's materialism index suggest that the 3-factor composite outperformed its 1-factor counterpart for both children and parents. Therefore, in this study, each dimension of materialism – success, centrality, and happiness – was analyzed separately in individual path analysis.

4.3.3 Social comparison

Previous scholarly works (e.g., O’Guinn & Shrum, 1997; Richins, 1991, 1992, 1995; Gulas & McKeage, 2000) suggest that frequent exposure to idealized media images would create unrealistic benchmarks of beauty and success for audiences. However, in the context of this research, asking direct questions on whether participants engage in upward comparison with the characters they see on television would “sensitize” them and might make them guess what the desirable responses would be, thus making their responses less genuine. To circumvent this possibility, participants were asked to compare their livelihood with most people, with the assumption that heavy viewers tend perceive their livelihood as worse than most people, due to the salience of the affluence they see in television stories as an unrealistic reference group.

In their study, Yang and Oliver (2010) used the Social Comparison Discrepancy Scale (Solberg, Diener, Wirtz, Lucas, & Oishi, 2002) to measure how participants perceived their livelihood relative to other people. As mentioned, Yang and Oliver found that heavy viewers appeared to perceive their life as economically worse-off than most people, and this relationship was more pronounced among individuals with low income. In the construction of the index, Solberg and colleagues (2002) reported high factor loadings of the items – ranging from .84 to .92 – indicating the scale’s high construct validity. In Yang and Oliver’s (2010) study, all items in the scale loaded into a single factor, with .85 as the smallest factor loading, and a reliability index of Cronbach’s alpha coefficient as high as .96. The items of the scale are presented below; on each item, participants responded on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Originally, in each item, the scale asked participants to compare their life to the life of “other people” (Solberg et al., 2002, p. 734), which potentially would induce ambiguity among participants. In this study, “other people in general” is replaced with “other people.” Furthermore, in this study, item number 4 in the original item “I can afford better transportation (car, bus, etc.) than other people in the general” was modified into “I can travel more comfortably than other people”. Participants responded to each item using a 5-point Likert Scale (1 = Strongly Disagree, and 5 = Strongly Agree); a higher score indicates the perception of being economically better off than other people (i.e., downward social comparison). The responses to the seven items were then averaged, therefore the possible score for each participant ranged from 1 to 5. The items that were used to measure social comparison in this study were:

1. I can afford a better dwelling (apartment, house, etc.) than other people.
2. I can afford better food than other people.
3. I can afford more expensive entertainment than other people.
4. I can afford to travel comfortably than other people.
5. I can afford better clothes than other people.
6. I can afford better medical care than other people.
7. I can afford to pay school expenses more easily than other students.

The overall mean for the social comparison index score is 2.56 (SD = .94; Skewness = .19; Kurtosis = -.45). The factor loadings generated from the CFA ranged between .71 to .86, although the model fit was modest ($\chi^2 = 46.16$, $df = 14$, $p < .001$, $n = 303$; RMSEA = .09 (RMSEA Confidence Interval = .06 – .12); CFI = .99; NFI = .98; GFI = .95; SRMR = .03). The index also had satisfactory composite reliability and

average variance extracted coefficients of .93 and .66, respectively (See Table 4.10 below and Figure 4.8 at the end of this chapter).

Table 4.10 Factor Loadings and Index Reliability of Social Comparison Index

Item No	Factor loadings	Error Variances	Composite Reliability	(Factor loading) ²	Average variance extracted
1	.86	.27	.93	.74	.66
2	.83	.30		.69	
3	.85	.28		.72	
4	.82	.32		.67	
5	.85	.28		.72	
6	.74	.46		.55	
7	.72	.49		.52	

4.3.4 Life satisfaction

The widely used five-item Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) was used to measure life satisfaction. In the original version of the scale, participants respond to each item using a 7-point Likert scale, where 1 represents “strongly agree” and 7 represents “strongly disagree.” In this study, a 5-point instead of 7-point Likert scale will be used, where 1 equals “strongly disagree” and 5 equals “strongly agree.” Therefore, a higher score represents better satisfaction with life. The scale possesses acceptable psychometric attributes for research purposes, with internal consistency coefficients that range from .79 to .86, with moderate temporal stability: test-retest score correlations range from .54 (2-year test-retest interval) to .83 (2-week interval) and .84 (1-month interval; Pavot & Diener, 1993; Pavot, Diener, Colvin, & Sandvik, 1991). Items number 3 and 4 were modified for the purpose of reversed coding. The items of the Satisfaction with Life Scale are as follows:

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.

3. I am not satisfied with my life. (Reversed)
4. So far I have not gotten the important things I want in life. (Reversed)
5. If I could live my life over, I would change almost nothing.

CFA on participants' self-reported life satisfaction index yielded acceptable model fit ($\chi^2 = 25.17$, $df = 5$, $p < .01$, $n = 303$; RMSEA = .11 (RMSEA Confidence Interval = .07 – .16); CFI = .97; NFI = .96; GFI = .97; SRMR = .04), with factor loadings ranged from .38 to .90. The average score for this life satisfaction index was 2.97 (SD = .87; Skewness = -.04; Kurtosis = -.41). However, the estimation of the index reliability only yielded modest composite reliability and average variance extracted coefficients ($\rho_c = .55$; $\rho_v = .46$), suggesting a considerable amount of variance attributed to measurement errors (See Table 4.11 below and Figure 4.9 at the end of this chapter).

Table 4.11 Factor loading and index reliability of Life Satisfaction Index

Item No	Factor loadings	Error Variances	Composite Reliability	(Factor loading) ²	Average variance extracted
1	.89	.20	.55	.79	.46
2	.76	.42		.58	
3	.68	.53		.46	
4	.38	.86		.14	
5	.57	.68		.32	

4.3.5 Demographic attributes

Data on several demographic characteristics were included in the questionnaire. Participants were asked about their gender (male, female, or transgender), age, racial group or ethnicity they identify themselves with (i.e., whether participants identified themselves as White, African American, Hispanic/Latino, Asian/Asian American, Native American, and political views (measured on a 7-point scale, where 1 = very liberal, and 7

= very conservative). Additionally, they also received questions on their own, as well as both their father's and mother's, educational attainment (1 = less than High School; 2 = High School or GED; 3 = Associate Degree or Some College; 4 = Bachelor's Degree; 5 = Graduate Degree), and the estimated family annual income before tax (measured in income brackets, starting at \$25,000 and below to \$95,000 and above, with \$10,000 increments per bracket).

Frequency analyses revealed that participants in this study were predominantly male and white. Out of 303 participants, 191 or 63 percent were male, while the remaining 112 or 37 percent were female, which differed from the U.S. national population (49.1 percent male) and U.S. MTurk workers (35 to 40 percent male) (Berinsky, Huber, & Lenz, 2012; Ipeirotis, 2010; Howden & Meyer, 2011). In his analyses on MTurk respondents, Ipeirotis (2010) argued that in general, across different age groups, MTurk respondents were more likely to be female, perhaps because there are many stay-at-home parents worked as Turkers as a means to earn supplementary income. However, having stay-at-home parents did not seem to apply in this study, given the predominantly male sample in this study.

Forty-three percent reported that their fathers' birthday came next, whereas the remaining 53 percent had their mothers' birthday coming next. Given the proportion between male and female participants, the examination on the gender of family members and the intergenerational cultivation of materialism could only involve the gender of the parents. The vast majority of participants, 221 individuals (71.3 percent), identified themselves as white. This disproportionate composition of racial groups differed from the

U.S. national population, where non-Hispanic white constituted 64 percent of the U.S. population (Humes, Jones, & Ramirez, 2011).

This study limited the age of participants within the range of 18 to 25, yielding the average reported age of 22.67 (SD = 1.83). Participants seemed to come from slightly higher socioeconomic backgrounds compared to the average Americans. Most participants reported that they either have completed some college or earned an associate degree (141 out of 303, or 46.5 percent), or received a Bachelor's Degree (109 out of 303, or 36 percent). Almost all participants reported that their parents at least graduated from high school. Only 6.6 percent and 5.6 percent reported that their father and mother, respectively, did not graduate from high school. Fifty-one percent of fathers and forty-four percent of mothers earned a college degree, or have some graduate education, or a graduate degree. The median estimated annual family income (before taxes) fell somewhere in between \$55,000 and \$64,999, which was higher than the national median household income of \$51,371 (U.S. Census Bureau, 2013b). In other words, as a whole, participants in this study came from wealthier and more educated families. The gender, race, socioeconomic background of the sample, which leaned heavily towards white male with higher socioeconomic origin, would limit the generalizability of the results of this study. The summary of participants' demographics can be seen in Table 4.12.

Table 4.12 Demographic Attributes (n = 303)

Attribute	Frequency	Percentage
Participants		
Gender		
Male	191	63.0%
Female	112	37.0%
	22.67	
Mean Age (SD)	(1.86)	n/a
Ethnicity		
White	221	72.9%
Non-White	82	27.1%
Educational Attainment		
Less than high school	4	1.3%
High school	36	11.9%
Some College/Associate Degree	141	46.5%
College	109	36.0%
Some Graduate School	11	3.6%
Graduate Degree	2	.7%
Parents (as reported by participants)		
Gender		
Male	130	42.9%
Female	173	57.1%
	53.63	
Mean Age (SD)	(6.59)	n/a
Educational Attainment		
Father		
Less than high school	20	6.6%
High school	83	29.3%
Some College/Assoc. Degree	67	30.9%
College	77	33.5%
Some Graduate School	14	5.8%
Graduate Degree	42	13.7%
Mother		
Less than high school	17	5.6%
High school	80	28.0%
Some College/Assoc. Degree	90	29.7%
College	77	26.9%
Some Graduate School	12	4.9%
Graduate Degree	27	14.1%
Annual Family Income		
Below \$25,000	35	11.6%

\$25,000 - \$34,999	40	13.2%
\$35,000 - \$44,999	29	9.6%
\$45,000 - \$54,999	30	9.9%
\$55,000 - \$64,999	33	10.9%
\$65,000 - \$74,999	26	8.6%
\$75,000 - \$84,999	26	8.6%
\$85,000 - \$94,999	18	5.9%
\$95,000 or above	66	21.8%

Figure 4.1 Conceptual Path Diagram of Parents' Television Viewing and the Cultivation of Materialism in the Family

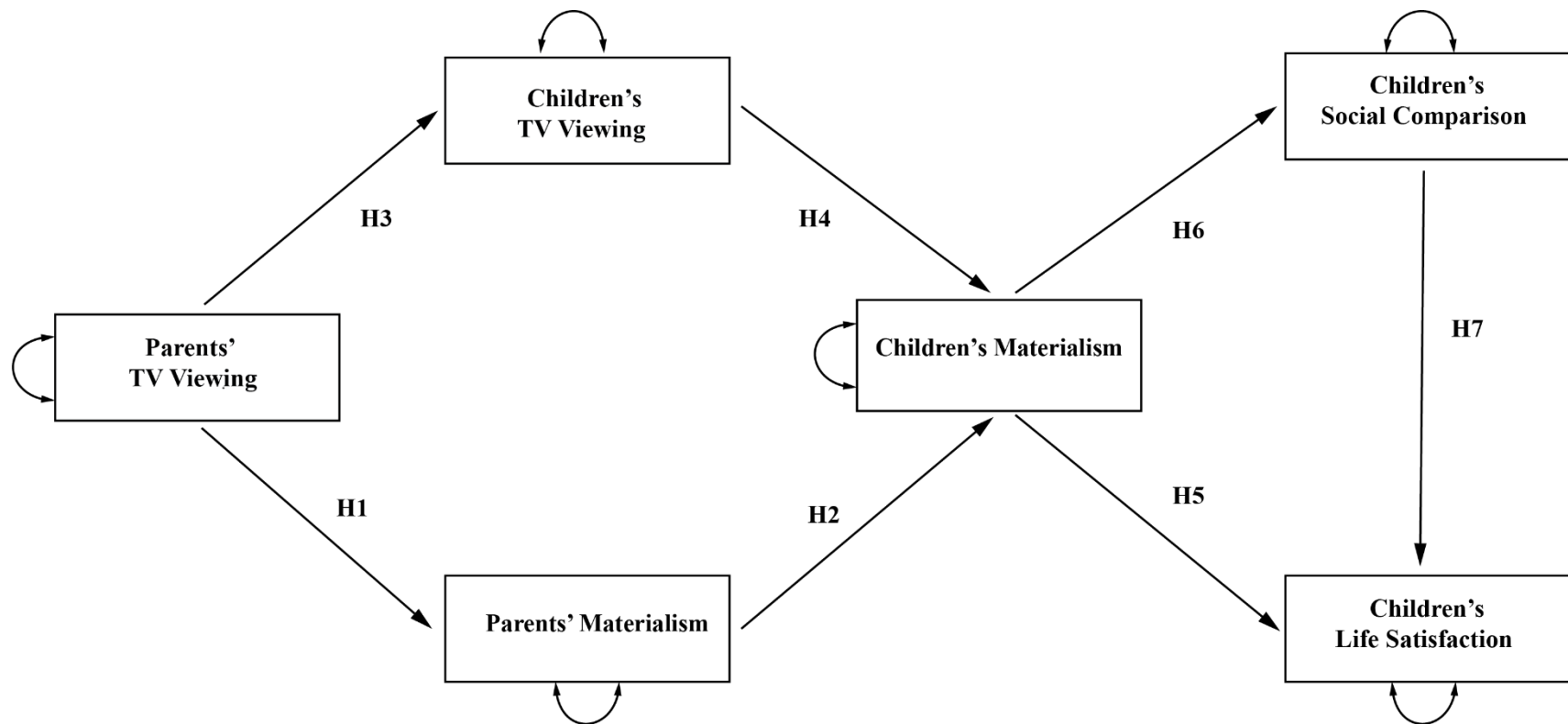


Figure 4.2 CFA of Children's General Television Viewing (n = 303)

Note: Factor loading coefficients are standardized solution. Model fit: $\chi^2_{(303, 9)} = 32.56$; RMSEA = .09 (CI .06; .13); CFI = .99; NFI = .98; GFI = .97; SRMR = .02

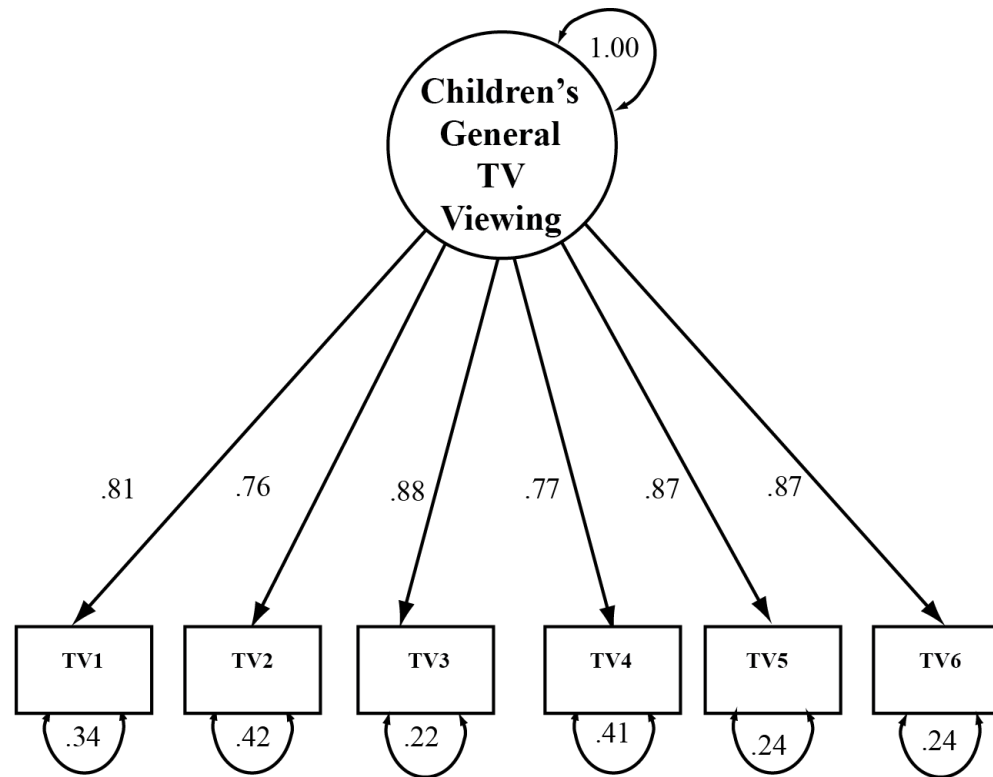


Figure 4.3 CFA of Parents' General Television Viewing (n = 303)

Note: Factor loading coefficients are standardized solution. Model fit: $\chi^2_{(303, 9)} = 28.56$; RMSEA = .09 (CI .05; .12); CFI = .99; NFI = .98; GFI = .97; SRMR = .02

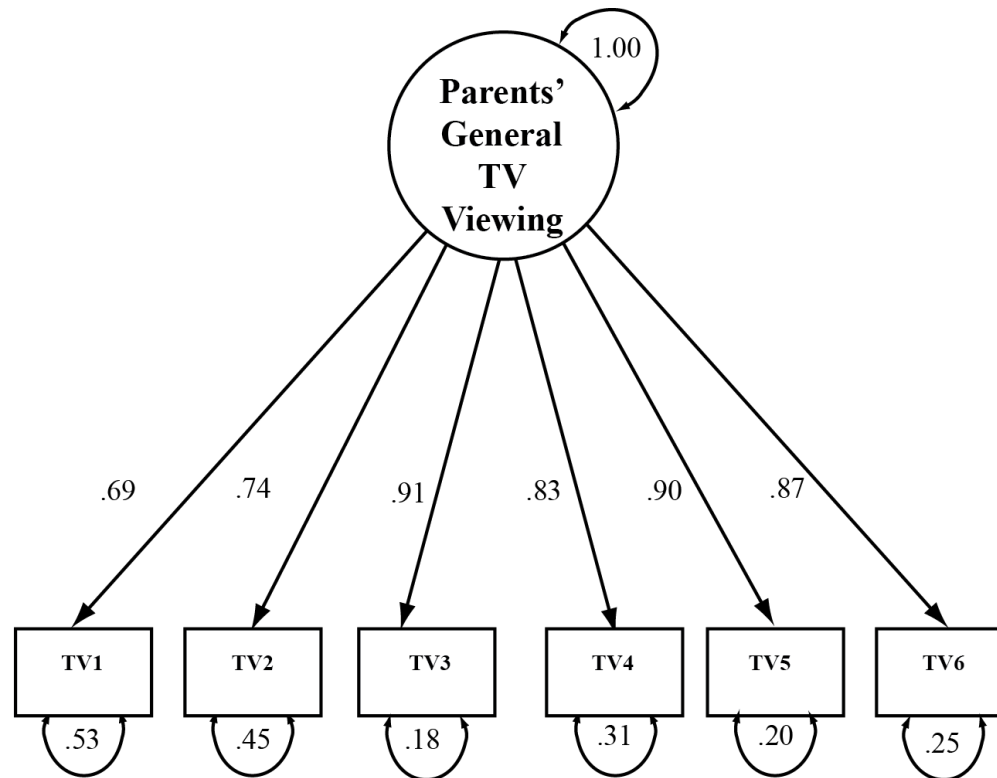


Figure 4.4 CFA of Children's Materialism (1 factor) (n = 303)

Note: Factor loading coefficients are standardized solution. Model fit: $\chi^2_{(303, 27)} = 285.59$; RMSEA = .18 (CI .16; .20); CFI = .90; NFI = .88; GFI = .83; SRMR = .08

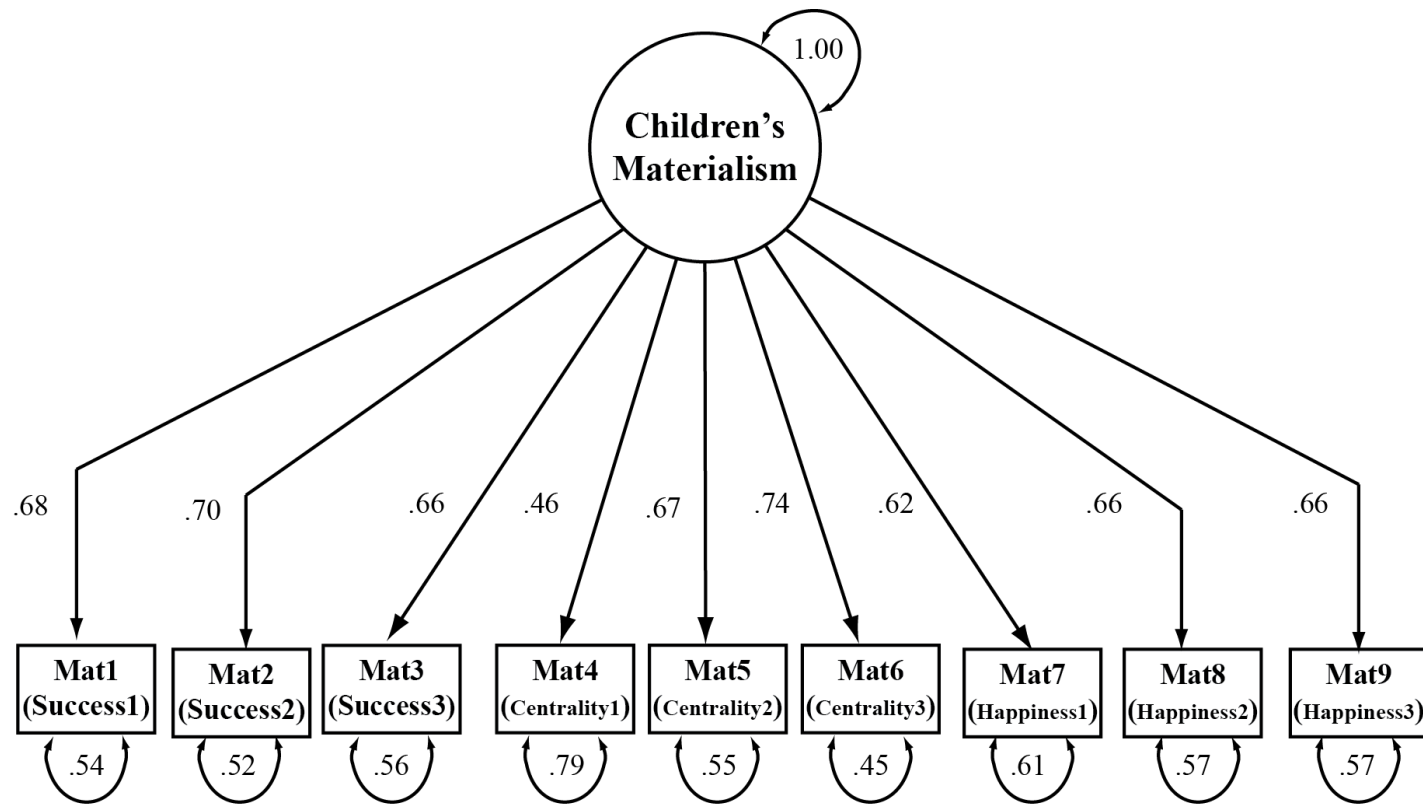


Figure 4.5 CFA of Parents' Materialism (1 factor) (n = 303)

Note: Factor loading coefficients are standardized solution. Model fit: $\chi^2_{(303, 27)} = 287.85$; RMSEA = .18 (CI .16; .19); CFI = .91; NFI = .92; GFI = .83; SRMR = .18

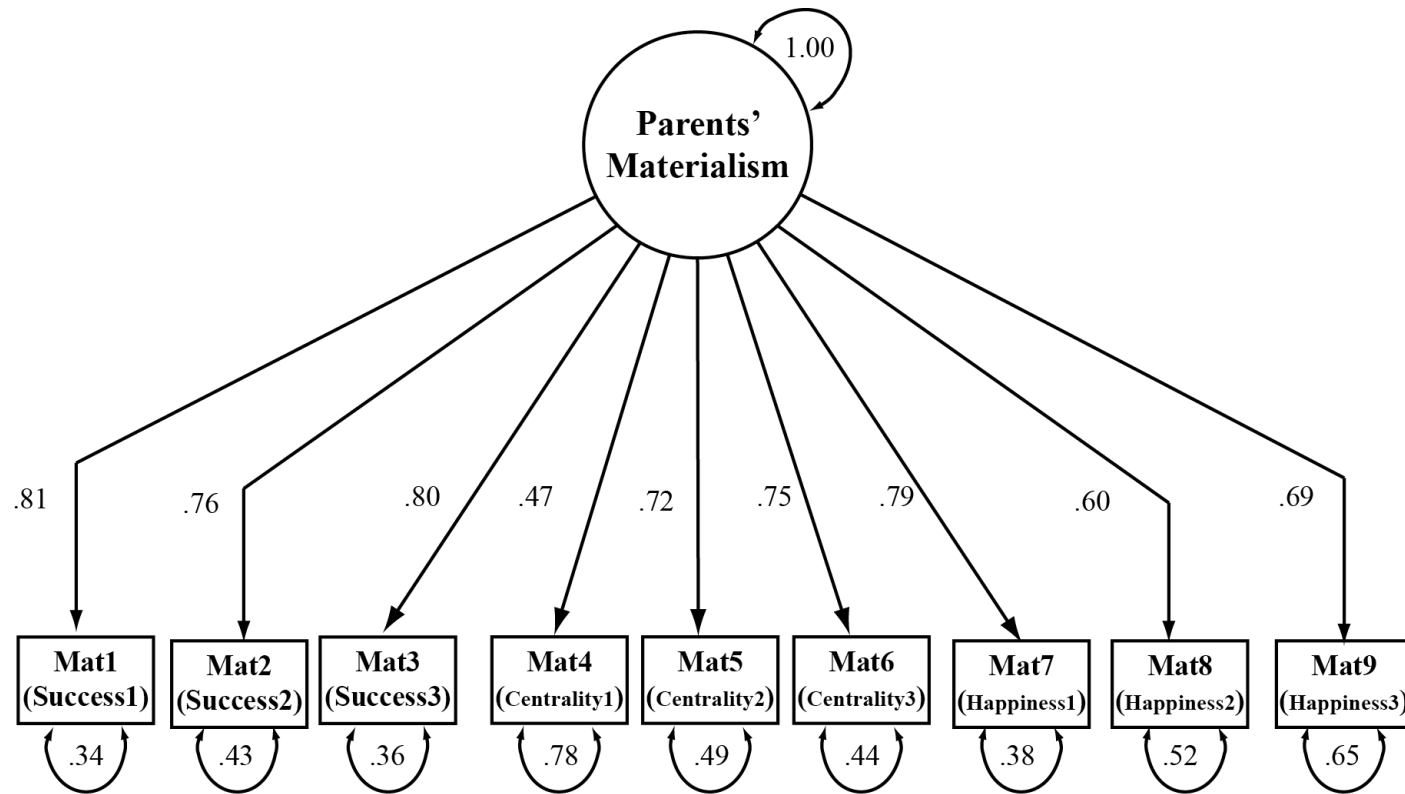


Figure 4.6 CFA of Children's Materialism (3 factors) (n = 303)

Note: Factor loading coefficients are standardized solution. Model fit: $\chi^2_{(303, 27)} = 36.77$; RMSEA = .04 (CI .03; .07); CFI = .99; NFI = .98; GFI = .97; SRMR = .03

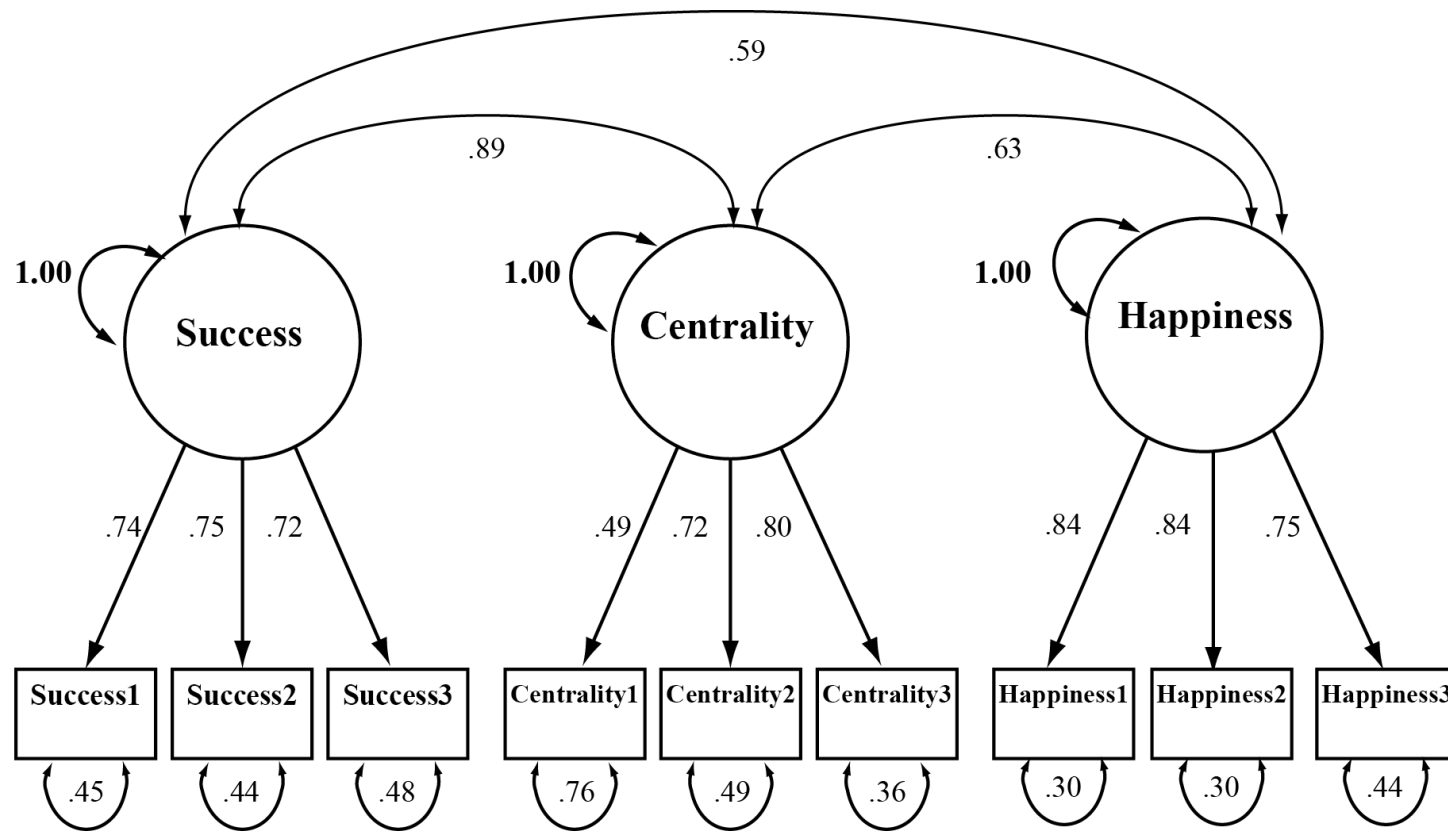


Figure 4.7 CFA of Parents' Materialism (3 factors) (n = 303)

Note: Factor loading coefficients are standardized solution. Model fit: $\chi^2_{(303, 27)} = 36.77$; RMSEA = .08 (CI .05; .10); CFI = .98; NFI = .98; GFI = .95; SRMR = .04

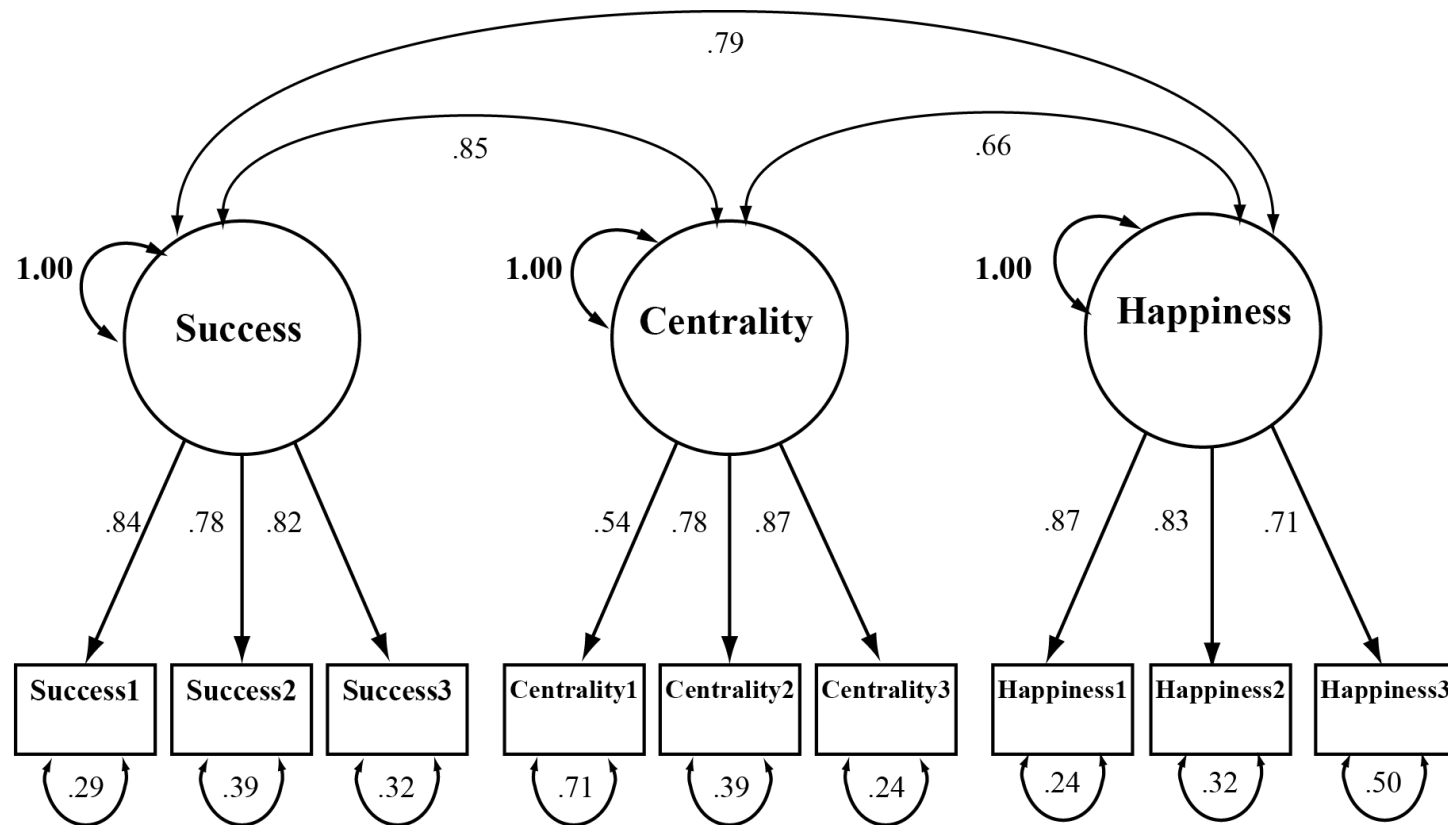


Figure 4.8 CFA of Children's Social Comparison (n = 303)

Note: Factor loading coefficients are standardized solution. Model fit: $\chi^2_{(303, 14)} = 46.16$; RMSEA = .09 (CI .06; .11); CFI = .99; NFI = .98; GFI = .95; SRMR = .03

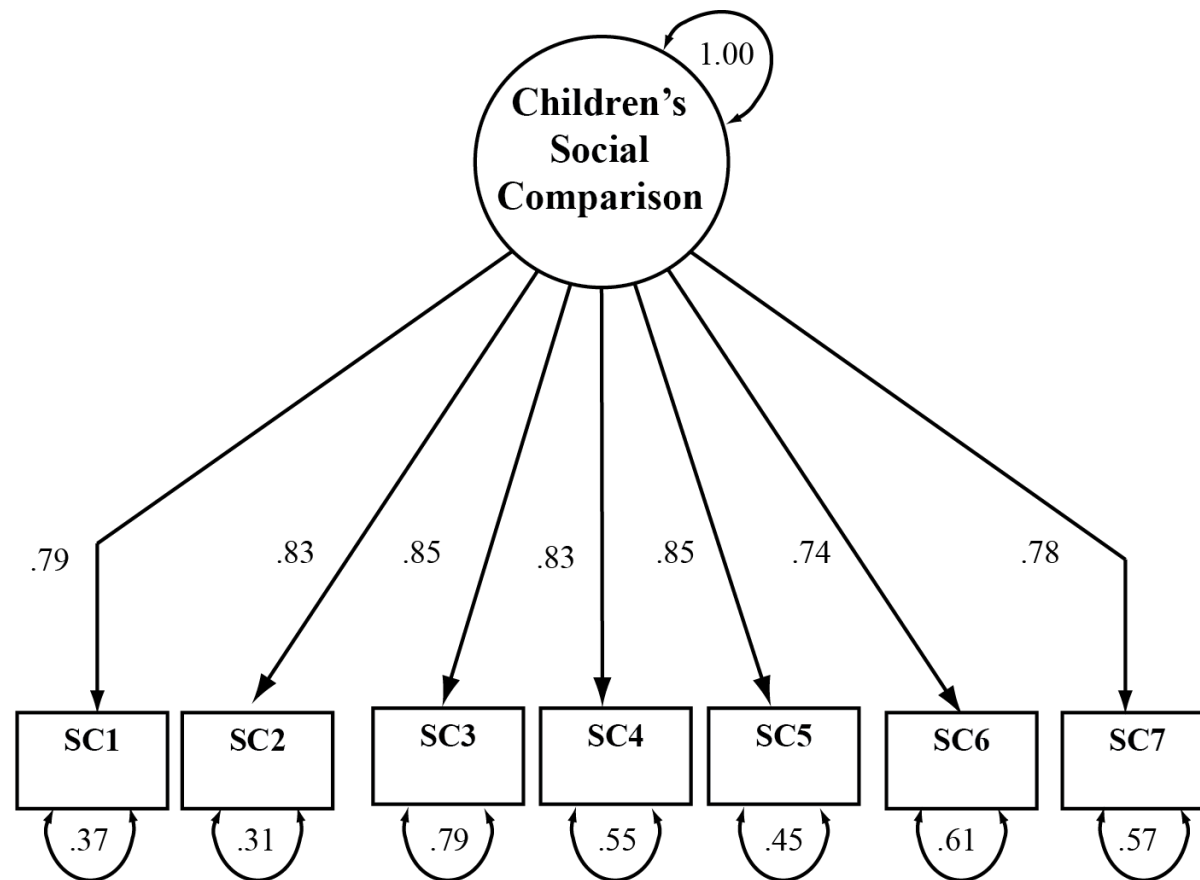
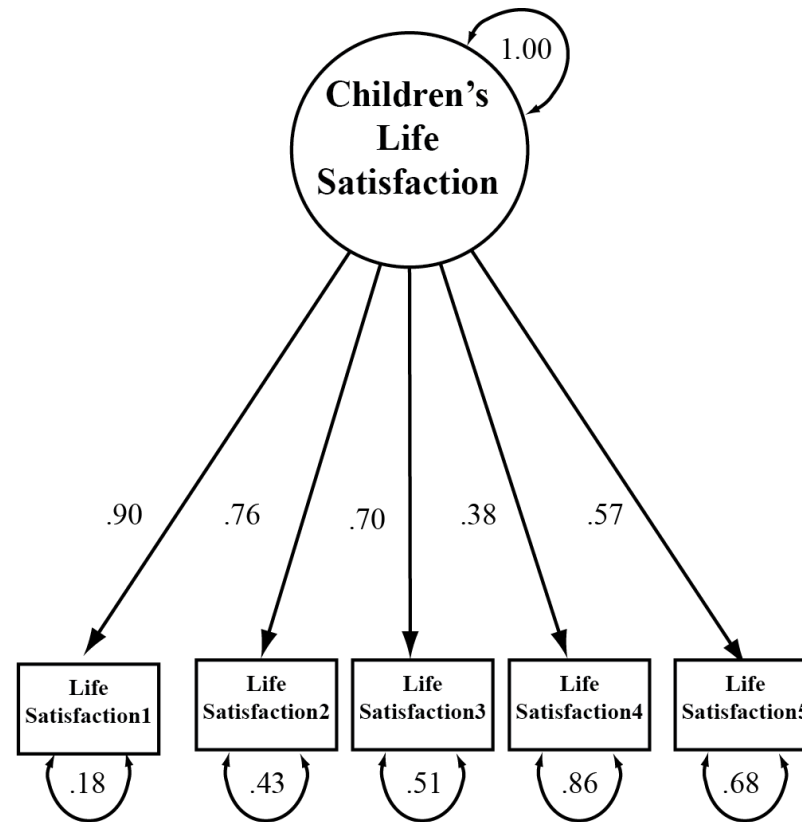


Figure 4.9 CFA of Children's Life Satisfaction (n = 303)

Note: Factor loading coefficients are standardized solution. Model fit: $\chi^2_{(303, 5)} = 25.17$; RMSEA = .11 (CI .07; .16); CFI = .97; NFI = .96; GFI = .97; SRMR = .04



CHAPTER 5

RESULTS

This study employed path analysis as data analysis technique. Each dimension of materialism – success, centrality, and happiness – was analyzed individually in separate path analyses. In order to test H1 to H7 and answer RQ1 on the role of general and genre-based television viewing in cultivating materialism in the family, individual analyses were conducted on overall and genre-specific television viewing for each dimension of materialism. In order to test H8, multi-group analyses were conducted to compare individuals from higher-SES and lower-SES families. The results of this study are presented based on the three dimensions of materialism. Within each dimension, analyses of overall and genre-based specific viewing are presented, followed by the results of the multi-group path analyses.

To test H8, the examinations of the role of socioeconomic status (SES) in the cultivation of materialism in the family were conducted by running separate multi-group path analyses based on an SES composite that was created by running principal component analyses on parents' education and income. For each multi-group analysis, a median split was used to divide the sample into two groups (Yang & Oliver, 2010).

As mentioned, parents' educational attainment was measured using a 5-point scale (1 = less than High School; 2 = High School or GED; 3 = Associate Degree or Some College; 4 = Bachelor's Degree; 5 = Graduate Degree) for mother and father separately. Similarly, family annual income (before tax) was measured using 9 option categories (1 = below \$25,000, 8 = \$95,000 or above; See Table 6). Using principal component analysis, father's and mother's educational attainment and family income

scores were subsequently used to generate an SES composite. Frequency analysis on the sample's SES composite yielded the median score of -.10, which was subsequently used as a cutoff to divide the sample into those who came from "lower" and "higher" SES in the multi-group analyses. For all multi-group analyses, 151 individuals were categorized into the "lower SES" group, whereas the remaining 152 were belonged to the "higher SES" group. The reported median family income for the lower-SES group fell somewhere between \$25,000 and \$34,999, and the median educational attainment of participants' father and mother was high school or GED. For participants from higher-SES, the reported median family income was somewhere between \$85,000 and \$94,999, and median father's and mother's educational attainment was four-year college degree.

Independent-sample t-tests suggest that the two groups did not differ on almost all latent variables with a few following exceptions: For parents' general television viewing, parents from higher-SES families were reported to watch television slightly less frequently than those from lower SES (Low: $M = 3.38$, $SD = 1.09$; High: $M = 3.17$, $SD = 1.02$; $t(301) = 1.82$, $p = .07$). Parents' from higher SES were reported to watch news (Low: $M = 3.03$, $SD = 1.12$; High: $M = 3.29$, $SD = 1.06$; $t(301) = 2.06$, $p < .05$) and sports (Low: $M = 2.31$, $SD = 1.32$; High: $M = 2.57$, $SD = 1.34$; $t(301) = 1.66$, $p = .10$) more frequently, but watched sitcom (Low: $M = 2.91$, $SD = 1.19$; High: $M = 2.64$, $SD = 1.18$; $t(301) = 1.98$, $p = .05$) less frequently than their lower SES counterparts.

Parents from higher SES also had a higher average score in the centrality dimension of materialism than parents from lower SES (Low: $M = 2.87$, $SD = .93$; High: $M = 3.10$, $SD = .89$; $t(301) = 2.19$, $p < .05$). Similarly, children from higher SES scored higher in social comparison (Low: $M = 2.39$, $SD = .91$; High: $M = 2.73$, $SD = .94$; $t(301)$

= 3.18, $p < .01$); in other words, compared to those from lower socioeconomic background, offspring from higher-SES families are more likely to see themselves as better off than other people. In contrast, offspring from lower SES scored slightly higher in the happiness dimension of materialism (Low: $M = 3.70$, $SD = .95$; High: $M = 3.50$, $SD = .91$; $t(301) = 1.98$, $p = .06$). That is, children from lower SES believe more strongly than their higher SES counterparts that material goods are needed to attain happiness in life.

In the path analyses, all path coefficients refer to the direct association between two variables, controlling for all other paths (See Figure 4.1 in Chapter 4). For example, the path coefficient between parents' materialism and children's materialism shows the association between the two variables, controlling for the relationships between parents' television viewing and parents' materialism, parents television viewing and children's television viewing, and children's television viewing and children's materialism, respectively. In "effect decomposition" analyses, the words "effect" and "association" or "relationship" are used interchangeably. The model tested the presence of one particular direction (i.e., parents-to-children transmission of materialism); however, as in cross-sectional design of the research, the analyses do not nullify the possible presence of reversed direction of the relationships (e.g., children-to-parents association). All tables in this chapter are provided within the text, and all figures that illustrate the results of the analyses are provided at the end of this chapter. The covariance/correlation matrices that were used in the analyses can be seen in the Appendix.

5.1 The Cultivation of the Success Dimension of Materialism in the Family

5.1.1 General television viewing and the success dimension of materialism

The model that tested the cultivation of the success dimension of materialism yielded good fit ($\chi^2 = 4.47$, $df = 8$, $p = .81$; RMSEA = .00 (CI = .00 – .04); CFI = 1.00; NFI = .96; GFI = .99, SRMR = .03). Path analysis suggests that parents' general television viewing positively predicts their belief that wealth and material possession are indicators of success ($B = .20$, $SE = .06$, $t = 3.55$), which in turn, controlling for other paths, predicts the same belief among children ($B = .13$, $SE = .05$, $t = 2.67$). Therefore, H1 and H2 are supported. However, contrary to H3, parents' general television viewing is not associated with children's television viewing ($B = .05$, $SE = .06$, $t = .84$), although, supporting H4, children's television viewing is positively correlated with children's success dimension of materialism, controlling for other associations in the model ($B = .12$, $SE = .05$, $t = 2.63$).

In line with H5, children's materialism negatively predicts their life satisfaction ($B = -.23$, $SE = .05$, $t = -4.73$). That is, children who believe that wealth and material possessions reflect how successful people are tend to be less satisfied with their own life. Nevertheless, contrary to H6, the relationship between the success dimension of materialism and social comparison was found to be positive ($B = .23$, $SE = .06$, $t = 3.89$). That is, individuals who use material possessions as a basis to judge other people's accomplishment in life are more likely to think that they are economically better off than other people. Supporting H7, those who perceive themselves as enjoying a better livelihood relative to other people tend to have higher life satisfaction ($B = .20$, $SE = .06$,

$t = 3.33$). See Figure 5.1 for the path diagram of parents' general television viewing and the cultivation of the success dimension of materialism.

The relationships among materialism, social comparison, and life satisfaction suggest the presence of suppression. Removing the path between social comparison and life satisfaction, the model yields a path coefficient of .23 ($SE = .06$) between materialism and social comparison, indicating the relationship between social comparison and life satisfaction as the suppressor for the association between materialism and life satisfaction. Removing the path between social comparison and life satisfaction causes the unstandardized path coefficient between children's materialism and life satisfaction decrease to $-.12$ ($SE = .05$, $t = -2.18$) from the aforementioned $B = -.23$ ($SE = .05$, $t = -4.73$), indicating the necessity to control the relationship between social comparison and life satisfaction.

Besides the direct associations among variables, the indirect and total effects were also calculated. Each indirect effect is estimated by multiplying the unstandardized path coefficients of the two or more paths that "lead" to the corresponding endogenous variable (Kline, 2011). If a variable is predicted through more than one "route", the indirect effects from each route are summed. For example, parents' television viewing predicted children's materialism through parents' materialism and children's television viewing. Therefore, the indirect effects of parents' television viewing on the success dimension of children's materialism is calculated as the sum of two indirect paths:

1. Parents' TV viewing \rightarrow Parents' Materialism (Success) \rightarrow Children's Materialism (Success), which is $.197 \times .132 = .026$. The Sobel test suggests that the indirect effect is significant ($z = 2.15$, $SE = .012$, $p < .05$).

2. Parents' TV viewing → Children's TV Viewing → Children's Materialism

(Success), which is $.051 \times .121 = .006$. Unlike the first indirect path, the indirect effect of parents' television viewing on children's materialism through children's television viewing is not significant ($z = .80$, $SE = .01$, $p = .42$).

The total indirect effect of parents' television viewing on children's success dimension of materialism is the sum of the two indirect effects above, which is .032. Total effect is calculated by adding up the direct association/effect and the total indirect effect(s). Since parents' television viewing is not directly associated with children's materialism in the model, the direct effect of parents' television viewing on the success dimension is zero. Therefore, the total effects of parents' television viewing on the success dimension of children's materialism is equal to its total indirect effects, which is .032 ($SE = .010$, $t = 3.2$, $p < .01$), or .040 in a form of standardized coefficient. The total indirect effects suggests a modest but significant association between parents' television viewing and the success dimension of children's materialism.

Using the same procedure, the total effects of children's materialism on their life satisfaction can be broken down into two "routes": First, one direct path from children's materialism to life satisfaction, and, second, an indirect path through children's social comparison:

1. Children's materialism → Children's life satisfaction = $-.227$.

2. Children's materialism → Children's social comparison → Children's life satisfaction = $.226 \times .479 = .108$. The Sobel test suggests the significance of

the indirect path from materialism to life satisfaction through social comparison ($z = 3.63$, $SE = .030$, $p < .001$)

Therefore, the total effect of children's materialism on life satisfaction is $-.227 + .108$, which is $-.119$.

Looking at the model as a whole, there are four indirect paths that connect parents' television viewing to children's life satisfaction:

1. Parents' TV viewing \rightarrow Parents' Materialism \rightarrow Children's Materialism \rightarrow Children's Social Comparison \rightarrow Children's Life Satisfaction
2. Parents' TV Viewing \rightarrow Children's TV Viewing \rightarrow Children's Materialism \rightarrow Children's Social Comparison \rightarrow Children's Life Satisfaction
3. Parents' TV Viewing \rightarrow Parents' Materialism \rightarrow Children's Materialism \rightarrow Children's Life Satisfaction
4. Parents' TV Viewing \rightarrow Children's TV Viewing \rightarrow Children's Materialism \rightarrow Children's Life Satisfaction

Therefore, the indirect effect for each path was calculated as the following:

1. Indirect Effect 1 = $.197 \times .132 \times .226 \times .479 = .0028$
2. Indirect Effect 2 = $.051 \times .121 \times .226 \times .479 = .0006$
3. Indirect Effect 3 = $.197 \times .132 \times -.227 = -.006$
4. Indirect Effect 4 = $.051 \times .121 \times -.227 = -.0014$

The total indirect effects of parents' television viewing on children's life satisfaction is the sum of the four specific indirect paths above, or $.0028 + .0006 + .006 + .0014$, which is $-.004$. The total effect of parents' television viewing on children's life satisfaction is the sum of the total direct and total indirect effects, or $0 + (-.004)$, which is

-.004. In other words, since the model does not include a direct path that links parents' television viewing and children's life satisfaction, the total effect of parents' television viewing on children's life satisfaction is solely comprised by the total indirect effects.

Drawing from the specific indirect paths above, therefore, the specific indirect effects of each endogenous variable on other endogenous variable can also be calculated. For example, the indirect effects of children's television viewing on life satisfaction consist of two specific indirect effects:

1. Children TV Viewing → Children's Materialism → Children's Life Satisfaction

$$\text{Indirect Effect 1} = .121 \times -.227 = -.027$$

2. Children TV Viewing → Children's Materialism → Children's Social Comparison → Children's Life Satisfaction

$$\text{Indirect Effect 2} = .121 \times .226 \times .479 = .013$$

Therefore, the total indirect effects of children's television viewing on children's life satisfaction is $-.027 + .013$, which is $-.014$.

The decompositions for the direct, total indirect, and total effects of parents' television viewing as the exogenous variable in the model on the endogenous variables are available in Tables 5.1. The decompositions for the direct, total indirect, and total effects of each endogenous variable on other endogenous variables can be seen in Table 5.2.

Table 5.1 Decompositions of Direct, Total Indirect, and Total Effects of the Parents' Television Viewing on the Endogenous Variable (Dimension of materialism: Success)

Endogenous Variables	Exogenous Variable		
	Parents' General TV Viewing		
	Unstandardized	SE	Standardized
Parents' Materialism (Success Dimension)			
Direct	.197 ^b	.060	.200
Total Indirect	—	—	—
Total	.197 ^b	.060	.200
Children's General TV Viewing			
Direct	.050	.060	.050
Total Indirect	—	—	—
Total	.050	.060	.050
Children's Materialism (Success Dimension)			
Direct	—	—	—
Total Indirect	.030 ^b	.010	.040
Total	.030 ^b	.010	.040
Children's Social Comparison			
Direct	—	—	—
Total Indirect	.007	.004	.008
Total	.007	.004	.008
Children's Life Satisfaction			
Direct	—	—	—
Total Indirect	-.004 ^a	.002	-.005
Total	-.004 ^a	.002	-.005
^a $p < .05$ ^b $p < .01$			

Table 5.2 Decompositions of Direct, Total Indirect and Total Effects of Endogenous on Other Endogenous Variables for the Cultivation of the Success Dimension of Materialism in the Family

Endogenous variables	Causal Variables											
	<u>Children's TV Viewing</u>			<u>Parents' Materialism (Success)</u>			<u>Children's Materialism (Success)</u>			<u>Children's Social Comparison</u>		
	Unst.	SE	St.	Unst.	SE	St.	Unst.	SE	St.	Unst.	SE	St.
Children's Materialism (Success)												
Direct	.121 ^b	.046 ^b	.148 ^b	.132 ^b	.049 ^b	.150 ^b	—	—	—	—	—	—
Total Indirect	—	—	—	—	—	—	—	—	—	—	—	—
Total	.121 ^b	.046 ^b	.148 ^b	.132 ^b	.049 ^b	.150 ^b	—	—	—	—	—	—
Children's Social Comparison												
Direct	—	—	—	—	—	—	.226 ^c	.058 ^c	.219 ^c	—	—	—
Total Indirect	.027 ^a	.013 ^a	.032 ^a	.030 ^a	.014 ^a	.033 ^a	—	—	—	—	—	—
Total	.027 ^a	.013 ^a	.032 ^a	.030 ^a	.014 ^a	.033 ^a	.226 ^c	.058 ^c	.219 ^c	—	—	—
Children's Life Satisfaction												
Direct	—	—	—	—	—	—	-.227 ^c	.048 ^c	-.238 ^c	—	—	—
Total Indirect	-.014	.009	-.018	-.016	.009	-.019	.108 ^c	.030 ^c	.114 ^c	—	—	—
Total	-.014	.009	-.018	-.016	.009	-.019	-.119 ^a	.055 ^a	-.125 ^a	.479 ^c	.047 ^c	.519 ^c

^a $p < .05$

^b $p < .01$

^c $p < .001$

5.1.2 Genre-based viewing and the cultivation of the success dimension of materialism

Separate path analyses were conducted to examine the possible role of different genres of television programs in cultivating materialism among parents and children. Five genres were tested individually: news, drama, sitcom, sports, and reality shows. In general, the five models yield acceptable model fit, although less so for news and sports (see Table 5.3).

Contrary to the absence of relationship between parents' and children's general television viewing, genre-based analyses demonstrate significant positive correlations between parents' and children's television viewing in all five types of television shows, which suggests a resembling preference for television programs in the family. Specifically, drama, sitcom, sports, and reality shows were associated with how strongly individuals assess people's life accomplishments based on material possessions. In those four genres, parents' viewing predict both children's viewing and parents' own materialism. Both children's consumption of drama programs and parents' materialism are associated with children's success dimension of materialism. That is, for drama, sports, and reality shows, parents' television viewing cultivate materialism among offspring through two "routes": the promotion of materialism among parents and offspring's preference for the types of television programs. Somewhat differently, parents' viewing of sitcom cultivates materialism through their own materialism. The model fit indices for the cultivation of the success dimension of materialism are available in Table 5.3, and the path diagrams that illustrate the genre-based cultivation can be seen in Figures 5.2 thru 5.6.

Table 5.3 Model fit indices for the cultivation of the success dimension of materialism (n = 303)

Genre	χ^2	df	p	RMSEA	RMSEA	CFI	NFI	GFI	SRMR
					Confidence Interval				
General Viewing	4.47	8	.81	.00	.00 - .04	1.00	.96	1.00	.03
News	14.39	8	.07	.05	.00 - .09	.94	.89	.98	.06
Drama	7.97	8	.44	.00	.00 - .07	1.00	.94	.99	.04
Sitcom	8.19	8	.42	.01	.00 - .07	1.00	.94	.99	.04
Sports	14.00	8	.08	.05	.00 - .09	.95	.90	.99	.05
Reality Shows	10.27	8	.25	.03	.00 - .08	.98	.92	.99	.04

The total indirect and total effects of parents' television viewing are also calculated. Since parents' genre-based viewing is not directly associated with children's materialism (i.e., there is no direct effect), the total effect of parents' genre-specific viewing is identical with its total indirect effects. Consistent with the results from the direct effects estimation, parents' viewing drama, sitcom, sports, and reality shows yielded significant indirect effects on the success dimension of children's materialism (See Table 5.4).

Table 5.4 Total Indirect and Direct Effects of Parents' Genre-Specific TV Viewing on the Success Dimension of Children's Materialism

Genre	Unstandardized	SE	Standardized
News			
Direct	—	—	—
Total Indirect	.012	.014	.015
Total	.012	.014	.015
Drama			
Direct	—	—	—
Total Indirect	.035 ^a	.013	.046
Total	.035 ^a	.013	.046
Sitcom			
Direct	—	—	—
Total Indirect	.025 ^a	.012	.033
Total	.025 ^a	.012	.033
Sports			

Direct	—	—	—
Total Indirect	.031 ^a	.014	.046
Total	.031 ^a	.014	.046
Reality Shows			
Direct	—	—	—
Total Indirect	.036 ^b	.013 ^b	.050 ^b
Total	.036 ^b	.013 ^b	.050 ^b
<hr/>			
^a $p < .05$	^b $p < .01$		

5.1.3 SES and the cultivation of the success dimension of materialism

To test H8, whether the model differs across individuals from different groups, two separate multi-group path analyses were conducted. In the first multi-group analysis, the parameters (i.e., path coefficients) for the two groups were constrained to be equal, whereas in the second analysis, the parameters were estimated freely for each group. The chi-square values from the first and second models were then compared in order to test which of the two models fit the data better. If the chi-square value of the second model (i.e., where the parameters were estimated freely for each of the two groups) is significantly smaller than the first model's (i.e., where the parameters were "forced" to be equal across groups), it can be inferred that the model works differently between the two groups. On the contrary, if the model fit difference between the first and second models is not significant, it is then assumed that the model does not vary across groups. Technically, the test was conducted by comparing the chi-square values and degrees of freedom from the two groups. This procedure was applied for each dimension of materialism.

In testing the cultivation of the success dimension of materialism across SES groups, the model with constrained parameters yielded a chi-square value of 31.64 ($df = 28, p = .26$), whereas the model with freely estimated parameters had a chi-square value

of 15.14 ($df = 21, p = .82$). The model-fit comparison suggests that the model where the parameters in each SES group were freely estimated had a better consistency with the data ($\Delta\chi^2 = 16.50, \Delta df = 7, p < .05$). In other words, the associations among variables in the model varied between high-SES and low-SES groups.

The global model fit indices for the multi-group path analyses on the success dimension of materialism, where the parameters were estimated freely across groups, suggest a good fit between the model and the data ($\chi^2 = 15.14, df = 21, p = .82$; RMSEA = .00 (CI = .00 – .04); CFI = 1.00, GFI_{HIGH SES} = .98, SRMR_{HIGH SES} = .06; GFI_{LOW SES} = .99, SRMR_{LOW SES} = .06). Resembling the results from the analysis of the model with the whole sample, parents' television viewing is positively associated with the belief that wealth and material possession reflect success in life in both SES groups (High SES: $B_{\text{PARENTS' TV}} = .15, SE = .08, t = 1.88$; Low SES: $B_{\text{PARENTS' TV}} = .26, SE = .08, t = 3.38$). However, contrary to H8, a positive correlation between parents' and children's overall television viewing was found among individuals from higher SES, but not among those who come from lower SES (High SES: $B_{\text{PARENTS' TV}} = .20, SE = .09, t = 2.22$; Low SES: $B_{\text{PARENTS' TV}} = -.07, SE = .08, t = -.90$).

Furthermore, both children's television viewing and parents' materialism predict stronger materialism among children, but only among individuals from higher-SES families (High SES: $B_{\text{CHILDREN'S TV}} = .16, SE = .06, t = 2.42$; $B_{\text{PARENTS' MATERIALISM}} = .25, SE = .07, t = 3.51$; Low SES: $B_{\text{CHILDREN'S TV}} = .08, SE = .07, t = 1.27$; $B_{\text{PARENTS' MATERIALISM}} = .01, SE = .06, t = .13$). The negative relationship between materialism and life satisfaction was found in both groups (High SES: $B_{\text{CHILDREN'S MATERIALISM}} = -.29, SE = .07, t = -4.31$; Low SES: $B_{\text{CHILDREN'S MATERIALISM}} = -.17, SE = .07, t = 2.48$).

Responses from individuals from higher SES yielded a positive relationship between children's materialism and the perception of social comparison, which was not found among those with lower SES (High SES: $B_{\text{CHILDREN'S MATERIALISM}} = .30$, $SE = .08$, $t = 3.84$; Low SES: $B_{\text{CHILDREN'S MATERIALISM}} = .14$, $SE = .08$, $t = 1.73$). In other words, the relationship between the belief that possession of material goods is a reflection of life accomplishment and the perception of being better economically better off is more pronounced among individuals whose parents are wealthier and better educated. Consistent with the results in the analysis with all participants, a positive relationship between social comparison and life satisfaction was found in both groups of SES (High SES: $B_{\text{SOCIAL COMPARISON}} = .45$, $SE = .07$, $t = 6.68$; Low SES: $B_{\text{SOCIAL COMPARISON}} = .53$, $SE = .07$, $t = 7.91$): those who feel better off than other people are happier in life compared to those who do not see themselves as economically well off. In sum, the results suggest that parents' television viewing cultivates offspring's materialism among higher-SES families. Therefore, H8 is not supported. The path diagrams from the multi-group analysis on the success dimension of materialism can be seen in Figures 5.7 and 5.8.

5.2 The cultivation of the centrality dimension of materialism in the family

5.2.1 General television viewing and the centrality dimension of materialism

The analysis on the centrality dimension of materialism (i.e., how individuals try to incorporate more luxury in their lives) yielded a good model fit ($\chi^2 = 4.11$, $df = 8$, $p = .85$; RMSEA = .00 (CI = .00 – .04); CFI = 1.00, GFI = 1.00, SRMR = .03). Consistent with the analysis on the success dimension, and supporting H1, parents' television

viewing is positively associated with their materialism ($B_{\text{PARENTS' MATERIALISM}} = .13$, $SE = .05$, $t = 2.70$), controlling for the association between parents' television viewing and children's television viewing. However, unlike the results on the success dimension, parents' centrality dimension of materialism does not cultivate the centrality dimension among children ($B_{\text{PARENTS' TV}} = .07$, $SE = .05$, $t = 1.30$), controlling for the associations between parents' television viewing and parents' materialism, parents' television viewing and children's television viewing, and children's television viewing and children's materialism, respectively. Therefore, H2 is rejected. Identical with the result of testing H3 in the success dimension, parents' television viewing does not predict children's television viewing, controlling for the association between parents' television viewing and parents' materialism. In contrast, H4 is supported: children's television viewing is positively linked to the centrality dimension of materialism among children, controlling for the relationships between parents' television viewing and parents' materialism, parents' materialism and children's materialism, and parents' television viewing and children's television viewing. ($B_{\text{CHILDREN'S TV}} = .10$, $SE = .04$, $t = 2.41$). In other words, the cultivation of the centrality dimension of materialism among parents and children takes place in "parallel" instead of through children's modeling of parents' television viewing or materialism.

A negative association between children's centrality dimension of materialism and life satisfaction is found, which lends support for H5 ($B_{\text{CHILDREN'S MATERIALISM}} = -.28$, $SE = .05$, $t = -5.39$), accounting for other paths that "preceded" this path in the model. Similar to the success dimension of materialism, but contrary to H6, a positive correlation between the centrality dimension and social comparison was found. That is, individuals

who want to acquire more possessions and luxury in their life are more likely to feel economically better off ($B_{\text{CHILDREN'S MATERIALISM}} = .30$, $SE = .06$, $t = 4.77$), which, in turn, consistent with H7, predicts higher life satisfaction ($B_{\text{SOCIAL COMPARISON}} = .50$, $SE = .05$, $t = 10.68$). The path diagram from the analysis of the cultivation of the centrality dimension of materialism can be seen in Figure 5.9.

Similar with the results of the analysis on the success dimension, the associations among materialism, social comparison, and life satisfaction indicates the presence of suppression, which is confirmed through removing the path between social comparison and life satisfaction. Removing the path that connects social comparison and life satisfaction changes path coefficient between materialism and life satisfaction to $-.13$ ($SE = .06$, $t = -2.26$), which suggests that the absence of control for the path between social comparison and life satisfaction masks the “true” relationship between materialism and life satisfaction.

Identical with the success dimension (See Section 5.1.2), the total effects of parents’ television viewing on the centrality dimension of children’s materialism consist of two indirect paths: first, through parents’ centrality dimension of materialism, and, second, through children’s television viewing. The breakdown of the paths are:

1. Parents’ TV viewing \rightarrow Parents’ Materialism (Centrality) \rightarrow Children’s Materialism (Centrality), which is $.134 \times .068 = .009$. Sobel test reveals that this indirect path is not significant ($z = 1.18$, $SE = .010$, $p = .24$).
2. Parents’ TV viewing \rightarrow Children’s TV Viewing \rightarrow Children’s Materialism (Centrality), which is $.059 \times .103 = .006$. Similar with the first indirect path above, the indirect effect of parents’ television viewing on the centrality

dimension of children's materialism through children's television viewing is not significant ($z = .79$, $SE = .006$, $p = .43$).

Therefore, the total effects of parents' television viewing on children's materialism is $.009 + .006$, which is $.015$. Also similar to the success dimension, the effects of children's centrality dimension of materialism on their life satisfaction can be decomposed into one direct and one indirect paths, respectively:

1. Children's materialism \rightarrow Children's life satisfaction = $-.281$
2. Children's materialism \rightarrow Children's social comparison \rightarrow Children's life satisfaction = $.296 \times .498 = .147$. This indirect path is significant based on the z score yielded in the Sobel test ($z = 4.35$, $SE = .033$, $p < .001$).

The sum of the direct and indirect effects above yields $-.134$ as the total effect of children's centrality dimension of materialism on their life satisfaction. Looking at the entire model, the specific indirect effects of parents' television viewing on children's life satisfaction are calculated below:

1. Parents' TV viewing \rightarrow Parents' Materialism \rightarrow Children's Materialism \rightarrow Children's Social Comparison \rightarrow Children's Life Satisfaction
Indirect Effect 1 = $.134 \times .068 \times .296 \times .498 = .0013$
2. Parents' TV Viewing \rightarrow Children's TV Viewing \rightarrow Children's Materialism \rightarrow Children's Social Comparison \rightarrow Children's Life Satisfaction
Indirect Effect 2 = $.051 \times .103 \times .296 \times .498 = .0008$
3. Parents' TV Viewing \rightarrow Parents' Materialism \rightarrow Children's Materialism \rightarrow Children's Life Satisfaction
Indirect Effect 3 = $.134 \times .068 \times -.281 = -.0025$

4. Parents' TV Viewing → Children's TV Viewing → Children's Materialism
→ Children's Life Satisfaction

$$\text{Indirect Effect 4} = .051 \times .103 \times -.281 = -.0015$$

Summing up the four indirect paths above yields the total effect of parents' television viewing on children's life satisfaction, which is -.002. The decompositions for the direct, total indirect, and total effects of parents' television viewing – the exogenous variable in the model – on the endogenous variables can be seen in Table 5.5, and the decompositions for the effects of each endogenous variable on other endogenous variables can be seen in Table 5.6.

Table 5.5 Decompositions of Direct, Total Indirect, and Total Effects of the Parents' Television Viewing on the Endogenous Variable (Dimension of materialism: Centrality)

Endogenous Variables	Exogenous Variable		
	Parents' General TV Viewing		
	Unstandardized	SE	Standardized
Parents' Materialism (Centrality Dimension)			
Direct	.134 ^b	.049 ^b	.155 ^b
Total Indirect	—	—	—
Total	.134 ^b	.049 ^b	.155 ^b
Children's General TV Viewing			
Direct	.051	.061	.048
Total Indirect	—	—	—
Total	.051	.061	.048
Children's Materialism (Centrality Dimension)			
Direct	—	—	—
Total Indirect	.014	.010	.018
Total	.014	.010	.018
Children's Social Comparison			
Direct	—	—	—
Total Indirect	.004	.003	.005
Total	.004	.003	.005
Children's Life Satisfaction			
Direct	—	—	—
Total Indirect	-.002	.002	-.002
Total	-.002	.002	-.002

^b $p < .01$

Table 5.6 Decompositions of Direct, Total Indirect and Total Effects of Endogenous on Other Endogenous Variables for the Cultivation of the Centrality Dimension of Materialism in the Family

Endogenous variables	Causal Variables											
	Children's TV Viewing			Parents' Materialism (Centrality)			Children's Materialism (Centrality)			Children's Social Comparison		
	Unst.	SE	St.	Unst.	SE	St.	Unst.	SE	St.	Unst.	SE	St.
Children's Materialism (Centrality)												
Direct	.103 ^a	.043 ^a	.137 ^a	.068	.052	.074	—	—	—	—	—	—
Total Indirect	—	—	—	—	—	—	—	—	—	—	—	—
Total	.103 ^a	.043 ^a	.137 ^a	.068	.052	.074	—	—	—	—	—	—
Children's Social Comparison												
Direct	—	—	—	—	—	—	.296 ^c	.062 ^c	.265 ^c	—	—	—
Total Indirect	.031 ^a	.014 ^a	.036 ^a	.020	.016	.020	—	—	—	—	—	—
Total	.031 ^a	.014 ^a	.036 ^a	.020	.016	.020	.296 ^c	.062 ^c	.265 ^c	—	—	—
Children's Life Satisfaction												
Direct	—	—	—	—	—	—	-.281 ^c	.052 ^c	-.272 ^c	.498 ^c	.047 ^c	.539 ^c
Total Indirect	-.014	.008	-.018	-.009	-.008	-.010	.147 ^c	.034 ^c	.143 ^c	—	—	—
Total	-.014	.008	-.018	-.009	-.008	-.010	-.133 ^a	.059 ^a	-.129 ^a	.498 ^c	.047 ^c	.539 ^c

^a $p < .05$ ^b $p < .01$ ^c $p < .001$

5.2.2 Genre-based viewing and the cultivation of the centrality dimension of materialism

Similar to the examination of the success dimension of materialism, five separate path analyses were also run for the centrality dimension of materialism. However, despite the acceptable generated model fit, none of the five tested genres (i.e., news, drama, sitcom, sports, and reality shows), appears to cultivate the centrality dimension of materialism among children. Neither parents' materialism nor children's genre-specific television viewing predicts the centrality dimension of children's materialism, although parents' drama, sitcom, and reality shows watching is associated with stronger centrality of parents' own materialism. Model fit indices for the cultivation of the centrality dimension of materialism can be seen in Table 5.7, and the path diagrams that illustrate the genre-based cultivation results can be seen in Figures 5.10 thru 5.14.

Table 5.7 Model-fit indices for the cultivation of the centrality dimension of materialism (n = 303)

Genre	χ^2	df	p	RMSEA	RMSEA Confidence Interval	CFI	NFI	GFI	SRMR
General Viewing	4.10	8	.85	.00	.00 - .04	1.00	.96	1.00	.03
News	17.27	8	.03	.06	.02 - .10	.92	.87	.98	.06
Drama	6.73	8	.57	.00	.00 - .06	1.00	.95	.99	.04
Sitcom	5.00	8	.76	.00	.00 - .05	1.00	.96	1.00	.03
Sports	12.02	8	.15	.04	.00 - .09	.97	.91	.99	.04
Reality Shows	9.52	8	.30	.03	.00 - .08	.99	.92	.99	.04

The calculations for the total indirect effects of parents' genre-specific viewing on the centrality dimension of children's materialism yield small but positive and significant indirect effects of parents' viewing of drama and sitcom on the centrality dimension of children's materialism (See Table 5.8)

Table 5.8 Total Indirect and Direct Effects of Parents' Genre-Specific TV Viewing on the Centrality Dimension of Children's Materialism

Genre	Unstandardized	SE	Standardized
News			
Direct	—	—	—
Total Indirect	-.018	.012	-.023
Total	-.018	.012	-.023
Drama			
Direct	—	—	—
Total Indirect	.020 ^d	.012	.028
Total	.020 ^d	.012	.028
Sitcom			
Direct	—	—	—
Total Indirect	.021 ^d	.012	.030
Total	.021 ^d	.012	.030
Sports			
Direct	—	—	—
Total Indirect	.018	.012	.029
Total	.018	.012	.029
Reality Shows			
Direct	—	—	—
Total Indirect	.013	.009	.019
Total	.013	.009	.019

^d $p < .10$

5.2.3 SES and the cultivation of the centrality dimension of materialism

Separate multi-group analyses with constrained and freely estimated parameters were conducted (see section 5.1.3 for the steps of the comparison). For the centrality dimension, the model with constrained parameters yield a chi-square value of 22.95 ($df = 28$, $p = .74$), whereas the model with freely estimated parameters generate a chi-square value of 12.22 ($df = 21$, $p = .93$). Therefore, it is inferred that the model where the parameters were estimated freely is not significantly better than the model with constrained parameter ($\Delta\chi^2 = 10.73$, $\Delta df = 7$, $p > .05$). In other words, the model does not differ across SES.

The result from the comparison above is reinforced by the findings from the model with freely estimated parameters, although the unconstrained model yielded a good model fit ($\chi^2 = 12.22$, $df = 21$, $p = .93$; RMSEA = .00 (CI = .00 – .02); CFI = 1.00, GFI = .99, SRMR = .05). Unlike the findings on the success dimension of materialism, the association between parents' television viewing and their own centrality aspect of materialism is only found among individuals from lower SES (High SES: $B_{\text{PARENTS' TV}} = .11$, $SE = .07$, $t = 1.56$; Low SES: $B_{\text{PARENTS' TV}} = .18$, $SE = .07$, $t = 2.68$). However, no relationship between parents' and children's materialism emerges among participants from either higher or lower SES (High SES: $B_{\text{PARENTS' MATERIALISM}} = .08$, $SE = .08$, $t = 1.02$; Low SES: $B_{\text{PARENTS' MATERIALISM}} = .06$, $SE = .07$, $t = .75$). Instead of through parents' materialism, the cultivation of the centrality dimension of materialism seems to take place through the relationship between parents' and children's television viewing, although the association only appears among individuals from higher SES families (High SES: $B_{\text{PARENTS' MATERIALISM}} = .20$, $SE = .08$, $t = 2.22$; Low SES: $B_{\text{PARENTS' MATERIALISM}} = -.07$, $SE = .08$, $t = -.90$). In turn, among individuals whose parents have high educational attainment and income, a marginally positive relationship between children's television viewing and materialism is found (High SES: $B_{\text{CHILDREN'S MATERIALISM}} = .11$, $SE = .02$, $t = 1.84$), whereas television viewing does not predict materialism among those who come from lower SES (Low SES: $B_{\text{CHILDREN'S MATERIALISM}} = .10$, $SE = .07$, $t = 1.52$).

Cohering with the analysis that involved the whole sample, children's materialism predicts lesser life satisfaction (High SES: $B_{\text{CHILDREN'S MATERIALISM}} = -.34$, $SE = .08$, $t = -4.55$; Low SES: $B_{\text{CHILDREN'S MATERIALISM}} = -.22$, $SE = .07$, $t = -2.97$). A positive relationship between materialism and social comparison, as well as a positive association

between social comparison and life satisfaction were found in both SES groups. Specifically, incorporating more luxury in life turns out to positively predict the perception of having a better livelihood than other people (High SES: $B_{\text{CHILDREN'S MATERIALISM}} = .38$, $SE = .09$, $t = 4.41$; Low SES: $B_{\text{CHILDREN'S MATERIALISM}} = .20$, $SE = .09$, $t = 2.25$), which in turn links to a higher life satisfaction (High SES: $B_{\text{SOCIAL COMPARISON}} = .48$, $SE = .07$, $t = 7.11$; Low SES: $B_{\text{SOCIAL COMPARISON}} = .54$, $SE = .07$, $t = 8.01$).

To summarize, the multi-group analysis lends evidence for intergenerational cultivation. However, the results suggest that offspring's centrality dimension of materialism is not cultivated through parents' television viewing and materialism, but instead takes place through parents' and children's own television viewing, and it only appears among higher-SES families. Specifically, in wealthier and better-educated families, parents' television viewing was associated with children's television viewing, which in turn predicted children's centrality of materialism. Therefore, H8 was not supported. The relationships among variables in this multi-group analysis can also be seen in Figures 5.15 thru 5.17.

5.3 The cultivation of the happiness dimension of materialism in the family

5.3.1 General television viewing and the happiness dimension of materialism

Resembling the aforementioned two dimensions of materialism – success and centrality, indicators from the model fit indices generated from the path analysis on the general television viewing cultivation of materialism suggest consistency between the model and data ($\chi^2 = 3.66$, $df = 8$, $p = .89$; RMSEA = .00 (CI = .00 – .03); CFI = 1.00; NFI = .98; GFI = 1.00; SRMR = .03). As also found on the success and centrality dimensions, parents' television viewing is positively associated with the belief that

wealth and material possession are required to achieve happiness ($B_{\text{PARENTS' TV}} = .23$, $SE = .06$, $t = 4.33$), which supports H1. Consistent with H2, a positive relationship between parents' and children's materialism was found: children who believe that more wealth and material goods bring more happiness tend to come from families where the parents (were perceived) put high importance on material goods as a means to attain happiness ($B_{\text{PARENTS' TV}} = .24$, $SE = .05$, $t = 4.64$). In line with H4, the stronger the belief in the necessity of luxury and consumer goods for happiness, the lesser one feels satisfied with his/her life ($B_{\text{CHILDREN'S MATERIALISM}} = -.36$, $SE = .04$, $t = -8.58$).

Supporting H5, children's materialism is negatively associated with social comparison, although the relationship was marginally significant ($B_{\text{CHILDREN'S MATERIALISM}} = -.11$, $SE = .06$, $t = -1.85$). That is, unlike the results from the two aforementioned dimensions of materialism (success and centrality), individuals who believe in the importance of material goods for attaining happiness in life are more likely to perceive themselves as worse off than other people, whereas those who do not hold such belief as strongly tend to think that they have a better livelihood than other people. Downward social comparison, in turn, positively predicts life satisfaction: those who tend to engage in upward comparison (i.e., who felt worse off than other people) are less satisfied with their life, while those who perceive their lives as better than other people are more likely to feel satisfied with their life ($B_{\text{CHILDREN'S MATERIALISM}} = .39$, $SE = .04$, $t = 9.26$). The path diagram for the cultivation of happiness dimension can be seen in Figure 5.18.

The calculations of indirect effects of parents' television viewing on children's happiness dimension of materialism are conducted by multiplying the regression coefficients of each specific path:

1. Parents' TV viewing → Parents' Materialism (Happiness) → Children's Materialism (Centrality), which is $.234 \times .236 = .055$. Sobel test suggests that this path is significant ($z = 3.10$, $SE = .017$, $p < .01$).
2. Parents' TV viewing → Children's TV Viewing → Children's Materialism (Happiness), which is $.051 \times .116 = .006$. Based on Sobel test, the indirect effect of parents' television viewing on children's materialism through children's television viewing is not significant ($z = .79$, $SE = .007$, $p = .43$).

The sum of the two indirect paths above constitute the total effect of parents' television viewing on the happiness dimension of children's materialism, which is .061. Using the same procedure, the total effect of children's materialism on life satisfaction is estimated:

1. Children's materialism → Children's life satisfaction = $-.364$
2. Children's materialism → Children's social comparison → Children's life satisfaction = $-.106 \times .393 = -.042$. Sobel test yields a marginally significant z -score of -1.82 ($SE = .023$, $p = .07$).

Adding up the direct and indirect effects above yields $-.406$ as the total effect of children's centrality dimension of materialism on their life satisfaction. Looking at the entire model, the specific indirect effects of parents' television viewing on children's life satisfaction are calculated below:

1. Parents' TV viewing → Parents' Materialism → Children's Materialism → Children's Social Comparison → Children's Life Satisfaction
Indirect Effect 1 = $.234 \times .236 \times -.106 \times .393 = -.0023$
2. Parents' TV Viewing → Children's TV Viewing → Children's Materialism → Children's Social Comparison → Children's Life Satisfaction

$$\text{Indirect Effect 2} = .051 \times .116 \times -.106 \times .393 = -.0003$$

3. Parents' TV Viewing → Parents' Materialism → Children's Materialism → Children's Life Satisfaction

$$\text{Indirect Effect 3} = .234 \times .236 \times -.364 = -.0020$$

4. Parents' TV Viewing → Children's TV Viewing → Children's Materialism → Children's Life Satisfaction

$$\text{Indirect Effect 4} = .051 \times .116 \times -.364 = -.0022$$

Therefore, the total effect of parents' television viewing on children's life satisfaction is $-.0023 + (-.0003) + (-.0020) + (-.0022) = -.0068$. The decompositions for the effect of parents' television viewing on the endogenous variables can be seen in Table 5.7. The decompositions for the effects of the endogenous variables on other endogenous variables are available in Table 5.9.

Table 5.9 Total Indirect and Direct Effects of Parents' Genre-Specific TV Viewing on the Centrality Dimension of Children's Materialism

Endogenous Variables	Exogenous Variable Parents' General TV Viewing		
	Unstandardized	SE	Standardized
Parents' Materialism (Happiness Dimension)			
Direct	.234 ^c	.053 ^c	.242 ^c
Total Indirect	—	—	—
Total	.234 ^c	.053 ^c	.242 ^c
Children's General TV Viewing			
Direct	.051	.061	.048
Total Indirect	—	—	—
Total	.051	.061	.048
Children's Materialism (Happiness Dimension)			
Direct	—	—	—
Total Indirect	—	—	—
Total	.061	.019	.069

Children's Social Comparison				
Direct	—		—	—
Total Indirect		-.006	.004	-.007
Total		-.006	.004	-.007
Children's Life Satisfaction				
Direct	—		—	—
Total Indirect		-.025 ^b	.008 ^b	-.030 ^b
Total		-.025 ^b	.008 ^b	-.030 ^b
^a $p < .05$		^b $p < .01$		

Table 5.10 Decompositions of Direct, Total Indirect and Total Effects of Endogenous on Other Endogenous Variables for the Cultivation of the Happiness Dimension of Materialism in the Family

Endogenous variables	Causal Variables											
	Children's TV Viewing			Parents' Materialism (Happiness)			Children's Materialism (Happiness)			Children's Social Comparison		
	Unst.	SE	St.	Unst.	SE	St.	Unst.	SE	St.	Unst.	SE	St.
Children's Materialism (Happiness)												
Direct	.116 ^a	.046 ^a	.137 ^a	.236 ^c	.051 ^c	.256 ^c	—	—	—	-.106	.057	-.106
Total Indirect	—	—	—	—	—	—	—	—	—	—	—	—
Total	.116 ^a	.046 ^a	.137 ^a	.236 ^c	.051 ^c	.256 ^c	—	—	—	-.106	.057	-.106
Children's Social Comparison												
Direct	—	—	—	—	—	—	-.106	.057	-.106	—	—	—
Total Indirect	-.012	.008	-.015	-.025	.015	-.027	—	—	—	—	—	—
Total	-.012	.008	-.015	-.025	.015	-.027	-.106	.057	-.106	—	—	—
Children's Life Satisfaction												
Direct	—	—	—	—	—	—	-.364 ^c	.040 ^c	-.394 ^c	.393 ^c	.042 ^c	.425 ^c
Total Indirect	-.047 ^a	.020 ^a	-.060 ^a	-.096 ^c	.023 ^c	-.112 ^c	-.042	.023	-.045	—	—	—
Total	-.047 ^a	.020 ^a	-.060 ^a	-.096 ^c	.023 ^c	-.112 ^c	-.406 ^c	.023 ^c	-.439 ^c	.393 ^c	.042 ^c	.425 ^c

^a $p < .05$ ^b $p < .01$ ^c $p < .001$

5.3.2 Genre-based viewing and the cultivation of the happiness dimension of materialism

Five individual path analyses were conducted on each of the following genres: news, drama, sitcom, sports, and reality shows were conducted. Among the five genres, drama, sitcom, and reality shows were found to be associated with parents' happiness dimension of materialism (i.e., the belief that happiness is contingent upon one's acquisition of material goods), which in turn predicted children's happiness dimension of materialism. Unlike the relationships that are found between children's genre-specific watching and the success dimension of materialism, children's own genre-based television viewing is not a predictor of their happiness dimension of materialism. Model-fit indices of the cultivation of the happiness dimension of materialism can be seen in Table 5.11, and the path diagrams that illustrate the genre-based cultivation of the happiness dimension can be seen in Figures 5.19 thru 5.23.

Table 5.11 Model-fit indices for the cultivation of the happiness dimension of materialism (n =303)

Genre	χ^2	df	p	RMSEA	RMSEA Confidence Interval	CFI	NFI	GFI	SRMR
General Viewing	3.66	8	.89	.00	.00 - .03	1.00	.98	1.00	.03
News	14.40	8	.07	.05	.00 - .09	.96	.92	.98	.05
Drama	5.96	8	.65	.00	.00 - .06	1.00	.95	.99	.03
Sitcom	6.64	8	.57	.00	.00 - .06	1.00	.96	.99	.03
Sports	12.57	8	.13	.04	.00 - .09	.98	.94	.99	.05
Reality Shows	9.89	8	.27	.03	.00 - .08	.99	.95	.99	.04

The results of the calculations for total indirect effects suggest that parents' viewing of drama, sitcom, and reality shows might have indirect positive and significant

influence, although small, on offspring's belief in the necessity of material goods to attain happiness (See Table 5.12).

Table 5.12 Total Indirect and Direct Effects of Parents' Genre-Specific TV Viewing on the Happiness Dimension of Children's Materialism

Genre	Unstandardized	SE	Standardized
News			
Direct	—	—	—
Total Indirect	-.010	.018	-.012
Total	-.010	.018	-.012
Drama			
Direct	—	—	—
Total Indirect	.040 ^a	.016	.052
Total	.040 ^a	.016	.052
Sitcom			
Direct	—	—	—
Total Indirect	.043 ^a	.017	.055
Total	.043 ^a	.017	.055
Sports			
Direct	—	—	—
Total Indirect	.020	.016	.028
Total	.020	.016	.028
Reality Shows			
Direct	—	—	—
Total Indirect	.036 ^a	.015	.049
Total	.036 ^a	.015	.049

^a $p < .05$

5.3.3 SES and the cultivation of the happiness dimension of materialism

Comparison between the models with constrained and unconstrained parameters suggests that the unconstrained model marginally yielded a better fit (Constrained model: $\chi^2 = 25.00$, $df = 28$, $p = .63$; Unconstrained model: $\chi^2 = 11.06$, $df = 21$, $p = .96$; ($\Delta\chi^2 = 13.94$, $\Delta df = 7$, $p < .10$). The global indicators for the multi-group path analysis with unconstrained parameters that examines the cultivation of the happiness dimension between lower and higher SES generate a good model fit ($\chi^2 = 11.06$, $df = 21$, $p = .96$;

RMSEA = .00 (CI = .00 – .00); CFI = 1.00, GFI_{HIGH SES} = .99, SRMR_{HIGH SES} = .04; GFI_{LOW SES} = .99, SRMR_{LOW SES} = .05). In both SES groups, parents' television viewing positively predicted the happiness dimension of materialism (High SES: $B_{\text{PARENTS' TV}} = .17$, SE = .08, $t = 2.17$; Low SES: $B_{\text{PARENTS' TV}} = .29$, SE = .07, $t = 3.42$), which, in turn was associated with children's materialism (High SES: $B_{\text{PARENTS' MATERIALISM}} = .25$, SE = .08, $t = 2.17$; Low SES: $B_{\text{PARENTS' MATERIALISM}} = .21$, SE = .07, $t = 3.02$). Likewise, children's materialism was negatively correlated with the life satisfaction (High SES: $B_{\text{CHILDREN'S MATERIALISM}} = -.46$, SE = .06, $t = -7.84$; Low SES: $B_{\text{CHILDREN'S MATERIALISM}} = -.28$, SE = .06, $t = -4.56$).

The multi-group analyses yields a positive association between children's television viewing and the belief in material good as a prerequisite for happiness, and this relationship only emerges among participants with highly educated and well-off parents (High SES: $B_{\text{CHILDREN'S TV}} = .17$, SE = .07, $t = 2.61$; Low SES: $B_{\text{CHILDREN'S TV}} = .07$, SE = .07, $t = 1.08$). In contrast, only responses from individuals from lower SES yields a marginal negative relationship between children's materialism and social comparison (High SES: $B_{\text{CHILDREN'S MATERIALISM}} = -.03$, SE = .08, $t = -.34$; Low SES: $B_{\text{CHILDREN'S MATERIALISM}} = -.14$, SE = .08, $t = -1.75$).

In summary, the data suggest that the role of parents' television viewing in cultivating children's belief in the necessity of wealth and material goods in attaining happiness and life satisfaction varies across families of different SES levels. Among families of higher SES, parents' television viewing seems to contribute to children's materialism by two possible routes. First, parents' television viewing cultivates parents' own materialism, which they subsequently pass on to the children, which, in turn,

predicts lesser life satisfaction among children. The second possible route was through children's own television viewing. This route suggests that children models their parents' television viewing: those whose parents spend a great deal of time watching television tend to report that they themselves watch television frequently. Those who watch more television tend to be more materialistic, and, consequently, are less satisfied with their life. Notably, the latter mechanism seems to only apply among individuals from socioeconomically privileged families. For individuals from less advantaged SES, the cultivation of the happiness dimension of children's materialism seems to occur through parents' own happiness dimension of materialism, but *not* children's television viewing. The path diagrams that illustrate the multi-group analyses can be seen in Figures 5.24 and 5.25.

5.4 Parents' Gender and the Cultivation of Materialism

To answer RQ2, multi-group analyses were conducted to compare whether fathers and mothers differ in cultivating materialism in the family. Similar with the investigation of materialism across SES groups, two path analyses – one with constrained and another one with freely estimated parameters – that compare mothers and fathers are conducted for each dimension of materialism. Prior to conducting the multi-group analyses, independent-sample t-test were conducted to examine whether fathers and mothers differ in their television viewing and materialism. The results of the t-test show that fathers and mothers did not differ their general and genre-specific television viewing, except for sports programs, where fathers were reported to watch more sports compared to mothers (Fathers: Mean = 3.02, SD = 1.39; Mothers: Mean = 2.01, SD = 1.12; $t(301) = 6.81$, $p <$

.001). Parents' gender also did not affect the success and centrality dimensions of their materialism; however, mothers scored marginally higher than fathers in the happiness dimension (Fathers: Mean = 3.12, SD = 1.02; Mothers: Mean = 3.32, SD = 3.33; $t(301) = -1.78, p = .08$).

In the multi-group path analyses, the chi-square values of the model with constrained parameters is compared to the one from the model where the parameters are not constrained. If the chi-square of the unconstrained model is significantly smaller than the chi-square value of the model, it is inferred that the model works differently among mothers and fathers. In contrast, if there is no significant difference between the chi-square values, the constrained model is retained, and one can conclude that mothers and fathers do not differ in cultivating materialism in the family.

On the multi-group analysis of success dimension of materialism, the constrained model yields a χ^2 value of 34.79 ($df = 28, p = .18$; RMSEA = .04 (CI .00; .08); NFI = .74; CFI = .92; GFI = .96; SRMR = .07), whereas the model with freely estimated parameters generate a χ^2 value of 26.97 ($df = 21, p = .17$; RMSEA = .04 (CI .00; .09); NFI = .79; CFI = .93; GFI_{FATHER} = .97; SRMR_{FATHER} = .05; GFI_{MOTHER} = .97; SRMR_{MOTHER} = .06). The χ^2 values between the constrained and unconstrained models do not significantly differ ($\Delta\chi^2 = 6.82, \Delta df = 7, p > .05$), therefore the constrained model is retained. In other words, fathers' and mothers' general television viewings do not differ in cultivating the success dimension of materialism among families with young adult offspring.

The multi-group analysis on the centrality dimension of materialism yields similar results. That is, there is no significant difference between the constrained and

unconstrained models. Specifically, the constrained model has a χ^2 value of 36.60 ($df = 28, p = .13$; RMSEA = .05 (CI .00; .08); NFI = .74; CFI = .92; GFI_{FATHER} = .97; SRMR_{FATHER} = .05; GFI_{MOTHER} = .96; SRMR_{MOTHER} = .06), which is not significantly larger than is of the unconstrained model ($\chi^2 = 28.97, df = 21, p = .12$; RMSEA = .05 (CI .00; .09); NFI = .79; CFI = .93; GFI_{FATHER} = .98; SRMR_{FATHER} = .05; GFI_{MOTHER} = .97; SRMR_{MOTHER} = .07). Based on the χ^2 difference, it can be inferred estimating the parameters across parents' gender does not increase the model fit ($\Delta\chi^2 = 7.63, \Delta df = 7, p > .05$). Therefore, similar with the success dimension, the cultivation of the centrality dimension of materialism does not differ between mothers and fathers.

However, the analyses on the happiness dimension yields slightly different results. The unconstrained model is slightly better than the constrained one. Specifically, the constrained model yields a χ^2 value of 36.44 ($df = 28, p = .13$; RMSEA = .04 (CI .00; .08); NFI = .82; CFI = .95; GFI_{FATHER} = .96; SRMR_{FATHER} = .06; GFI_{MOTHER} = .97; SRMR_{MOTHER} = .07), whereas the model with freely estimated parameters has a χ^2 value of 22.56 ($df = 21, p = .37$; RMSEA = .02 (CI .00; .08); NFI = .89; CFI = .99; GFI_{FATHER} = .98; SRMR_{FATHER} = .04; GFI_{MOTHER} = .97; SRMR_{MOTHER} = .06). The chi-square comparison suggests that the cultivation of the happiness of materialism in the family varies among fathers and mothers. The multi-group path analysis reveals that both fathers' and mothers' television viewing positively predicts the happiness dimension of materialism of theirs. However, only mothers' television viewing is positively correlated with the offspring's materialism; no relationship between fathers' materialism and the materialism among offspring emerges among the young adults in the sample (See Figures 5.26 thru 5.29).

Figure 5.1 Parents' General Television Viewing and the Cultivation of the Success Dimension of Materialism (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 4.47$ ($p = .81$); RMSEA = .00 (CI .00; .04); CFI = 1.00; NFI = .96; GFI = 1.00; SRMR = .03 ($+p < .10$ $*p < .05$ $**p < .01$ $***p < .001$, two-tailed)

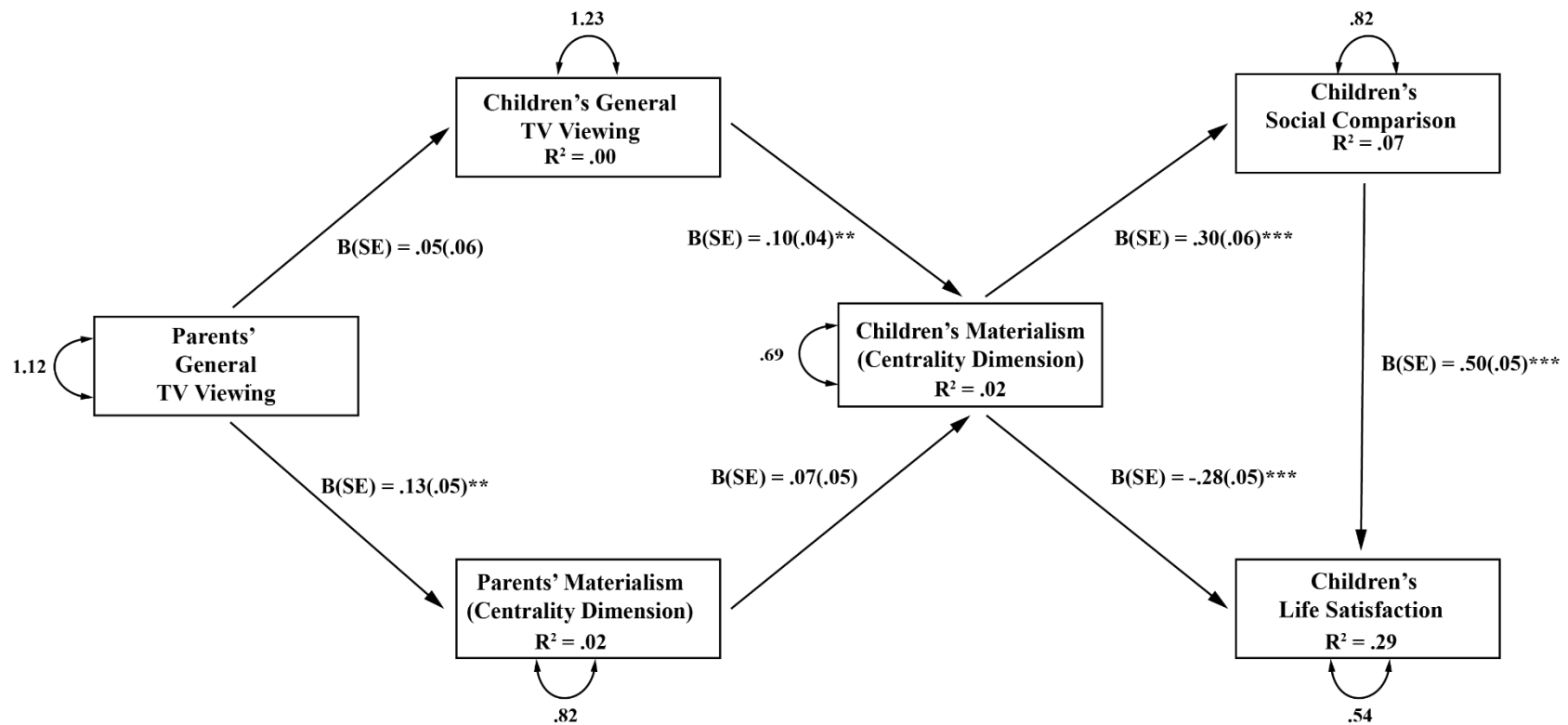


Figure 5.2 Parents' News Viewing and the Cultivation of the Success Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 14.39$ ($p = .07$); RMSEA = .05 (CI .00; .09); CFI = .94; NFI = .89; GFI = .98; SRMR = .06 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

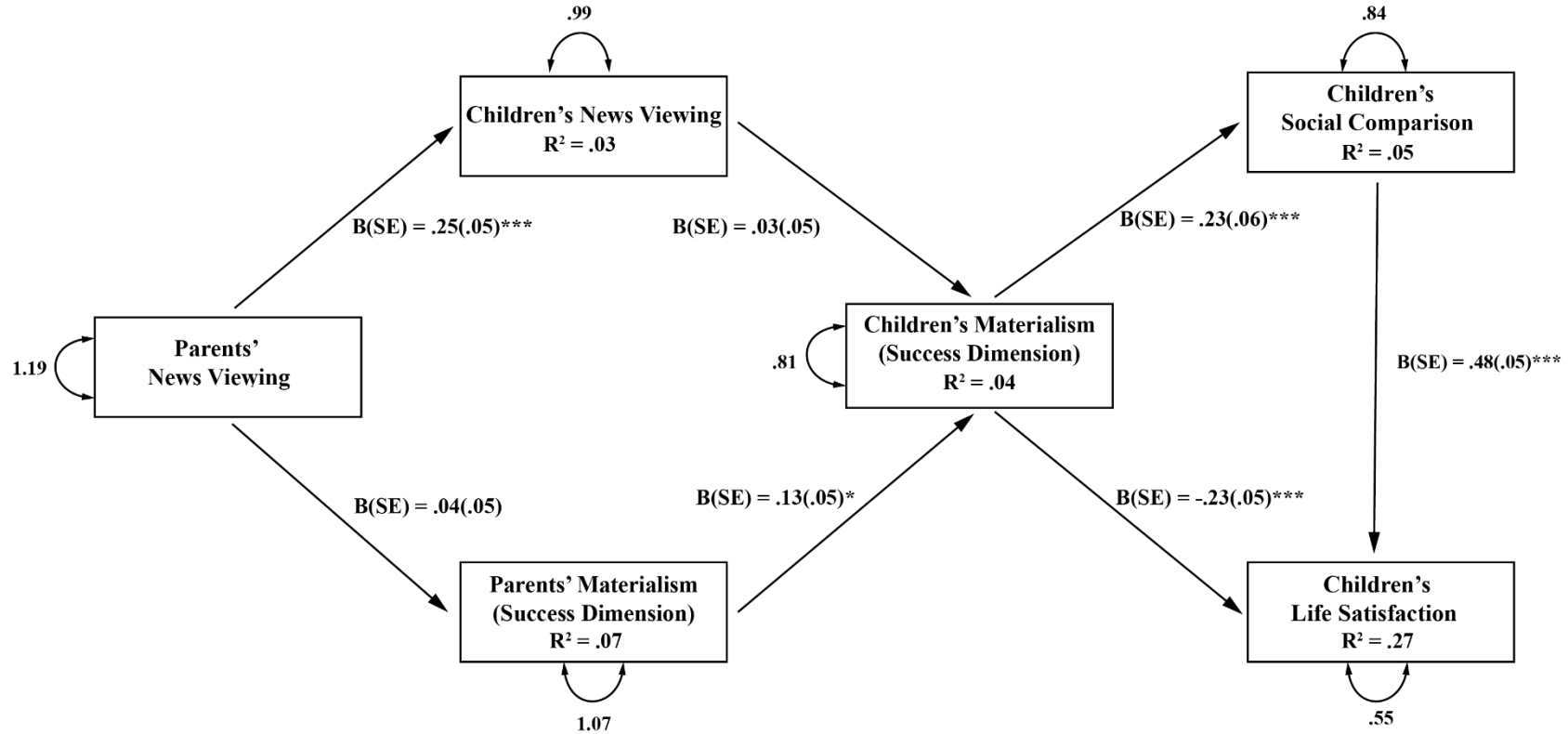


Figure 5.3 Parents' Drama Viewing and the Cultivation of the Success Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 7.97$ ($p = .44$); RMSEA = .00 (CI .00; .04); CFI = 1.00; NFI = .94; GFI = .99; SRMR = .04 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

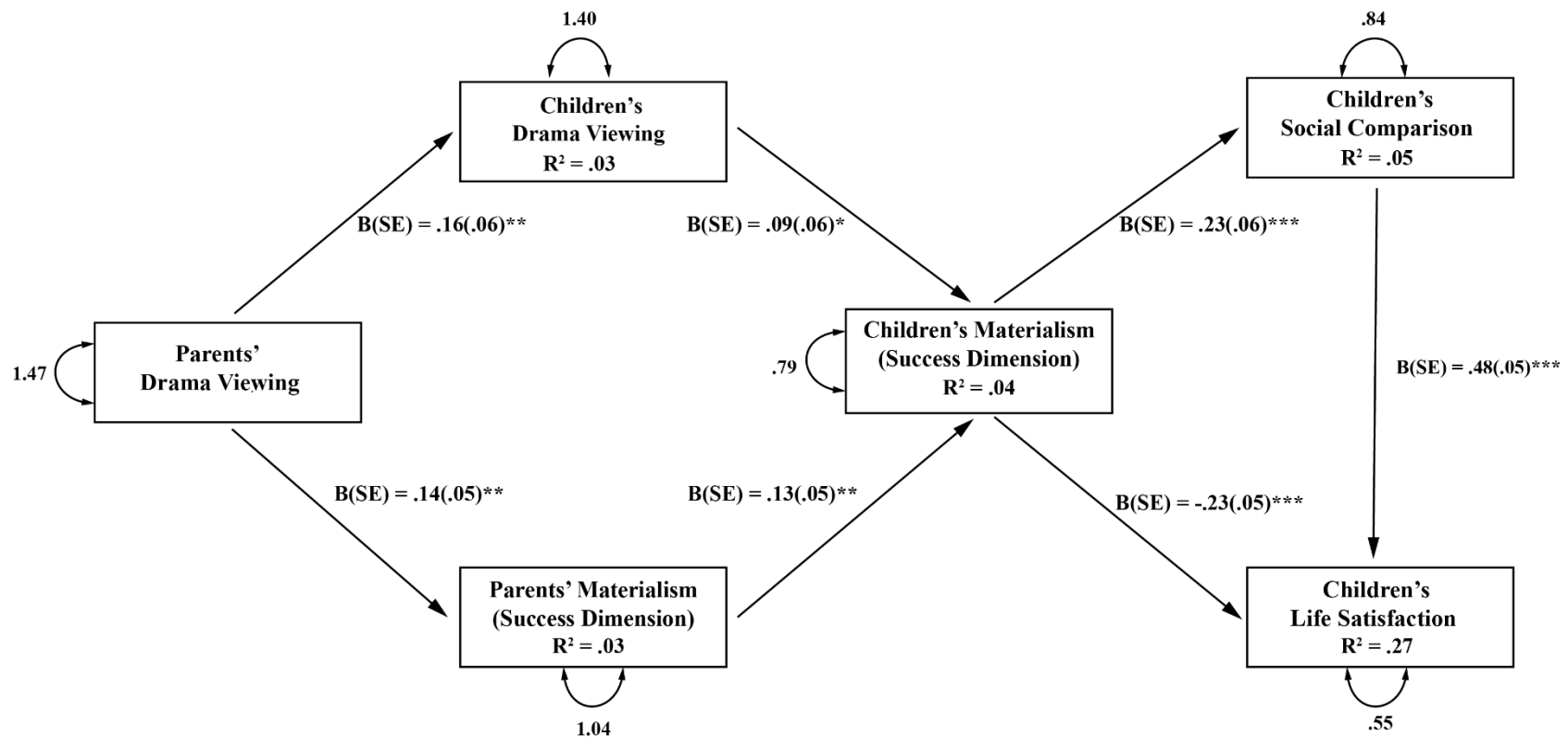


Figure 5.4 Parents' Sitcom Viewing and the Cultivation of the Success Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 8.19$ ($p = .42$); RMSEA = .01 (CI .00; .07); CFI = 1.00; NFI = .94; GFI = .99; SRMR = .04 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

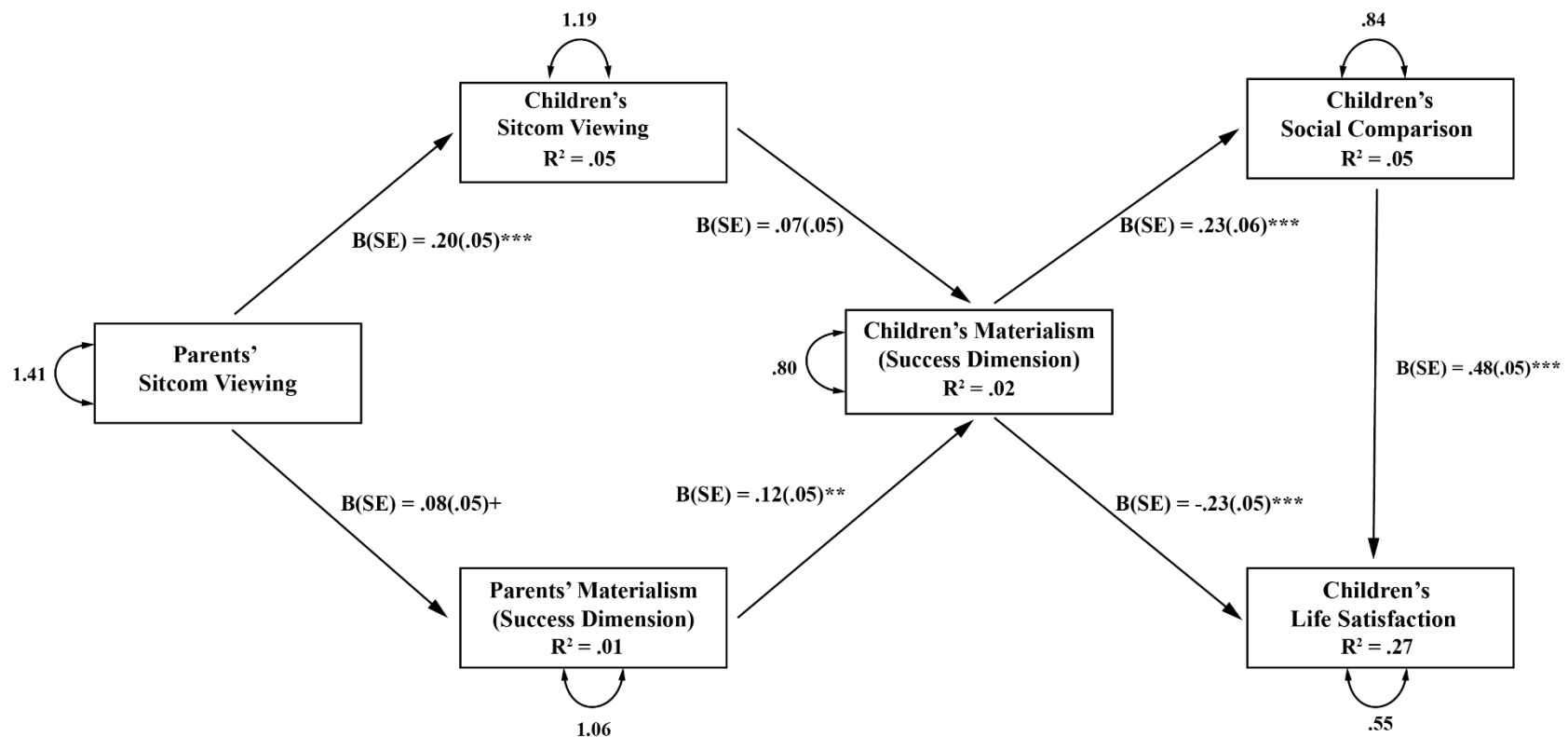


Figure 5.5 Parents' Sports Viewing and the Cultivation of the Success Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 14.00$ ($p = .08$); RMSEA = .05 (CI .00; .09); CFI = .95; NFI = .90; GFI = .99; SRMR = .05 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

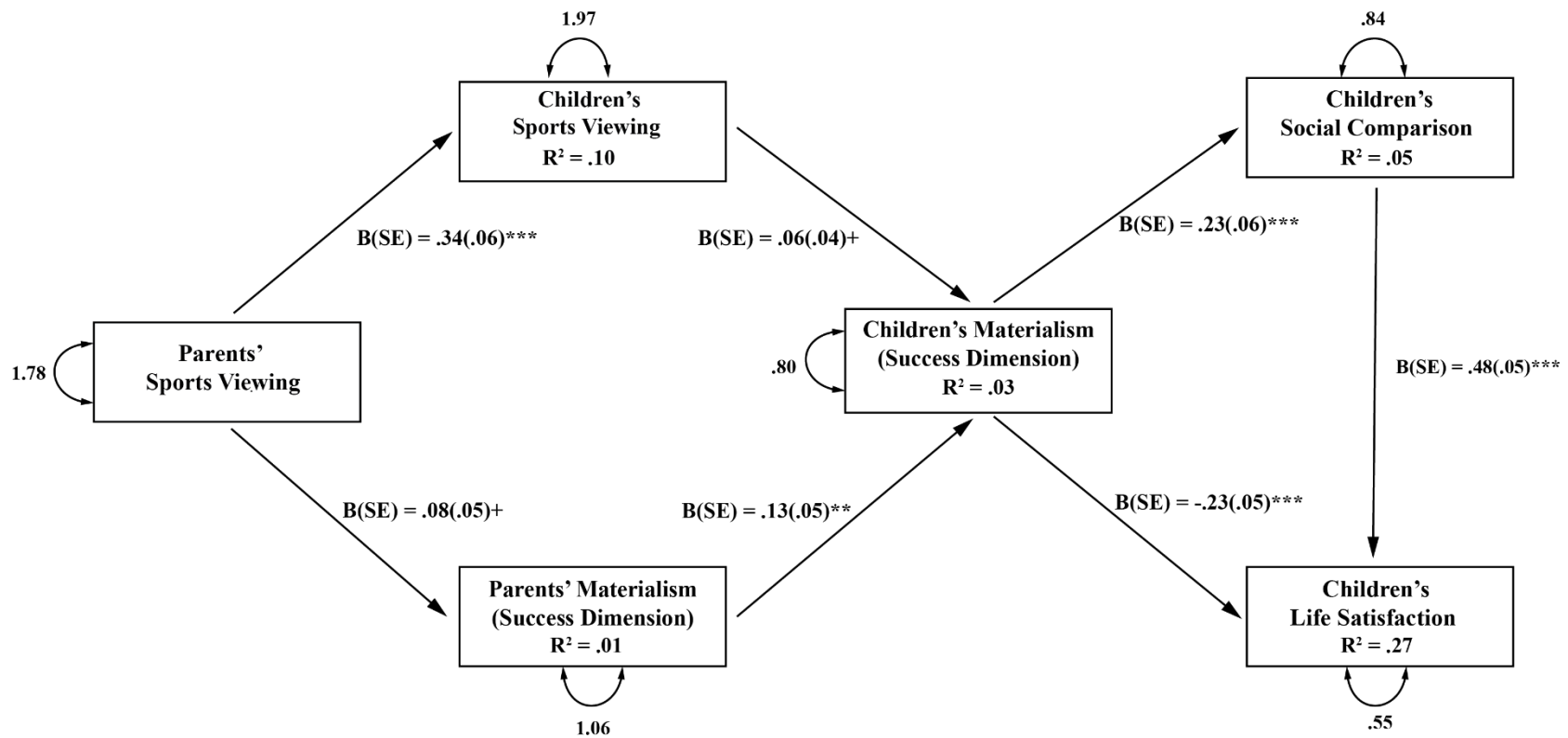


Figure 5.6 Parents' Reality Shows Viewing and the Cultivation of the Success Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 10.27$ ($p = .25$); RMSEA = .03 (CI .00; .07); CFI = .98; NFI = .92; GFI = .99; SRMR = .04 (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

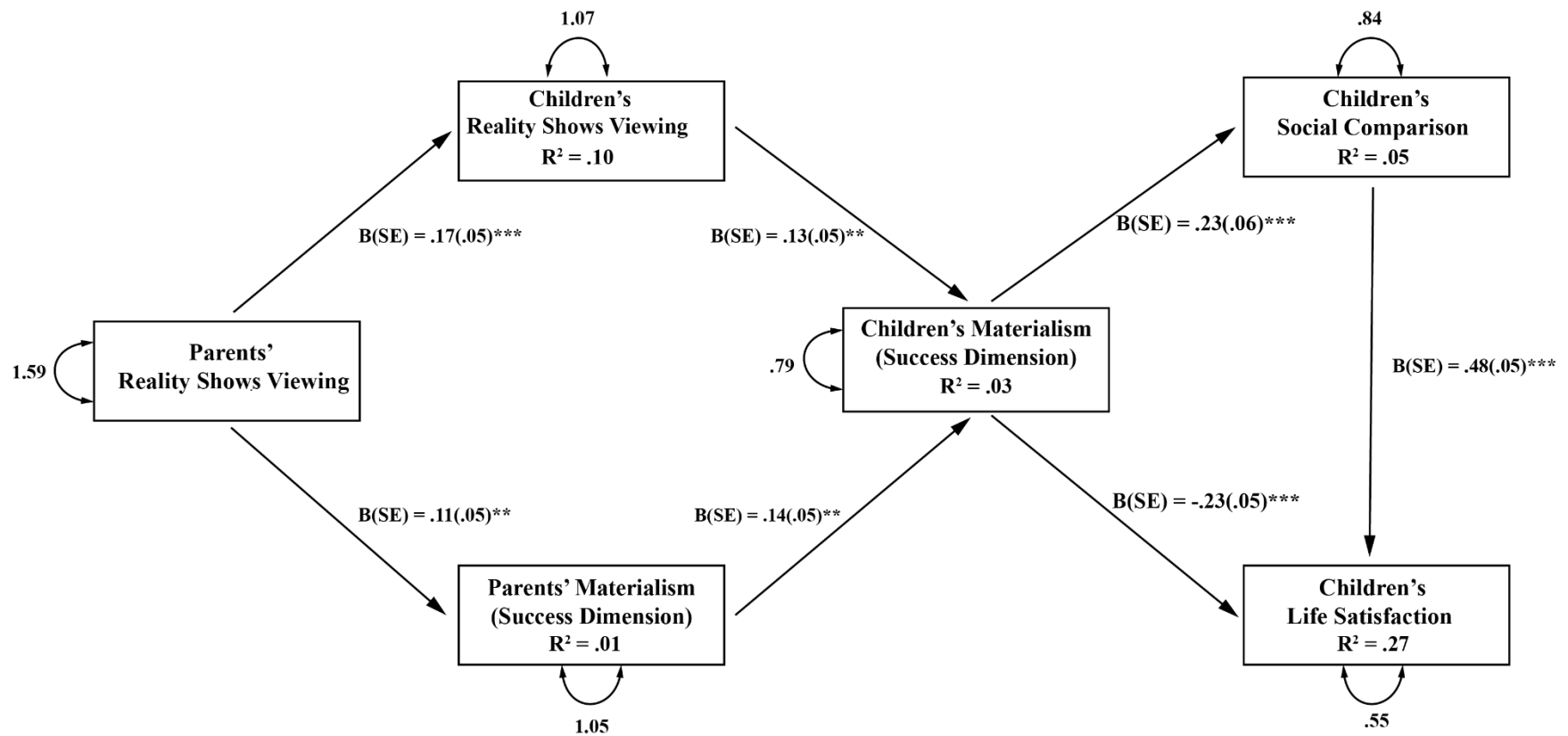


Figure 5.7 Parents' Television Viewing and the Cultivation of the Success Dimension of Materialism among High-SES Families (n = 152) Note: Path coefficients are unstandardized solution. (+p < .10 *p < .05 **p < .01 ***p < .001, two-tailed)

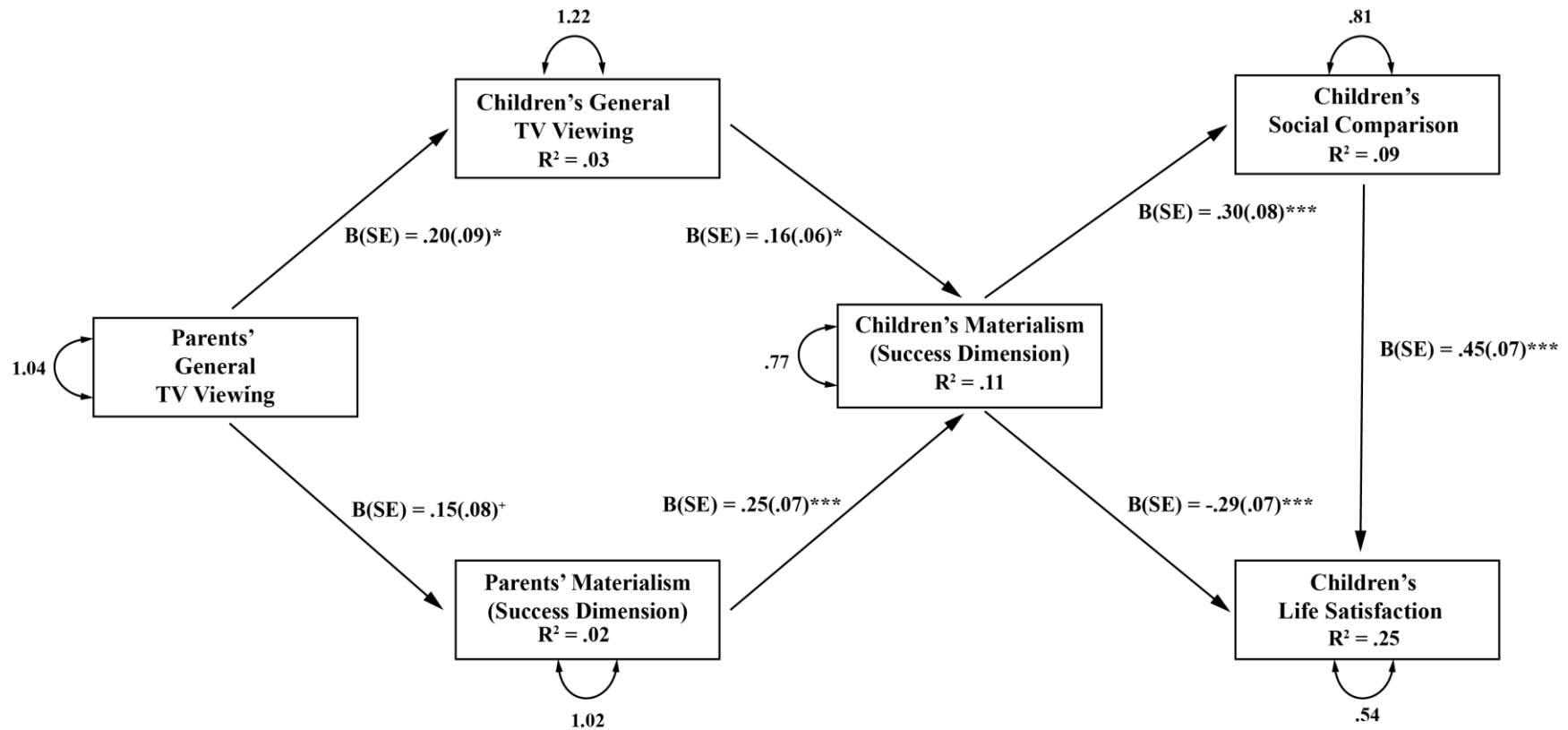


Figure 5.8 Parents' Television Viewing and the Cultivation of the Success Dimension of Materialism among Low-SES Families (n = 151) Note: Path coefficients are unstandardized solution. (+p < .10 *p < .05 **p < .01 ***p < .001, two-tailed)

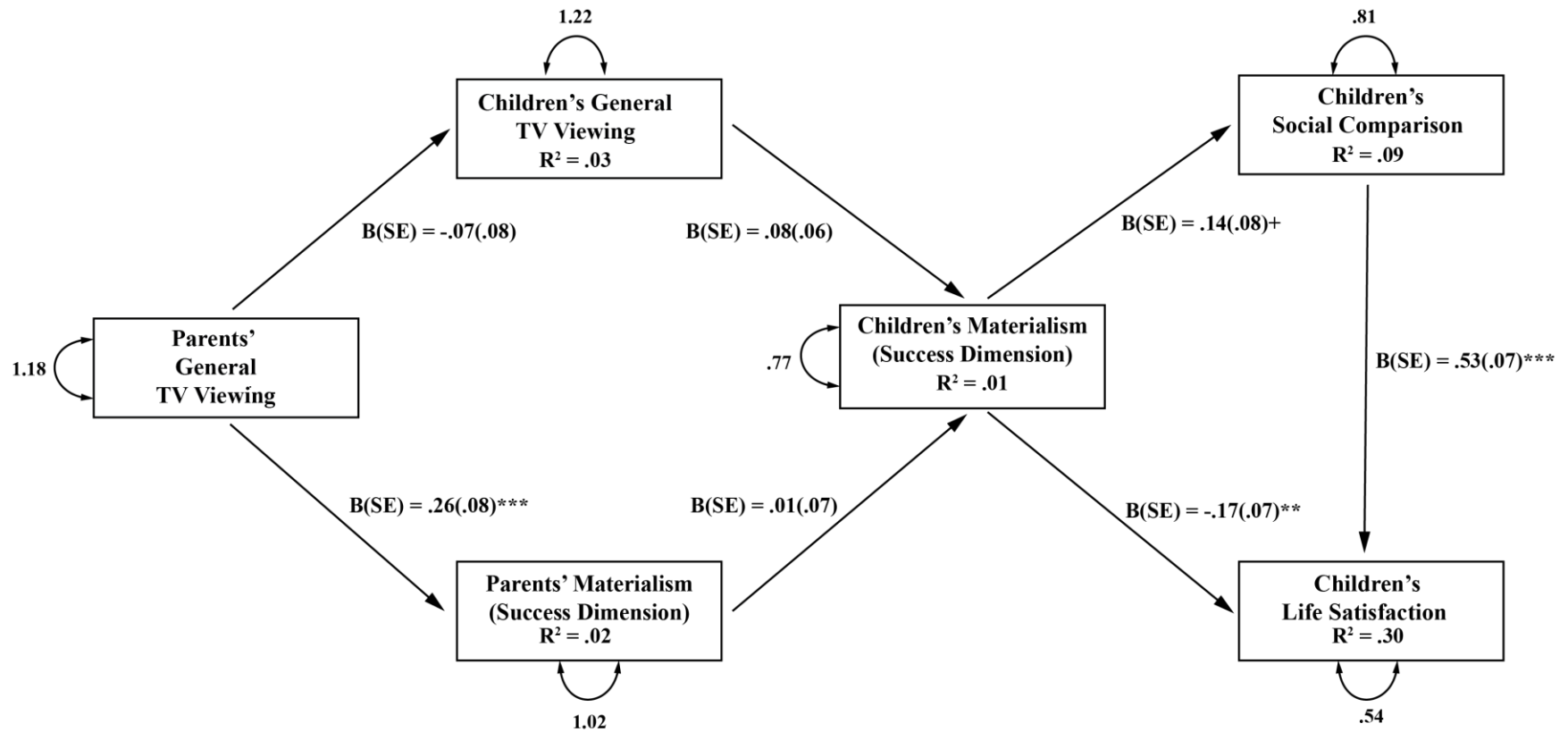


Figure 5.9 Parents' General Television Viewing and the Cultivation of the Centrality Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 4.10$ ($p = .85$); RMSEA = .00 (CI .00; .04); CFI = 1.00; NFI = .96; GFI = 1.00; SRMR = .03 ($+p < .10$ $*p < .05$ $**p < .01$ $***p < .001$, two-tailed)

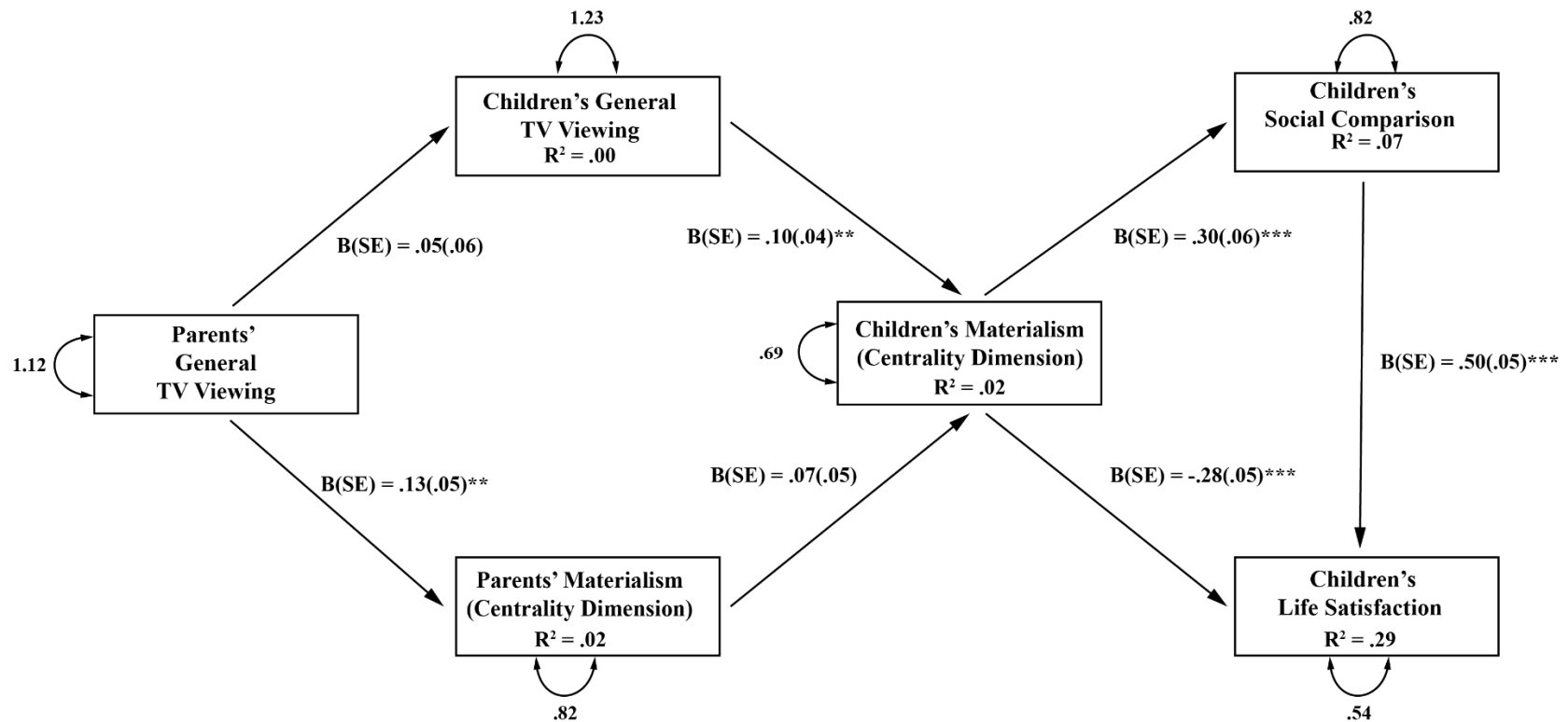


Figure 5.10 Parents' News Viewing and the Cultivation of the Centrality Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 17.27$ ($p < .05$); RMSEA = .06 (CI .02; .10); CFI = .92; NFI = .87; GFI = .98; SRMR = .06 (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

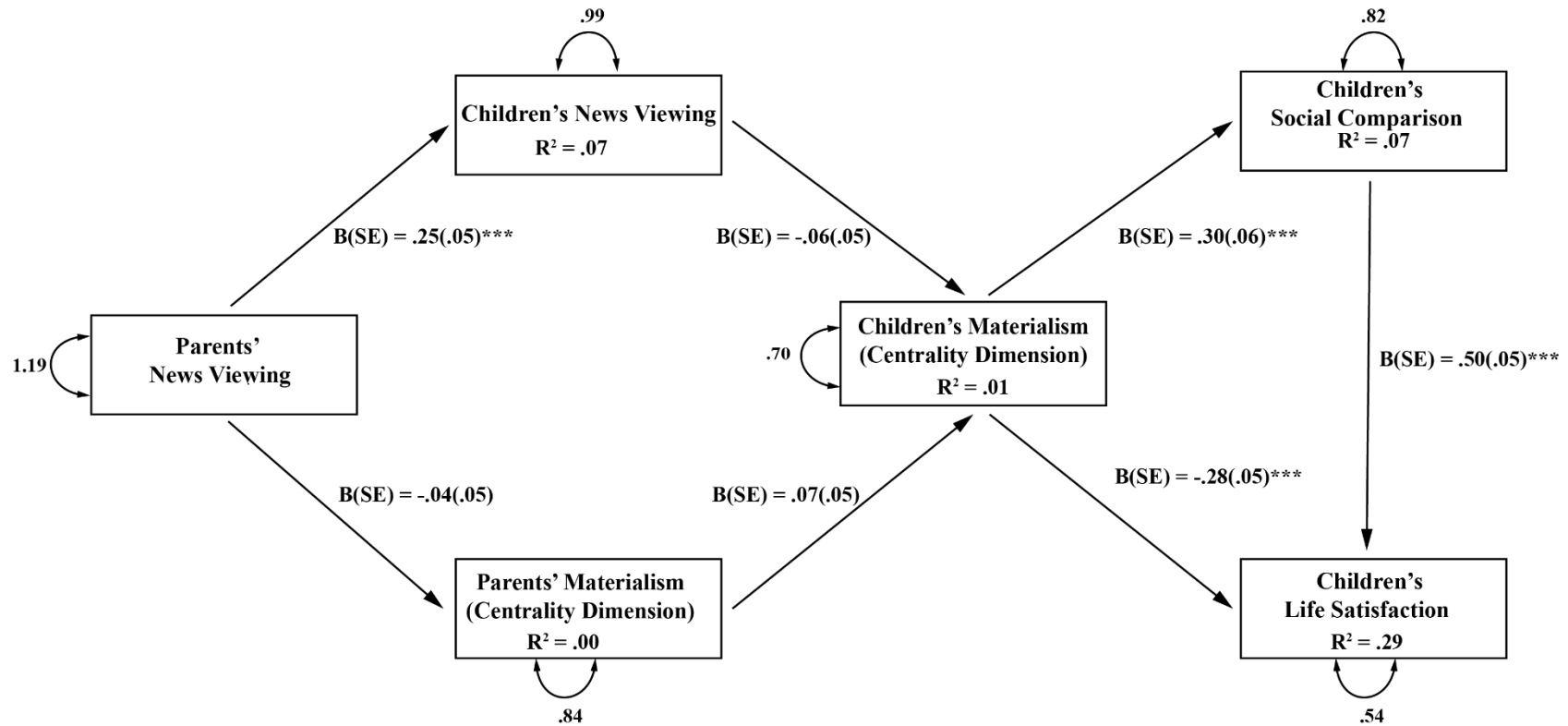


Figure 5.11 Parents' Drama Viewing and the Cultivation of the Centrality Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 6.73$ ($p = .57$); RMSEA = .00 (CI .00; .06); CFI = 1.00; NFI = .95; GFI = .99; SRMR = .04 (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

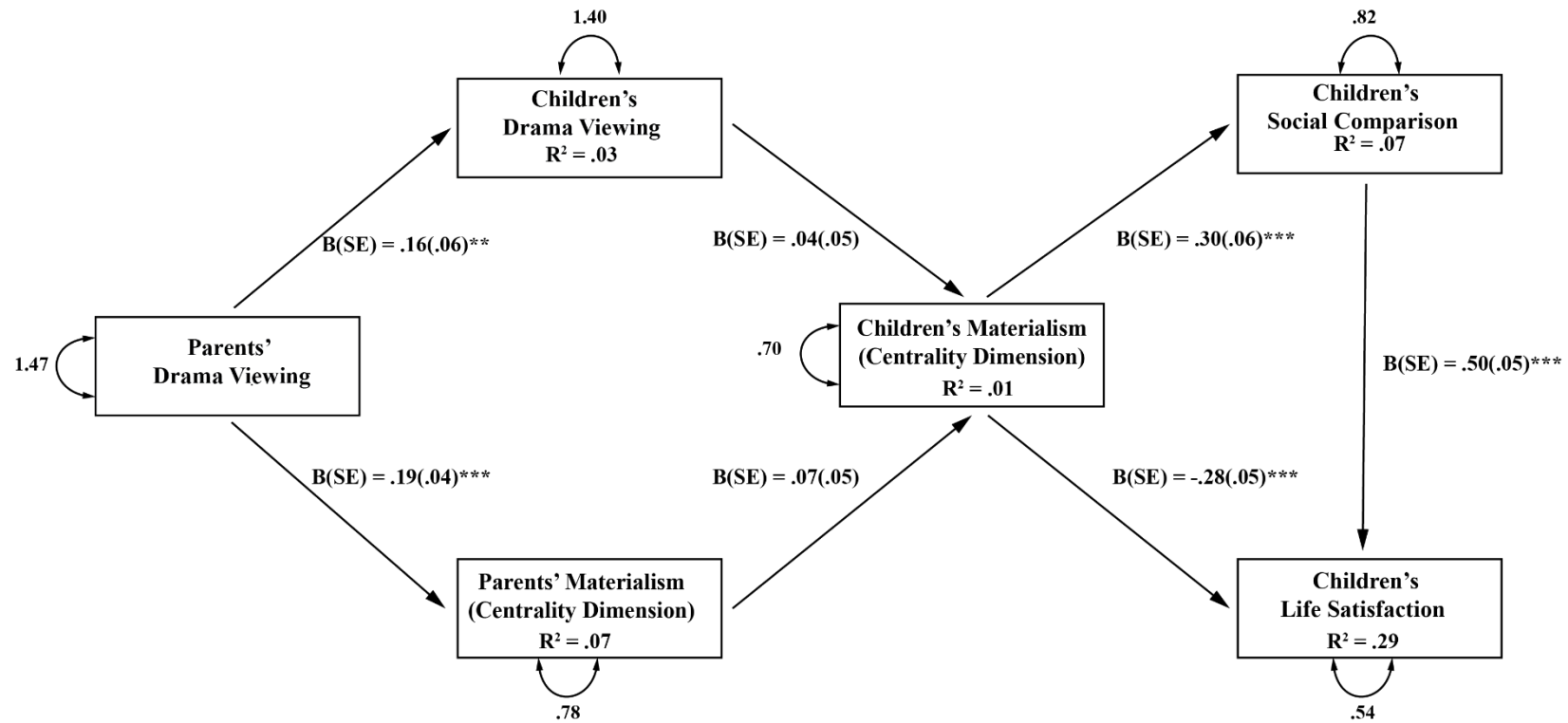


Figure 5.12 Parents' Sitcom Viewing and the Cultivation of the Centrality Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 5.00$ ($p = .76$); RMSEA = .00 (CI .00; .05); CFI = 1.00; NFI = .96; GFI = 1.00; SRMR = .03 (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

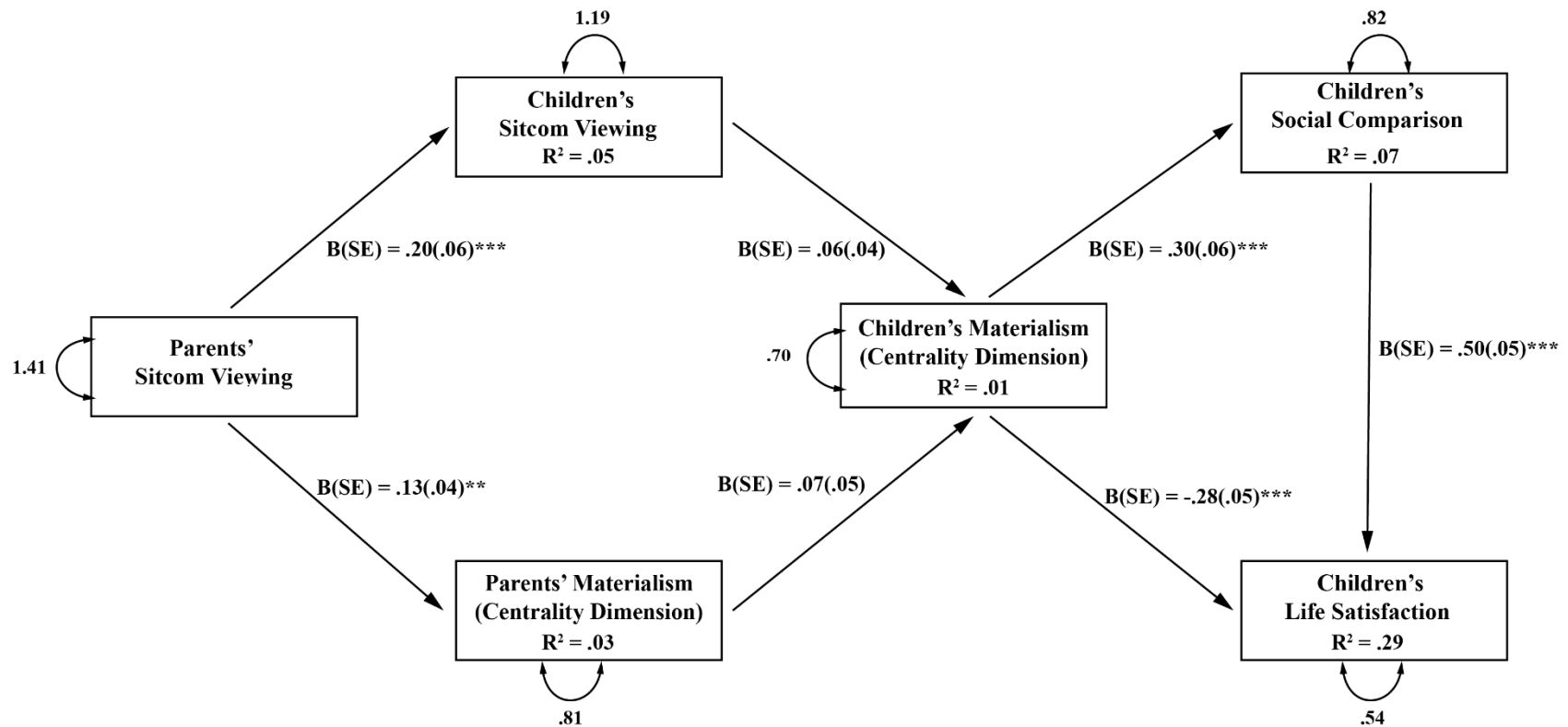


Figure 5.13 Parents' Sports Viewing and the Cultivation of the Centrality Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 12.02$ ($p = .15$); RMSEA = .04 (CI .00; .09); CFI = .97; NFI = .91; GFI = .99; SRMR = .04 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

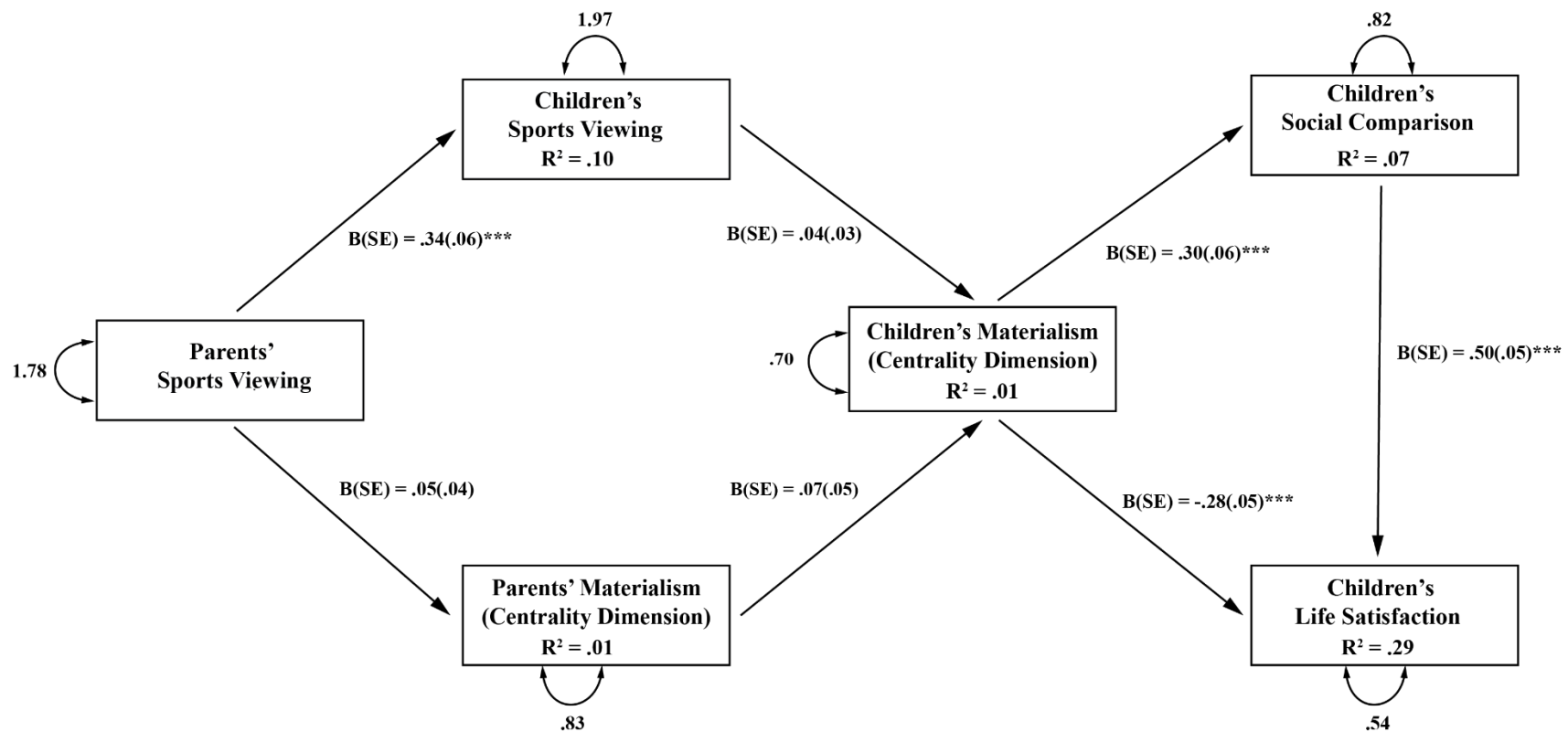


Figure 5.14 Parents' Reality Shows Viewing and the Cultivation of the Centrality Dimension of Materialism in the Family (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 9.52$ ($p = .30$); RMSEA = .03 (CI .00; .08); CFI = .99; NFI = .92; GFI = .99; SRMR = .04 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

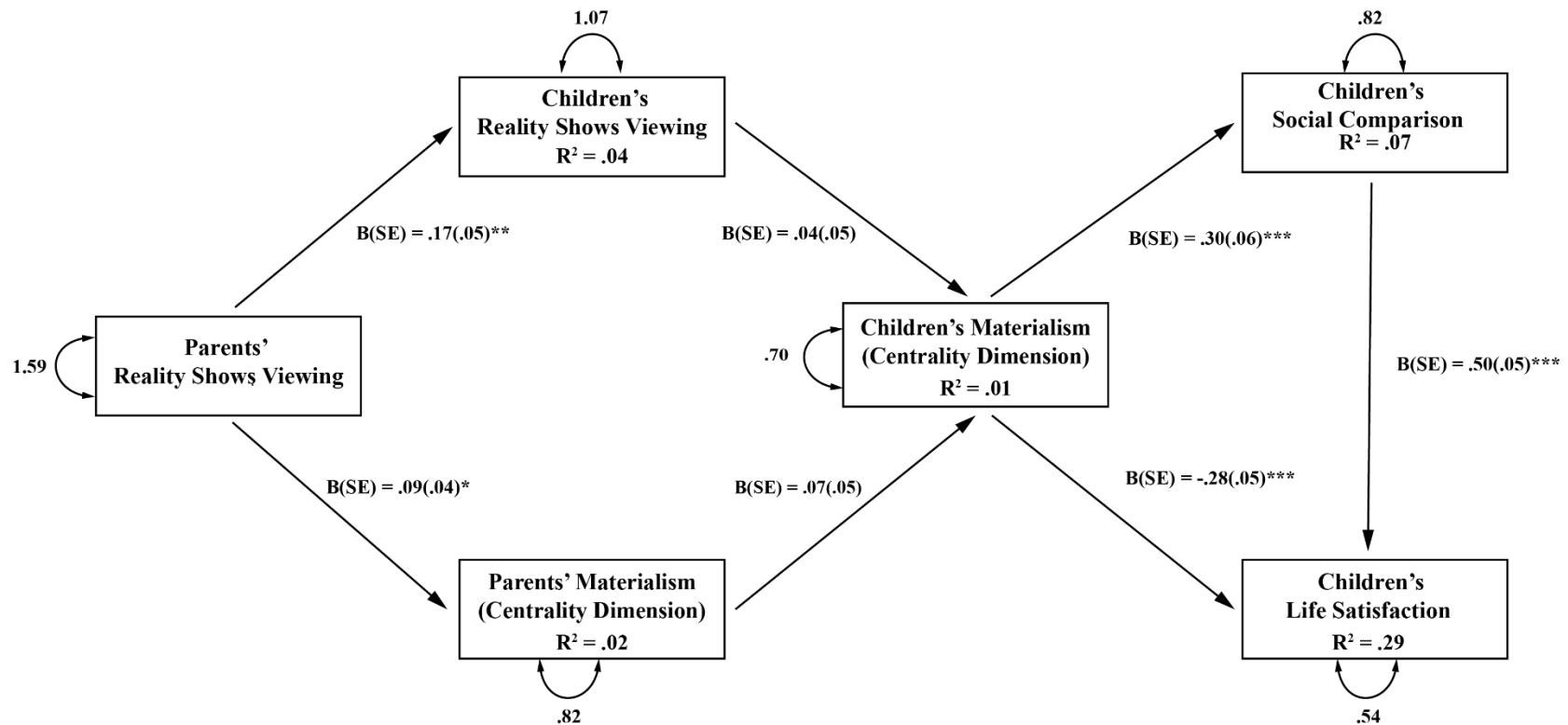


Figure 5.15 Parents' Television Viewing and the Cultivation of the Centrality Dimension of Materialism across SES groups (Constrained)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 28)} = 22.57$ ($p = .75$); RMSEA = .00 (CI .00; .05); CFI = 1.00; NFI = .82; GFI HIGH SES = .97, SRMR HIGH SES = .06; GFI LOW SES = .98 SRMR LOW SES = .06 ($+p < .10$ $*p < .05$ $**p < .01$ $***p < .001$, two-tailed)

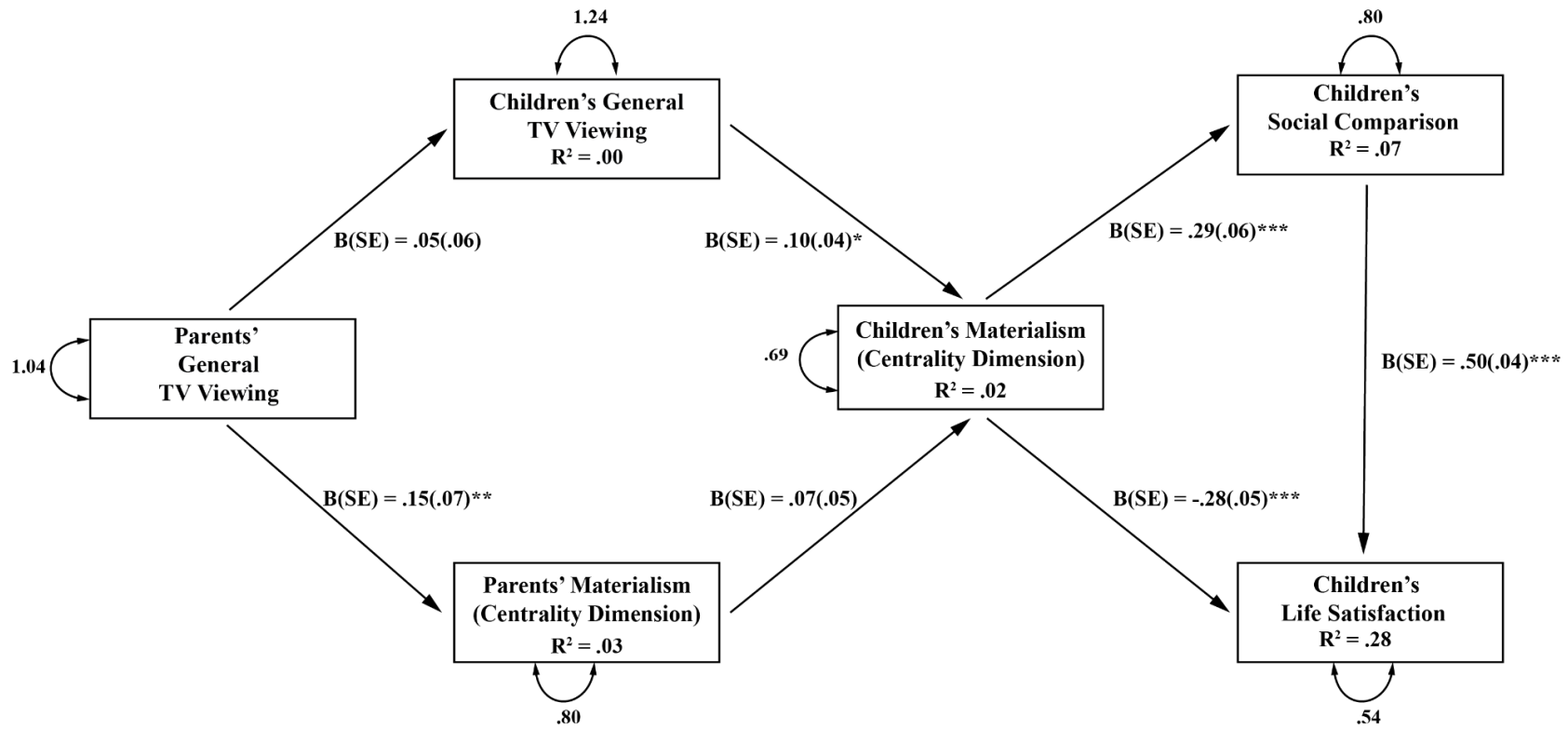


Figure 5.16 Parents' Television Viewing and the Cultivation of the Centrality Dimension of Materialism among High-SES Families (n = 151)

Note: Path coefficients are unstandardized solution. (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

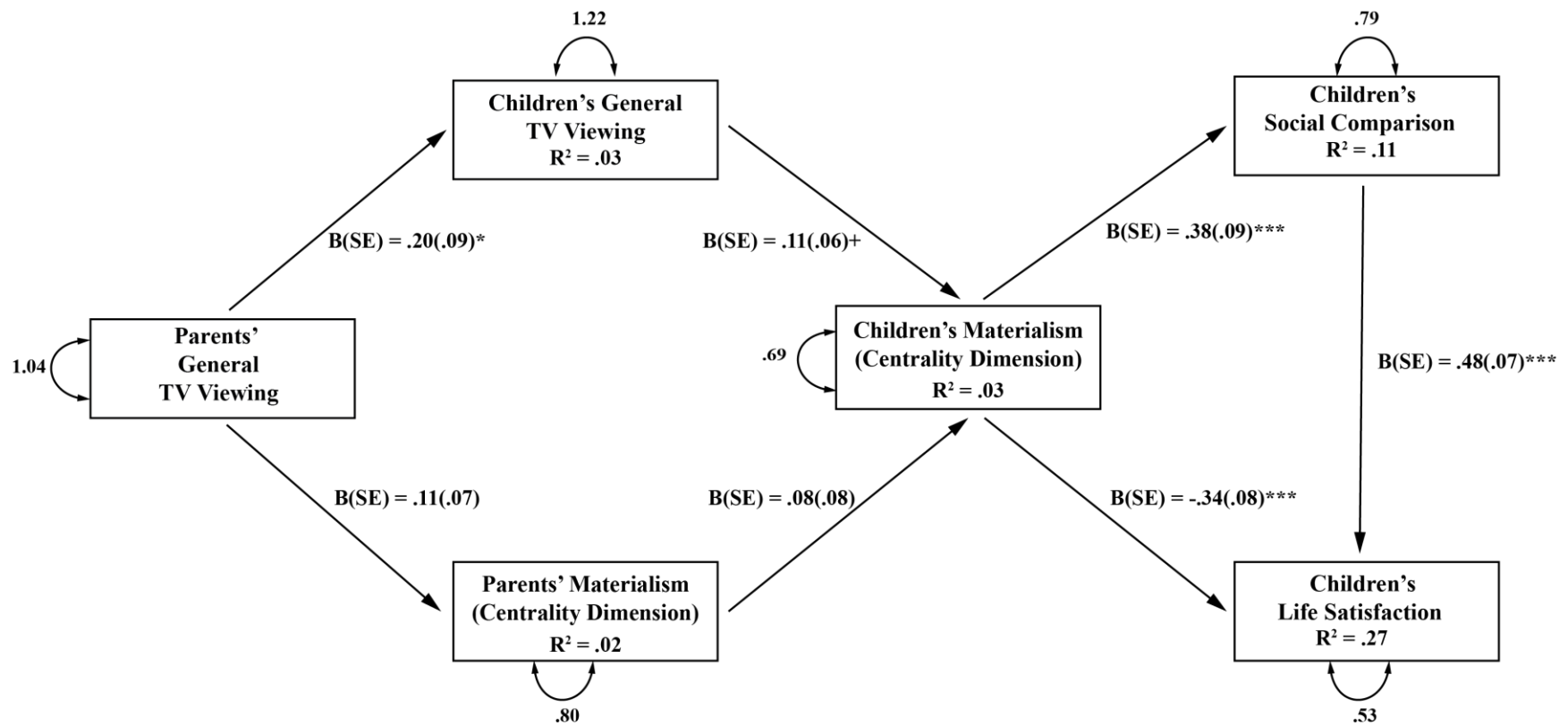


Figure 5.17 Parents' Television Viewing and the Cultivation of the Centrality Dimension of Materialism among Low-SES Families (n = 151)

Note: Path coefficients are unstandardized solution. (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

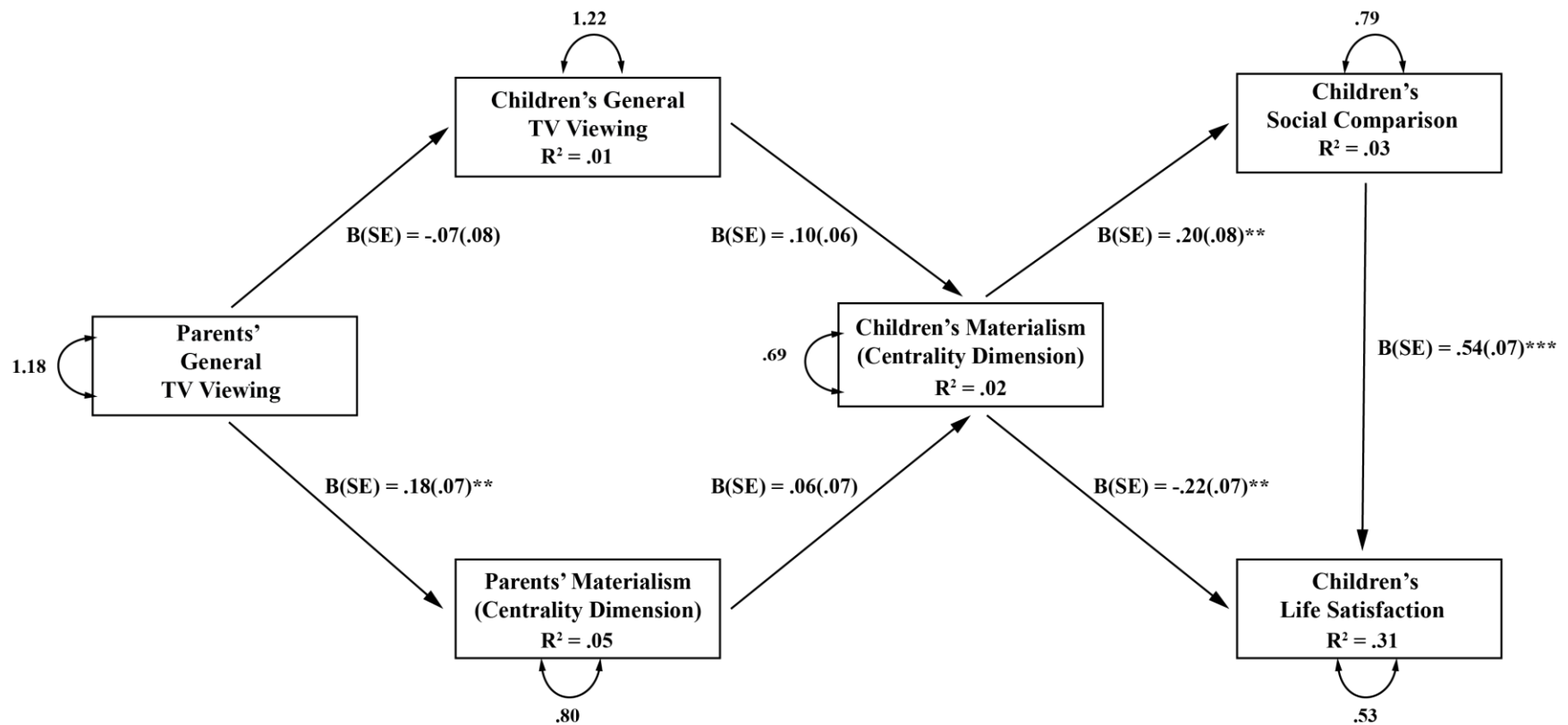


Figure 5.18 Parents' General Television Viewing and the Cultivation of the Happiness Dimension of Materialism in the Families (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 3.66$ ($p = .89$); RMSEA = .00 (CI .00; .03); CFI = 1.00; NFI = .98; GFI = 1.00; SRMR = .03 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

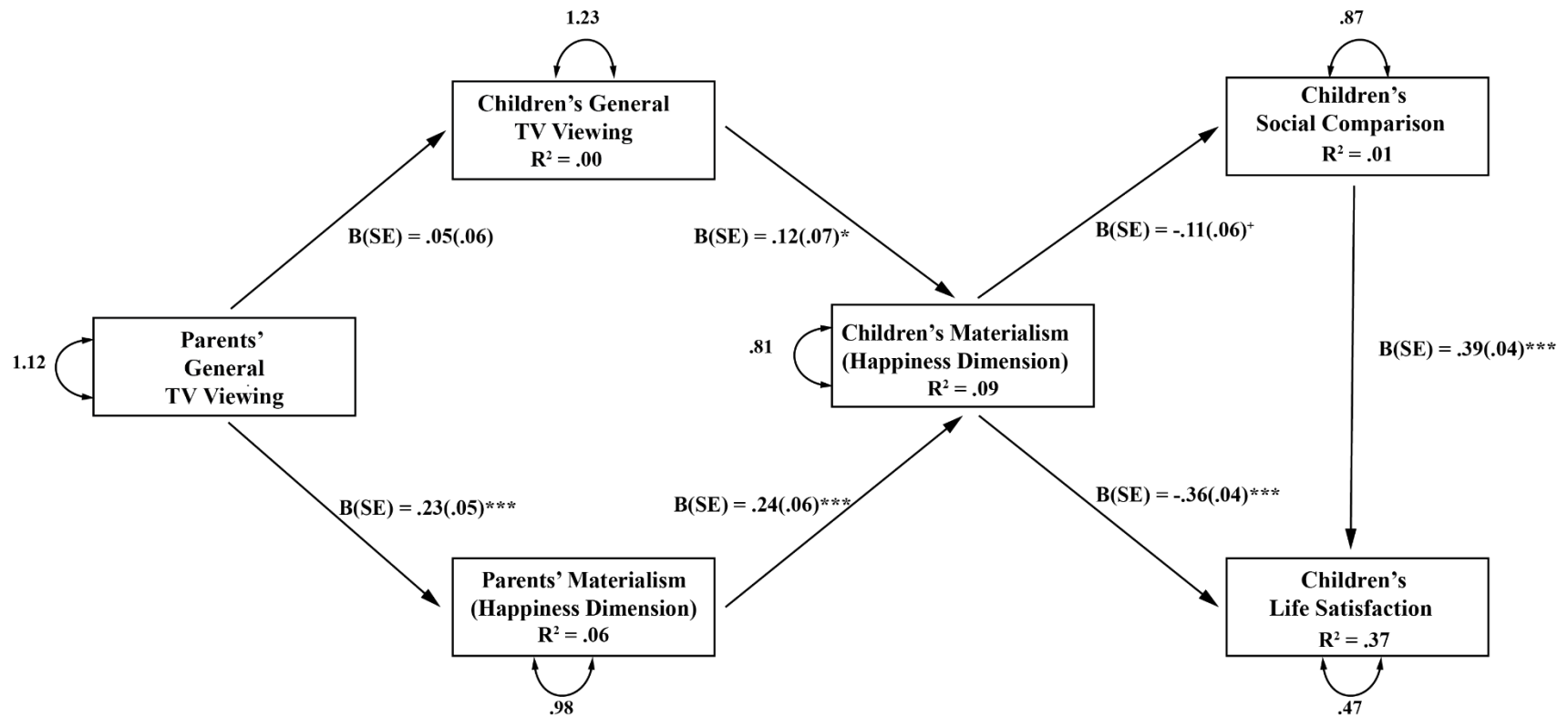


Figure 5.19 Parents' News Viewing and the Cultivation of the Happiness Dimension of Materialism in the Families (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 14.40$ ($p = .07$); RMSEA = .05 (CI .00; .09); CFI = .96; NFI = .92; GFI = .98; SRMR = .05 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

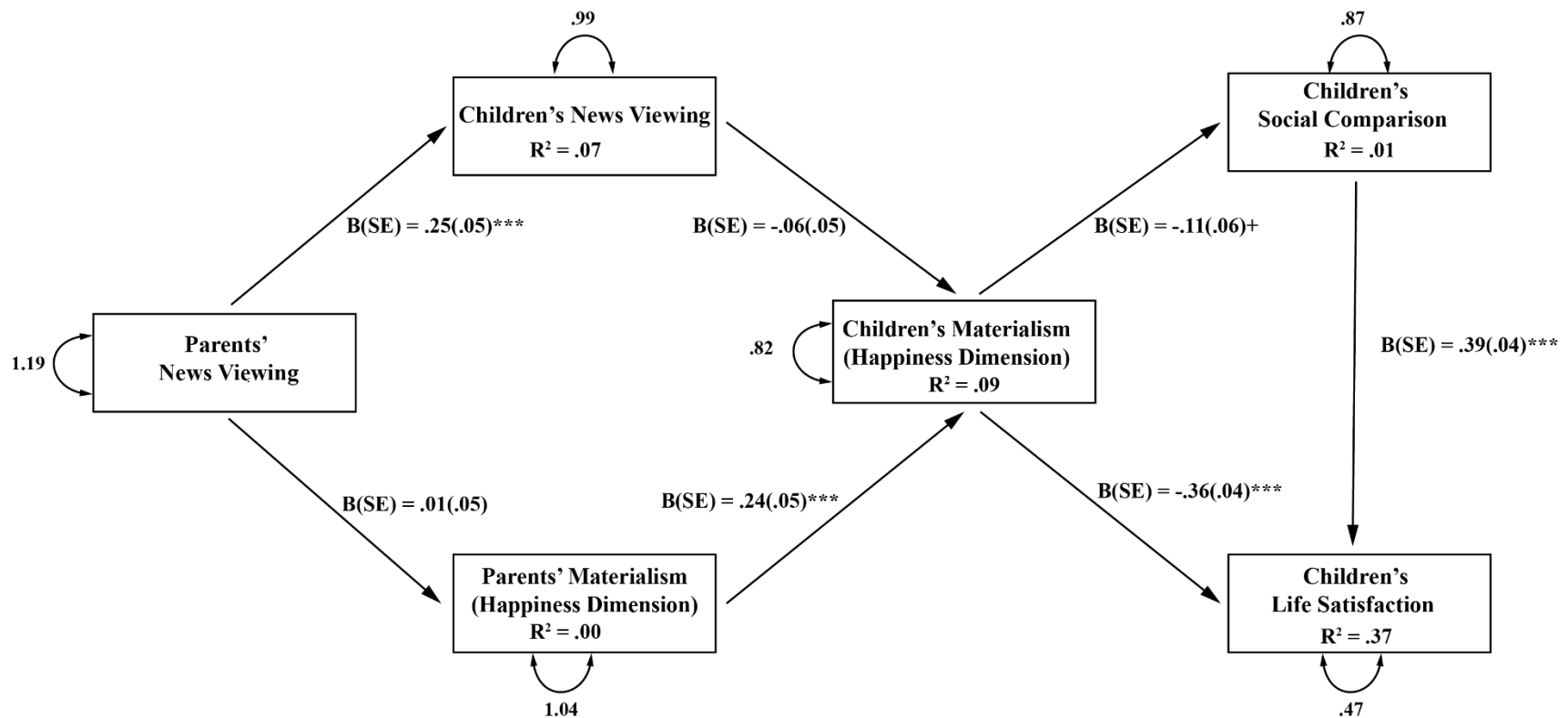


Figure 5.20 Parents' Drama Viewing and the Cultivation of the Happiness Dimension of Materialism in the Families (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 5.96$ ($p = .65$); RMSEA = .05 (CI .00; .05); CFI = 1.00; NFI = .97; GFI = .99; SRMR = .03 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

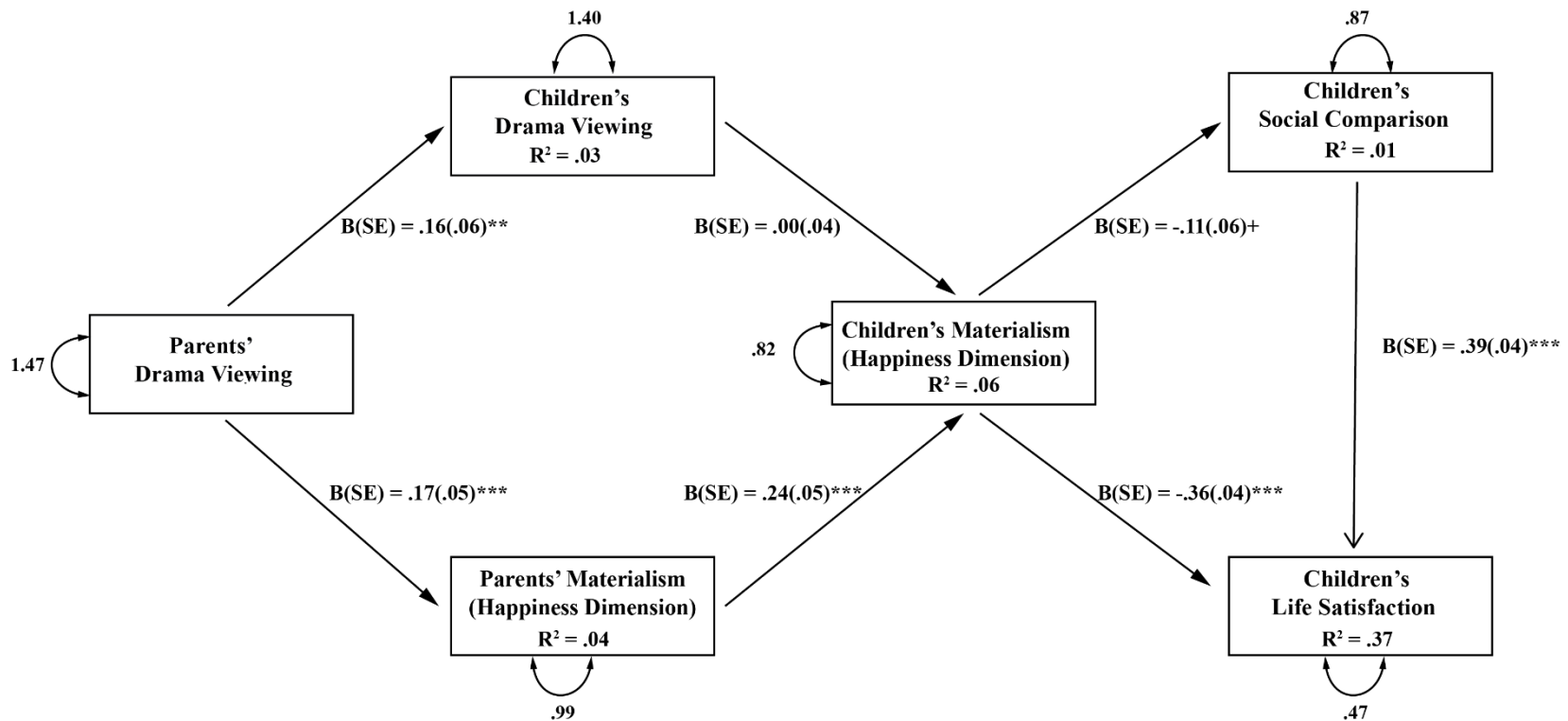


Figure 5.21 Parents' Sitcom Viewing and the Cultivation of the Happiness Dimension of Materialism in the Families (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 6.64$ ($p = .57$); RMSEA = .00 (CI .00; .06); CFI = 1.00; NFI = .96; GFI = .99; SRMR = .03 (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

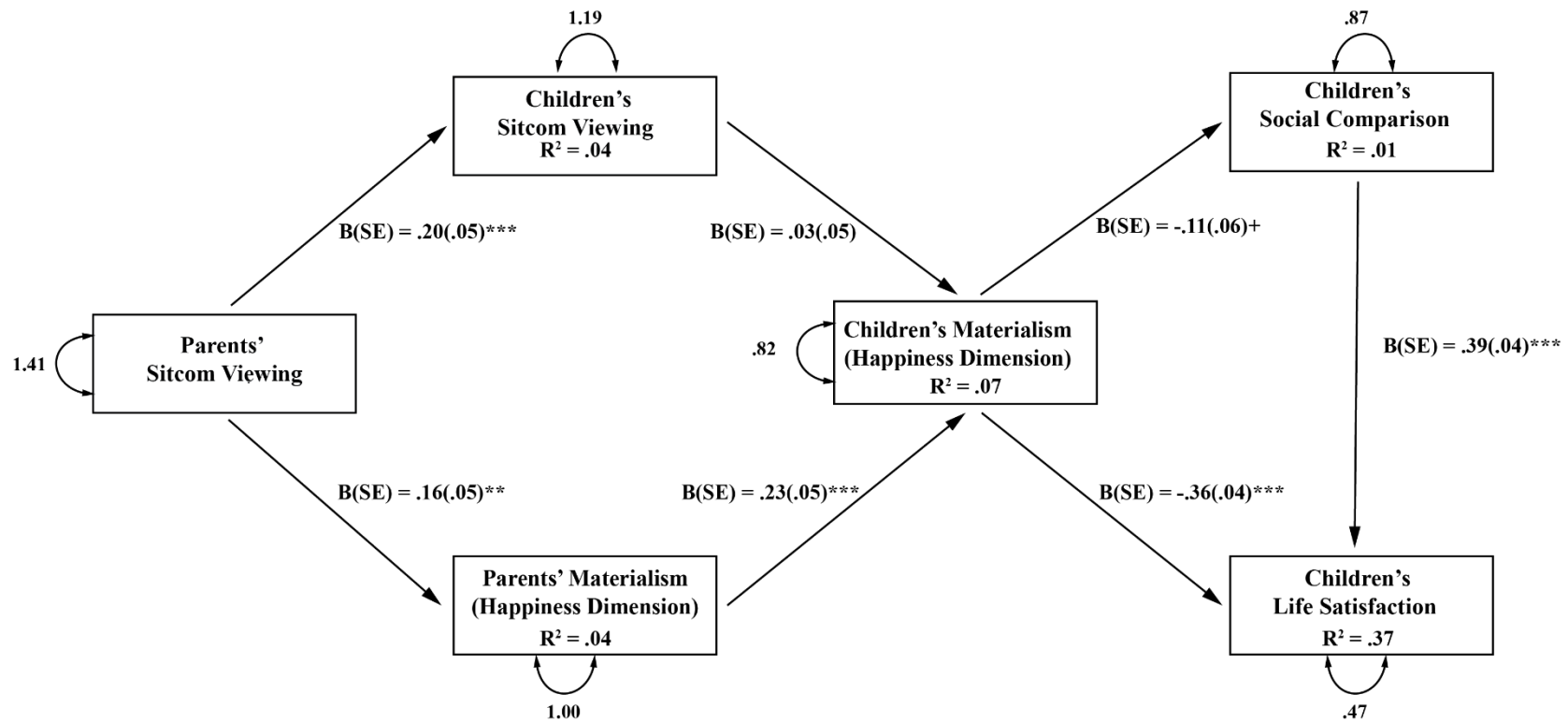


Figure 5.22 Parents' Sports Viewing and the Cultivation of the Happiness Dimension of Materialism in the Families (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 12.57$ ($p = .13$); RMSEA = .04 (CI .00; .09); CFI = .98; NFI = .94; GFI = .99; SRMR = .05 (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

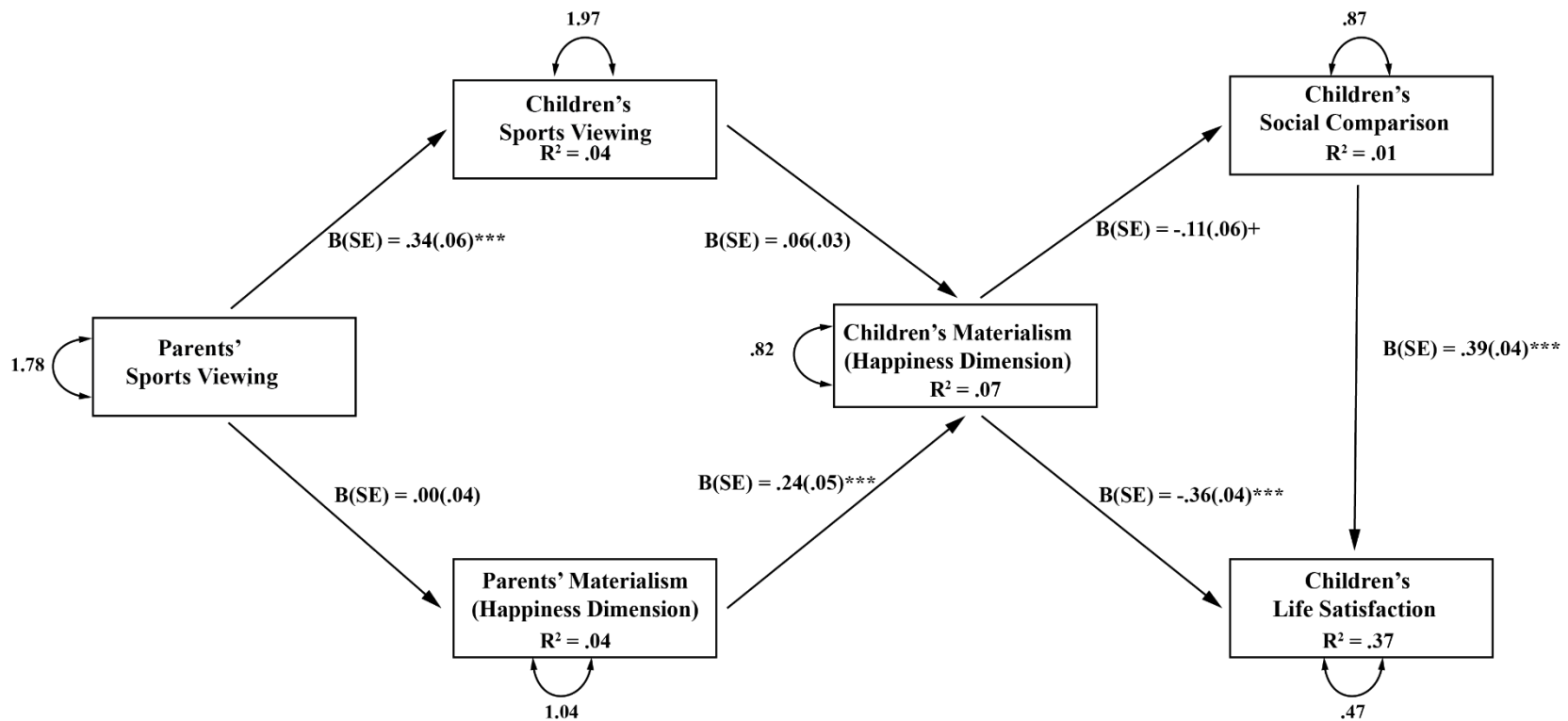


Figure 5.23 Parents' Reality Shows Viewing and the Cultivation of the Happiness Dimension of Materialism in the Families (n = 303)

Note: Path coefficients are unstandardized solution. Model fit: $\chi^2_{(303, 8)} = 9.89$ ($p = .27$); RMSEA = .03 (CI .00; .08); CFI = .99; NFI = .95; GFI = .99; SRMR = .04 ($+p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

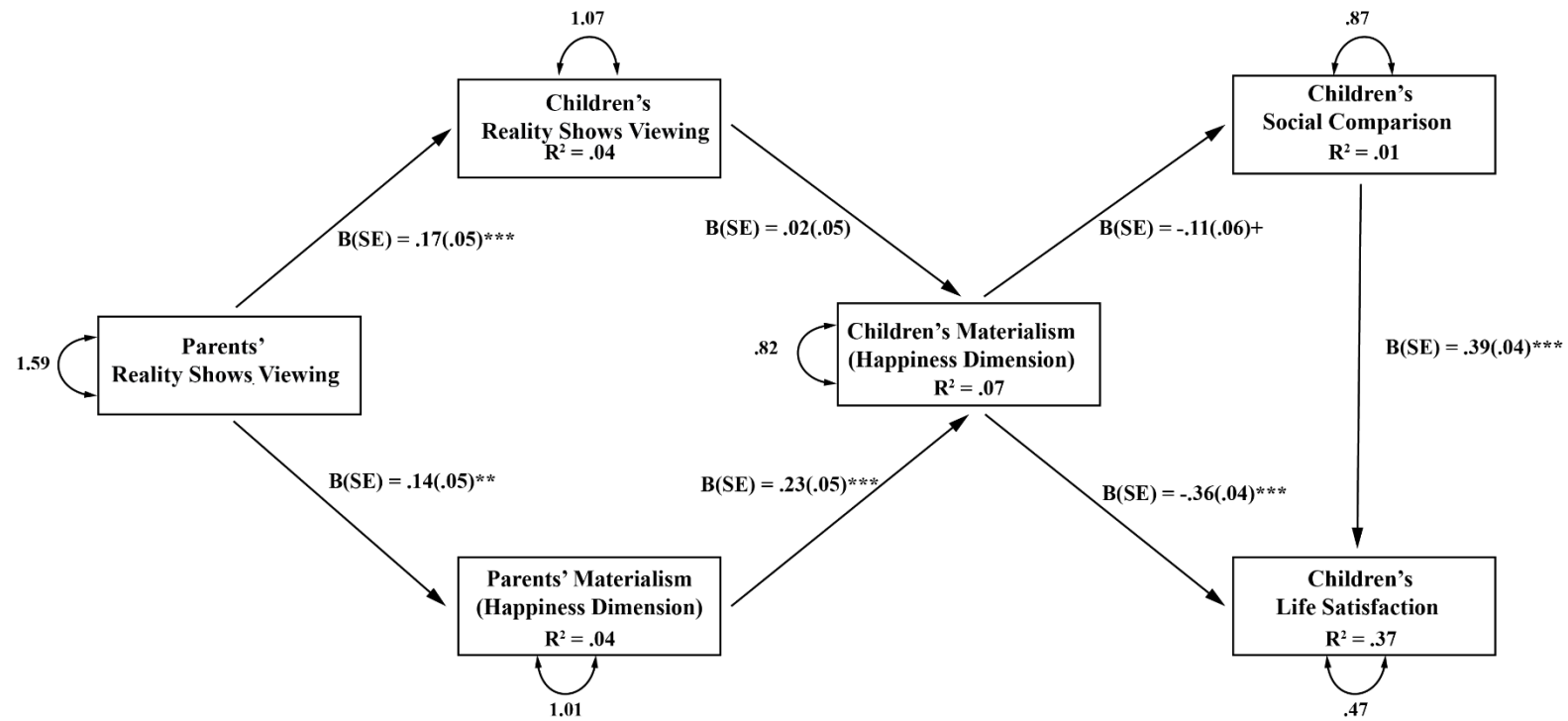


Figure 5.24 Parents' Television Viewing and the Cultivation of the Happiness Dimension of Materialism among High-SES Families (n = 152)

Note: Path coefficients are unstandardized solution. (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

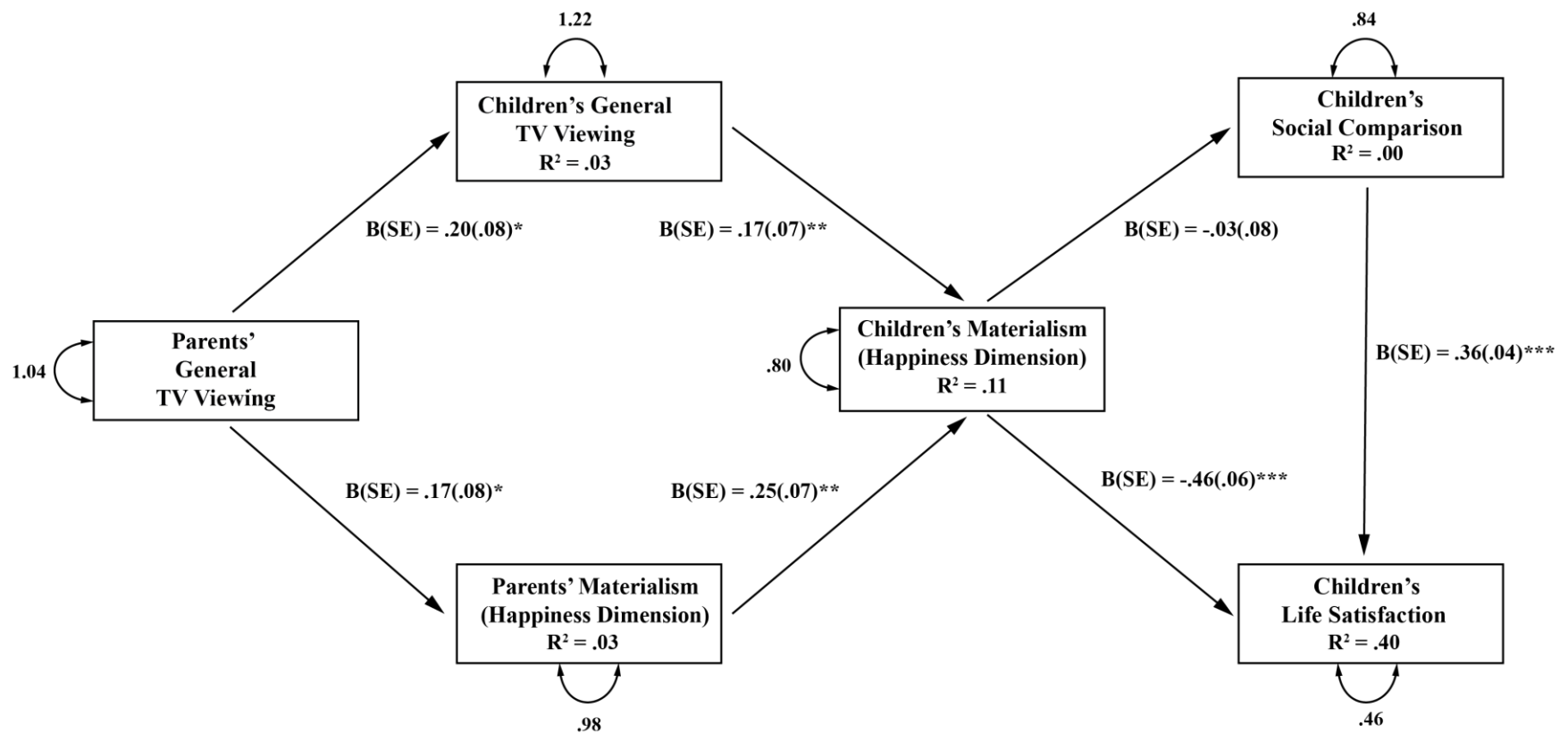


Figure 5.25 Parents' Television Viewing and the Cultivation of the Happiness Dimension of Materialism among Low-SES Families (n = 151)

Note: Path coefficients are unstandardized solution. (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

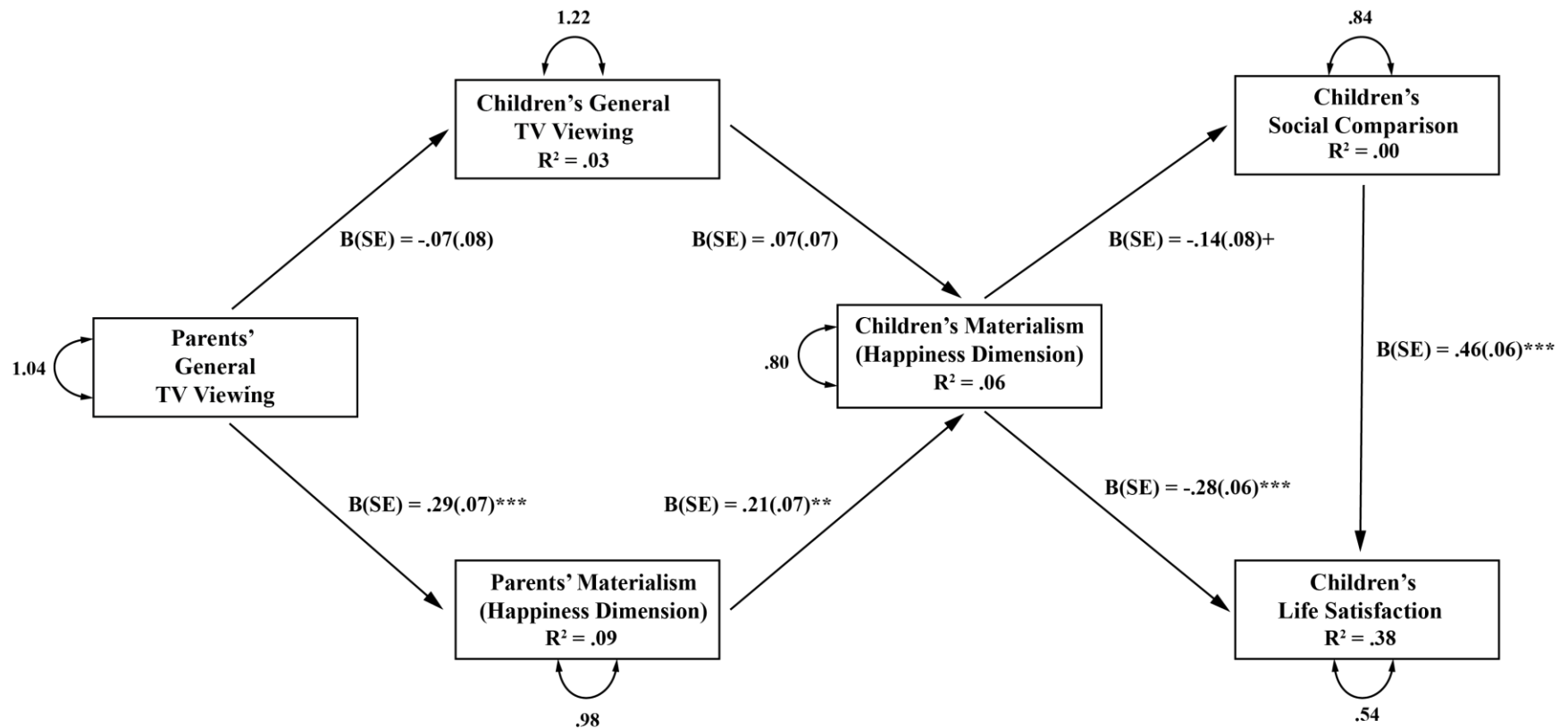


Figure 5.26 Fathers and Mothers' Television Viewing and the Cultivation of the Success Dimension of Materialism (Constrained)

Note: Path coefficients are unstandardized solution. (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

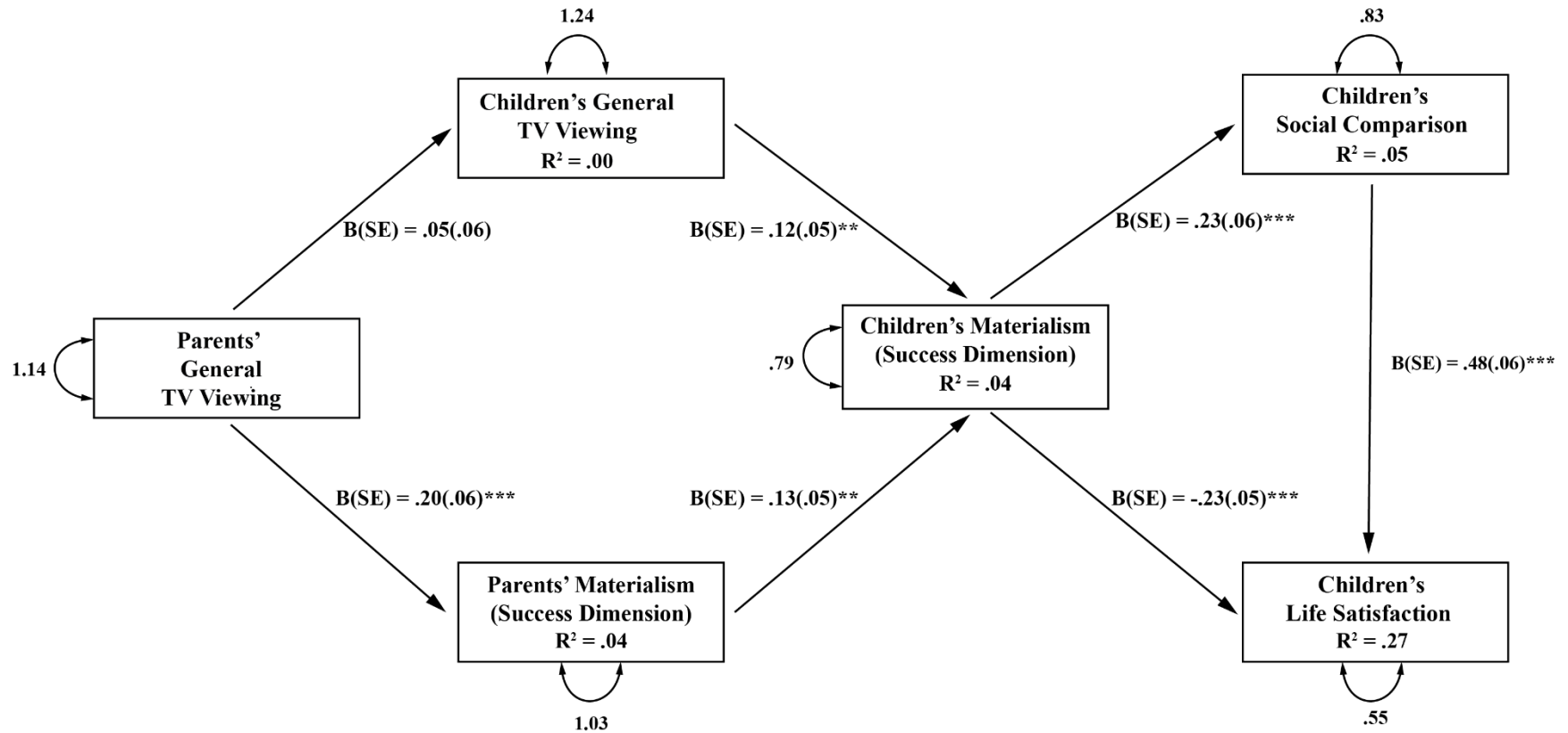


Figure 5.27 Fathers and Mothers' Television Viewing and the Cultivation of the Centrality Dimension of Materialism (Constrained)

Note: Path coefficients are unstandardized solution. ($+p < .10$ $*p < .05$ $**p < .01$ $***p < .001$, two-tailed)

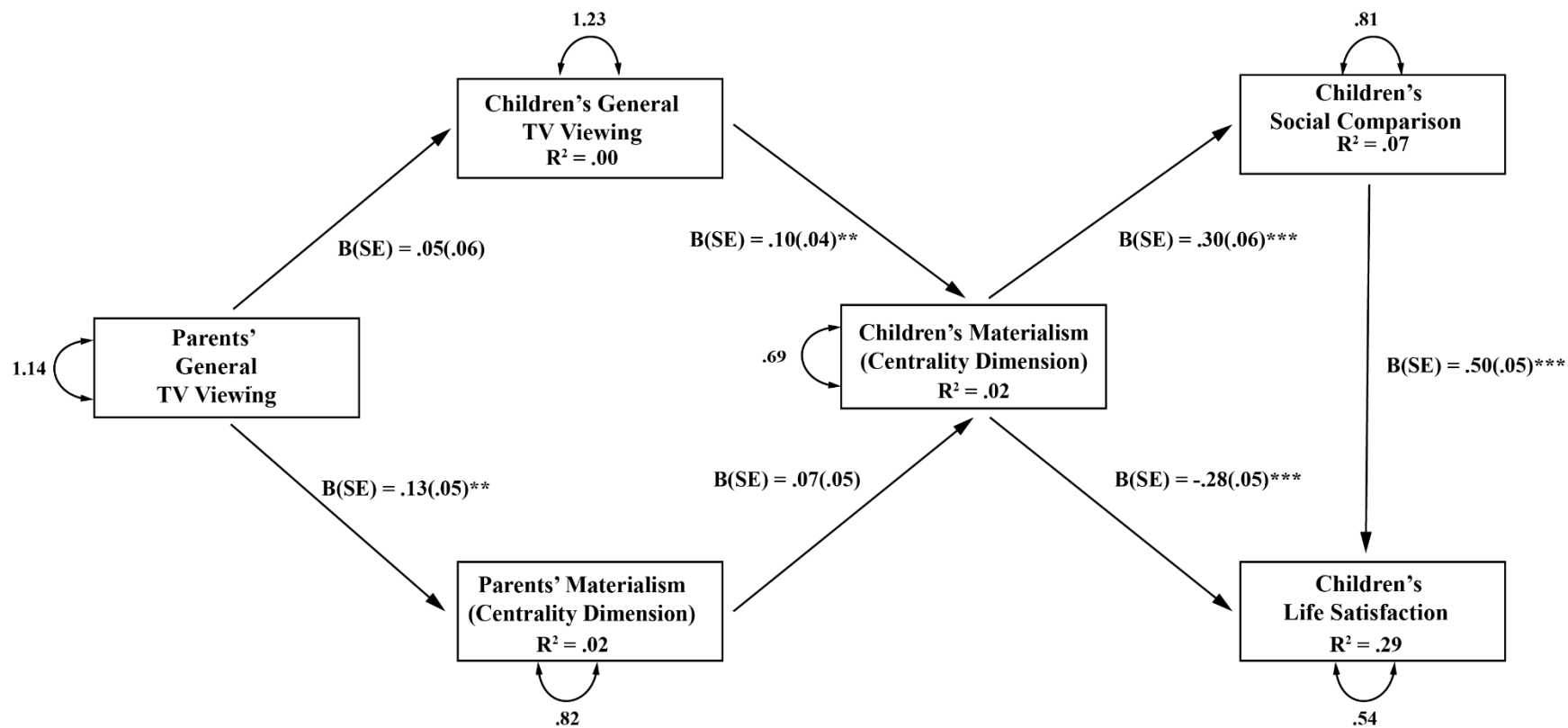


Figure 5.28 Fathers' Television Viewing and the Cultivation of the Happiness Dimension of Materialism in the Families (n = 130)

Note: Path coefficients are unstandardized solution. (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)

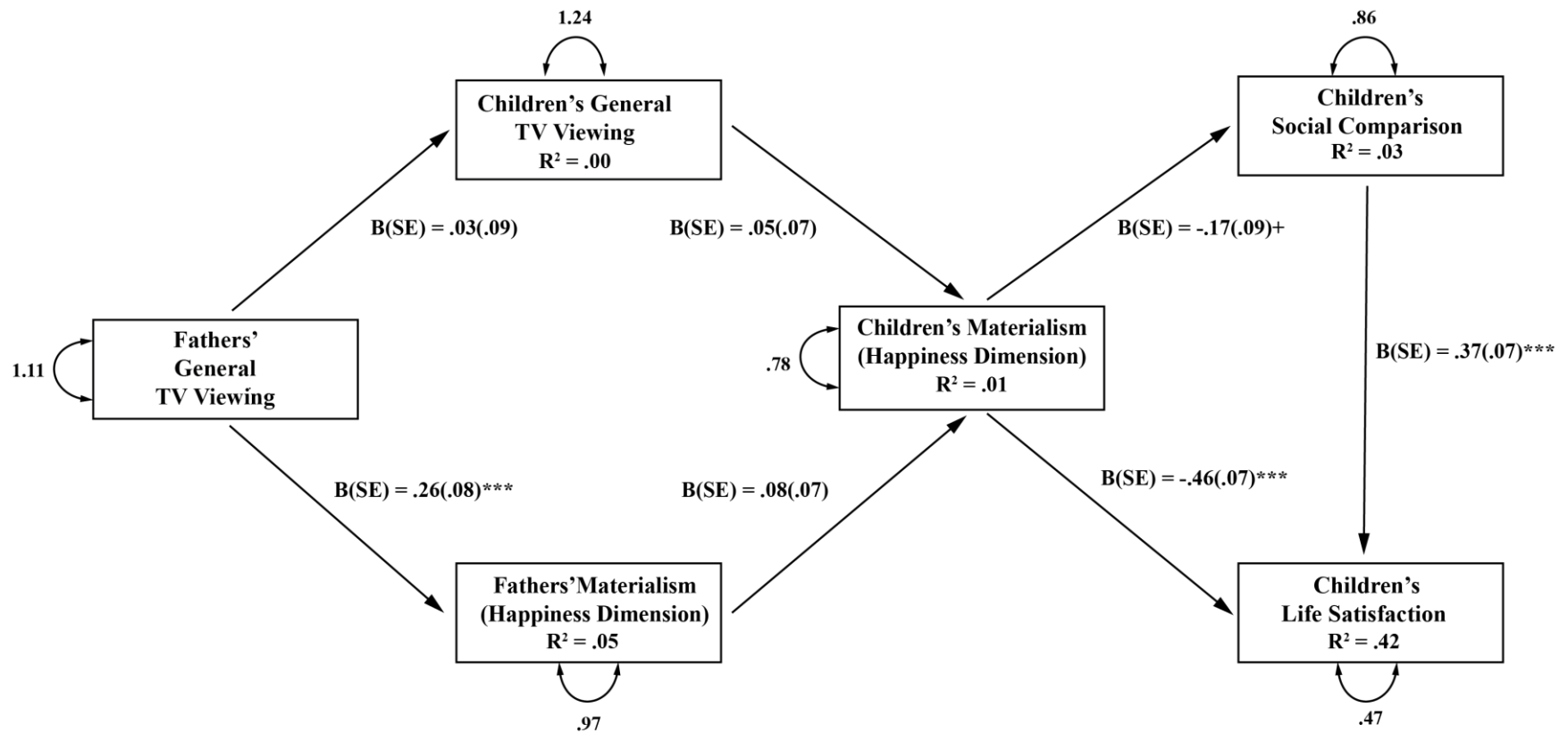
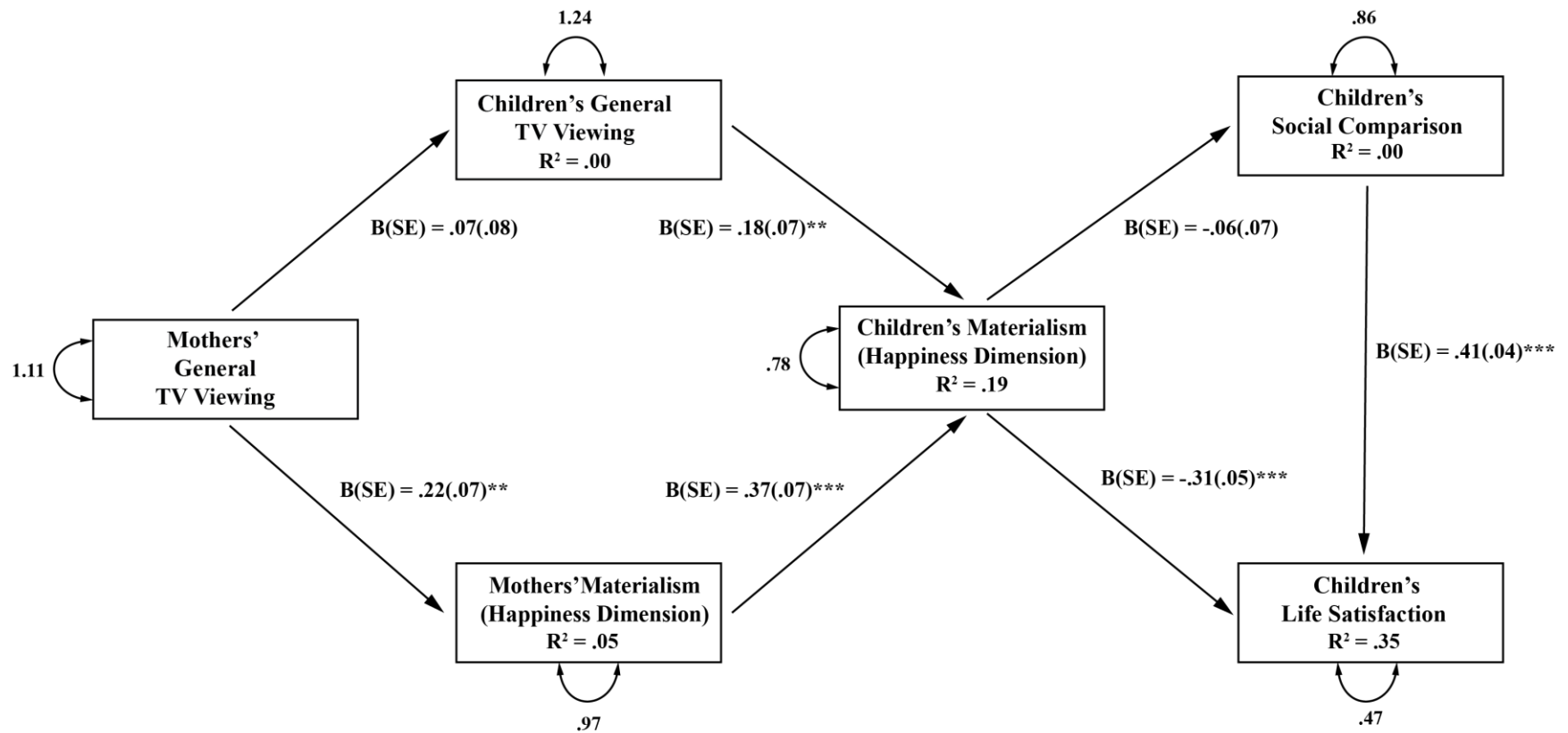


Figure 5.29 Mothers' Television Viewing and the Cultivation of the Happiness Dimension of Materialism in the Family (n = 173)

Note: Path coefficients are unstandardized solution. (+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$, two-tailed)



CHAPTER 6

DISCUSSION

6.1 General Discussion

6.1.1 Summary of the study

This study examined the cultivation of materialism in the family by testing how parents' television viewing predicts their young adult offspring's television viewing, materialism, social comparison, and life satisfaction. A vast body of literature on materialism suggests that emphasis on the acquisition and accumulation of money and consumer goods is negatively associated with personal well-being (Roberts & Clemens, 2006; Sirgy et al., 1998), the sustainability of the environment (Banerjee & McKeage, 1994; Kasser, 2002; Kilbourne & Pickett, 2008), and might lead to the erosion of social capital (Duriez et al., 2007; Piff et al., 2010, 2012a, 2012b; Rucker et al., 2000; Vohs et al., 2006). Existing work in psychology and sociology has demonstrated the transmission of materialism as a value from parents to children (e.g., Chaplin & John, 2007; Flouri, 1999, 2004; Goldberg et al., 2003). Materialistic values among children can usually be "traced" to how strong their parents believe in the significance of wealth and material possession, although there is also evidence for other family-related factors, such family structure and "disruptive" family events (Rindfleisch, Burroughs, & Denton, 1997), a non-nurturing parenting style (Chaplin & John, 2010), and the possible presence of genetic factors in children's acquisition of materialism (Giddens et al., 2008).

Likewise, studies on consumer behavior and mass communication have also suggested the contribution of media in promoting materialism. For decades, mass media,

especially television shows, have been inundated with stories that valorize affluence and consumptive behavior (e.g., Kendall, 2011; O’Guinn & Shrum, 1997; Richins, 1995; Signorielli & Kahlenberg, 2001), and even imply a positive association between economic status and industriousness or morality (Kendall, 2011; Selnow, 1986; 1990). Although some studies have focused on the prevalence of materialism in advertising (e.g., Chia, 2010; Richins, 1995; Sirgy, 2012), due to the fact that commercials explicitly appeal to the audiences to purchase more consumer goods, the overarching narrative that links wealth with accomplishment or status arguably appears not only in advertising, but across various types of television programs (e.g., O’Guinn & Shrum, 1997; Shrum et al., 2011; Yang & Oliver, 2010). Numerous studies have found correlational and causal associations – through cross-sectional surveys, laboratory experiments as well as longitudinal studies – between television viewing and materialism (e.g., Buijzen & Valkenburg, 2005; Clark et al., 2001; O’Guinn & Shrum, 1997; Oprea et al., 2014; Shrum et al., 2011; Yang & Oliver, 2010), and some have revealed a negative relationship between materialism and life satisfaction (Shrum et al., 2011; Sirgy et al., 2013; Yang & Oliver, 2010).

However, despite the evidence for the contribution of family and mass media in perpetuating materialism, only a few studies have examined mass media consumption in the family context in its relation to consumer socialization and materialism. A corpus of long-standing research findings suggests the significance of media messages in shaping consumer values among adults, yet previous studies tend to address the role of parents in promoting or mitigating their offspring’s problematic media use, but do not look into

parents' own media consumption (e.g., Buijzen & Valkenburg, 2005; Moschis & Churchill, 1978; Moschis, 1985; Moschis & Mitchell, 1986; Ward & Wackman, 1971).

Employing cultivation theory as a guiding theoretical framework, this study attempted to fill this gap in the body of literature by investigating parents' own television viewing and its relationship with materialism among their young adult offspring. Embarking from the concerns over the skewed portrayals of the social world in television stories, cultivation theory posits that heavy viewers – those who spend a great deal of time watching television – tend to perceive the world in a way that coheres with what they see on the screen (e.g., Shanahan & Morgan, 1999; Morgan & Shanahan, 2010). Existing cultivation research in the family context – which is in itself a scant sub-area in cultivation research – suggests that parents' television viewing might lead them to take certain actions that can be linked to what they see on television. For example, parents who watch more crime shows or news programs are more likely to either take more precautionary acts to protect their very young children or to reassure the children about the unlikelihood of the crime to happen (Martins & Wilson, 2011; Wilson et al., 2005). Parents' exposure to crime news was also found to positively predict parental warnings to their young adult offspring about crime, which in turn was associated with higher estimates of crimes among offspring (Busselle, 2003). In sum, parents' television viewing might exert implications not only for themselves, but also for their children.

Utilizing Qualtrics and Amazon's Mechanical Turk (MTurk) as online questionnaire and participant recruitment platforms, respectively, this study analyzed data from young adults aged 18 to 25. All participants were asked about their own general (Shrum et al., 2011) and genre-based television viewing, materialism (Richins, 2004),

social comparison (Solberg et al., 2002), and life satisfaction (Diener et al., 1985). In lieu of direct measurement of parents' television viewing and materialism, children's perceptions were used as a proxy for those variables. The data collection generated 303 participants with valid and complete responses. For the purpose of SES-based multi-group analyses, a composite based on parents' educational attainment and family income was created. Two SES groups – higher SES and lower SES – were then created by running a median split based on participants' SES composite scores.

6.1.2 Parents' general and genre-specific television viewing and children's materialism

This study began by hypothesizing two possible mechanisms of how parents' television viewing predicts children's materialism. First, parents' television viewing was predicted to be positively associated with children's materialism through the children's television viewing. In other words, children might take after their parents' television viewing habits, which in turn cultivates their own materialism. Second, parents' own materialism might serve as an intermediary in the indirect positive relationship between parents' television viewing and children's materialism. That is, children's emulation of parents' materialism might originate from what parents “learn” from television stories.

In the present study, separate path analyses that examined the relationship between parents' television viewing and children's materialism were conducted for each of the three dimensions of materialism (i.e., success, centrality, and happiness). In examining each dimension of materialism, overall and genre-specific television viewing were also tested separately. For overall television viewing, this study lends support to the

second route, but not to the first. No relationship between parents' and children's television viewing was found, although children's television viewing was positively associated with the children's centrality dimension of materialism. Instead, except for the centrality dimension of materialism, parents' television viewing seems to cultivate materialism among parents, which they apparently pass down to their offspring. In contrast to general television viewing, parents' and children's genre-specific viewing are positively correlated which, in turn, for some genres, positively predicts materialism among children. The associations suggest a resemblance between parents and children on the frequency of watching of certain types of television programs. In addition, it also provides support for the intergenerational cultivation that takes place through offspring's television viewing.

Looking into the genres, some types of television shows seem to cultivate intergenerational materialism more strongly than other types of programs. Drama and reality shows, for example, appear to promote the success and happiness dimensions of materialism among both parents and children. Watching more drama seems to cultivate the belief that success in life can be measured in how much one owns. Furthermore, parents' viewing of the two genres cultivates children's success dimension of materialism *both* through promoting parents' materialism and through children's viewing of dramatic and reality television. Similarly, parents' viewing of drama and reality shows were also found to be associated with the happiness dimension of materialism, even though this association only appeared through parents' materialism as opposed to via children's viewing. Parents who watch drama and reality television tend to believe in the necessity

of material goods as a means to attain happiness, which seems to be taken after by the children.

A similar pattern was found with the genre of sitcoms and the cultivation of the happiness dimension of materialism, where watching more sitcoms predicts a stronger belief in the importance of material goods in order to be happy in life among parents, which in turn cultivates the belief among children. Somewhat similarly, sports was found to cultivate the success dimension of materialism among children through parents' materialism. Contrary to the other four genres, news is not a predictor of parents' or children materialism, although parents' and children's news viewing are positively correlated.

The findings on the cultivation of the success and happiness dimensions of materialism reinforce previous cultivation research on the topic (e.g., Hoffner et al., 2008; O'Guinn & Shrum, 1997; Oprea et al., 2014; Shrum et al., 2005, 2011; Yang & Oliver, 2010). The results cohered with the findings from previous studies on the transmission of materialism from parents to children (Chaplin & John, 1999, 2010; Flouri, 1999, 2004; Goldberg et al., 2004), as well as the evidence for the role of media, especially television, in promoting materialism among audiences (O'Guinn & Shrum, 1997; Shrum et al., 2011; Yang & Oliver, 2010). In other words, heavy viewing parents, who are more likely to be exposed to the prevalence of materialism in television stories, were more likely to evaluate people based on wealth and possession, as well as to believe in the importance of material goods to attain happiness. In turn, parents with higher materialistic values are more likely to have materialistic children. Drawing from this

result, one may speculate that heavy-viewing parents are more likely to adopt materialism from television stories and pass it on to their children.

The results of the genre-specific analyses which suggest the role of drama, reality shows, sitcom, and sports in cultivating the success and/or happiness dimensions of materialism are consistent with the content and textual analyses on the depictions of affluence in those genres, as well as with the contention of classic cultivation researchers on the importance of narrative-based television programs in fostering certain social values (Shanahan & Morgan, 1999). Existing analyses on primetime television shows – where drama, sitcoms, and reality shows are almost always part of this most lucrative time slot – have demonstrated that not only do the shows over-represent white-collar jobs, they also paint the affluent characters in a more favorable light (Kendall, 2011; Selnow, 1986, 1990; Signorielli & Kahlenberg, 2001). Even in reality shows, where the characters or contestants often come from modest socioeconomic origins, the main premise of many reality shows tends to evolve around the notion of someone ascending from humility to fame and fortune (Kendall, 2011).

Furthermore, entertainment television tends to attribute the accomplishment of the privileged characters solely to hard work, talent, or intelligence, while putting aside factors that fall beyond personal control, such as whether someone benefits from family wealth or assets without having to work for it. In other words, one may argue that television stories imply an association among affluence, *earned* life accomplishment, and happiness. In contrast, less affluent characters rarely appear in television stories, and are more likely to be depicted as criminals, or lacking manners and determination (Kendall, 2011; Mastro & Kopacz, 2006; Ramasubramanian, 2010, 2011). In other words: they are

poor and unhappy because they do not work hard enough. The same vein of argument perhaps also apply to sports programs, where athletes are portrayed as having glamorous lifestyles as the results of their physical and/or psychological prowess.

Contrary to the hypotheses, neither overall nor genre-specific television viewing was found to cultivate intergenerational transmission of the centrality dimension of materialism. Instead, the associations reflect a “parallel cultivation.” That is, parents’ general television viewing positively predicts their own scores on the centrality dimension of materialism, as children’s general television viewing is associated with theirs, yet parents’ materialism does not “translate” into the children’s materialism, nor are parents’ and children’s television viewing associated. Genre-based analyses suggest that watching more drama, sitcom, or reality shows might promote the affinity for having more luxury in life, but the value is not “passed down” to the offspring.

The findings on the centrality dimension raise the question of whether this facet of materialism, which pertains to whether participants derive pleasure from buying material goods and having luxury, is not as “easily communicated” or vicariously learned as the other two dimensions – success and happiness – in parent-child interactions. One may speculate that it might be easier for parents to embed the notion of material possession as a measure of life accomplishment, or the importance of wealth for one’s psychological well-being in family conversations. In contrast, the centrality dimension of materialism might be too subtle to be vicariously learned from parents, which consequently might have hindered the parent-child value transmission.

The absence of the cultivation of centrality dimension of materialism also somewhat resonates to the results in Richins and Chaplin (2015) study on material

parenting. In testing the psychometric attributes of Richin's 9-item Material Values Scale, the same scale that was used in the present study, Richins and Chaplin only found the emergence of the success and happiness dimensions in the exploratory factor analysis. The researchers reported that although the items for the centrality dimension were correlated with the success and happiness facets, they did not cohere as a distinctive dimension. Richins and Chaplin found this pattern among MTurk participants as well as among participants recruited through consumer panel. Consequently, success and happiness were analyzed independently, which is also the approach that was taken in this study upon the low goodness-of-fit in the confirmatory factor analysis that fit the nine items of Richin's Materialism Value Scale into one factor (See Section 4.3.2 in Chapter 4). Therefore, the absence of cultivation of the centrality dimension in this study might be more attributable to the psychometric attributes of the facet itself rather than induced by unsystematic measurement error; perhaps the dimensionality of the nine items in the Materialism Values Scale might have shifted since the initial construction of the scale. Further research might be needed to recalibrate the scale in different populations to evaluate its validity and reliability.

6.1.3 SES and the cultivation of materialism

Previous research suggests that the cultivation of materialism might vary across socioeconomic strata. Specifically, individuals who come from lower SES are more likely to become heavy viewers, since access to television, relative to other forms of media (e.g., books or films), requires minimal financial resources and literacy (O'Guinn & Shrum, 1997; Yang & Oliver, 2010). Limited access to economic resources has also

been documented as a positive predictor of materialism. Individuals who financially struggle (La Barbera & Gurhan, 1997; Nickerson et al., 2003), or those who grew up during a precarious national economy (Inglehart & Abramson, 1994) are more likely to develop materialism, perhaps as an overcompensation for the economic deprivation from which they suffer. Based on the scholarly work on the associations among SES, television viewing, and materialism, this study also investigated whether intergenerational cultivation varies across SES levels.

Contrary to the hypothesis, the results from multi-group path analyses suggest that the cultivation of materialism in the family is more pronounced among families of higher SES. For families whose parents have higher earnings and better educational attainment, parents' general and genre-specific television viewing were both found to be positively associated with the offspring's viewing, while no such relationship between parents' and children's television viewing was found among individuals of lower SES. Furthermore, among higher-SES families, for the success dimension of materialism, not only is parents' television viewing associated with their own materialism, but it also positively predicts children's materialism. In addition, children's materialism is also predicted by children's television viewing, lending support for both "value-transmission" and "media-habit emulation" routes. In contrast, for lower-SES families, although television viewing seems to cultivate materialism among parents, the passing down of the value from parents to children was not found. Similarly, for the centrality dimension, intergenerational cultivation only appears among higher SES families, although only through children's television viewing. For these two dimensions, no relationship between offspring's

television viewing and their materialism was found among participants from lower-SES families.

Happiness – the belief in the necessity of material goods to attain happiness in life – is the only dimension where parents’ television viewing was found to cultivate materialism among parents and offspring from lower-SES families. However, this relationship was also found among the more socioeconomically privileged participants. For participants from higher SES, the cultivation of the happiness dimension of materialism among offspring appears through both children’s television viewing *and* parents’ materialism, resembling the aforementioned cultivation of the success dimension. On the contrary, intergenerational cultivation was only found through parents’ materialism for the lower-SES participants.

The results from the SES-based analyses are contrary to findings and arguments in previous cultivation research that individuals who enjoy less educational and financial privilege are more prone to the cultivation of materialism (O’Guinn & Shrum, 1997; Yang & Oliver, 2010). Furthermore, the patterns that emerge in the analyses resembled the notion of “resonance” in classic cultivation framework (Shanahan & Morgan, 1999). The findings of this study can be attributed to the SES of the participants. The self-reported median family income among the young adults in this study was slightly above the national median income, and more than 60 percent of the parents at least have some college education. The median family income for the higher-SES individuals was reported to be somewhere between \$85,000 and \$94,999, with the median parents’ completed schooling of college degree (compared to \$25,000 to \$34,999 annual family income and parental education of high school or GED for the lower SES group). One

may speculate that participants, especially those from wealthier and better-educated families, might have more access to different forms of media and technology that enable them to access television programs from more places, which in turn might contribute to the cultivation of materialism through children's own television viewing. Second, children from higher SES families perhaps have more opportunity to observe their parents more closely and/or to have more interaction with them, which not only might facilitate the parent-child value transmission, but might also explain why the association between parents' and children's television viewing only was found only among individuals from higher SES families.

The third possibility is whether parents from different SES have different approaches in raising their offspring. Recently, Richins and Chaplin (2015) found a positive association between young adults' materialism and how much their parents used material goods as part of childrearing. "Material parenting", the use of material good as a method of rewarding and punishing (e.g., giving children a present for getting good grades at school) or as a means to express love during offspring's childhood, was found to be associated with stronger materialism in the offspring's young adulthood. In the context of the current study, higher-SES parents might have more resources to engage in material parenting, which results in the transmission of materialism to their offspring. Further research is needed to test the possible dynamics among parents' media consumption, parenting practice, and value socialization across families with different SES.

6.1.4 Offspring's materialism, social comparison, and life satisfaction

A vast body of research suggests that materialism might lead individuals to be less satisfied with life. Some scholars (e.g., Richins, 1995; Shrum et al., 2011; Sirgy et al., 2012; Yang & Oliver, 2010) have argued that the discontentment might result from materialists' constant engagement in upward social comparison. Relative to less materialistic individuals, materialists are more likely to evaluate their livelihood against others, especially those who are wealthier than themselves. Frequently engaging in such upward comparison, with unrealistic and unattainable reference groups, materialists would eventually have negative perceptions about their own livelihoods, seeing it as worse than most people in general, which in turn leads to the feeling of dissatisfaction with life.

In line with the hypothesis and previous research, offspring's materialism was negatively associated with their life satisfaction: more materialistic offspring tend to be less satisfied with their lives compared to their less materialistic counterparts. However, and surprisingly, the success and centrality dimensions of materialism were found to be *positively* associated with social comparison: those who tend to judge people based on material possession and those who gain pleasure from buying goods and luxury perceive themselves as economically better off than other people. A plausible explanation for this counterintuitive result is the fact that as a whole, the sample of this study comes from wealthier and better-educated families. Therefore, the positive association between materialism and social comparison might reflect the "affirmation" of their actual economic ability and resources to obtain material goods they need and want. In other words, the participants in this study might indeed enjoy more comfort luxury in life, and

fall on the “right side” when it comes to “wealth-based” social judgment. Indeed, an independent-sample t-test on social comparison (see Chapter 5) showed that compared to participants from lower SES, participants from higher SES families significantly perceived themselves better off relative to other people. This explanation also seems to cohere with the findings from the aforementioned positive association between parents’ and children’s success and centrality dimensions of materialism, which, upon closer examination based on participants’ SES, only emerged among individuals from higher-SES families. At the same time, the absence of a relationship between materialism and upward comparison raises the question of whether the association between the happiness dimension and life satisfaction possibly works through a different mechanism, for instance the perceived meaningfulness of the comfortable life, which was untapped in this study. Additionally, the positive association between materialism and social comparison is arguably in line with the concept of “resonance”: what people see in television stories might be consistent with the comfortable lifestyles they enjoy in the real life (Shanahan & Morgan, 1999).

The findings on the positive relationship between materialism and social comparison are somewhat consistent with the results of La Barbera and Gurhan’s (1997) and Nickerson and colleagues (2003) studies, where materialists were found to be unhappy with their life only when they do not have sufficient economic resources to attain their needs. Similarly, they are also in line with the results from Kasser and colleagues’ (2013) study that reported a positive relationship between materialism and subjective well-being among Icelandic participants, which were attributed to three plausible reasons: First, Kasser et al. noted that the participants in their study were

wealthier and better educated than the average Icelandic, therefore their materialism might signify the socioeconomic advantage they actually enjoyed rather than tapping into the insatiable desire for material goods. Second, the research was conducted during Iceland's national economic collapse; Kasser and colleagues argued that in an economic downturn, individuals' perceptions of material goods might shift away from commodities that signify images and wealth to the ones that are associated with physical safety and health. Third, the economic crisis that happened in Iceland around the time when the researchers conducted their study might have also incited certain dissonance-reduction mechanism (e.g., "I might not be able to obtain a sustainable job, but money is not important anyway."). Therefore, besides the socioeconomic origins of the participants of this study, the Millennials' expressed confidence about the economy in spite of the bleak prediction of their financial future as a cohort (Taylor, 2014) may also be another possible explanation for the positive association between materialism and social comparison. This sense of assurance about the economy, however, can either be a genuine optimism or a dissonance-reduction strategy that young adults adopt in order to reduce anxiety about their future livelihood. Unfortunately, the design of the present study did not enable the test of which of the three possible psychological mechanisms – affirmation, optimism, or dissonance-reduction – has taken place and might have yielded the positive relationship between materialism and downward social comparison.

In this study, happiness is the only dimension of materialism that is negatively associated with social comparison: individuals who believe that having a lot of money and material goods is important to be happy in life tend to see themselves as having a worse livelihood relative to other people. SES-based analyses revealed that, contrary to

the other two dimensions of materialism, the negative relationship appears only among individuals from socioeconomically less advantaged families; no relationship between the happiness dimension of materialism and social comparison was found among offspring from families with high SES. Recalling that the wordings of the items that measure happiness asked whether they would be happier had they been able to afford to buy more things, this association perhaps reflects the longing for the material possession that is scarcer and less accessible for lower SES families.

Looking at the whole model, from parents' and/or children's television viewing to the offspring's life satisfaction, the socioeconomic privilege that the participants of this study as a whole enjoy might give them more access to either more media content and/or the opportunity to interact closer with their parents to emulate parents' media habit and/or materialistic values. The emulation of parents' television viewing and/or materialism might then have lead the offspring to evaluate other people's success based on wealth and material goods. Given the fact that their families are indeed relatively better off than average American families, the evaluation might have made them feel better about themselves, which in turn predicts higher life satisfaction. Therefore, one may argue that the findings in this study, particularly on the cultivation of the success and centrality dimensions of materialism, reflect reinforcement or affirmation for the participants' family socioeconomic privilege instead of the economic deficit that the Millennials as a cohort experienced during the recent economic collapse and its aftermath.

6.1.5 Parents' gender and the cultivation of materialism

Multi-group analyses suggest that the cultivation of the success and centrality dimensions do not differ between fathers and mothers, but might slightly differ for the happiness dimension. Specifically, although television viewing cultivates the belief in the necessity of owning material goods in attaining happiness among both fathers and mothers, it seems that mothers are more likely than fathers to pass on the happiness dimension to the offspring. Most previous studies on materialism as well as cultivation in the family had predominantly maternal sample, making it challenging to propose a plausible explanation for the difference between fathers and mothers in the intergenerational transmission of the happiness dimension of materialism. One may speculate that mothers and fathers might communicate the happiness dimension differently to their children, or that mothers might differ from fathers in using material goods as part of parenting practices. More research in the future is needed to examine the possible underlying mechanism of the difference between fathers and mothers in socializing the value among their offspring.

6.2 Limitations

This study has several limitations that need to be acknowledged. First, the characteristics of the sample in this study did not resemble the wider U.S. population. Seventy-three percent of participants identified themselves as white, compared to the national proportion of non-Hispanic/Latino white of 64 percent based on the 2010 U.S. national census, as well as the projected proportion of 47 percent in 2050 (Humes, Jones, & Ramirez, 2011; Passel & Cohn, 2008). Furthermore, participants of this study also

came from wealthier and more educated families. Consequently, in the analyses on the cultivation of materialism across SES groups, the “lower-SES families” probably differed significantly from the lower-SES families in the population. Specifically, families that fell into the category of low SES in this study might still be more advantaged than the ones in the population. Therefore, the results of this study have to be interpreted with cautions.

Second, due to the unavailability of dyadic parent-child data, all data come from offspring’s reports. Children’s perceptions of their parents’ television viewing – both general and genre-specific – and materialism were used as the proxy of parents’ actual television consumption and materialism. On the one hand, this approach might have compromised the reliability of the information on the variables – television viewing, materialism, parent’s educational attainment, and family income – that required participants (i.e., children) to make estimations about their parents, especially considering the possibility that many of them probably did not live with their parents, thus compromising the accuracy of their estimation, materialism, or family income. On the other hand, this strategy has been used in a study on advertising exposure and the perceived social influences on adolescents’ materialism, where the researcher included adolescents’ perceptions of their peers and parents’ exposure to advertising in the absence of direct measures (Chia, 2010). Furthermore, research on parental mediation suggests that the children’s perceptions of parents’ behaviors can be as informative as the direct responses from parents (Austin & Fujioka, 2003; Nathanson, 2002; see also Schaefer, 1965). In the absence of dyadic data, children’s responses are arguably more “authentic”, as data from parents’ report might be more prone to social desirability, since parents

might report what “they ought to do as parents” instead of what they actually do (Sonck, Nikken & de Haan, 2013).

This study only included participants’ perceptions of one of their parents. It is possible that the parent that participants were thinking about when responding to the survey was the one that respondents spend less time with, or the less influential one in terms of value socialization. Future studies should use dyadic, or, ideally, for two-parent families, triadic data in order to obtain direct measures of parents and children’s media consumption, personal values, and other attitudinal or behavioral measures.

Third, this study did not employ the measure of television viewing that is commonly used in classic cultivation research. The baseline hours of television watching for both general and genre-based television viewing (usually asked as “How many hours on average do you spend watching television?”) were not included in the data collection, making it impossible to assess whether the average hours of television viewing in the sample was comparable to the national average. The decision not to include the items on offspring’s average hours of daily television viewing and their estimation of the number of hours of their parents’ television viewing was taken due to the concerns of the reliability of children’s estimates of parents’ television viewing and the length of the questionnaire. Additionally, due to the sample size of this study, the analyses on genre-specific cultivation was conducted by testing one genre at a time, without applying simultaneous control for individuals’ viewing of the other genres.

Due to its modest sample size ($n = 303$), and the unbalanced proportion between male and female participants, this study was not able to look into the complexities of gender-related dynamics (e.g., mother-son versus mother-daughter value emulation) that

might affect the intergenerational transmission of values and aspirations. Large numbers of dyads would be required to examine the interactions that may result from the parents' and children's genders. Similarly, child participants' birth order was not included in the analysis, although it might contribute to value socialization in the family. For example, compared to their younger siblings, first-borns might be more likely to adopt their parents' values (Churchill & Moschis, 1979). Parents might also behave differently towards daughters versus sons (Bush et al., 2001; Busselle, 2003). Future studies should employ a larger sample of participants and their parents that would enable direct measurements, as opposed to perceptions, of behaviors and values, as well as the assessment of interaction terms, or by examining certain groups (e.g., examining fathers and sons, or mothers and daughters, or fathers and first-born sons, etc.).

Lastly, the cross-sectional design of this study does not eliminate of the possibility of reversed causality. That is, it is still possible that children influence their parents as much as parents affect them, considering that the "hierarchy" between parents and offspring might wane once the latter reach adulthood. Cross-lagged data are needed to test the parents-to-offspring versus offspring-to-parents dynamic in order to better understand the causal direction of the cultivation of materialism in the family.

6.3 Theoretical Implications

In spite of its limitations, this study generates theoretical contributions in three ways. First, the results of this study add to the existing body of literature on materialism, particularly on the role of parents in socializing material values to their offspring. Secondly, it further sheds light on intergenerational media effects. As discussed, studies

have found that television plays a role in promoting and cultivating material values as well as unhealthy aspirations to acquire consumer goods, wealth, and money among children and adults alike (e.g., Buijzen & Valkenburg, 2003; Hoffner et al., 2008; Oprea et al., 2014; Shrum et al., 2005; Yang & Oliver, 2010). In other words, as adults, parents are not invulnerable to the messages about values and lifestyles conveyed through the idealized images of affluent lifestyles depicted in television programming. Previous research on materialism in the family context also suggests the role of parents in passing on the value to their children. However, the vast bulk of studies on media consumption and materialism in the family context tend to focus on the role of family, especially parents, in mitigating media influence on children's adoption of material values. That is, scholars have overlooked the possibility that parents' own exposure to television stories and images may contribute to the values they adopt and pass on their children. This study bridges this gap in the body of literature of media effects by examining the intergenerational role of television viewing in the family context. Particularly among the Millennials, who are forecasted to be prone to materialism due to growing up in precarious economy, the results of this study raises a question on whether parents, media, and parents' media consumption would augment the Millennials' "predisposition" for materialism. A longitudinal study should be conducted to "track" the materialism among the Millennials once they leave young adulthood, as well as to examine the transmission of the values to their own offspring.

Third, this research extends cultivation research by testing cultivation theory in the family context. As mentioned, several studies have found that parents' television viewing predicts what they communicate to their children (Busselle, 2003; Martins &

Wilson, 2012; Wilson et al., 2005). The results of this study are consistent with the findings of the aforementioned three studies: the association between parents' television viewing and their own beliefs and values may have implications for what is being communicated from parents to children. In other words, as television viewers, parents may adopt certain values from television stories, and in turn pass down the values to their children. To summarize, the current study contributes to the corpus of cultivation research in the family context by providing the evidence for the associations among parents' television viewing, parents' materialism, and children's materialism.

Furthermore, this study also adds to the discussions and debates on the overall versus genre-specific viewing. Classic cultivation theory and research originate from the Cultural Indicator analyses on television programs that suggested the homogeneity of television stories (Shanahan & Morgan, 1999). The proliferation of television programs, through cable television and online streaming service (e.g., *Hulu*, *Netflix*, *Amazon Instant*), and the segmentation of viewers, have raised a question whether measuring overall viewing, as opposed to focusing on genre-specific viewing, is sufficient or even relevant in today's landscape of television programming and viewership. The notion of "heavy viewers", according to scholars who argue for genre-specific cultivation, might have shifted from its original conceptualization. Due to audience segmentation, television viewers may no longer be "omnivorous" in terms of what they watch.

Responding to the overall-versus-genres critiques, researchers who adhere to the original premise of cultivation theory contend that despite the presence of numerous program types, multiple avenues and forms of accessing television shows, and the emergence of niche audience, television still operates on profit-seeking orientation.

Therefore, the overarching message one could draw from today's television stories would not significantly differ from how it is in the past. Moreover, there is no solid evidence for the notion those who watch certain types of programs do not see other kinds of shows at all (see Morgan & Shanahan, 2010, also Morgan, Signorielli, & Shanahan, 2012 for the review of the debates on genre-based cultivation research). Morgan and Shanahan (2010) suggested to include both overall and genre-based television viewing in cultivation research.

This study finds support for both general and genre-specific cultivation. Parents' general television viewing seems to cultivate their materialism, which in turn positively predicts children's materialism, although this study did not employ an "orthodox" measure of parents' and children's television viewing. Furthermore, as mentioned, drama, sitcom, sports, and reality shows were found to cultivate at least one dimension of materialism among parents and children, even though as mentioned in the limitation, this study was not able to control parents' and children's viewings of the different genres simultaneously. Lastly, it is important to note that the use of path analyses in this study, while providing an evidence for the presence of parent-to-child intergenerational cultivation, did not eliminate the possibility of having reversed causality, due to the cross-sectional design of this study. Cross-lagged or longitudinal data is needed in order to empirically confirm causal relationship.

6.4 Practical Implications

The results of this study corroborate the findings of existing studies on the role of media in cultivating personal values and the significance of parents in socializing the

values to their children. Besides contributing to the body of literature on materialism and the role of television viewing in the family context, this study may also inform public debate and discussion among citizens, activists, and policymakers on the implications of U.S. media institutions and content on families. This suggests the need for an alternative strategy that can be conducted to mitigate the cultivation of material values among audiences.

In the last 30 years, scholars have suggested media literacy education as an option to reduce the negative effects of media and/or to empower individuals as media users (Jeong, Cho, & Huang, 2012). In the realm of materialism, as part of their longitudinal studies on materialism and life satisfaction, Kasser and colleagues (2013) conducted an experiment where they ran a three-session workshop for families (adolescents and their parents) over the span of 12 weeks. The purpose of the workshop was to “redirect” adolescents’ financial orientation away from spending, which is associated with the accumulation of consumer goods, to sharing and saving. Additionally, the workshop also discussed the ubiquity of advertising and consumer culture, and its influence on people’s financial decisions and life goals. Upon completion of the workshop, a decrease in materialism was found among adolescents who participated in the workshop. In contrast, adolescents in the control group (those who did not receive any intervention) experienced an increase in their materialism. The results of Kasser et al.’s study illustrate the potential of social intervention, including media literacy initiatives to reduce materialism.

However, most existing media literacy curricula are designed for children and adolescents, which again reflects the concerns about the vulnerability of young audiences and less attention to the effects of media exposure on adults. The findings of this study

may provide an empirical basis for the development of media literacy initiatives that are designed for families, including parents. The media literacy initiative may aim at increasing parents' awareness of and reflexivity towards media content and their media habits, bearing in mind that the implications of parents' media consumption might go beyond their own social perceptions and values, but instead might be carried on and transmitted to their children. In other words, as this study shows, children might vicariously model what their parents learn from television stories.

Besides reducing the cultivation of material values and the over-emphasis on the significance of financial success among audiences, media literacy programs that focus on media and materialism might have implications beyond the realm of consumer behaviors, extending the benefits of the programs to the domains of social interaction. Existing studies have demonstrated the potentially detrimental effects of materialism on interpersonal relationships and social capital. Materialists have been found to be more likely to engage in unethical behaviors. They are also less altruistic and more prejudiced (e.g., Vohs et al., 2006). In turn, and "perhaps rightfully so," materialists are stigmatized by other individuals around them (Boven, Campbell, & Gilovich, 2010, p. 551). Combined, they would erode social cohesion and inflict interpersonal and intergroup frictions. As mentioned, television stories are imbued with unsubstantiated positive associations between wealth and morality (Kendall, 2011), which resonates with the success dimension of materialism that evaluates life accomplishment based on money and material possession (Richins, 2004).

Drawing from existing research on television viewing and the cultivation of interracial and interclass prejudice, heavy television viewing was found to promote

negative stereotypes and prejudice towards others, for example against racial minorities and individuals from less privileged background (Mastro & Kopacz, 2006). Such negative attitudes might generate societal impact not only by exacerbating the tension among different socioeconomic groups and racial minorities, but also negatively influencing the support for certain policies such as government assistance for individuals living in poverty or affirmative action (Tan, Fujioka, & Tan, 2000), perhaps due to the perception about the policies as an “easy way out” for undeserving beneficiaries. Therefore, extrapolating from the lines of studies on materialism, television viewing, and intergroup attitudes, encouraging parents and family members to be more critical and reflective about the depictions of affluence and what are implied in the portrayals, might reduce not only the emphasis on wealth in their lives, but also promote altruism and diminish prejudice towards other social groups.

Lastly, one may argue that media literacy education should be brought further, at least as a long-term goal, to advance media activism that challenges the status quo of the commercial enterprise of U.S. television. The results of this study reinforce the call for a reformation of the television landscape or its content. The prevalence of the portrayals of affluence in various types of television programming partly reflects the ubiquity of consumer culture in this society, yet it is also inextricably related to the commercial nature of the U.S. media enterprise. Specifically, it arguably results from the pressure to appeal to marketers and advertisers (Kubey & Csikzentmihaly, 1990; Richins, 1991, 1995). As Lewis and Jhally (1998) argued, media literacy education should not stop at teaching audiences how to analyze television stories and messages. Instead, it should promote understanding and critical attitudes on the institutional forces of media, and

encourage audiences as citizens to engage in public debates regarding the landscape of U.S. media and alternatives to the current commercial media system.

APPENDIX: COVARIANCE/CORRELATION MATRICES

Covariance/Correlation Matrices used in the Confirmatory Factor Analyses

Note: The bold numbers on the diagonal are the estimated variances; covariances are above the diagonal and correlations are below; SD represents the standard deviation.

Television Viewing

Children's Television Viewing

	Indicators					
	CHTV1	CHTV2	CHTV3	CHTV4	CHTV5	CHTV6
CHTV1	1.618	0.932	1.155	0.976	1.299	1.198
CHTV2	0.608	1.453	1.118	0.817	1.126	1.026
CHTV3	0.689	0.703	1.739	1.212	1.346	1.355
CHTV4	0.603	0.532	0.722	1.621	1.126	1.160
CHTV5	0.748	0.684	0.747	0.647	1.867	1.378
CHTV6	0.709	0.641	0.774	0.686	0.760	1.763
Mean	2.653	3.224	2.875	2.475	3.013	2.693
SD	1.272	1.205	1.319	1.273	1.367	1.328

Parents' Television Viewing

	Indicators					
	PARTV1	PARTV2	PARTV3	PARTV4	PARTV5	PARTV6
PARTV1	1.506	0.638	0.905	0.887	0.973	1.010
PARTV2	0.455	1.305	0.936	0.939	0.987	0.904
PARTV3	0.606	0.673	1.482	1.153	1.259	1.246
PARTV4	0.567	0.645	0.743	1.623	1.152	1.266
PARTV5	0.632	0.688	0.825	0.721	1.574	1.244
PARTV6	0.630	0.606	0.784	0.761	0.759	1.707
Mean	3.083	3.571	3.383	3.050	3.531	3.040
SD	1.227	1.143	1.217	1.274	1.255	1.307

Materialism

Children's Materialism

	Indicators								
	MAT1C	MAT2C	MAT3C	MAT4C	MAT5C	MAT6C	MAT7C	MAT8C	MAT9C
MAT1C	1.231	0.657	0.654	0.406	0.534	0.639	0.362	0.437	0.467
MAT2C	0.561	1.114	0.618	0.303	0.515	0.626	0.427	0.470	0.422
MAT3C	0.535	0.531	1.214	0.367	0.520	0.666	0.380	0.370	0.446
MAT4C	0.364	0.286	0.332	1.008	0.417	0.411	0.255	0.307	0.196
MAT5C	0.455	0.461	0.445	0.392	1.121	0.669	0.376	0.479	0.450
MAT6C	0.520	0.536	0.546	0.369	0.571	1.225	0.427	0.500	0.523
MAT7C	0.309	0.383	0.326	0.240	0.336	0.365	1.117	0.831	0.698
MAT8C	0.357	0.404	0.304	0.278	0.410	0.410	0.713	1.216	0.700
MAT9C	0.398	0.378	0.383	0.185	0.402	0.447	0.625	0.601	1.118
Mean	3.231	3.178	2.934	2.693	3.396	3.000	3.538	3.686	3.584
SD	1.110	1.055	1.102	1.004	1.059	1.107	1.057	1.103	1.057

Parents' Materialism

	Indicators								
	MAT1P	MAT2P	MAT3P	MAT4P	MAT5P	MAT6P	MAT7P	MAT8P	MAT9P
MAT1P	1.321	0.926	0.945	0.446	0.706	0.782	0.780	0.681	0.631
MAT2P	0.693	1.353	0.884	0.404	0.567	0.707	0.790	0.693	0.588
MAT3P	0.677	0.626	1.475	0.583	0.741	0.920	0.797	0.692	0.619
MAT4P	0.344	0.307	0.425	1.276	0.479	0.631	0.420	0.329	0.309
MAT5P	0.578	0.459	0.574	0.400	1.129	0.817	0.671	0.553	0.459
MAT6P	0.601	0.537	0.669	0.494	0.680	1.280	0.717	0.498	0.431
MAT7P	0.593	0.594	0.574	0.325	0.552	0.554	1.308	0.937	0.811
MAT8P	0.516	0.519	0.496	0.254	0.454	0.384	0.713	1.318	0.891
MAT9P	0.459	0.423	0.425	0.229	0.361	0.318	0.592	0.648	1.434
Mean	3.010	3.122	2.891	2.733	3.294	2.934	3.172	3.426	3.116
SD	1.149	1.163	1.214	1.130	1.062	1.132	1.144	1.148	1.197

Children's Social Comparison

	Indicators						
	SC1	SC2	SC3	SC4	SC5	SC6	SC7
SC1	1.229	0.917	0.865	0.817	0.848	0.869	0.759
SC2	0.745	1.233	0.825	0.760	0.866	0.843	0.774
SC3	0.729	0.694	1.145	0.802	0.849	0.839	0.715
SC4	0.704	0.654	0.716	1.095	0.784	0.751	0.802
SC5	0.713	0.727	0.740	0.698	1.150	0.795	0.750
SC6	0.630	0.610	0.630	0.577	0.595	1.549	0.937
SC7	0.579	0.589	0.565	0.648	0.591	0.636	1.399
Mean	2.545	2.739	2.508	2.310	2.587	2.640	2.604
SD	1.109	1.110	1.070	1.047	1.073	1.245	1.183

Children's Life Satisfaction

	Indicators				
	SATIS1	SATIS2	SATIS3	SATIS4	SATIS5
SATIS1	1.291	0.862	0.858	0.388	0.709
SATIS2	0.694	1.196	0.697	0.374	0.503
SATIS3	0.600	0.506	1.585	0.616	0.587
SATIS4	0.289	0.289	0.414	1.397	0.343
SATIS5	0.521	0.385	0.390	0.242	1.432
Mean	2.937	3.125	3.066	2.898	2.789
SD	1.136	1.094	1.259	1.182	1.197

Covariance/Correlation Matrices Used in Path Analyses

Success Dimension

General Television Viewing

	Indicators					
	PARTVAVE	CHTVAVE	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
PARTVAVE	1.117	0.057	0.220	0.031	-0.028	-0.052
CHTVAVE	0.048	1.236	-0.020	0.147	0.038	-0.050
MATPSUC	0.201	-0.017	1.073	0.139	-0.030	-0.108
MATCSUC	0.033	0.146	0.148	0.824	0.186	-0.098
COMPARAV	-0.029	0.037	-0.031	0.219	0.880	0.380
LIFSATAV	-0.057	-0.051	-0.120	-0.125	0.467	0.751
Mean	3.276	2.822	3.008	3.114	2.562	2.963
SD	1.057	1.112	1.036	0.908	0.938	0.867

News Viewing

	Indicators					
	NEWSP	NEWSC	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
NEWSP	1.189	0.292	0.048	-0.025	0.075	0.060
NEWSC	0.259	1.064	0.012	0.031	0.178	0.082
MATPSUC	0.043	0.011	1.073	0.139	-0.030	-0.108
MATCSUC	-0.025	0.033	0.148	0.824	0.186	-0.098
COMPARAV	0.073	0.183	-0.031	0.219	0.880	0.380
LIFSATAV	0.063	0.092	-0.120	-0.125	0.467	0.751
Mean	3.162	2.469	3.008	3.114	2.562	2.963
SD	1.090	1.032	1.036	0.908	0.938	0.867

Drama Viewing

Indicators						
	DRAMAP	DRAMAC	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
DRAMAP	1.466	0.241	0.210	0.008	-0.023	-0.085
DRAMAC	0.166	1.436	-0.054	0.126	0.089	0.001
MATPSUC	0.168	-0.044	1.073	0.139	-0.030	-0.108
MATCSUC	0.007	0.116	0.148	0.824	0.186	-0.098
COMPARAV	-0.020	0.079	-0.031	0.219	0.880	0.380
LIFSATAV	-0.081	0.001	-0.120	-0.125	0.467	0.751
Mean	2.799	2.716	3.008	3.114	2.562	2.963
SD	1.211	1.198	1.036	0.908	0.938	0.867

Sitcom

Indicators						
	SITCOMP	SITCOMC	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
SITCOMP	1.415	0.288	0.119	-0.007	-0.007	-0.026
SITCOMC	0.217	1.246	0.135	0.106	0.025	-0.070
MATPSUC	0.096	0.116	1.073	0.139	-0.030	-0.108
MATCSUC	-0.006	0.105	0.148	0.824	0.186	-0.098
COMPARAV	-0.006	0.024	-0.031	0.219	0.880	0.380
LIFSATAV	-0.026	-0.072	-0.120	-0.125	0.467	0.751
Mean	2.772	2.726	3.008	3.114	2.562	2.963
SD	1.189	1.116	1.036	0.908	0.938	0.867

Sports

Indicators						
	SPORTSP	SPORTSC	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
SPORTSP	1.784	0.608	0.142	0.060	0.082	0.041
SPORTSC	0.309	2.173	-0.085	0.118	0.218	0.011
MATPSUC	0.103	-0.056	1.073	0.139	-0.030	-0.108
MATCSUC	0.049	0.088	0.148	0.824	0.186	-0.098
COMPARAV	0.065	0.158	-0.031	0.219	0.880	0.380
LIFSATAV	0.036	0.008	-0.120	-0.125	0.467	0.751
Mean	2.439	2.432	3.008	3.114	2.562	2.963
SD	1.335	1.474	1.036	0.908	0.938	0.867

Reality Shows

Indicators						
	REALITYP	REALITYC	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
REALITYP	1.593	0.262	0.174	-0.009	-0.039	-0.071
REALITYC	0.197	1.112	-0.044	0.138	0.126	0.011
MATPSUC	0.133	-0.041	1.073	0.139	-0.030	-0.108
MATCSUC	-0.008	0.144	0.148	0.824	0.186	-0.098
COMPARAV	-0.033	0.128	-0.031	0.219	0.880	0.380
LIFSATAV	-0.065	0.013	-0.120	-0.125	0.467	0.751
Mean	2.330	1.898	3.008	3.114	2.562	2.963
SD	1.262	1.055	1.036	0.908	0.938	0.867

High SES

Indicators						
	PARTVAVE	CHTVAVE	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
PARTVAVE	1.036	0.204	0.157	0.082	0.048	-0.048
CHTVAVE	0.189	1.122	0.032	0.182	-0.038	-0.104
MATPSUC	0.150	0.029	1.061	0.266	-0.042	-0.136
MATCSUC	0.093	0.198	0.298	0.752	0.228	-0.118
COMPARAV	0.050	-0.038	-0.043	0.280	0.877	0.324
LIFSATAV	-0.055	-0.115	-0.155	-0.159	0.406	0.727
Mean	3.167	2.834	3.096	3.162	2.730	3.020
SD	1.018	1.059	1.030	0.867	0.936	0.853

Low SES

Indicators						
	PARTVAVE	CHTVAVE	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
PARTVAVE	1.181	-0.088	0.303	-0.009	-0.068	-0.044
CHTVAVE	-0.069	1.359	-0.073	0.112	0.111	0.004
MATPSUC	0.269	-0.061	1.077	0.003	-0.049	-0.091
MATCSUC	-0.008	0.101	0.003	0.898	0.129	-0.085
COMPARAV	-0.069	0.105	-0.052	0.150	0.832	0.419
LIFSATAV	-0.046	0.003	-0.100	-0.102	0.522	0.774
Mean	3.386	2.810	2.918	3.066	2.393	2.906
SD	1.087	1.166	1.038	0.948	0.912	0.880

Centrality Dimension

General Television Viewing

Indicators						
	PARTVAVE	CHTVAVE	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
PARTVAVE	1.117	0.057	0.150	0.053	-0.028	-0.052
CHTVAVE	0.048	1.236	0.025	0.130	0.038	-0.050
MATPCEN	0.155	0.025	0.838	0.060	-0.043	-0.074
MATCCEN	0.060	0.139	0.078	0.705	0.209	-0.094
COMPARAV	-0.029	0.037	-0.050	0.265	0.880	0.380
LIFSATAV	-0.057	-0.051	-0.093	-0.129	0.467	0.751
Mean	3.276	2.822	2.987	3.030	2.562	2.963
SD	1.057	1.112	0.915	0.840	0.938	0.867

News Viewing

Indicators						
	NEWSP	NEWSC	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
NEWSP	1.189	0.292	-0.050	-0.053	0.075	0.060
NEWSC	0.259	1.064	-0.032	-0.066	0.178	0.082
MATPCEN	-0.050	-0.034	0.838	0.060	-0.043	-0.074
MATCCEN	-0.058	-0.076	0.078	0.705	0.209	-0.094
COMPARAV	0.073	0.183	-0.050	0.265	0.880	0.380
LIFSATAV	0.063	0.092	-0.093	-0.129	0.467	0.751
Mean	3.162	2.469	2.987	3.030	2.562	2.963
SD	1.090	1.032	0.915	0.840	0.938	0.867

Drama Viewing

Indicators						
	DRAMAP	DRAMAC	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
DRAMAP	1.466	0.241	0.284	0.005	-0.023	-0.085
DRAMAC	0.166	1.436	-0.009	0.050	0.089	0.001
MATPCEN	0.257	-0.008	0.838	0.060	-0.043	-0.074
MATCCEN	0.005	0.050	0.078	0.705	0.209	-0.094
COMPARAV	-0.020	0.079	-0.050	0.265	0.880	0.380
LIFSATAV	-0.081	0.001	-0.093	-0.129	0.467	0.751
Mean	2.799	2.716	2.987	3.030	2.562	2.963
SD	1.211	1.198	0.915	0.840	0.938	0.867

Sitcom Viewing

	Indicators					
	SITCOMP	SITCOMC	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
SITCOMP	1.415	0.288	0.189	0.047	-0.007	-0.026
SITCOMC	0.217	1.246	0.090	0.081	0.025	-0.070
MATPCEN	0.174	0.088	0.838	0.060	-0.043	-0.074
MATCCEN	0.047	0.086	0.078	0.705	0.209	-0.094
COMPARAV	-0.006	0.024	-0.050	0.265	0.880	0.380
LIFSATAV	-0.026	-0.072	-0.093	-0.129	0.467	0.751
Mean	2.772	2.726	2.987	3.030	2.562	2.963
SD	1.189	1.116	0.915	0.840	0.938	0.867

Sports Viewing

	Indicators					
	SPORTSP	SPORTSC	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
SPORTSP	1.784	0.608	0.099	0.047	0.082	0.041
SPORTSC	0.309	2.173	-0.043	0.088	0.218	0.011
MATPCEN	0.081	-0.032	0.838	0.060	-0.043	-0.074
MATCCEN	0.041	0.071	0.078	0.705	0.209	-0.094
COMPARAV	0.065	0.158	-0.050	0.265	0.880	0.380
LIFSATAV	0.036	0.008	-0.093	-0.129	0.467	0.751
Mean	2.439	2.432	2.987	3.030	2.562	2.963
SD	1.335	1.474	0.915	0.840	0.938	0.867

Reality Shows

	Indicators					
	REALITYP	REALITYC	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
REALITYP	1.593	0.262	0.145	-0.007	-0.039	-0.071
REALITYC	0.197	1.112	-0.011	0.043	0.126	0.011
MATPCEN	0.125	-0.012	0.838	0.060	-0.043	-0.074
MATCCEN	-0.006	0.048	0.078	0.705	0.209	-0.094
COMPARAV	-0.033	0.128	-0.050	0.265	0.880	0.380
LIFSATAV	-0.065	0.013	-0.093	-0.129	0.467	0.751
Mean	2.330	1.898	2.987	3.030	2.562	2.963
SD	1.262	1.055	0.915	0.840	0.938	0.867

High SES

Indicators						
	PARTVAVE	CHTVAVE	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
PARTVAVE	1.036	0.204	0.113	0.047	0.048	-0.048
CHTVAVE	0.189	1.122	0.018	0.126	-0.038	-0.104
MATPCEN	0.125	0.019	0.784	0.062	-0.080	-0.113
MATCCEN	0.054	0.140	0.082	0.721	0.273	-0.116
COMPARAV	0.050	-0.038	-0.096	0.344	0.877	0.324
LIFSATAV	-0.055	-0.115	-0.149	-0.160	0.406	0.727
Mean	3.167	2.834	3.101	3.059	2.730	3.020
SD	1.018	1.059	0.886	0.849	0.936	0.853

Low SES

Indicators						
	PARTVAVE	CHTVAVE	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
PARTVAVE	1.181	-0.088	0.213	0.067	-0.068	-0.044
CHTVAVE	-0.069	1.359	0.030	0.133	0.111	0.004
MATPCEN	0.211	0.028	0.871	0.051	-0.045	-0.048
MATCCEN	0.074	0.137	0.066	0.692	0.135	-0.076
COMPARAV	-0.069	0.105	-0.052	0.178	0.832	0.419
LIFSATAV	-0.046	0.003	-0.058	-0.104	0.522	0.774
Mean	3.386	2.810	2.872	3.000	2.393	2.906
SD	1.087	1.166	0.933	0.832	0.912	0.880

Happiness Dimension

General Television Viewing

Indicators						
	PARTVAVE	CHTVAVE	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
PARTVAVE	1.117	0.057	0.261	0.046	-0.028	-0.052
CHTVAVE	0.048	1.236	-0.018	0.139	0.038	-0.050
MATPHAP	0.242	-0.016	1.038	0.243	-0.098	-0.148
MATCHAP	0.047	0.133	0.254	0.879	-0.093	-0.356
COMPARAV	-0.029	0.037	-0.102	-0.106	0.880	0.380
LIFSATAV	-0.057	-0.051	-0.168	-0.439	0.467	0.751
Mean	3.276	2.822	3.238	3.603	2.562	2.963
SD	1.057	1.112	1.019	0.938	0.938	0.867

News Viewing

Indicators						
	NEWSP	NEWSC	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
NEWSP	1.189	0.292	0.022	-0.018	0.075	0.060
NEWSC	0.259	1.064	0.080	-0.045	0.178	0.082
MATPHAP	0.020	0.076	1.038	0.243	-0.098	-0.148
MATCHAP	-0.018	-0.047	0.254	0.879	-0.093	-0.356
COMPARAV	0.073	0.183	-0.102	-0.106	0.880	0.380
LIFSATAV	0.063	0.092	-0.168	-0.439	0.467	0.751
Mean	3.162	2.469	3.238	3.603	2.562	2.963
SD	1.090	1.032	1.019	0.938	0.938	0.867

Drama Viewing

Indicators						
	DRAMAP	DRAMAC	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
DRAMAP	1.466	0.241	0.251	0.063	-0.023	-0.085
DRAMAC	0.166	1.436	-0.001	0.002	0.089	0.001
MATPHAP	0.204	-0.001	1.038	0.243	-0.098	-0.148
MATCHAP	0.056	0.002	0.254	0.879	-0.093	-0.356
COMPARAV	-0.020	0.079	-0.102	-0.106	0.880	0.380
LIFSATAV	-0.081	0.001	-0.168	-0.439	0.467	0.751
Mean	2.799	2.716	3.238	3.603	2.562	2.963
SD	1.211	1.198	1.019	0.938	0.938	0.867

Sitcom Viewing

Indicators						
	SITCOMP	SITCOMC	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
SITCOMP	1.415	0.288	0.226	0.088	-0.007	-0.026
SITCOMC	0.217	1.246	0.138	0.070	0.025	-0.070
MATPHAP	0.187	0.122	1.038	0.243	-0.098	-0.148
MATCHAP	0.079	0.067	0.254	0.879	-0.093	-0.356
COMPARAV	-0.006	0.024	-0.102	-0.106	0.880	0.380
LIFSATAV	-0.026	-0.072	-0.168	-0.439	0.467	0.751
Mean	2.772	2.726	3.238	3.603	2.562	2.963
SD	1.189	1.116	1.019	0.938	0.938	0.867

Sports Viewing

Indicators						
	SPORTSP	SPORTSC	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
SPORTSP	1.784	0.608	0.007	-0.033	0.082	0.041
SPORTSC	0.309	2.173	-0.059	0.106	0.218	0.011
MATPHAP	0.005	-0.039	1.038	0.243	-0.098	-0.148
MATCHAP	-0.026	0.077	0.254	0.879	-0.093	-0.356
COMPARAV	0.065	0.158	-0.102	-0.106	0.880	0.380
LIFSATAV	0.036	0.008	-0.168	-0.439	0.467	0.751
Mean	2.439	2.432	3.238	3.603	2.562	2.963
SD	1.335	1.474	1.019	0.938	0.938	0.867

Reality Shows Viewing

Indicators						
	REALITYP	REALITYC	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
REALITYP	1.593	0.262	0.220	0.045	-0.039	-0.071
REALITYC	0.197	1.112	-0.022	0.020	0.126	0.011
MATPHAP	0.171	-0.020	1.038	0.243	-0.098	-0.148
MATCHAP	0.038	0.020	0.254	0.879	-0.093	-0.356
COMPARAV	-0.033	0.128	-0.102	-0.106	0.880	0.380
LIFSATAV	-0.065	0.013	-0.168	-0.439	0.467	0.751
Mean	2.330	1.898	3.238	3.603	2.562	2.963
SD	1.262	1.055	1.019	0.938	0.938	0.867

High SES

Indicators						
	PARTVAVE	CHTVAVE	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
PARTVAVE	1.036	0.204	0.178	0.065	0.048	-0.048
CHTVAVE	0.189	1.122	0.040	0.200	-0.038	-0.104
MATPHAP	0.179	0.039	0.950	0.242	-0.078	-0.156
MATCHAP	0.070	0.207	0.272	0.833	-0.023	-0.391
COMPARAV	0.050	-0.038	-0.085	-0.026	0.877	0.324
LIFSATAV	-0.055	-0.115	-0.187	-0.502	0.406	0.727
Mean	3.167	2.834	3.193	3.502	2.730	3.020
SD	1.018	1.059	0.975	0.913	0.936	0.853

Low SES

Indicators						
	PARTVAVE	CHTVAVE	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
PARTVAVE	1.181	-0.088	0.336	0.005	-0.068	-0.044
CHTVAVE	-0.069	1.359	-0.075	0.081	0.111	0.004
MATPHAP	0.291	-0.061	1.129	0.235	-0.103	-0.137
MATCHAP	0.004	0.073	0.232	0.910	-0.130	-0.313
COMPARAV	-0.069	0.105	-0.106	-0.149	0.832	0.419
LIFSATAV	-0.046	0.003	-0.146	-0.373	0.522	0.774
Mean	3.386	2.810	3.283	3.704	2.393	2.906
SD	1.087	1.166	1.062	0.954	0.912	0.880

Success Dimension – Comparing Fathers and Mothers

Fathers

Indicators						
	PARTVAVE	CHTVAVE	MATPSUC	MATCSUC	COMPARAV	LIFSATAV
PARTVAVE	1.137	0.037	0.238	-0.019	0.100	-0.060
CHTVAVE	0.031	1.258	0.075	0.173	-0.066	0.042
MATPSUC	0.205	0.062	1.180	0.016	0.007	-0.040
MATCSUC	-0.021	0.179	0.017	0.748	0.219	-0.018
COMPARAV	0.101	-0.063	0.007	0.273	0.860	0.377
LIFSATAV	-0.064	0.042	-0.042	-0.023	0.458	0.788
Mean	3.291	2.797	3.041	3.151	2.447	2.915
SD	1.066	1.121	1.086	0.865	0.927	0.887

Mothers

Indicators						
	PARTVAVE	CHTVAVE	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
PARTVAVE	1.137	0.037	0.052	0.053	0.100	-0.060
CHTVAVE	0.031	1.258	0.046	0.111	-0.066	0.042
MATPCEN	0.053	0.045	0.846	-0.043	-0.001	0.082
MATCCEN	0.061	0.120	-0.057	0.682	0.206	-0.046
COMPARAV	0.101	-0.063	-0.001	0.269	0.860	0.377
LIFSATAV	-0.064	0.042	0.100	-0.063	0.458	0.788
Mean	3.291	2.797	2.972	3.062	2.447	2.915
SD	1.066	1.121	0.920	0.826	0.927	0.887

Centrality Dimension – Comparing Fathers and Mothers

Fathers

	Indicators					
	PARTVAVE	CHTVAVE	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
PARTVAVE	1.137	0.037	0.052	0.053	0.100	-0.060
CHTVAVE	0.031	1.258	0.046	0.111	-0.066	0.042
MATPCEN	0.053	0.045	0.846	-0.043	-0.001	0.082
MATCCEN	0.061	0.120	-0.057	0.682	0.206	-0.046
COMPARAV	0.101	-0.063	-0.001	0.269	0.860	0.377
LIFSATAV	-0.064	0.042	0.100	-0.063	0.458	0.788
Mean	3.291	2.797	2.972	3.062	2.447	2.915
SD	1.066	1.121	0.920	0.826	0.927	0.887

Mothers

	Indicators					
	PARTVAVE	CHTVAVE	MATPCEN	MATCCEN	COMPARAV	LIFSATAV
PARTVAVE	1.137	0.037	0.052	0.053	0.100	-0.060
CHTVAVE	0.031	1.258	0.046	0.111	-0.066	0.042
MATPCEN	0.053	0.045	0.846	-0.043	-0.001	0.082
MATCCEN	0.061	0.120	-0.057	0.682	0.206	-0.046
COMPARAV	0.101	-0.063	-0.001	0.269	0.860	0.377
LIFSATAV	-0.064	0.042	0.100	-0.063	0.458	0.788
Mean	3.291	2.797	2.972	3.062	2.447	2.915
SD	1.066	1.121	0.920	0.826	0.927	0.887

Happiness Dimension – Comparing Fathers and Mothers

Fathers

	Indicators					
	PARTVAVE	CHTVAVE	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
PARTVAVE	1.137	0.037	0.292	-0.016	0.100	-0.060
CHTVAVE	0.031	1.258	0.065	0.074	-0.066	0.042
MATPHAP	0.268	0.056	1.045	0.092	-0.040	-0.087
MATCHAP	-0.017	0.077	0.105	0.732	-0.126	-0.385
COMPARAV	0.101	-0.063	-0.042	-0.159	0.860	0.377
LIFSATAV	-0.064	0.042	-0.096	-0.507	0.458	0.788
Mean	3.291	2.797	3.118	3.646	2.447	2.915
SD	1.066	1.121	1.022	0.855	0.927	0.887

Mothers

	Indicators					
	PARTVAVE	CHTVAVE	MATPHAP	MATCHAP	COMPARAV	LIFSATAV
PARTVAVE	1.137	0.037	0.292	-0.016	0.100	-0.060
CHTVAVE	0.031	1.258	0.065	0.074	-0.066	0.042
MATPHAP	0.268	0.056	1.045	0.092	-0.040	-0.087
MATCHAP	-0.017	0.077	0.105	0.732	-0.126	-0.385
COMPARAV	0.101	-0.063	-0.042	-0.159	0.860	0.377
LIFSATAV	-0.064	0.042	-0.096	-0.507	0.458	0.788
Mean	3.291	2.797	3.118	3.646	2.447	2.915
SD	1.066	1.121	1.022	0.855	0.927	0.887

BIBLIOGRAPHY

- Appel, M. (2008). Fictional narratives cultivate Just-World beliefs. *Journal of Communication*, 58(1), 62-83.
- Arndt, J., Solomon, S., Kasser, T., & Sheldon, K. M. (2004). The urge to splurge: A terror management account of materialism and consumer behavior. *Journal of Consumer Psychology*, 14(3), 198-212.
- Banarjee, B., & McKeage, K. (1994). How green is my value: Exploring the relationship between environmentalism and materialism. *Advances in Consumer Research*, 21, 147-147.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Belk, R. W. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 12(3), 265-280.
- Billandzic, H., & Busselle, R. (2012). A narrative perspective on genre-specific cultivation. In M. Morgan, J. Shanahan & N. Signorielli (Eds.), *Living with television now: Advances in cultivation theory and research* (pp. 261-286). New York, NY: Peter Lang.
- Brossard, D., & Shanahan, J. (2003). Do citizens want to have their say? media, agricultural biotechnology, and authoritarian views of democratic processes in science. *Mass Communication and Society*, 6(3), 291-312.
- Bruni, L., & Stanca, L. (2006). Income aspirations, television and happiness: Evidence from the world values survey. *Kyklos*, 59(2), 209-225.
- Bryant, J., & Miron, D. (2004). Theory and research in mass communication. *Journal of Communication*, 54(4), 662-704.
- Buijzen, M. (2007). Reducing children's susceptibility to commercials: Mechanisms of factual and evaluative advertising interventions. *Media Psychology*, 9(2), 411-430.
- Buijzen, M., Rozendaal, E., Moorman, M., & Tanis, M. (2008). Parent versus child reports of parental advertising mediation: Exploring the meaning of agreement. *Journal of Broadcasting & Electronic Media*, 52(4), 509-525.
- Buijzen, M., & Valkenburg, P. M. (2003a). The effects of television advertising on materialism, parent-child conflict, and unhappiness: A review of research. *Journal of Applied Developmental Psychology*, 24(4), 437-456.
- Buijzen, M., & Valkenburg, P. M. (2003b). The unintended effects of television advertising: A parent-child survey. *Communication Research*, 30(5), 483-503.

- Buijzen, M., & Valkenburg, P. M. (2005). Parental mediation of undesired advertising effects. *Journal of Broadcasting & Electronic Media*, 49(2), 153-165.
- Burgoyne, C. B., & Lea, S. E. G. (2006). Money is material. *Science*, 314(5802), 1091-1092.
- Bureau of Labor Statistics. (2014). *American time use survey: 2012 results*. (No. USDL-13-1178). US Department of Labor.
- Bush, A. J., Martin, C. A., & Clark, P. W. (2001). The effect of role model influence on adolescents' materialism and marketplace knowledge. *Journal of Marketing Theory and Practice*, 9(4), 27-36.
- Busselle, R., & Bilandzic, H. (2012). Cultivation and the perceived realism of stories. In M. Morgan, J. Shanahan & N. Signorielli (Eds.), *Living with television now: Advances in cultivation theory and research* (pp. 168-186). New York, NY: Peter Lang.
- Busselle, R., & Crandall, H. (2002). Television viewing and perceptions about race differences in socioeconomic success. *Journal of Broadcasting & Electronic Media*, 46(2), 265-282.
- Busselle, R. W. (2003). Television exposure, parents' precautionary warnings, and young adults' perceptions of crime. *Communication Research*, 30(5), 530-556.
- Carlson, J. M. (1993). Television viewing: Cultivating perceptions of affluence and support for capitalist values. *Political Communication*, 10(3), 243-257.
- Carlson, L., Grossbart, S., & Walsh, A. (1990). Mothers' communication orientation and consumer-socialization tendencies. *Journal of Advertising*, 19(3), 27-38.
- Carlson, L., Walsh, A., Laczniak, R. N., & Grossbart, S. (1994). Family communication patterns and marketplace motivations, attitudes, and behaviors of children and mothers. *Journal of Consumer Affairs*, 28(1), 25-53.
- Carver, C. S., & Baird, E. (1998). The american dream revisited: Is it what you want or why you want it that matters? *Psychological Science*, 9(4), 289-292.
- Chan, K., & Prendergast, G. (2007). Materialism and social comparison among adolescents. *Social Behavior and Personality: An International Journal*, 35(2), 213-228.
- Chan, R., & Joseph, S. (2000). Dimensions of personality, domains of aspiration, and subjective well-being. *Personality and Individual Differences*, 28(2), 347-354.
- Chandler, J., Mueller, P., & Paolacci, G. (2014). Nonnaïveté among Amazon Mechanical Turk workers: Consequences and solutions for behavioral researchers. *Behavior research methods*, 46(1), 112-130.
- Chaplin, L. N., & John, D. R. (2010). Interpersonal influences on adolescent materialism: A new look at the role of parents and peers. *Journal of Consumer Psychology*, 20(2), 176.

- Cheung, C., & Chan, C. (1996). Television viewing and mean world value in hong kongs adolescents. *Social Behavior and Personality: An International Journal*, 24(4), 351-364.
- Chia, S. C. (2010). How social influence mediates media effects on adolescents' materialism. *Communication Research*, 37(3), 400-419.
- Churchill Jr, G. A., & Moschis, G. P. (1979). Television and interpersonal influences on adolescent consumer learning. *Journal of Consumer Research*, 6(1), 23-35.
- Crawford Solberg, E., Diener, E., Wirtz, D., Lucas, R. E., & Oishi, S. (2002). Wanting, having, and satisfaction: Examining the role of desire discrepancies in satisfaction with income. *Journal of Personality and Social Psychology*, 83(3), 725.
- Csikszentmihalyi, M., & Rochberg-Halton, E. (1981). *The meaning of things: Domestic symbols and the self*. New York, NY: Cambridge University Press.
- Csikszentmihalyi, M., & Rochberg-Halton, E. (1978). Reflections on materialism. *University of Chicago Magazine*, 70(3), 6-15.
- DeFleur, M. L. (1964). Occupational roles as portrayed on television. *Public Opinion Quarterly*, 28(1), 57-74.
- DeNavas-Walt, C., & Proctor, B. (2014). *US census bureau current population reports: Income and poverty in the united states 2013*. (No. P60-249). Washington, D.C.: US Government Printing Office.
- Diamantopoulos, A., & Siguaw, J. A. (2000). *Introducing LISREL: a guide for the uninitiated*. Thousand Oaks, CA: Sage Publications, Ltd.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Diener, E., & Oishi, S. (2000). Money and happiness: Income and subjective well-being across nations. In E. Diener, & E. M. Suh (Eds.), *Culture and subjective well-being* (pp. 185-218). Cambridge, MA: MIT Press.
- Doob, A. N., & Macdonald, G. E. (1979). Television viewing and fear of victimization: Is the relationship causal. *Journal of Personality and Social Psychology*, 37(2), 170-179.
- Duriez, B., Vansteenkiste, M., Soenens, B., & De Witte, H. (2007). The social costs of extrinsic relative to intrinsic goal pursuits: Their relation with social dominance and racial and ethnic prejudice. *Journal of Personality*, 75(4), 757-782.
- Easterlin, R. A., & Crimmins, E. M. (1991). Private materialism, personal self-fulfillment, family life, and public interest THE nature, effects, and causes of recent changes in the values of american youth. *Public Opinion Quarterly*, 55(4), 499-533.

- Feibleman, J. K. (1975). *The stages of human life: A biography of entire man*. The Hague: Martinus Nijhoff.
- Ferraro, R., Shiv, B., & Bettman, J. R. (2005). Let us eat and drink, for tomorrow we shall die: Effects of mortality salience and self-esteem on self-regulation in consumer choice. *Journal of Consumer Research*, 32(1), 65-75.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117-140.
- Flouri, E. (1999). An integrated model of consumer materialism: Can economic socialization and maternal values predict materialistic attitudes in adolescents? *Journal of Socio-Economics*, 28(6), 707-724.
- Flouri, E. (2004). Exploring the relationship between mothers' and fathers' parenting practices and children's materialist values. *Journal of Economic Psychology*, 25(6), 743-752.
- Fox, W. S., & Philliber, W. W. (1978). Television viewing and the perception of affluence. *Sociological Quarterly*, 19(1), 103-112.
- Francis, G. (2012). Evidence that publication bias contaminated studies relating social class and unethical behavior. *Proceedings of the National Academy of Sciences of the United States of America*, 109(25), doi:10.1073/pnas.1203591109.
- Fujioka, Y., & Austin, E. W. (2003). The relationship of family communication patterns to parental mediation styles. *Communication Research*, 29(6), 642-665.
- Gerbner, G. (1981). A curious journey into the scary world of paul hirsch. *Communication Research*, 8(1), 39-72.
- Gerbner, G. (1981). Final reply to hirsch. *Communication Research*, 8(3), 259-280.
- Gerbner, G., & Gross, L. (1976). Living with television: The violence profile. *Journal of Communication*, Spring, 173-199.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1981). On the limits of "the limits of advocacy research": Response to hirsch. *The Public Opinion Quarterly*, 45(1), 116-118.
- Gerbner, G., & Gross, L. (1979). Editorial response: A reply to newcombs' "humanistic critique". *Communication Research*, 6(2), 223-230.
- Gerbner, G., Gross, L., Eleey, M. F., Jackson-Beeck, M., Jeffries-Fox, S., & Signorielli, N. (1977). TV violence profile no. 8: The highlights. *Journal of Communication*, 27(2), 171-180.
- Gerbner, G., Gross, L., Jackson-Beeck, M., Jeffries-Fox, S., & Signorielli, N. (1978). Cultural indicators: Violence profile no. 9. *Journal of Communication*, 28(3), 176-207.

- Gerbner, G., Gross, L., Signorielli, N., Morgan, M., & Jackson-Beeck, M. (1979). The demonstration of power: Violence profile no. 10. *Journal of Communication*, 29(3), 177-196.
- Giddens, J. L., Schermer, J. A., & Vernon, P. A. (2009). Material values are largely in the family: A twin study of genetic and environmental contributions to materialism. *Personality and Individual Differences*, 46(4), 428-431.
- Goldberg, M. E., Gorn, G. J., Peracchio, L. A., & Bamossy, G. (2003). Understanding materialism among youth. *Journal of Consumer Psychology*, 13(3), 278-288.
- Good, J. (2007). Shop'til we drop? television, materialism and attitudes about the natural environment. *Mass Communication & Society*, 10(3), 365-383.
- Gorn, G. J., & Florsheim, R. (1985). The effects of commercials for adult products on children. *Journal of Consumer Research*, 11(4), 962-967.
- Gulas, C. S., & McKeage, K. (2000). Extending social comparison: An examination of the unintended consequences of idealized advertising imagery. *Journal of Advertising*, 29(2), 17-28.
- Hagerty, M. R. (2000). Social comparisons of income in one's community: Evidence from national surveys of income and happiness. *Journal of Personality and Social Psychology*, 78(4), 764.
- Hanson, S. L., & Zogby, J. (2010). The polls--trends: Attitudes about the american dream. *Public Opinion Quarterly*, 74(3), 570-584.
- Harmon, M. D. (2001). Affluenza: Television use and cultivation of materialism. *Mass Communication & Society*, 4(4), 405-418.
- Hawkins, R. P., & Pingree, S. (1981). Uniform messages and habitual viewing: Unnecessary assumptions in social reality effects. *Human Communication Research*, 7(4), 291-301.
- Hawkins, R. P., & Pingree, S. (1982). Television's influence on social reality. *Television and Behavior: Ten Years of Scientific Progress and Implications for the Eighties*, 2, 224-247.
- Hawkins, R. P., Pingree, S., & Adler, I. (1987). Searching for cognitive processes in the cultivation effect adult and adolescent samples in the united states and australia. *Human Communication Research*, 13(4), 553-557.
- Hirsch, P. (1980). The "scary world" of the nonviewer and other anomalies: A reanalysis of gerbner et al.'s findings on cultivation analysis, part I. *Communication Research*, 7(4), 403-456.
- Hirsch, P. M. (1980). On hughes's contribution: The limits of advocacy research. *Public Opinion Quarterly*, 44(3), 411-413.

- Hirsch, P. M. (1981). Distinguishing good speculation from bad theory: rejoinder to Gerbner et al. *Communication Research*, 8(1), 73-95.
- Hirsch, P. M. (1981). On not learning from one's own mistakes: A reanalysis of Gerbner et al.'s findings on cultivation analysis part II. *Communication Research*, 8(1), 3-37.
- Hirschman, E. C. (1991). Secular mortality and the dark side of consumer behavior: Or how semiotics saved my life. *Advances in Consumer Research*, 18, 1-4.
- Hoffner, C. A., Levine, K. J., & Toohey, R. A. (2008). Socialization to work in late adolescence: The role of television and family. *Journal of Broadcasting & Electronic Media*, 52(2), 282-302.
- Howden, L. M., & Meyer, J. A. (2011). Age and sex composition: 2010 census briefs. Washington, D.C.: U.S. Census Bureau. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf> on April 6, 2015.
- Hsee, C. K., Zhang, J., Cai, C. F., & Zhang, S. (2013). Overearning. *Psychological Science*, 24(6), 852-859. Advanced online publication. doi:10.1177/0956797612464785.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Hughes, M. (1980). The fruits of cultivation analysis: A reexamination of some effects of television watching. *Public Opinion Quarterly*, 44(3), 287.
- Humes, K. R., Jones, N. A., & Ramirez, R. R. (2011). Overview of race and hispanic origins: 2010 census briefs. Washington, D. C.: U.S. Census Bureau. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf> on April 6, 2015.
- Hyll, W., & Schneider, L. (2013). The causal effect of watching TV on material aspirations: Evidence from the "valley of the innocent". *Journal of Economic Behavior & Organization*, 86, 37-51.
- Inglehart, R., & Abramson, P. R. (1994). Economic security and value change. *American Political Science Review*, 88(2), 336-354.
- Ipeirotis, P. G. (2010). Demographics of mechanical turk. Retrieved from <http://archive.nyu.edu/fda/bitstream/2451/29585/2/CeDER-10-01.pdf> on September 14, 2014.
- Jeong, S., Cho, H., & Hwang, Y. (2012). Media literacy interventions: A Meta-Analytic review. *Journal of Communication*, 62(3), 454-472.
- John, D. R. (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *Journal of Consumer Research*, 26(3), 183-213.

- Joseph Sirgy, M., Gurel-Atay, E., Webb, D., Cicic, M., Husic-Mehmedovic, M., Ekici, A., . . . Johar, J. (2011). Is materialism all that bad? effects on satisfaction with material life, life satisfaction, and economic motivation. *Social Indicators Research*, 110(1), 349-366.
- Kasser, T. (2003). *The high price of materialism*. Cambridge, MA: MIT Press.
- Kasser, T., & Ahuvia, A. (2002). Materialistic values and well-being in business students. *European Journal of Social Psychology*, 32(1), 137-146.
- Kasser, T., Rosenblum, K. L., Sameroff, A. J., Deci, E. L., Niemiec, C. P., Ryan, R. M., . . . Dungan, N. (2014). Changes in materialism, changes in psychological well-being: Evidence from three longitudinal studies and an intervention experiment. *Motivation and Emotion*, 38(1), 1-22. doi: 10.1007/s11031-013-9371-4.
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65(2), 410-422.
- Kasser, T., Ryan, R. M., Zax, M., & Sameroff, A. J. (1995). The relations of maternal and social environments to late adolescents' materialistic and prosocial values. *Developmental Psychology*, 31(6), 907.
- Kasser, T., & Sheldon, K. M. (2000). Of wealth and death: Materialism, mortality salience, and consumption behavior. *Psychological Science*, 11(4), 348-351.
- Kendall, D. E. (2011). *Framing class: Media representations of wealth and poverty in America*. New York, NY: Rowman & Littlefield.
- Kilbourne, W., & Pickett, G. (2008). How materialism affects environmental beliefs, concern, and environmentally responsible behavior. *Journal of Business Research*, 61(9), 885-893.
- Kilby, R. W. (1993). *The study of human values*. Lanham, MD: University Press of America.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: Guilford Press.
- Kubey, R., & Csikszentmihalyi, M. (1990). *Television and the quality of life: How viewing shapes everyday experience*. Mahwah, NJ: Lawrence Erlbaum.
- Lazarus, R. S., & Alfert, E. (1964). Short-circuiting of threat by experimentally altering cognitive appraisal. *The Journal of Abnormal and Social Psychology*, 69(2), 195.
- Lewis, J., & Jhally, S. (1998). The struggle over media literacy. *Journal of Communication*, 48(1), 109-120.
- Lichter, S. R., Lichter, L. S., & Rothman, S. (1994). *Prime time: How TV portrays american culture*. Washington, D.C.: Regnery Publications.

- Lull, J. (1980). Family communication patterns and the social uses of television. *Communication Research*, 7(3), 319-333.
- Martins, N., & Wilson, B. J. (2011). Parental communication about kidnapping stories in the US news. *Journal of Children and Media*, 5(2), 132-146.
- McCullough, J. L. (2014). The role of coviewing in the development of materialistic attitudes. *Communication Research Reports*, 31(1), 92-101.
- Meirick, P. C., Sims, J. D., Gilchrist, E. S., & Croucher, S. M. (2009). All the children are above average: Parents' perceptions of education and materialism as media effects on their own and other children. *Mass Communication and Society*, 12(2), 217-237.
- Moore, R. L., & Moschis, G. P. (1981). The role of family communication in consumer learning. *Journal of Communication*, 31(4), 42-51.
- Moore, R. L., & Stephens, L. F. (1975). Some communication and demographic determinants of adolescent consumer learning. *Journal of Consumer Research*, 2(2), 80-92.
- Morgan, M. (1984). Heavy television viewing and perceived quality of life. *Journalism & Mass Communication Quarterly*, 61(3), 499-740.
- Morgan, M. (2002). *Against the mainstream: The selected works of George Gerbner* Peter Lang, New York.
- Morgan, M. (2009). Cultivation analysis and media effects. In R. L. Nabi, & M. B. Oliver (Eds.), *Media processes and effects* (pp. 69-81). Thousand Oaks, CA: Taylor & Francis.
- Morgan, M. (2012). *George Gerbner: A critical introduction to media and communication theory*. New York, NY: Peter Lang.
- Morgan, M., Shanahan, J., & Signorielli, N. (2012). Looking forward, looking backward: Ten questions about cultivation. In M. Morgan, J. Shanahan & N. Signorielli (Eds.), *Living with television now: Advances in cultivation theory and research* (pp. 389-404). New York, NY: Peter Lang.
- Morgan, M., & Shanahan, J. (1997). Two decades of cultivation research: An appraisal and meta-analysis
In B. R. Burleson (Ed.), *Communication yearbook 20*. (pp. 1-45). Thousand Oaks: Sage.
- Morgan, M., Shanahan, J., & Signorielli, N. (2009). Growing up with television: Cultivation processes. In J. Bryant, & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 34-49). New York: Routledge.
- Morgan, M., & Shanahan, J. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media*, 54(2), 337-355.

- Moschis, G. P. (1985). The role of family communication in consumer socialization of children and adolescents. *Journal of Consumer Research*, 11(4), 898-913.
- Moschis, G. P., & Moore, R. L. (1982). A longitudinal study of television advertising effects. *Journal of Consumer Research*, 9(3), 279-286.
- Nabi, R. L. (2009). Cosmetic surgery makeover programs and intentions to undergo cosmetic enhancements: A consideration of three models of media effects. *Human Communication Research*, 35(1), 1-27.
- Nathanson, A. I. (2001). Parent and child perspectives on the presence and meaning of parental television mediation. *Journal of Broadcasting & Electronic Media*, 45(2), 201-220.
- Neuman, W. R., & Guggenheim, L. (2011). The evolution of media effects theory: A Six-Stage model of cumulative research. *Communication Theory*, 21(2), 169-196.
- Newcomb, H. (1978). Assessing the violence profile studies of gerbner and gross: A humanistic critique and suggestion. *Communication Research*, 5(3), 264.
- Nickerson, C., Schwarz, N., Diener, E., & Kahneman, D. (2003). Zeroing in on the dark side of the american dream A closer look at the negative consequences of the goal for financial success. *Psychological Science*, 14(6), 531-536.
- Nielsen Company. (2012). *The cross-platform report: A new connected community*. Nielsen Company.
- Notten, N., Kraaykamp, G., & Konig, R. P. (2012). Family media matters: Unraveling the intergenerational transmission of reading and television tastes. *Sociological Perspectives*, 55(4), 683-706.
- O'Guinn, T. C., & Shrum, L. J. (1997). The role of television in the construction of consumer reality. *Journal of Consumer Research*, 23(4), 278-294.
- Oprea, S. J., Buijzen, M., van Reijmersdal, E. A., & Valkenburg, P. M. (2014). Children's advertising exposure, advertised product desire, and materialism: A longitudinal study. *Communication Research*, 41(5), 717-735. Advance online publication. doi:10.1177/0093650213479129.
- Park, H., Twenge, J. M., & Greenfield, P. M. (2014). The great recession implications for adolescent values and behavior. *Social Psychological and Personality Science*, 5(3), 310-318.
- Parsons, T., & Bales, R. F. (1956). *Family Socialization and Interaction*. Oxon: Routledge.
- Passel, J. S., & Cohn, D'Vera. (2008). U.S. Population Projections: 2005-2050. Washington, D. C.: Pew Research Center. Retrieved from <http://www.pewhispanic.org/2008/02/11/us-population-projections-2005-2050/> on April 6, 2015.

- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment*, 5(2), 164-172.
- Pavot, W., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the satisfaction with life scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment*, 57(1), 149-161.
- Pew Charitable Trust. (2011). *Economic mobility and the American dream: Where do we stand in the wake of the great recession?*. doi:May 19, 2011
- Pew Social and Demographic Trends. (2011). *Is college worth it? college presidents, public assess value, quality and mission of higher education*. (). Washington, D.C.: Pew Research Center. doi:May 16, 2011
- Piff, P. K., Kraus, M. W., Côté, S., Cheng, B. H., & Keltner, D. (2010). Having less, giving more: The influence of social class on prosocial behavior. *Journal of Personality and Social Psychology*, 99(5), 771.
- Piff, P. K., Stancato, D. M., Côté, S., Mendoza-Denton, R., & Keltner, D. (2012). Reply to francis: Cumulative power calculations are faulty when based on observed power and a small sample of studies. *Proceedings of the National Academy of Sciences*, 109(25), E1588-E1588.
- Piff, P. K., Stancato, D. M., Cote, S., Mendoza-Denton, R., & Keltner, D. (2012). Higher social class predicts increased unethical behavior. *Proceedings of the National Academy of Sciences of the United States of America*, 109(11), 4086-4091. doi:10.1073/pnas.1118373109.
- Pingree, S., & Hawkins, R. (1981). US programs on Australian television: The cultivation effect. *Journal of Communication*, 31(1), 97-105.
- Potter, W. J. (1991). The linearity assumption in cultivation research. *Human Communication Research*, 17(4), 562-583.
- Potter, W. J., & Chang, I. C. (1990). Television exposure measures and the cultivation hypothesis. *Journal of Broadcasting & Electronic Media*, 34(3), 313-333.
- Potter, W. J. (1991). The linearity assumption in cultivation research. *Human Communication Research*, 17(4), 562-583.
- Potter, W. J. (1993). Cultivation theory and research: A conceptual critique. *Human Communication Research*, 19(4), 564-601.
- Ramasubramanian, S. (2010). Television viewing, racial attitudes, and policy preferences: Exploring the role of social identity and intergroup emotions in influencing support for affirmative action. *Communication Monographs*, 77(1), 102-120.

- Ramasubramanian, S. (2011). The impact of stereotypical versus counterstereotypical media exemplars on racial attitudes, causal attributions, and support for affirmative action. *Communication Research*, 38(4), 497-516.
- Richins, M. L. (1987). Media, materialism, and human happiness. *Advances in Consumer Research*, 14(1), 352-356.
- Richins, M. L. (1991). Social comparison and the idealized images of advertising. *Journal of Consumer Research*, 18(1), 71-83.
- Richins, M. L. (1995). Social comparison, advertising, and consumer discontent. *American Behavioral Scientist*, 38(4), 593-607.
- Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*, 31(1), 209-219.
- Richins, M. L. (2013). When wanting is better than having: Materialism, transformation expectations, and product-evoked emotions in the purchase process. *Journal of Consumer Research*, 40(1), 1-18.
- Richins, M.L. & Chaplin, L. N. (2015). Material parenting: how the use of goods in parenting fosters materialism in the next generation. *Journal of Consumer Research*, doi: 10.1086/680087.
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3), 303-316.
- Riesman, D., & Roseborough, H. (1955). Careers and consumer behavior. *Consumer Behavior*, 2, 1-18.
- Rindfleisch, A., Burroughs, J. E., & Wong, N. (2009). The safety of objects: Materialism, existential insecurity, and brand connection. *Journal of Consumer Research*, 36(1), 1-16.
- Roberts, J. A., & Clement, A. (2007). Materialism and satisfaction with over-all quality of life and eight life domains. *Social Indicators Research*, 82(1), 79-92.
- Rose, P., & DeJesus, S. P. (2007). A model of motivated cognition to account for the link between self-monitoring and materialism. *Psychology & Marketing*, 24(2), 93-115.
- Rothschild, N., & Morgan, M. (1987). Cohesion and control: Adolescents' relationships with parents as mediators of television. *The Journal of Early Adolescence*, 7(3), 299-314.
- Ryan, L., & Dziurawiec, S. (2001). Materialism and its relationship to life satisfaction. *Social Indicators Research*, 55(2), 185-197.
- Schaefer, E. S. (1965). A configurational analysis of children's reports of parent behavior. *Journal of Consulting Psychology*, 29(6), 552.

- Schor, J. B. (1999). *The overspent American: Why we want what we don't need* HarperCollins.
- Schor, J. B. (1991). *The overworked American: The unexpected decline of leisure*. New York: Basic Books.
- Selnow, G. W. (1986). Solving problems on prime-time television. *Journal of Communication*, 36(2), 63-72.
- Selnow, G. W. (1990). Values in prime-time television. *Journal of Communication*, 40(2), 64-74.
- Shanahan, J., & Morgan, M. (1999). *Television and its viewers: Cultivation theory and research*. Cambridge: Cambridge University Press.
- Shanahan, J., Morgan, M., & Stenbjørre, M. (1997). Green or brown? television and the cultivation of environmental concern. *Journal of Broadcasting & Electronic Media*, 41(3), 305-323.
- Sheldon, K. M., & Kasser, T. (2008). Psychological threat and extrinsic goal striving. *Motivation and Emotion*, 32(1), 37-45.
- Sheldon, K. M., & McGregor, H. A. (2000). Extrinsic value orientation and "The tragedy of the commons". *Journal of Personality*, 68(2), 383-411.
- Shrum, L. J. (1999). The relationship of television viewing with attitude strength and extremity: Implications for the cultivation effect. *Media Psychology*, 1(1), 3-25.
- Shrum, L. J. (2009). Media consumption and perceptions of social reality: Effects and underlying processes. In J. Bryant, & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 50-73). New York: Routledge.
- Shrum, L. J., Burroughs, J. E., & Rindfleisch, A. (2005). Television's cultivation of material values. *Journal of Consumer Research*, 32(3), 473-479.
- Shrum, L. J., & Lee, J. (2012). Multiple processes underlying cultivation effects: How cultivation works depends on the types of beliefs being cultivated. In M. Morgan, J. Shanahan & N. Signorielli (Eds.), *Living with television now: Advances in cultivation theory and research* (pp. 147-167). New York, NY: Peter Lang.
- Shrum, L. J., Lee, J., Burroughs, J. E., & Rindfleisch, A. (2011). An online process model of Second-Order cultivation effects: How television cultivates materialism and its consequences for life satisfaction. *Human Communication Research*, 37(1), 34-57.
- Shrum, L. (1996). Psychological processes underlying cultivation effects further tests of construct accessibility. *Human Communication Research*, 22(4), 482-509.

- Shrum, L., Wyer, J., Robert S, & O'Guinn, T. C. (1998). The effects of television consumption on social perceptions: The use of priming procedures to investigate psychological processes. *Journal of Consumer Research*, 24(4), 447-458.
- Shrum, L. J. (2004). The cognitive processes underlying cultivation effects are a function of whether the judgments are on-line or memory based. *Communications*, 29, 327-344.
- Signorielli, N., & Kahlenberg, S. (2001). Television's world of work in the nineties. *Journal of Broadcasting & Electronic Media*, 45(1), 4-22.
- Signorielli, N. (1989). Television and conceptions about sex roles: Maintaining conventionality and the status quo. *Sex Roles*, 21(5-6), 341-360.
- Sirgy, M. J. (1998). Materialism and quality of life. *Social Indicators Research*, 43(3), 227-260.
- Sirgy, M. J., Gurel-Atay, E., Webb, D., Cicic, M., Husic, M., Ekici, A., . . . Johar, J. (2012). Linking advertising, materialism, and life satisfaction. *Social Indicators Research*, 107(1), 79-101.
- Sirgy, M. J., Lee, D. J., Kosenko, R., Meadow, H. L., Rahtz, D., Cicic, M., . . . Wright, N. (1998). Does television viewership play a role in the perception of quality of life? *Journal of Advertising*, 27(1), 125-142.
- Sonck, N., Nikken, P., & de Haan, J. (2013). Determinants of internet mediation: A comparison of the reports by dutch parents and children. *Journal of Children and Media*, 7(1), 96-113.
- Stutzer, A. (2004). The role of income aspirations in individual happiness. *Journal of Economic Behavior & Organization*, 54(1), 89-109.
- Tan, A., Fujioka, Y., & Tan, G. (2000). Television use, stereotypes of african americans and opinions on affirmative action: An affective model of policy reasoning. *Communications Monographs*, 67(4), 362-371.
- Taylor, P. (2014). *The next America: Boomers, millennials, and the looming generational showdown*. Washington, D.C.: Public Affairs.
- Twenge, J. M., & Kasser, T. (2013). Generational changes in materialism and work centrality, 1976-2007: Associations with temporal changes in societal insecurity and materialistic role modeling. *Personality & Social Psychology Bulletin*, 39(7), 883-897. Advance online publication. doi:10.1177/0146167213484586
- Van Boven, L., Campbell, M. C., & Gilovich, T. (2010). Stigmatizing materialism: On stereotypes and impressions of materialistic and experiential pursuits. *Personality & Social Psychology Bulletin*, 36(4), 551-563. doi:10.1177/0146167210362790 [doi]
- Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science (New York, N.Y.)*, 314(5802), 1154-1156. doi:10.1126/science.1126943 [pii]

- Wackman, D. B., Wartella, E., & Ward, S. (1977). Learning to be consumers: The role of the family. *Journal of Communication*, 27(1), 138-151.
- Ward, S. (1974). Consumer socialization. *Journal of Consumer Research*, 1(2), 1-14.
- Ward, S., & Wackman, D. (1971). Family and media influences on adolescent consumer learning. *American Behavioral Scientist*, 14(3), 415-427.
- Weimann, G. (1984). Images of life in america: The impact of american TV in israel. *International Journal of Intercultural Relations*, 8(2), 185-197.
- Wilson, B. J., Martins, N., & Marske, A. L. (2005). Children's and parents' fright reactions to kidnapping stories in the news. *Communication Monographs*, 72(1), 46-70.
- Wober, J. M. (1978). Televised violence and paranoid perception: The view from great britain. *Public Opinion Quarterly*, 42(3), 315-321.
- Wober, M., & Gunter, B. (1982). Television and personal threat: Fact or artifact? A british survey. *British Journal of Social Psychology*, 21(3), 239-247.
- Wright, N. D., & Larsen, V. (1993). Materialism and life satisfaction: A meta-analysis. *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 6, 158-165.
- Yang, G. S., & Huesmann, L. R. (2013). Correlations of media habits across time, generations, and media modalities. *Journal of Broadcasting & Electronic Media*, 57(3), 356-373.
- Yang, H., & Oliver, M. B. (2010). Exploring the effects of television viewing on perceived life quality: A combined perspective of material value and upward social comparison. *Mass Communication and Society*, 13(2), 118-138.
- Yang, H., Ramasubramanian, S., & Oliver, M. B. (2008). Cultivation effects on quality of life indicators: Exploring the effects of American television consumption on feelings of relative deprivation in South Korea and India. *Journal of Broadcasting & Electronic Media*, 52(2), 247-267.
- Yang, Y. (2008). Social inequalities in happiness in the united states, 1972 to 2004: An age-period-cohort analysis. *American Sociological Review*, 73(2), 204-226.