

RELATIONSHIP BETWEEN CHILDREN'S INVOLVEMENT IN CONSUMER CULTURE  
AND DEPRESSIVE SYMPTOMATOLOGY

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## **ABSTRACT**

Michelle Leigh Poole: Relationship Between Children's Involvement in Consumer Culture and Depressive Symptomatology  
(Under the direction of William B. Ware)

Children who are more involved in consumer culture have shown symptoms of depression and a dislike for school. Emotional distress has been a factor in decreased academic performance. Survey research was used to describe the extent that variation in children's depressive symptomatology could be explained by the child's involvement in consumer culture. The study included 59 elementary and middle school students enrolled in after-school programs. Children responded to items from the *Center for Epidemiologic Studies Depression Scale* and *Youth Materialism Scale*. Only 3% of variation in children's depressive symptomatology could be explained by their involvement in consumer culture. No relationship was found between depressive symptomatology and consumer culture involvement. Examination of the residuals indicated that the model was appropriate for this sample. Differences between this study and other studies that have found a relationship between the variables are discussed. Future research would include additional and different measures for depressive symptomatology.

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## **CHAPTER I**

### **INTRODUCTION**

Consumer culture has become increasingly widespread in society and now interferes with children's welfare (Schor, 2004). Children who hold materialistic values are less happy, have lower self-esteem, and are more anxious (Kasser, 2005). Their involvement in consumer culture also has implications for their education. Marketing messages that continually surround us on the television, internet, and in almost every public space not only encourage an adoption of materialistic values, but also take away from the time a child might devote to academic learning. Children spend more time with electronic media (television, computers, videos, movies, radio) than doing anything else but sleeping (Levin & Linn, 2004). Involvement in consumer culture does not promote children's thinking or probing deeply. Further, classroom education is considered uninteresting to children who are accustomed to being passively entertained (Pulliam, 1979). Researching consumer culture is not only important, but necessary. Psychologists seek to improve the quality of life of all people (Kasser & Kanner, 2004). One step towards achieving this goal is to research the culture of consumption and what it means for children.

#### *Consumer Culture in the United States*

The United States is the most consumer-oriented society in the world and Americans work longer hours than individuals of any other industrialized country (Schor, 2004). Our savings rates are lower than ever before, consumer credit has exploded, and roughly a million and a half households declare bankruptcy each year (Schor, 2004). Americans



spend exorbitant amounts of money at Christmas to give their children whatever they desire. Many families spend the rest of the year paying off the debt they incur at Christmas to provide lavish toys. Although there are fewer people per household, the size of our houses continues to expand. Schor (2004) has suggested that we need larger homes to contain more and more possessions. She stated that the average adult acquires 48 new articles of clothing a year; that Americans own more television sets than inhabitants of any other country (almost one set per person); and that there are more than 46,000 shopping centers in the United States, which is a nearly two-thirds increase since 1986. Why? Perhaps we work more so that we can provide our children with more, thereby spending more. Why do we spend more? What message does spending more send to our children? How does placing value on material possessions affect children? How does it affect their attitudes and relationships with their parents and how does it affect children's overall well-being? Are they happier, more confident, and healthier? Research suggests that they are not. In fact, the research on consumer culture and children suggests that it is harmful to their overall well-being (Cohen & Cohen, 1996; Kasser, 2002; Kasser & Ryan, 1993, 1996, 2001; Schor, 2004; Sheldon & Kasser, 1995).

### *Marketing to Children*

Marketing has exploded on television and advertisements can be found in almost every public space. Wherever we go, our senses are inundated with material messages encouraging us to purchase more (Kasser & Kanner, 2004). Further, it has become children who are targeted most by marketing campaigns. Even young children have buying power; therefore advertisers target them. Advertisers want to appeal to children's desires so that parents purchase their product. Children between 2 and 14 years old now influence purchases of about \$500 billion annually (Levin & Linn, 2004). In interviews with advertising executives, Levin and Linn (2004) learned that children request specific brands and are

brand-aware almost as soon as they acquire verbal skills. Child development psychologists are often hired to help companies develop specific marketing strategies that target children given that children differ developmentally from adults, and therefore respond to different messages. The works of theorists Piaget and Erikson are cited in books specifically written to expose the psychology behind marketing to children (Levin & Linn, 2004).

Schor (2004) believed that marketers have set their sights on children because they have realized that children's tastes drive market trends and that their opinions shape how companies make consumer products. Few adults realize the magnitude that the emersion of consumer culture has on our society and on our children. Unless there is a substantial shift in our society, the more affluent members of society will decide how the less affluent and disadvantaged members of society live (Kindlon, 2001). The affluent therefore have a great opportunity to make a difference in the lives of everyone else.

### *Connection to Education*

Research on consumer culture and children has implications for education. Using a national sample of 9 to 14-year-olds, Goldberg, Gorn, Peracchio, and Bamossy (2003) found that children who were higher on their *Youth Materialism Scale* appeared to like school less than children lower on the scale. Using self-report to collect grade averages, Goldberg et al. found that the children who scored higher on the *Youth Materialism Scale* performed somewhat more poorly academically relative to the children scoring lower on the scale. That is, those children scoring higher on the materialism scale reported lower grade averages than children scoring lower on the materialism scale.

Behavioral issues also play a role in how well a child performs academically. Children and adolescents who exhibit conduct problems are at an increased risk of educational under-achievement (Fergusson & Woodward, 2000). Behavioral issues have been found in children who hold materialistic values. In a study about frugality, generosity,

and materialism, Kasser (2005) found that, in a sample of over 200 children ages 10 to 18, the materialistic subjects reported more use of alcohol and more fighting. Williams, Cox, Hedberg, and Deci (2000) found that materialistic teens were more likely to engage in risk behaviors such as smoking cigarettes or marijuana, chewing tobacco, drinking alcohol, and having sex than were teens who were focused on other values.

Emotional distress has also been a factor in decreased academic performance. Children who report negative emotions such as internalized sadness or anxiety have shown diminished academic functioning (Roeser, Eccles, & Strobel, 1998). Symptoms of depression, such as sadness, hopelessness, and loneliness, have been associated with lower achievement on standardized tests, lower teacher-rated grades, challenge avoidance in the classroom, and poorer peer relations (Roeser et al., 1998). Aluja and Blanch (2004) found in a non-clinical sample of 11 to 15-year-olds that the association between depressive mood and social maladjustment, as measured by the *Children's Depression Inventory*, is significant, though the strongest effect on academic achievement was exclusively due to social maladjustment. The research on children and consumer culture shows that children who are more involved in consumer culture are more depressed and anxious, and have lower self-esteem (Kasser, 2002; Kasser & Ryan, 1993, 1996, 2001; Schor, 2004).

During childhood, children look to their parents and peers for confirmation about who they are when developing their self-concept (Chaplin & John, 2005). They also learn about consumption behaviors through their interactions with parents, peers, and mass media (Bao, Fern, & Sheng, 2007). The number one aspiration among American children and teens, according to a Roper Poll, is to be rich (Schor, 2005). One must consider that such aspirations among children might inhibit their long and short-term educational goals and outcomes.

### *Theoretical Framework*

One of the theories that is applicable when discussing consumer culture is Maslow's Hierarchy of Needs. This hierarchy includes physiological, safety and security, love and belonging, esteem, and self-actualization needs (Maslow, 1943). When basic physiological needs are met, other needs gain more importance, and these needs begin to monopolize an individuals' behavior (Oleson, 2004). Kasser (2002) has adapted Maslow's hierarchy into his own theory, which includes four sets of needs basic to the motivation, functioning, and well-being of all humans. The stages are not hierarchical, like Maslow's; however Kasser acknowledged that his thinking has been greatly influenced by him (Kasser, 2002). Kasser's stages include safety, security, and sustenance; competence, efficacy, and self-esteem; connectedness; and autonomy and authenticity. Basic needs, according to Kasser, are those of safety, security, and sustenance. Children need to believe that they can depend on others to meet their needs (Levin & Linn, 2004). When individuals come from a low socio-economic background, they often have concerns about the basic need of sustenance. Kasser pointed out that this tendency towards materialism may persist even if individuals' situation improves to where they are no longer worried about basic needs, simply because the feelings of insecurity were with them for so long. The need for connectedness aligns with Maslow's need for love and belonging. Kasser believed that we all have a need to be connected and identify with other people and their lives – whether it is our parents, friends, neighbors, or coworkers.

Miller (2002) stated that children learn by observing others. They watch to see which behaviors lead to reinforcement and punishment. What they learn from these observations enable them to set their own standards of conduct, abstract rules, set goals, and make decisions around when to use certain behaviors (Miller, 2002). A concept that developed out of Social Learning Theory has been associated with depression. Internal versus external

control of reinforcement (also referred to as 'locus of control'), in simple terms, involves how reinforcements are perceived. When the reinforcement or event is perceived by the individual as contingent on the individual's own behavior or characteristics, then the individual is said to have an internal locus of control (Rotter, 1975). If the reinforcement or event is perceived as not entirely contingent on the individual's own action, but rather as a result of others' actions, or by luck, chance, or fate, then the individual is said to have an external locus of control (Rotter, 1975).

External locus of control has been correlated with poor school achievement, helplessness, ineffective stress management, decreased self-control, and depression (Twenge, Zhang, & Im, 2004). In a meta-analysis, Benassi, Sweeney, and Dufour (1988) found that locus of control orientation and degree of depression were significantly related, that the relationship was moderately strong, and these findings were consistent across studies. These researchers found greater external locus of control was associated with greater depression. Alarming, when researchers conducted a meta-analysis of 97 college sample studies and 41 child studies, locus of control was found to have become more external between 1960 and 2002 in samples of 18,310 college students and 6,554 children 9 to 14 years old (Twenge, Zhang, & Im, 2004).

The locus of control concept has even been used by researchers in the fashion design and merchandizing field to examine the effects it has on attributes (e.g., boredom proneness, intrinsic enjoyment, and boredom coping) that drive fashion diffusion theory, which is the spread of a fashion innovation within and across social systems (Workman & Studak, 2005). One of the major goals of consumer behavior research has been to understand why and how consumers vary with regard to a style's life cycle (Workman & Studak, 2005). Characteristics associated with individuals with either an internal or external locus of control orientation are likely to affect consumer behavior (Workman & Studak, 2005). In essence, locus of control has implications for consumer behavior.

### *Purpose of the Study*

The purpose of this study is to determine if there is a relationship between children's involvement in consumer culture and whether or not they exhibit depressive symptomatology, and if there is a relationship, to determine the nature of the relationship. The study will further this new area of research in psychology that is dedicated to better understanding children's involvement with materialism.

### *Research Question*

While there exists a fair amount of anecdotal evidence as well as criticism about how consumer oriented our society has become, consumer culture research is a relatively new area of research in psychology, and few studies have been done to document the effects of consumer culture (i.e., valuing materialism) on children. Researchers avoid this area of research because it is often viewed as a conflict of interest – psychologists conduct much of the industry-based market research that is geared towards influencing consumer behavior. Additionally, in the past this area of research has been viewed by some as anti-capitalistic (Kasser & Kanner, 2004).

This research study will seek to contribute to the empirical body of evidence that describes the relationship between children's involvement in consumer culture and depressive symptomatology. This study will help to grow an area of research dedicated to better understanding children's involvement with materialism.

This study will address the following research question:

To what extent can variation in children's depressive symptomatology be explained by the child's involvement in consumer culture?

## CHAPTER II

### LITERATURE REVIEW

The research on consumer culture and children suggests that it is harmful to their overall well-being (Cohen & Cohen, 1996; Kasser, 2002; Kasser & Ryan, 1993, 1996, 2001; Schor, 2004; Sheldon & Kasser, 1995). Children are especially vulnerable to the effects of consumer culture as marketers have focused on them. Specific research findings will be discussed in this chapter.

#### *Consumer Culture, Materialistic Values, Spoiled Children, and Overindulgent Parents*

*Consumer culture* refers to the adoption of a “getting and spending” attitude, of desiring and obtaining that which marketers have made us believe we need (Schor, 2004). *Materialistic values* characterize individuals who have an overall extrinsic focus (Kasser, 2002). These individuals desire praise and seek satisfaction from outside of themselves. Their lifestyle involves striving for financial success, having the right social image, and having a lot of possessions rather than spiritual or intellectual development (Merriam-Webster, 2005). *Spoiled children* are dependent on others and do not feel the need to rely on themselves (Adler, 1928). They are demanding – always receiving everything from others, and therefore are not prepared for the demands of life (Adler, 1928). They lack consideration for others and have difficulty delaying gratification (McIntosh, 1989). Spoiled children are not necessarily spoiled by overindulgence (McIntosh, 1989). Overindulgence stems from the parent’s needs – not the child’s (Bredehoft, Mennicke, Potter, & Clarke, 1988). *Overindulgent parents* give their children too much (e.g., too much time, attention, or

things) at developmentally inappropriate times, without providing enough structure or limits (Bredehoft et al., 1988; McIntosh, 1989).

### *Depressive Symptomatology*

Depressive symptomatology refers to symptoms of depressed mood; a sadness greater and more prolonged than that warranted by any objective reason. Depression has been cited as the most chronic emotional problem facing younger populations (Cecchini, 1998) and has been negatively correlated with various academic measures (Lundy, 2007). Schor (2004) and Kasser (2005) found that involvement with consumer culture related to more anxiety and depression, and lower self-esteem and overall happiness.

American children are spoiled and accustomed to getting and spending. Values such as hard work, delayed gratification, honesty, and compassion are not learned because they are not taught (Levine, 2005). As discussed in Chapter 1, research shows that children who grow up this way are overall less happy, have lower self-esteem, exhibit higher levels of depression and anxiety, as well as have elevated levels of physical symptoms such as headache, stomachache, backache, sore muscles and sore throats (Schor, 2004; Kasser, 2002). Additionally, research shows that they are more likely to use substances such as cigarettes, alcohol, marijuana, chewing tobacco and hard drugs, and they are more likely to engage in other risk behaviors such as having sex (Kasser, 2002).

### *Harmful Affects of Consumer Culture on Children*

The research on consumer culture suggests that it is harmful to overall well-being. Schor (2004) surveyed 300 children between the ages of 10 and 13 in the areas of media use, consumer values, involvement in consumer culture, relationships with parents, and physical well-being. Nearly all of the children were fifth and sixth grade students and two-thirds of the children were from a suburban area (what Schor called Doxley, Massachusetts)



while the remaining one-third of the children were from an urban city (Boston, Massachusetts). Schor's purpose was to connect media use, advertising, and children's involvement in the consumer marketplace and then test to see whether children's consumer culture involvement had apparent effects on their well-being (Schor, 2004). Schor measured levels of depression, anxiety, self-esteem, and psychosomatic (headache, stomachache, boredom) complaints in the children for the well-being variable. Schor then used structural equation modeling to infer causality. It is questionable whether the relationship between these variables is in fact causal. The legitimacy of Schor's causal inference will be revisited.

Parents from both the Boston and Doxley groups were highly educated and placed a high value on education. However, one difference noted was that the Boston group had more low-income residents and less home ownership than the Doxley group. From the survey results, Schor (2004) found that overall the Boston children displayed a higher average level of consumer involvement than the Doxley children. A higher percentage of Boston children than Doxley children also reported that they watch television every day, as well as that they watch more than 15 hours of television each week. In regards to the children's well-being, low levels were reported by children overall for depression, anxiety, and psychosomatic outcomes (boredom, headache, stomachache). Overall the children had a healthy sense of self-esteem and had positive views of their parents. Even though low levels were reported for each of the well-being variables, it is important to note that the Boston children reported higher levels than the Doxley children for depression, anxiety, and psychosomatic outcomes. They also were more likely to be strongly positive about their parents and revealed low levels of fighting with their parents.

To test for relationships, Schor (2004) developed models where she considered all possible relationships among the four variables of media use, the consumer involvement scale, parental attitude scale, and for each model, one well-being variable. Schor considered all possible relationships in order to determine the direction of the relationship.

She used structural equation modeling to specify all of the possible relationships in advance. The statistical program that was used estimated all of the relationships, taking all of the other variables in the model into account.

The parental attitude scale was made up of children's responses to questions that described their feelings toward their primary parent. The well-being variables were depression, anxiety, psychosomatic outcomes, and self-esteem. Schor was testing a variety of questions. Examples include: whether children who watch a lot of television develop more consumerist values, or whether kids who already have high consumer values opt for more screen time; whether watching more television leads to more depression or anxiety, or if children who are already depressed or anxious seek out television as a way to relax; and whether consumer involvement causes more negative attitudes towards parents, or whether children who already have negative relationships with their parents are more likely to become heavily involved in consumer culture. Attention to the hypothesized and independent models in any structural equation modeling procedure is important. "Close fit of a model does not necessarily imply that the model is a good one. It should be borne in mind that there may be other equivalent models that fit as closely" (Browne & Arminger, 1995, p. 214).

Using the models developed, Schor (2004) stated that there was a causal relationship: high consumer involvement was a significant cause of depression, anxiety, low self-esteem, and psychosomatic complaints. The reverse was not true for her sample – being depressed or anxious or having low self-esteem did not cause higher levels of consumer involvement. Although Schor developed causal models using structural equation modeling and stated that there was a causal relationship, it is questionable whether the relationship between these variables is in fact causal, as "there is nothing causal, in the sense of inferring causality, about the use of SEM" (Tabachnick & Fidell, 2001, p. 659).

In Schor's study (2004), the effect of all of the significant factors (television use and other media use) flowed through consumer involvement; that is, the path from television use to depression was not significant. However, the paths from television use to consumer involvement and consumer involvement to the depression scale were both significant. Schor (2004) also found that children who reported higher levels of consumer involvement reported diminished relationships with parents (as measured by both the parental attitude scale and the likelihood of agreeing or disagreeing with parents about buying things) and reduced self-esteem in the areas of peer and family relationships. Additionally, children who reported diminished relationships with parents reported more depression, anxiety, lower self-esteem, and more psychosomatic complaints (Schor, 2004). These findings were true for the entire sample (remember that the Doxley/suburban children represent two-thirds of the sample); however they were not true for the Boston children alone. One possible explanation for this finding is that given that the Boston children reported lower levels of parental restrictions for media, it is possible that the Doxley parents disapproved more of commercialized culture than the Boston parents, and that element created a rift between the child and parent.

Another study by Buijzen and Valkenburg (2003) sought to revive the research begun in the 1970s on the unintended effects of advertising. Buijzen and Valkenburg focused on the three dependent variables: materialism, parent-child conflict, and unhappiness, and conducted a survey using 350 parent-child (eight- to twelve-year-old) dyads. The survey items used for materialism were borrowed from an existing scale developed by Moschis and Churchill (1978) that is used by most researchers studying the relationship between advertising and materialism. The items were similar to those in the *Survey on Children, Media, and Consumer Culture*. Examples of the questions used were "(a) Do you (does your child) think it is important to have a lot of money? (b) Do you (does your child) think it is important to own a lot of things? and (c) Would you (your child) like to

be able to buy things that cost a lot of money?” (Buijzen & Valkenburg, 2003, p. 491). Using Schor’s survey instrument and the added materialism items, Buijzen & Valkenburg (2003) found that children who frequently watched television commercials held stronger materialistic values than their peers who watched commercials less often. Using the EQS program for structural equation modeling, Buijzen & Valkenburg (2003) rejected their initially hypothesized model which was based on one independent variable (advertising exposure), one mediating variable (purchase requests), and four dependent variables (materialism, parent-child conflict, disappointment, and life satisfaction). They found that the model could be improved by adding four additional paths – from materialism to purchase requests, from materialism to parent-child conflict, from disappointment to parent-child conflict, and from disappointment to life dissatisfaction (Buijzen & Valkenburg, 2003). To their surprise, these four paths were statistically significant. Overall, they concluded that advertising exposure was related to parent-child conflict, however as anticipated, it was mediated by children’s purchase requests. The relationship between advertising exposure and materialism is direct, and the relationship between advertising and parent-child conflict and advertising and unhappiness were indirect (Buijzen & Valkenburg, 2003).

There is additional evidence of the harmful effects of consumer culture and valuing materialism. Kasser (2002) described several studies that he did with Ryan (Kasser & Ryan, 1993, 1996, 2001). In 1993, the two showed that when financial success is central to young adult’s aspirations, low well-being, high distress, and difficulty adjusting to life are also evident. In their 1996 study, they showed that adults who focused more on money, image, and fame reported less self-actualization and vitality, more depression, and significantly more experiences with physical symptoms, such as headaches, backaches, sore muscles, and sore throats, than those less concerned with these values. In 2001, they showed that people with strong materialistic values were highly likely to use substances such as cigarettes, alcohol, marijuana, and hard drugs frequently.

Kasser (2002) went further to describe other research studies that have reported similar findings. In 2000, Williams, Cox, Hedberg, and Deci found that high school student smokers were more oriented towards materialistic values than values such as self-acceptance, affiliation, and community feeling. Williams et al. also found that materialistic teens were more likely to engage in risk behaviors such as smoking cigarettes or marijuana, chewing tobacco, drinking alcohol, and having sex than teens who were focused on other values. In a study about frugality, generosity, and materialism, Kasser (2005) found that in a sample of over 200 children ages 10 to 18, materialism was related to lower happiness and self-esteem and to more anxiety. The materialistic subjects also reported more use of alcohol and more frequent fights.

Cohen & Cohen (1996) found that adolescents who admired materialistic values and put a priority on being rich were 1.51 to 1.68 times more likely to have a separation anxiety disorder (as defined by DSM III-R) than those who did not have materialistic values. Sheldon and Kasser (1995) found that adults ages 18 to 72 who were highly oriented toward materialistic goals also reported fewer experiences of positive emotions and less overall satisfaction with their lives than those with less materialistic values. These types of results have been replicated in samples of different ages and cultures from around the world. Results were replicated with groups of British, Danish, German, Indian, Romanian, Russian, South Korean, and Australian college students; German adults and business students in Singapore; and adults in China, Turkey, Australia, Canada, and Singapore (Kasser, 2002).

Kasser and Ryan (2001) asked college students to rate how much they felt they had attained materialistic goals (money, fame, and image) and non-materialistic goals (personal growth, close relationships, and community contribution). From the ratings, they created four groups: group 1 were those high in attainment of both types of goals; group 2 were those high in only non-materialistic goals; group 3 were those high only in materialistic goals; and group 4 were those that felt unsuccessful in reaching either type of goal. Kasser and Ryan

then compared the four groups in terms of well-being, drug use, and self-esteem, among other things. Almost equivalent well-being was reported by groups 1 and 2; well-being was low for groups 3 and 4; and group 3's well-being was not significantly different from group 4's. Similar results were found when recording the progress made by individuals over a couple of months (Kasser and Ryan, 2001). Sheldon and Kasser (1995) tracked the progress of university students' self-identified goals at the beginning and end of the study, and from day to day, during October through December. Students identified their goals and rated the extent to which they believed success with these goals would help them attain materialistic outcomes, as opposed to other outcomes. The participants who made progress toward materialistic goals showed no increase in their well-being from October through December, or any progress from one day to the next. "Each of these studies reveals that beyond the point of providing for food, shelter, and safety, increases in wealth do little to improve people's well-being and happiness" (Kasser, 2002, p. 47).

### *After-School Programs*

The current study will enroll participants who are part of an after-school program. Therefore, it is important to discuss what an after-school program is as well as some of the known benefits and purposes of after-school programs. The Harvard Family Research Project, which is part of the Harvard Graduate School of Education, combed 10 years worth of research on after-school programs (Little, Wimer, & Weiss, 2008, February). "After-school is the general term used to describe an array of safe, structured programs that provide children and youth ages kindergarten through high school with a range of supervised activities intentionally designed to encourage learning and development outside of the typical school day" (Little et al., 2008, February, p. 2). After-school programs vary in their overall goals, yet several traditions remain constant in almost every after-school program: safety, positive youth development, and academic enrichment and support. Activities also

vary and can include tutoring, mentoring, help with homework, arts, reading, math, science, civic engagement, gardening, physical activity, and games.

What did the Harvard researchers find? For the most part, the researchers found that participation in after-school programs was associated with positive outcomes, especially for disadvantaged children and youth. Outcome examples include better attitudes towards school and higher educational aspirations; higher school attendance and less tardiness; lower drop-out rates; less disciplinary action; improved homework completion; engagement in learning; and better performance in school (as measured by achievement tests scores and grades) (Little et al., 2008, February). Participation in after-school programs can also improve social and developmental outcomes for children. Examples of such outcomes include decreased behavioral problems; improved social and communication skills and/or relationships with others (peers, parents, teachers); increased self-confidence, self-esteem, and self-efficacy; and lower levels of depression and anxiety. Additionally, participation in after-school has been shown to contribute to healthy lifestyles and prevention outcomes including better food choices; increased physical activity; increased knowledge of nutrition and the benefits of exercise; avoidance of sexual activity and drug and alcohol use; as well as reduction in juvenile crime.

Little et al. (2008, February) based their review on 55 of the highest quality after-school research and evaluation studies using an experimental or quasi-experimental design to determine effects. While the researchers admit that most studies are biased in that students typically self-select into a study, they chose this set of studies from hundreds in the Harvard Family Research Project database. Participants in the present study were either enrolled in a fee-based or free after-school program. Fees for the elementary after-school program included a \$35 non-refundable registration fee, \$100 deposit, and \$200 monthly tuition. Tuition assistance was available. The middle school after-school program was free to enrolled students. Each elementary after-school program used in this study was licensed by

the accrediting state agency and held a five-star rating. The elementary after-school program was also accredited by the National AfterSchool Association.

### *Conclusion*

Overall, research surrounding consumer culture related to well-being shows that involvement in consumer culture and placing a high value on material possessions is harmful to one's well-being. Children are especially vulnerable to the effects of consumer culture. It is imperative that educational psychologists begin to pay more attention to this topic in order to improve the lives of children.

### *Focus of This Study*

The purpose of this study is to examine children's involvement in consumer culture (i.e., materialism) to determine if there is a relationship, and if so, to describe the nature of the relationship between children's involvement in consumer culture and depressive symptomatology. The study will address the following research question: To what extent can variation in children's well-being be explained by the child's involvement in consumer culture? The researcher hypothesizes that higher levels of consumer involvement will correspond with higher levels of depressive symptomatology.



## CHAPTER III

### METHOD

This correlational study used survey research to describe the degree of the relationship between children's involvement in consumer culture and depressive symptomatology. The survey instrument used in this study consisted of 34 questions and used a combination of two existing scales: the *Center for Epidemiologic Studies Depression Scale (CES-D)* and *Youth Materialism Scale (YMS)* (Goldberg et al., 2003; Radloff, 1977). Additionally, four demographic questions were included in the survey to gather age, race, gender, and grade level of the children.

#### *Participants*

Participants for this study consisted of 59 5th, 6th, and 7th-grade elementary and middle school students between the ages of 9 and 13 years old enrolled in after-school programs at six elementary schools and two middle schools located in a suburban Southeastern city. The participants were volunteers and able to complete a written survey in English. Table 1 summarizes the demographics of the full sample. Overall, the demographics of the sample were balanced, with the exception of gender. With regard to race, the demographics of the sample were more balanced than the demographics of the school district elementary and middle schools. The district elementary and middle schools were 55% White, 20% African-American, 14% Asian-American, 11% Latinino/a, and less than 1% multiracial or other race (North Carolina Department of Public Instruction, 2008). The response rate for the study was 40%. All 14 schools within the school district (10 elementary and 4 middle) were recruited and 9 agreed to participate in the study. All fifth,

sixth, and seventh grade students enrolled in the after-school program at the nine participating schools were invited to participate in the study (n=149), however students at one elementary school who wanted to participate did not return parent consent forms, and therefore did not participate in the study (n=5). Additionally, one parent declined consent and four students did not want to participate. Participants were not excluded based on gender, race, or ethnicity. Therefore, the results of the study are generalizable to children between the ages of 9 and 13 years old in a suburban Southeastern city.

Table 1

*Sample Demographics*

Characteristic	Categories	Number	Percentage
Gender	Male	21	36%
	Female	38	64%
Age (in years)	9	4	7%
	10	24	41%
	11	21	35%
	12	9	15%
	13	1	2%
Race/ethnicity	White	19	32%
	African-American	20	34%
	Asian-American	6	10%
	Latino/a	10	17%
	Multiracial	3	5%
	Other	1	2%
Grade Level	Fifth	30	51%
	Sixth	23	39%
	Seventh	6	10%

Two-thirds (64%) of participants were female and one-third (36%) were male. The majority of participants were 10 (41%) or 11 (35%) years old. A smaller percentage of participants were either younger or older – 7% were 9 years old; 15% were 12 years old and 2% were 13 years old. Approximately two-thirds of participants were White (32%) or African-

American (34%). The remaining one-third of participants were Asian-American (10%), Latin (17%), multiracial (5%), or other race (2%). Half of participants were enrolled in elementary school (51%) and half were enrolled in middle school (49%).

### *Instruments*

#### *Youth Materialism Scale*

Understanding that children between the ages of 9 and 14 influence family purchases, Goldberg et al. (2003) developed the 10-item *Youth Materialism Scale (YMS)* using a national sample of 9 to 14-year-olds, with the goal of gaining a better understanding of youth's orientation towards consumerism. The researchers cited these years when children experience a desire to buy and own things, the satisfaction in having these things, and the desire for money to be able to buy these things (Goldberg et al.).

Goldberg et al. (2003) started with two adult scales (Belk, 1985: 24 items; Richins & Dawson, 1992: 18 items) and two adolescent scales (Achenreiner, 1997: 5 items; Moschis & Churchill, 1978: 6 items). They selected and merged items from the existing scales and adapted some of the items using wording more appropriate for children between 9 and 14 years old, for example, the scale includes positively worded items that require lower verbal reasoning skills. Children respond to each item by indicating their level of agreement on a 4-point Likert scale from 'disagree a lot' to 'agree a lot'. The researchers then shared the items along with a description of materialism from the literature with 12 mothers and 16 teachers of 9 to 14-year-olds. The mothers and teachers indicated for each item if children would understand the wording and whether or not the item reflected a materialistic orientation. After this process, 19 items were kept and used in a pre-test with 123 middle-class children in the 9 to 14 year old age range. The items were on a 4-point Likert scale from 1 (disagree a lot) to 4 (agree a lot). Ten items had item-total correlations above .40, ranging from .41 to .62. Internal consistency for the 10 items was .79. The test was administered again to the

same set of children two weeks later and the test-retest reliability was .85. The 10-item *YMS* was determined to be more appropriate for this age group than either of the two adult scales and while the *YMS* is slightly longer than the adolescent scale, it allowed for greater reliability. Further, a principal axis factor analysis of the 10 items revealed a single factor solution with an eigenvalue above 1 (2.61), which accounted for almost all of the common variance. In testing for a one factor solution using a confirmatory factor analysis, although the chi-square solution was significant,  $\chi^2(35, N=111) = 55.41, p < .05$ , the goodness-of-fit index (.92) indicated adequate fit of the model. The average factor loading was .50, ranging from .37 to .70, all significant,  $t(110) > 3.82$ .

Goldberg et al. (2003) also included four criterion measures in the pre-test questionnaire: satisfaction with possessions, expectations regarding birthday and Christmas gifts, spending a \$500 windfall, and summer jobs. Children were asked to rate their satisfaction with things they 'owned' relative to the 'things they wanted but didn't have'. They were asked to indicate how much money they felt their parents should spend on them for a birthday gift and Christmas gift. They were asked to distribute \$500 that they might receive from an aunt or uncle into three parts: money to buy anything they wanted for themselves, money to give away to people trying to save the environment, and money to give to charity for poor kids their age. Finally, the children were asked what type of summer job they preferred: one where they could 'earn lots of money', 'have lots of fun and earn very little money', or 'help save the environment and earn very little money'. The most materialistic children (those scoring highest on the *YMS*) responded as expected. The materialistic children were significantly less satisfied with the things they owned; thought that their parents should spend significantly more on them, on average, for birthday and Christmas gifts; allocated a higher amount of windfall money to themselves; and more often chose a summer job where they could 'earn lots of money', than the children who scored lowest on the *YMS*.

As part of the validation of the *YMS*, the scale was used in a national study conducted by Simmons Marketing Research Bureau in New York (Goldberg et al., 2003). Approximately 1,500 households who indicated that they had a child between 9 and 14 years old living in the home agreed for the parent and the child to each complete a detailed questionnaire that focused on the media and product consumption behavior of the child and included the questions from the *YMS*. Five hundred forty parent questionnaires and 996 child questionnaires were returned. The child sample was 52% female and 48% male. Half of the children were between 9 and 11 years old, and half were between 12 and 14 years old. Results from the national study were similar to the pre-test results. The item-to-total correlation ranged from .37 to .66. The internal consistency coefficient (alpha) was .75. The principal axis factor analysis revealed a single factor with the eigenvalue equal to 2.61 that accounted for all of the common variance. Whereas the chi-square statistic was significant for the confirmatory factor analysis testing a single factor solution,  $\chi^2(36, N=996) = 254.61$ ,  $p < .0001$ , the goodness-of-fit index (.95) indicated an adequate fit of the model. The average factor loading was .50, ranging from .31 to .65, all significant,  $z > 8.82$ . They performed separate analysis for each of the age ranges (9 to 11, 12 to 14) and the results were virtually the same.

#### *Center for Epidemiologic Studies Depression Scale*

The *Center for Epidemiologic Studies Depression Scale (CES-D)* was developed in the 1970s and is one of the most widely used and validated measures of depressive symptomatology for non-clinical samples. It is a quick and easy to use self-report depression scale for research in the general population and should be used as a screening tool to identify individuals or groups at risk for depression. It has high internal consistency and adequate test-retest reliability. Although the scale was normed on adult populations, reliability, validity, and factor structure have been found to be similar across a wide variety of

demographic characteristics – including age, grade, sex, and race (Doerfler, Felner, Rowlinson, Raley, and Evans, 1988; Radloff, 1991). The scale can also be given in a variety of ways – as a face-to-face interview, telephone interview, or self-administration (Radloff, 1991). The scale consists of 20 items that were chosen from previously validated scales (Radloff, 1991). The items are structured on a 4-point scale ranging from 0 (rarely or none of the time) to 3 (most or all of the time), with total scores ranging from 0 to 60. Higher scores denote higher levels of depressive symptomatology. Scores of 16 and above are often interpreted as suggestive of depression (Radloff, 1977).

Some have questioned using the score of 16 to denote either symptoms of depression or the clinical definition of depression. Roberts, Andrews, Lewinsohn, and Hops (1990) found across four pilot samples of adolescent boys and girls with a mean age of 16 years, that the prevalence of depressive symptomatology, using the standard criterion score of 16 or more on the *CES-D*, was 46% for boys and 59% for girls. These percentages seem high. In adult samples, mean *CES-D* scores are typically less than one half those reported for adolescents (Roberts et al.). The researchers stated that if using the definition of psychological distress, then depression in adolescents is likely common. If using the Diagnostic and Statistical Manual of Mental Disorders (DSM) clinical definition, then the researchers say that depression in adolescents is likely not as common as their research suggests.

While the use of the *CES-D* with adults and adolescents has been widely documented and validated (Gupta & Yick, in press; Phillips, Shadish, Murray, Kubik, Lytle, & Birnbaum, 2006; Radloff, 1991; Roberts et al., 1990), its use with younger children has been much less documented. In a sample of 1,207 public school students enrolled in grades 4 through 12, Doerfler et al. (1988) found no significant grade, sex, or race effects on the *CES-D*. Another study evaluated the psychometric properties of the *CES-D* with child and adolescent psychiatric inpatients between 8 and 17 years old (Faulstich, 1986). Results

showed adequate test-retest reliability, internal consistency, and concurrent validity. While some (Faulstich, 1986) have challenged the four subfactors established by Radloff (1977), Phillips et al. (2006) found after testing 12 models previously supported by factor analyses, that the standard scoring of one total score (60) on the *CES-D* was justified. Given that there is less documented use of the *CES-D* with 9 to 13-year-olds, it is imperative that the *CES-D* be used as a screening tool only, and that diagnoses are made in conjunction with further follow-up clinical measures.

#### *Reliability of the YMS and CES-D*

The reliability of each scale was generated using Cronbach's alpha. The reliability alpha ( $\alpha$ ) coefficient of the YMS with 52 cases and 10 items was .73. Alpha for the *CES-D* with 52 cases and 20 items was .69. Both alpha coefficients were less than that typically reported for each scale (.91 and .75 - .79, respectively), and for this sample the reliability of the *CES-D* was in a questionable range (Gliem & Gliem, 2003, October). Table 2 lists the psychometric properties of each scale.

Table 2

#### *Psychometric Properties of the Scales*

Scale	Number of Items	Internal Consistency Reliability		Test-Retest Reliability – Previous Studies
		Previous Studies	Current Study	
CES-D	20	.91	.69	considered adequate in a range of studies and populations
YMS	10	.75 - .79	.73	.85

With regard to threats to internal validity, the survey instrument itself could have been a potential threat, as this survey was the only data point for this study – no follow-up

procedures were conducted with participants. Because the research study was fairly straightforward and required only a half hour of students' time, it was well-received by students, and few participants declined to participate in the study. Several students forgot to return parent consent forms, however no students dropped out of the study once they began completing the survey. The student sample could be viewed as a threat to external validity. The students who completed the questionnaire were volunteers, and thereby already motivated. To help minimize this potential concern, the researcher explicitly stated the importance of the study, made the appeal for volunteers as non-threatening as possible (by letting them know that they can leave the study at any time), and ensured participants that by participating they could potentially benefit other children (Gall, Gall, & Borg, 2003). Additionally, the participants were enrolled in after-school programs. As mentioned earlier in Chapter II, participation in after school programs can improve social and developmental outcomes for children, including lower levels of depression and anxiety. Further discussion of threats to internal and external validity are discussed in Chapter V.

### *Measures*

#### *Independent Variable: Consumer Culture Involvement (Materialism)*

Ten survey items from the *YMS*, which represent children's involvement in consumer culture, are presented in Table 3, along with the data ranges for each item. Scores from all 10 survey items were summed for each case to obtain a total *YMS* score, which became the independent variable. Possible *YMS* scores range from 10 to 40, with higher scores indicating higher levels of consumer involvement. No cases were missing data on the materialism survey items.



Table 3

Youth Materialism Scale (YMS)

Survey Item/Variable	Data Ranges/Codes
I'd rather spend time buying things, than doing almost anything else.	1 = Disagree a lot 2 = Disagree a little
I would be happier if I had more money to buy more things for myself.	3 = Agree a little 4 = Agree a lot
I have fun just thinking of all the things I own.	
I really enjoy going shopping.	
I like to buy things my friends have.	
When you grow up, the more money you have, the happier you are.	
I'd rather not share my snacks with others if it means I'll have less for myself.	
I would love to be able to buy things that cost lots of money.	
I really like the kids that have very special games or clothes.	
The only kind of job I want when I grow up is one that gets me a lot of money.	

Dependent Variable: Depressive Symptomatology

Twenty survey items from the *CES-D*, which represent children's depressive symptomatology, are presented in Table 4, along with the data ranges for each item. Scores from all 20 survey items were summed for each case to obtain a total *CES-D* score, which became the dependent variable. Possible depression scores range from 0 to 60. Four items, "I felt I was just as good as other people", "I felt hopeful about the future", "I was happy", and "I enjoyed life", were reversed scored to match the structure of the other 16 items, meaning that higher scores on each item indicate more depressive symptomatology.

When the 20 *CES-D* survey items were summed, seven cases were missing data and did not receive a summed score. The seven cases were missing any combination of the following *CES-D* items: "I felt that I could not shake off the blues even with help from my family or friends", "I had trouble keeping my mind on what I was doing", "I felt depressed", "I felt that everything I did was an effort", "I thought my life had been a failure", "I felt fearful, "My sleep was restless", "People were unfriendly", "I had crying spells", "I felt sad", and "I could not get "going".

Table 4

*Center for Epidemiologic Studies Depression (CES-D) Scale*

Survey Item	Data Ranges/Codes
<b>During the Past Week....</b>	
I was bothered by things that usually don't bother me.	0 = Rarely or none of the time (less than 1 day)
I did not feel like eating; my appetite was poor.	1 = Some or a little of the time (1-2 days)
I felt that I could not shake off the blues even with help from my family or friends.	2 = Occasionally or a moderate amount of time (3-4 days)
I had trouble keeping my mind on what I was doing.	3 = Most or all of the time (5-7 days)
I felt depressed.	
I felt that everything I did was an effort.	
I thought my life had been a failure.	
I felt fearful.	
My sleep was restless.	
I talked less than usual.	
I felt lonely.	
People were unfriendly.	
I had crying spells.	
I felt sad.	
I felt that people dislike me.	
I could not get "going."	
I felt I was just as good as other people.	0 = Most or all of the time (5-7 days)
I felt hopeful about the future.	1 = Occasionally or a moderate amount of time (3-4 days)
I was happy.	2 = Some or a little of the time (1-2 days)
I enjoyed life.	3 = Rarely or none of the time (less than 1 day)

### *Procedure*

Participants were instructed that their participation was voluntary, that they could have declined participation or chosen not to answer any question that made them feel uncomfortable, or that they could have left the study at any time, without penalty. In addition, participants were instructed that they could ask questions about the study and the researcher would answer their questions.

The researcher managed the recruitment of participants and answered student questions about the study. The researcher was in the room while students completed the survey. Additionally, there was usually an after-school staff member in the room or in the next room while students completed the survey. The survey took students approximately 10 to 20 minutes to complete and was completed during the time students were participating in the after-school program. Participants completed the survey in facilities available to the after-school program, e.g., school cafeteria, theatre stage, gymnasium, auditorium, and classrooms.

The recruitment and data collection period spanned approximately three weeks. Children who were interested in participating in the study signed the Child Assent Form (see Appendix D) on site, and took home a letter to their parents, along with a Parent Consent Form (see Appendices B and C, respectively). Only children who had signed the Child Assent Form and returned their signed Parent Consent Form participated in the study.

This study involved no more than minimal risk of harm to participants. Surveys were anonymous, and therefore follow-up procedures were not conducted. The principal investigator did not collect any personally identifying information from the participants. Demographics (e.g., age, race, gender, and grade level) were collected, however were reported only in the aggregate. The surveys have been kept confidential.

### *Data Analysis*

All of the data collected were quantitative. Data were entered, stored, and analyzed using SPSS graduate student version 15.0 for Windows. Using the Explore procedure in SPSS, data were screened for missing values and outliers. Means and standard deviations on each of the variables were examined to ensure values were within the expected range. The bivariate relationship was examined for any departures from linearity using a scatterplot (Tabachnick & Fidell, 2001). The reliability of each scale (*CES-D* and *YMS*) was obtained using Cronbach's alpha.

To address the research question, simple linear regression was used to explain the variation in children's depressive symptomatology from their involvement in consumer culture. The  $r^2$  value yielded from the regression analyses was used to determine whether the variance explained was statistically significant ( $\alpha = .05$ ), and the  $r$  value indicated the nature and the strength of the relationship between children's involvement in consumer culture and depressive symptomatology. To ensure that the results of the regression analysis were interpreted accurately and that the assumptions were met, residuals were analyzed by group and across groups (Karakostas, 2004). Residuals were examined by group for skewness and kurtosis. Residual values were examined across groups by looking at the variances with Levene's test as well as by looking at the  $F$  value from a one-way analysis of variance (ANOVA) which tests whether the means of the residuals across groups are equal.

## **CHAPTER IV**

### **RESULTS**

The data were screened for missing values. Of the 59 cases, seven contained incomplete data. All seven cases missing data were missing data from the depression (*CES-D*) scale. No cases were missing data from the materialism (*YMS*) scale. These seven cases were removed from the analysis because they had incomplete data. Three of the seven cases represented elementary school students and four represented middle school students. This left 52 cases that were included in the analysis ( $n=52$ ).

The remaining 52 cases were screened using the Explore procedure. Means, standard deviations, minimum and maximum values, and skewness and kurtosis on the two variables are included in Table 5. These results indicated that all means and standard deviations appeared reasonable and within range. The dependent variable, depressive symptomatology, had a mean of 18.90 and ranged from 9.00 to 46.00. Typically, scores of 16 and higher are interpreted as suggestive of depression (Radloff, 1977). Using this guideline, over half of participants in this sample (58%) would be considered for depression, which seems high. The independent variable, materialism, had a mean of 21.48 and ranged from 12.00 to 33.00.

Table 5

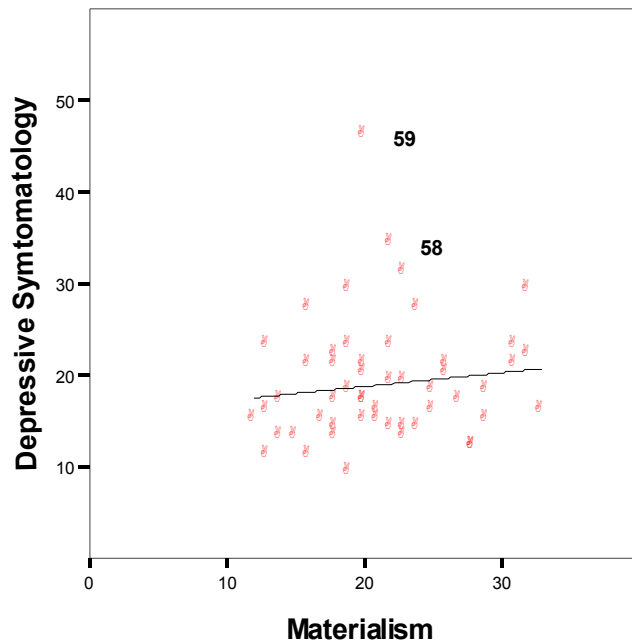
*Univariate Descriptive Statistics*

<b>Variable</b>	<b>Mean</b>	<b>St. Dev.</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Skewness / Std. Error</b>	<b>Kurtosis / Std. Error</b>
Total CES-D (Depressive Symptomatology)	18.90	6.63	9.00	46.00	1.70 .33	4.53 .65
Total YMS (Materialism)	21.48	5.46	12.00	33.00	.35 .33	-.55 .65

Although the means, standard deviations, and minimum and maximum values of the remaining 52 cases appeared reasonable and within range, the stem-and-leaf and box plots indicated two outliers on depressive symptomatology, with values of 46 and 34. The value of 34 fell just outside the whiskers on the box plot. There were not any outliers identified on the box plot for materialism. Upon examination of the scatterplot, used for describing the relationship between the dependent and independent variables as well as noting bivariate outliers, it was apparent that the relationship between depressive symptomatology and materialism, for this sample, was not that strong, and only slightly positive. It was also clear that case 59 was a bivariate outlier. Because regression analysis is sensitive to outlier values, the decision was made to exclude case 59, shown in Figure 1, from the regression analysis. This meant that for the regression analysis, the data set would go from 52 to 51 cases.

Figure 1

*Bivariate Relationship between Depressive Symptomatology and Materialism*



*Regression Analysis*

The regression analysis of the 51 cases revealed an  $r^2$  value equal to .032 ( $p=.21$ ). That is, for this sample, only 3% of the variation in children's depressive symptomatology could be explained by their involvement in consumer culture (i.e., materialism). A significant relationship was not found between depressive symptomatology and consumer culture involvement, ( $t(49) = 1.28$ ,  $p=.21$ ) and the correlation coefficient ( $r$  value) was .18. The regression equation for predicting depressive symptomatology (Y) following this model was:

$$\hat{Y} = 14.54 + .18X, \text{ where } X = \text{involvement in consumer culture.}$$

The residuals were examined by partitioning the unstandardized residual values



into four groups, based on the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentile points of the predicted values (Karakostas, 2004). For the most part the groups were equal. Group 1 included 11 cases, group 2 included 14 cases, group 3 included 12 cases, and group 4 included 14 cases. Means, variances, minimum and maximum values, and skewness and kurtosis for the residuals are listed in Table 6 by group.

Table 6

*Descriptive Statistics of the Residuals by Group*

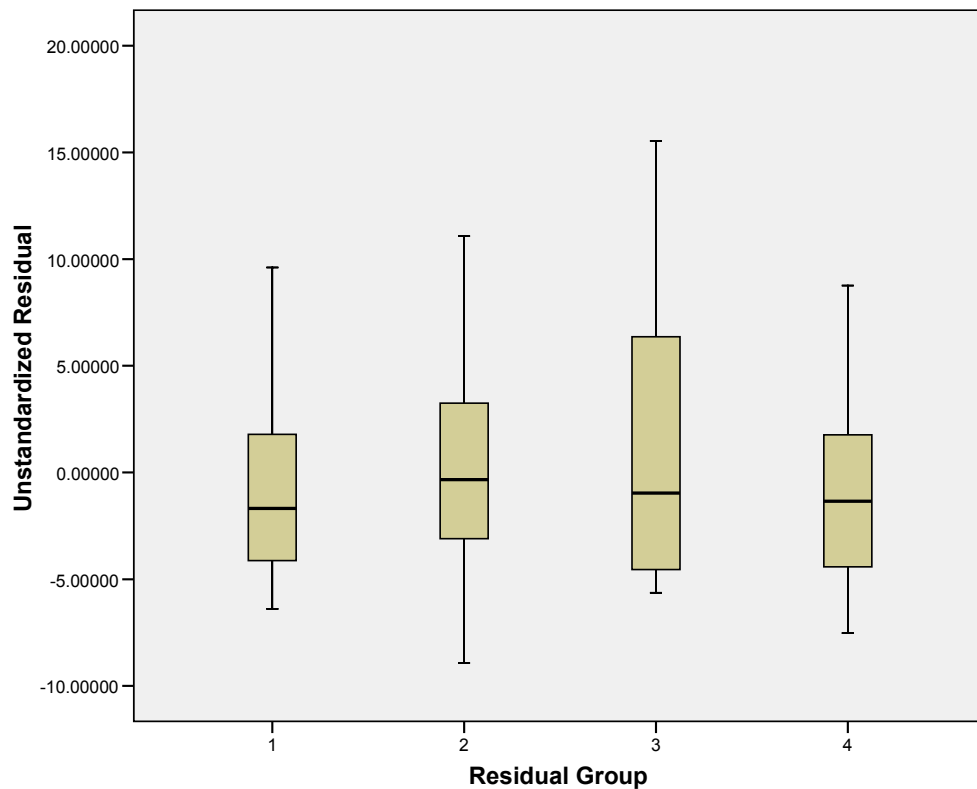
Residual Group	Mean / Std. Error	Variance	Minimum	Maximum	Skewness / Std. Error	Kurtosis / Std. Error
1	-.57 1.53	25.89	-6.39	9.61	.92 .66	.03 1.28
2	.36 1.32	24.32	-8.93	11.07	.29 .60	.83 1.15
3	1.37 2.08	52.02	-5.64	15.54	.98 .64	-.30 1.23
4	-1.08 1.17	19.26	-7.53	8.76	.48 .60	.64 1.15

Upon examination of the residuals by group, the skewness and kurtosis statistics were all within plus or minus two. The box plot of unstandardized residuals in Figure 2 did not show any outliers. These combined results indicated that the assumption of normally distributed residuals should be accepted.

Figure 2

Unstandardized Residuals by Group

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Lastly, residual values were examined across groups by looking at the variances with Levene's test as well as by looking at the  $F$  value for group mean differences. Levene's test of homogeneity of variances was not significant,  $F(3, 47) = 1.57$ ,  $p = .21$ , therefore equal variances between the residual groups should be assumed. The  $F$  value from the one-way ANOVA was not significant,  $F(3, 47) = .50$ ,  $p = .69$ , indicating that the means of the residuals across groups appeared equal. The results from both Levene's test and the one-way ANOVA suggested that the model was appropriate for this data set.

In summary, using Radloff's guideline (1977), over half of participants in this sample (58%) would be considered for depression. It was found with this sample that only 3% of the variation in children's depressive symptomatology could be explained by their involvement in

consumer culture (i.e., materialism). No relationship was found between depressive symptomatology and involvement in consumer culture. Examination of the residuals indicated that the model was appropriate for this data set.

## **CHAPTER V**

### **CONCLUSION**

This study addressed the following research question regarding the relationship between children's depressive symptomatology and their involvement in consumer culture (i.e., materialism): To what extent can variation in children's depressive symptomatology be explained by the child's involvement in consumer culture?

#### *General Implications of Findings*

For this data set of 52 cases, only 3% of the variation in the children's depressive symptomatology was explained by their involvement in consumer culture. Three percent is a very small amount of variation explained, and leaves 97% of variation in children's depressive symptomatology unexplained. No relationship was found between depressive symptomatology and involvement in consumer culture. These findings are inconsistent with the literature. Typically stronger relationships between depression and materialism have been found (Kasser, 2002 & 2005; Schor, 2004). For example, in a sample of 300 children between the ages of 10 and 13 years old, Schor found that children's involvement in consumer culture significantly contributed to the variation in self-reported depression ( $r^2 = .178$ ,  $p < .05$ ). In a sample of over 200 children ages 10 to 18 Kasser found that materialism was related to lower happiness.

The researcher hypothesized that higher levels of consumer involvement would correspond with higher levels of depressive symptomatology. The correlation found between the two variables was non-significant, and thus the hypothesis was incorrect. These findings

fail to provide support for the idea that higher involvement in consumer culture is related to higher levels of depressive symptomatology. It is possible that a relationship does not exist between depressive symptomatology and children's involvement with materialism.

Considering other findings about consumer culture in the literature that show a relationship with depression, it is worth exploring the differences between this study and other studies that have found a relationship between the variables.

### *General Limitations of this Study*

Differences between this study and other studies could explain why a relationship between consumer involvement and depressive symptomatology was not found in this study but has been found in other studies. This study used well-validated measures (*CES-D* and *YMS*), whereas Schor's study used a new measure that was developed by Schor (*Survey on Children, Media, and Consumer Culture*). In addition to creating her own items, Schor used four items from the *Authoritative Parenting Scale*, the entire 36-item *DuBois Self-Esteem Scale*, 17 items from the *Children's Depression Inventory*, and 16 items from the *Revised Children's Manifest Anxiety Scale* (DuBois, Felner, Brand, Phillips, & Lease, 1996; Jackson, Henriksen, & Foshee, 1998; Reynolds & Richmond, 1979; Saylor et al., 1984a; Saylor, Finch, Spirito, & Bennett, 1984b). Almost half of her survey items were from existing scales.

Other researchers sought to establish the validity of the consumer involvement portion of the *Survey on Children, Media, and Consumer Culture* – that is, the 18-item portion of the survey that asks children about their consumer involvement). Bottomley, Nairn, Kasser, and Engle (2007) found that, as Schor (2004) suggested, the consumer involvement factor could be divided into three subfactors: dissatisfaction, consumer orientation, and brand awareness. Bottomley et al. (2007) also found that the convergent validity of items within each subfactor was satisfactory but could benefit from further

refinement. A study using the 18-item consumer involvement portion of the *Survey on Children, Media, and Consumer Culture* explored whether experience in romantic relationships, attachment style, materialism, self-esteem, and choice of leisure activities related to how much a girl idolizes a male celebrity (Engle & Kasser, 2005). Researchers found that girls who strongly idolized a male celebrity also scored higher in materialism (Engle & Kasser, 2005). Cronbach's alpha was only .60 in that sample (Engle & Kasser, 2005). Studies using the full *Survey on Children, Media, and Consumer Culture* were not found. Overall, the *CES-D* and *YMS* are well-validated measures and better measures than Schor's *Survey on Children, Media, and Consumer Culture*.

The reliability of the scales is a possible difference. The reliability of the *CES-D* used in this study was in a questionable range. The researcher encountered some questions from participants regarding the meaning of some of the words and phrases used in the survey, all of which were part of the *CES-D* scale. Specific items that participants had questions about were: "I felt that I could not shake off the blues even with help from my family or friends", "I felt that everything I did was an effort", "I had crying spells", and "I could not get 'going'". One known factor affecting reliability is the readability of the question(s) themselves (Kubiszyn & Borich, 2003). The better the questions are written and formatted, the higher the reliability will be. It is possible that some participants misunderstood some of the questions, thereby affecting their response to those items. Schor's reliability coefficient for the *Survey on Children, Media, and Consumer Culture* was not known.

Other differences between this study and Schor's were that Schor looked at more factors. This study considered one dependent variable, depressive symptomatology, whereas Schor (in addition to depression) considered the child's relationship and attitudes towards their primary parent, psychosomatic complaints, self-esteem, anxiety, and television/media use. Originally, this study was designed to collect information on a parent-child relationship construct; however, the construct was eliminated from the study at the

request of the participating school district. The goal in originally including the construct was to assess the relationship between children's involvement in consumer culture and their perception of their relationship with their parent. Messages that inundate children are often more influential than parents' opinions. Those messages can force stress on the parent-child relationship and ultimately undermine the parental control and authority. Roberts, Tanner, and Manolis (2005) found that children in grades 7 through 12 who associated happiness with material possessions reported higher levels of family stress due to a family disruption (such as their parents' divorce) compared to children who are less likely to associate happiness with material items. A study of over 2,000 secondary school age children found that although father involvement was unrelated to materialism, mother's involvement was negatively and inter-parental conflict was positively related to child's materialism (Flouri, 2004). Additionally, Flouri found that materialistic children exhibited emotional and behavioral problems. Goldberg et al. (2003) found that highly materialistic parents have more materialistic children. Bottomley et al. (2007) speculated that because mothers are the primary care givers and typically spend more time with children than fathers, that mothers are then viewed by children to be the barrier to getting what they want. The researchers further speculated that perhaps fathers are presented with fewer demands from children or perhaps they give in to their children's demands more easily. One issue is certain, however – that children are happier with a family consumption decision when they have more influence over the decision (Bao et al., 2007). Parenting practices and the interactions between parents and their child play a role in the child's socialization development. By removing the parent-child relationship construct, this study was somewhat diminished in capacity.

The number and type of participants enrolled in this study compared to previous studies that found a relationship between materialism and depression is another difference. Other studies answering similar questions (Kasser, 2005; Schor, 2004) have enrolled more

participants. Schor's study enrolled 300 participants, two-thirds from a suburban town and one-third from an urban city. Schor's suburban sample included mostly children from public schools, and the urban sample was comprised of students from either a charter school or a pilot school whose focus was science and math. This study enrolled almost 60 participants, all from a suburban area, and all were enrolled in after-school programs. The Little et al. (2008, February) summary explained that participation in after-school programs could improve social and developmental outcomes for children, including lower levels of depression and anxiety and better attitudes towards and performance in school. The samples for this study and Schor's study were dissimilar and could account for the differing results found by each study.

Possibly the time period over which data was collected could account for the difference in results from this study compared to Schor's study. Data was collected for this study over a period of three weeks. Schor administered her survey in two phases – during the fall and winter months of 2001-2002 with the suburban sample, and then a year later with the urban sample.

The differences between this study, which did not find a significant relationship between children's consumer culture involvement and depressive symptomatology, and Schor's study which found high consumer involvement is a significant cause of depression, explain why different results were found by each. It is possible that a relationship does not exist between depressive symptomatology and children's involvement with materialism. Perhaps other studies, such as Schor's, have overestimated the relationship between consumer culture and depressive symptomatology. Clearly, more exploration and research on this topic is needed.



### *Future Directions*

In the future, because the *CES-D* was normed on adult populations and is appropriate to use with adolescent and adult populations, the researcher would use another measure to capture child depression – perhaps the *Children's Depression Inventory* (CDI). The *CDI* is one of the most widely used measures of depression in children and adolescents 6 to 17 years old (Finch, Saylor, Edwards, & McIntosh, 1987; Pearson Education, Inc., 2008, October). It consists of 27 items, each of which includes three statements. Each item is designed to assess a specific symptom of depression, such as crying or the ability to concentrate on schoolwork. For each item, the child would be asked to select the statement that best describes how he or she has felt for the past two weeks. The survey is brief and can be administered individually or to groups. A shorter form of 10 items is also available. The shorter form might be more appropriate to use if additional scale items were collected at the same time. The researcher would not only collect self-report data from children, but would also attempt to collect teacher and parent data on symptoms of depression exhibited by the child – possibly through individual interviews with teachers and parents.

Future research would incorporate the parent-child relationship construct. The researcher would find another measure or scale that is viewed as less risky for children and include it in future research. Additionally, at least one academic measure (e.g., grades, grade point averages) would be added to a future study, with the intention of making the study stronger by having another variable to correlate with consumer involvement and depression. Adding an academic measure also enables potential participating school districts to see more easily how the study might benefit their schools and students. If the potential benefit to schools and students were evident to districts, they might be more willing to sacrifice a small amount of instructional time for the researcher to collect data. Districts are extremely protective of instructional time, thus the need to collect data in after-school programs for the present study.

Ultimately, the ideal study would be a longitudinal study following children and/or adolescents into and beyond their college years. A longitudinal study could determine what, if any, changes occur among an individual's level of consumer culture involvement as they enter adulthood and the workforce, as well as to assess what types of long-term outcomes materialistic children experience (e.g., well-being/happiness, educational outcomes, career success).

## **APPENDIX A**

### **Children and Consumer Culture Survey**

#### **DIRECTIONS**

Please read the directions below before beginning the survey.

1. THIS IS NOT A TEST. There are no right or wrong answers. What is important is that you give honest answers to the questions. The purpose of the survey is to learn more about kids.
2. Your answers are completely anonymous and confidential. Your name will not be on the survey. No one at school or in your family will ever see your answers.
3. If a question bothers you and you would prefer not to answer it, you may SKIP THAT QUESTION. Just move on to the next question that you feel you would like to answer.
4. Give only one answer to each question.
5. While you are taking the survey, please do not talk to any of your classmates.
6. Thank you very much for participating!

**Continue to next page →**

### **Children and Consumer Culture Survey**

Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the **past week**. Mark one answer per line.

<b>During the Past Week....</b>	<b>Rarely or none of the time (less than 1 day)</b>	<b>Some or a little of the time (1-2 days)</b>	<b>Occasionally or a moderate amount of time (3-4 days)</b>	<b>Most or all of the time (5-7 days)</b>
1. I was bothered by things that usually don't bother me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I did not feel like eating; my appetite was poor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I felt that I could not shake off the blues even with help from my family or friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I felt I was just as good as other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I had trouble keeping my mind on what I was doing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I felt depressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I felt that everything I did was an effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I felt hopeful about the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I thought my life had been a failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I felt fearful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. My sleep was restless.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I was happy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I talked less than usual.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I felt lonely.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. People were unfriendly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Continue to next page →**

<b>During the Past Week....</b>	<b>Rarely or none of the time (less than 1 day)</b>	<b>Some or a little of the time (1-2 days)</b>	<b>Occasionally or a moderate amount of time (3-4 days)</b>	<b>Most or all of the time (5-7 days)</b>
16. I enjoyed life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I had crying spells.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I felt sad.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I felt that people dislike me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I could not get "going."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Below is a list of some of the ways you may have felt. Choose the *one* answer that best describes how you feel. Mark one answer per line.

	<b>Disagree a lot</b>	<b>Disagree a little</b>	<b>Agree a little</b>	<b>Agree a lot</b>
21. I'd rather spend time buying things, than doing almost anything else.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I would be happier if I had more money to buy more things for myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I have fun just thinking of all the things I own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I really enjoy going shopping.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I like to buy things my friends have.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. When you grow up, the more money you have, the happier you are.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I'd rather not share my snacks with others if it means I'll have less for myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. I would love to be able to buy things that cost lots of money.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I really like the kids that have very special games or clothes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. The only kind of job I want when I grow up is one that gets me a lot of money.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Continue to next page →**

31. How old are you? 9 [ ] 10 [ ] 11 [ ] 12 [ ] 13 [ ] other [ ]

32. In what grade are you enrolled? 5<sup>th</sup> [ ] 6<sup>th</sup> [ ] 7<sup>th</sup> [ ]

33. What is your race or ethnicity?

White [ ] African-American [ ] Latino/a [ ] Asian-American [ ] Multiracial [ ] Other [ ]

34. Are you a... boy [ ] girl [ ]

**Thank you very much for participating in this survey!**

## APPENDIX B

### Letter Sent Home

[insert date]

***Dear Parent and Student,***

I am a graduate student at the University of North Carolina at Chapel Hill and as part of my master's thesis I am studying children's interactions with consumer culture (i.e., materialism) to help grow an area of research dedicated to better understanding children's involvement with consumer culture. Under the direction of my faculty advisor, Dr. William B. Ware, I will survey approximately 150 children in grades 5, 6, and 7 who are enrolled in the after-school program within the school district. I will be surveying 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade students at your school the week of [insert September/October + date], 2008. I write to ask parents to agree to their child's participation in this study and to ask children if they want to participate in the study.

For the study, children will complete a 34-question written survey in English that will take approximately 20-30 minutes. Survey responses will be *anonymous* – students will not put their names on the survey. The individual surveys will be kept *confidential*, and will only be seen by me, the researcher on the project. Only the overall results of the survey will be made public. Results from the survey will be described in my master's thesis paper and will grow a body of research dedicated to better understanding children's involvement with materialism. I will work with after-school directors to conduct the survey in a way that minimizes the impact on homework time.

If your child wishes to participate in the research study and you wish to grant permission for your child to participate in this research study, please sign the Parent Consent Form, have your child sign the Child Assent Form and **return the consent and assent forms to his/her after-school director by [insert September/October + date], 2008**. There are no costs for being in the study, other than your child's time to complete a survey. Your child will not receive anything for taking part in this study and may not benefit personally from being in this research study. Refusal to participate or withdrawal from the study at any time will involve no negative consequences and will not affect you or your child's relationship with his/her school.

If you have any questions about this study or would like a copy of the survey questionnaire that will be used, please contact me.

Thank you!

*Leigh Poole*  
Master's Degree Candidate  
Educational Psychology, Measurement &  
Evaluation  
UNC-Chapel Hill School of Education  
lpoole@allkindsofminds.org  
919-933-8082, ext. 2290

Faculty Advisor:  
William B. Ware, Ph.D.  
Professor of Educational Psychology and  
Professor of Social Work  
UNC-Chapel Hill School of Education  
wbware@unc.edu  
919-962-7848

## APPENDIX C

### Parent Consent Form

**University of North Carolina-Chapel Hill**  
**Parental Permission for a Minor Child to Participate in a Research Study**  
**Social Behavioral Form**

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**IRB Study #:** 08-1388

**Consent Form Version Date:** 9/14/08

**Title of Study:** Children and Consumer Culture

**Principal Investigator:** Leigh Poole

**UNC-Chapel Hill Department:** Education

**Email Address:** lpoole@allkindsofminds.org

**Faculty Advisor:** William B. Ware, Ph.D.

**Faculty Advisor email address:** wbware@unc.edu

**Faculty Advisor telephone number:** 919-962-7848

**Study Contact telephone number:** 919-933-8082 ext. 2290

**Study Contact email address:** lpoole@allkindsofminds.org

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#### **What are some general things you should know about research studies?**

You are being asked to allow your child to take part in a research study. To join the study is voluntary. You may refuse to give permission, or you may withdraw your permission for your child to be in the study, for any reason. Even if you give your permission, your child can decide not to be in the study or to leave the study early.

Research studies are designed to obtain new knowledge. This new information may help people in the future. Your child may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you and your child can make an informed choice about being in this research study.

You will be given a copy of this permission form. You and your child should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

#### **What is the purpose of this study?**

The purpose of this research study is to learn about children's interactions with consumer culture (i.e., materialism) to help grow an area of research dedicated to better understanding children's involvement with materialism. This study will examine children's involvement in materialism to determine if there is a relationship between children's involvement in consumer culture and their well-being. The reason for doing this research is to better understand children who are of a similar age as your child.

Your child is being asked to be in the study because he/she is between the ages of 9-13, healthy, and able to complete a written survey in English. All 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade students who are enrolled in the after-school program at your child's school are being asked to participate in this study.



**Are there any reasons your child should not be in this study?**

Your child should not be in this study if he/she is not between the ages of 9-13 and able to complete a written survey in English.

**How many people will take part in this study?**

Approximately 150 children will take part in this research study.

**How long will your child's part in this study last?**

Your child's participation in the research study will span approximately 45 minutes – approximately 15 minutes to read and sign the Child Assent Form, and 20-30 minutes to complete the written survey. Follow-up procedures will not be conducted.

**What will happen if your child takes part in the study?**

1. Consent

Your child will be asked to take some forms home and share them with you. You will need to grant permission in order for your child to participate in this study. If you grant permission and your child would like to participate, please read and sign this form (**Parent Consent Form**). Your child will need to read and sign the **Child Assent Form**.

2. Survey Administration

After a few days, the principal investigator will return to your child's after-school program and administer a 34-item written survey to children who wish *and* have permission to participate in the study. Your child may choose not to answer a question for any reason.

3. Follow-up

The surveys will be anonymous – your child will not be asked to put his/her name on the survey. Therefore, follow-up procedures will not be conducted.

4. Results

Results from the study will be reported in aggregate form only and will be described in the principal investigators master's thesis paper.

**What are the possible benefits from being in this study?**

Research is designed to benefit society by gaining new knowledge. There is no known benefit for individual participants, and therefore your child may not benefit personally from being in this research study.

**What are the possible risks or discomforts involved from being in this study?**

Your child could feel anxious during participation in the study, through answering questions about his/her feelings. Remember that your child's participation is voluntary, and he/she may decline participation or choose not to answer any question that makes him/her feel uncomfortable, or leave the study at any time, without penalty. Your child will be instructed that his/her participation is voluntary, that he/she may decline participation or choose not to answer any question that makes him/her uncomfortable, or leave the study at any time, without penalty.

Your child may not feel anxious during participation in the study. There may be uncommon or previously unknown risks. You should report any problems to the researcher.

**How will your child's privacy be protected?**

The principal investigator will protect your child's privacy and minimize the risk of breach of confidentiality in several ways.

1. Surveys will be anonymous and kept confidential (children will not be asked to put their name on the survey);
2. Instead, surveys will be coded by number after they are collected – the number will not be tied to the child's name;
3. Only the principal investigator will have access to the data collected;
4. Demographic variables (e.g., age, race, gender) will be collected, however results will be reported in aggregate form only;

5. There will not be any follow-up procedures conducted with participants.

Participants *will not* be identified in any report or publication about this study. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies for purposes such as quality control or safety.

**Will your child receive anything for being in this study?**

Your child will not receive anything for taking part in this study.

**Will it cost you anything for your child to be in this study?**

There will be no costs for being in the study, other than your child's time to participate.

**What if you are a UNC student?**

You may choose not to give permission for your child to be in the study or to stop being in the study before it is over at any time. This will not affect your class standing or grades at UNC-Chapel Hill. You will not be offered or receive any special consideration if your child takes part in this research.

**What if you are a UNC employee?**

Your child's taking part in this research is not a part of your University duties, and refusing to give permission will not affect your job. You will not be offered or receive any special job-related consideration if your child takes part in this research.

**What if you or your child has questions about this study?**

You and your child have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researchers listed on the first page of this form.

**What if you or your child has questions about your child's rights as a research participant?**

*All research on human volunteers is reviewed by a committee that works to protect your child's rights and welfare. If you or your child has questions or concerns about your child's rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB\_subjects@unc.edu.*

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**Title of Study: Children and Consumer Culture**

**Principal Investigator:** Leigh Poole

**Parent's Agreement:**

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily give permission to allow my child to participate in this research study.

\_\_\_\_\_  
Printed Name of Research Participant (Child)

\_\_\_\_\_  
Signature of Parent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Parent

## APPENDIX D

### Child Assent Form

University of North Carolina-Chapel Hill  
Assent to Participate in a Research Study  
Minor Subjects (7-14 yrs)

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IRB Study #: 08-1388

Consent Form Version Date: 9/14/08

Title of Study: Children and Consumer Culture

Person in charge of study: Leigh Poole

Where they work at UNC-Chapel Hill: School of Education graduate student

Other people who work on the study: Faculty Advisor: William B. Ware, Ph.D.

Faculty Advisor email address: wbware@unc.edu

Faculty Advisor telephone number: 919-962-7848

Study contact phone number: 919-933-8082 ext. 2290

Study contact email address: lpolee@allkindsofminds.org

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The people named above are doing a research study.

**These are some things we want you to know about research studies:**

Your parent needs to give permission for you to be in this study. You do not have to be in this study if you don't want to, even if your parent has already given permission.

You may stop being in the study at any time. If you decide to stop, no one will be angry or upset with you.

Sometimes good things happen to people who take part in studies, and sometimes things we may not like happen. We will tell you more about these things below.

**Why are they doing this research study?**

The researcher is studying children's interactions with materialism to better understand children's feelings towards shopping, having a lot of things, and money. This study will look at children's feelings towards shopping, having a lot of things, and money to determine if there is a relationship between children's feelings about these things and their well-being.

The reason for doing this research is to better understand children who are of a similar age as you.

**Why are you being asked to be in this research study?**

You are being asked to participate in this research study because you are between the ages of 9-13, healthy, and able to complete a written survey in English. All 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade students at your school who are enrolled in the after-school program are being asked to participate in this study.

**How many people will take part in this study?**

About 150 children will take part in this research study.

### **What will happen during this study?**

1. **Consent**  
You will be asked to take some forms home and share them with your mother or father. Your mother or father will need to grant permission for you to participate in this study. If your mother or father grants permission and you would like to participate, please have your mother or father read and sign the **Parent Consent Form**. You will need to read and sign this form (**Child Assent Form**). Then, return both forms to your after-school director.
2. **Survey Administration**  
After a few days, I will return to your after-school program and hand out a 34-item written survey to children who wish and have permission to participate in the study. Those children will then complete the written survey.
3. **Time to Participate**  
Your participation in the research study will span approximately 45 minutes – approximately 15 minutes to read and sign the Child Assent Form, and 20-30 minutes to complete the written survey.
4. **Follow-up**  
The surveys will be anonymous – you will not be asked to put your name on the survey. Follow-up procedures will not be conducted.
5. **Results**  
Results from the study will be described in my master's thesis paper.

### **Who will be told the things we learn about you in this study?**

I will collect all completed surveys and store the hardcopy surveys in a secure location at my home (in a locked cabinet). I will be the only one who will have access to the survey data collected, and electronic data will be stored on a password protected laptop. Only the overall results of the survey will be made public. The overall results will be described in my master's thesis paper.

### **What are the good things that might happen?**

People may have good things happen to them because they are in research studies. These are called “benefits.” There is no known benefit for individual study participants, and therefore there is little chance you will benefit from being in this research study.

### **What are the bad things that might happen?**

Sometimes things happen to people in research studies that may make them feel bad. These are called “risks.” These are the risks of this study:

1. You could feel anxious during participation in this study. You could feel anxious answering questions about your feelings. Remember that your participation is voluntary, and you may decline participation or choose not to answer any question that makes you feel uncomfortable, or leave the study at any time, without penalty.  
  
You may not feel anxious. It may not happen or things may happen that the researchers don't know about. You should report any problems to the researcher.
2. Your participation in this study and your answers to the survey questions are to be kept private. That privacy could be breached if someone other than me (the principal investigator) has access to the data (for example, your teacher, parent, or classmates). In order to minimize the risk that your privacy will be breached, I will take the following steps:
  - > You will not be asked to put your name on the survey;
  - > I will keep your responses private;
  - > I will be the only one who has access to the data collected;
  - > I will collect your age, race, grade level, and gender, however, I will not report individual participant results – I will only report results for the whole group of 150 participants;
  - > There will not be any follow-up procedures conducted with you;
  - > When space allows, there will be an empty seat between you and another participant.

**Will you get any money or gifts for being in this research study?**

You will not receive any money or gifts for being in this research study.

**Who should you ask if you have any questions?**

If you have questions you should ask the people listed on the first page of this form. If you have other questions about your rights while you are in this research study you may contact the Institutional Review Board at 919-966-3113 or by email to [IRB\\_subjects@unc.edu](mailto:IRB_subjects@unc.edu).

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**Title of Study:** Children and Consumer Culture

**Principal Investigator:** Leigh Poole

If you sign your name below, it means that you agree to take part in this research study.

\_\_\_\_\_  
Sign your name here if you want to be in the study

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print your name here if you want to be in the study

\_\_\_\_\_  
Signature of Person Obtaining Assent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Assent

## APPENDIX E

### Letter to School District

[insert date]

Leigh Poole  
526 Auburn Square Drive  
Durham, NC 27713

[insert school district contact information – name, title, mailing address]

Dear [insert school district contact name],

I am a graduate student at the University of North Carolina at Chapel Hill and as part of my master's thesis I am studying children's interactions with consumer culture (i.e., materialism) to help grow an area of research dedicated to better understanding children's involvement with consumer culture. I write in hopes of working with [insert school district name] for my thesis project.

Under the direction of my faculty advisor, Dr. William B. Ware, I will survey approximately 150 children in grades 5, 6, and 7. I write to ask for your permission to survey students in your school district. I will work with school principals, classroom teachers, and/or after-school directors to identify times for recruitment and survey data collection that suit their schedules and minimize the impact on instructional/homework time. Classroom teachers or after-school directors will be instructed that participation is entirely voluntary and that they may decline to participate without consequence to their employment.

For the study, children will complete a 3-page, 34-question written survey in English that asks children how they feel about shopping and having a lot of things and about their overall well-being. The survey will take approximately 20-30 minutes to complete. Survey responses will be anonymous – students will not put their names on the survey. The individual surveys will be kept confidential, and will only be seen by me, the researcher on the project. Only the overall results of the survey will be made public and will be described in my master's thesis paper. There will be no costs to you, school principals, classroom teachers, after-school directors, or the children for being in the study, other than the time to complete the survey.

I would like to survey students during September 2008. This project would involve me coming to classrooms or after-school programs two times – the first time to introduce the project and let children know that their parents must grant them permission to participate in the study (*this recruitment visit would last approximately 10 minutes*). At that time I would distribute invitation letters, parent consent forms, and child assent forms to students and for the after-school programs, stay to meet parents and answer any questions they have about the study. The second time I would come to classrooms to collect the parent consent and child assent forms and administer the survey (*this data collection visit would last approximately 35 minutes*). The total amount of time I would spend in classrooms for both visits would be approximately 45 minutes.

I am happy to discuss further details of my study with you, share a copy of the survey, and respond to any questions or concerns you may have. My contact information is listed below.

I appreciate your time and consideration in allowing me to survey students in your school district. I look forward to hearing from you.

Warm regards,  
Leigh Poole  
Master's Degree Candidate  
Educational Psychology, Measurement & Evaluation  
UNC-Chapel Hill School of Education  
lpoole@allkindsofminds.org  
919-933-8082, ext. 2290

Faculty Advisor:  
William B. Ware, Ph.D.  
Professor of Educational Psychology and  
Professor of Social Work  
UNC-Chapel Hill School of Education  
wbware@unc.edu  
919-962-7848

## APPENDIX F

### Email to School District

Dear [insert school district contact name],

I am a graduate student at the University of North Carolina at Chapel Hill and as part of my master's thesis I am studying children's interactions with consumer culture (i.e., materialism) to help grow an area of research dedicated to better understanding children's involvement with consumer culture. I write in hopes of working with [insert school district name] for my thesis project.

Under the direction of my faculty advisor, Dr. William B. Ware, I will survey approximately 150 children in grades 5, 6, and 7. I write to ask for your permission to survey students in your school district. I will work with school principals, classroom teachers, and/or after-school directors to identify times for recruitment and survey data collection that suit their schedules and minimize the impact on instructional/homework time. Classroom teachers or after-school directors will be instructed that participation is entirely voluntary and that they may decline to participate without consequence to their employment.

For the study, children will complete a 3-page, 34-question written survey in English that asks children how they feel about shopping and having a lot of things and about their overall well-being. The survey will take approximately 20-30 minutes to complete. Survey responses will be anonymous – students will not put their names on the survey. The individual surveys will be kept confidential, and will only be seen by me, the researcher on the project. Only the overall results of the survey will be made public and will be described in my master's thesis paper. There will be no costs to you, school principals, classroom teachers, after-school directors, or the children for being in the study, other than the time to complete the survey.

I would like to survey students during September 2008. This project would involve me coming to classrooms or after-school programs two times – the first time to introduce the project and let children know that their parents must grant them permission to participate in the study (*this recruitment visit would last approximately 10 minutes*). At that time I would distribute invitation letters, parent consent forms, and child assent forms to students and for the after-school programs, stay to meet parents and answer any questions they have about the study. The second time I would come to classrooms to collect the parent consent and child assent forms and administer the survey (*this data collection visit would last approximately 35 minutes*). The total amount of time I would spend in classrooms for both visits would be approximately 45 minutes.

I am happy to discuss further details of my study with you, share a copy of the survey, and respond to any questions or concerns you may have. My contact information is listed below.

I appreciate your time and consideration in allowing me to survey students in your school district. I look forward to hearing from you.

Warm regards,  
Leigh

Leigh Poole  
Master's Degree Candidate  
Educational Psychology, Measurement & Evaluation  
UNC-Chapel Hill School of Education  
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## APPENDIX G

### After-School Director Recruitment Email

Hello [insert after-school director name],

I am a graduate student at the University of North Carolina at Chapel Hill and as part of my master's thesis, I am studying children's interactions with consumer culture (i.e., materialism) to help grow an area of research dedicated to better understanding children's involvement with consumer culture. Under the direction of my faculty advisor, Dr. William B. Ware, I will survey approximately 150 children in grades 5, 6, and 7 who are enrolled in the after-school program within the school district. I write to ask for your permission to recruit students from your program for my study. I will work with you to identify times for recruitment and survey data collection that suit your schedule and will minimize the impact on homework time. Participation is entirely voluntary. You may decline to participate without consequence to your employment.

For the study, children will complete a 34-question written survey in English that will take approximately 20-30 minutes. Survey responses will be anonymous – students will not put their names on the survey. The individual surveys will be kept confidential, and will only be seen by me, the researcher on the project. Only the overall results of the survey will be made public. There will be no costs to you or the children for being in the study, other than the time to complete a survey. Results from the survey will be described in my master's thesis paper.

I would like to survey students during September, 2008. This project would involve me coming to the after-school program two times – the first time to introduce the project and let children know that their parents must grant them permission to participate in the study (*this recruitment visit would last approximately 10 minutes*). At that time I would distribute invitation letters and parent consent forms to students and stay to meet parents and answer any questions they have about the study. The second time I would come to the after-school program to collect the parent consent and child assent forms and conduct the survey (*this data collection visit would last approximately 35 minutes*). The total amount of time I would spend for both visits with you and your students would be approximately 45 minutes.

If you are willing to have me recruit children from your program, please reply to me: [lpoole@allkindsofminds.org](mailto:lpoole@allkindsofminds.org) or 919-933-8082, ext. 2290 and I will respond to any questions or concerns you may have and arrange times to visit your after-school program for recruitment and data collection.

Thank you very much for your time and I look forward to hearing from you.  
Warm regards,

*Leigh*

*Leigh Poole*

Master's Degree Candidate  
Educational Psychology, Measurement &  
Evaluation  
UNC-Chapel Hill School of Education  
[lpoole@allkindsofminds.org](mailto:lpoole@allkindsofminds.org)  
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## REFERENCES

- Achenreiner, G. (1997). Materialistic values and susceptibility to influence in children. *Advances in Consumer Research*, 24, 82-88.
- Adler, A. (1928). The cause and prevention of neuroses. *Journal of Abnormal and Social Psychology*, 23(1), 4-11.
- Aluja, A., & Blanch, A. (2004). Depressive mood and social maladjustment: Differential effects on academic achievement. *European Journal of Psychology of Education*, 19(2), 121-131.
- Bao, Y., Fern, E. F., & Sheng, S. (2007). Parental style and adolescent influence in family consumption decisions: An integrative approach. *Journal of Business Research*, 60, 672-680.
- Belk, R. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 12, 265-280.
- Benassi, V. A., Sweeney, P. D., & Dufour, C. L. (1988). Is there a relation between locus of control orientation and depression? *Journal of Abnormal Psychology*, 97(3), 357-367.
- Bottomley, P. A., Nairn, A., Kasser, T., & Engle, Y. (2007). *Measuring Childhood Materialism: Validating and Refining Schor's (2004) Consumer Involvement Scale*. Manuscript submitted for publication.
- Bredehoft, D. J., Mennicke, S. A., Potter, A. M., & Clarke, J. I. (1988). Perceptions attributed by adults to parental overindulgence during childhood. *Journal of Family and Consumer Sciences Education*, 16(2), 1-15.
- Browne, M. W., & Arminger, G. (1995). Specification and estimation of mean- and covariance-structure models. In G. Arminger, C. C. Clogg, & M. E. Sobel (Eds.), *Handbook of statistical modeling for the social and behavioral sciences*, (pp. 185-249). New York: Plenum Press.
- Buijzen, M., & Valkenburg, P. M. (2003). The unintended effects of television advertising a parent-child survey. *Communication Research*, 30(5), 483-503.
- Cecchini, T. B. (1998). An interpersonal and cognitive-behavioral approach to childhood depression: A school-based primary prevention study (Doctoral dissertation, Utah State University, 1998). *Dissertation Abstracts International*, 58(12B), 6803.
- Chaplin, L. N., & John, D. R. (2005). The development of self-brand connections in children and adolescents. *Journal of Consumer Research*, 32, 119-129.
- Cohen, P., & Cohen, J. (1996). *Life values and adolescent mental health*. Mahwah, NJ: Erlbaum.

- Doerfler, L. A., Felder, R. D., Rowlinson, R. T., Raley, P. A., & Evans, E. (1988). Depression in children and adolescents: A comparative analysis of the utility and construct validity of two assessment measures. *Journal of Consulting and Clinical Psychology*, 56(5), 769-772.
- DuBois, D. L., Felner, R. D., Brand, S., Phillips, R. S. C., & Lease, M. A. (1996). Early adolescent self-esteem: A developmental-ecological framework and assessment strategy. *Journal of Research on Adolescence*, 6(4), 543-579.
- Engle, Y., & Kasser, T. (2005). Why do adolescent girls idolize male celebrities? *Journal of Adolescent Research*, 20(2), 263-283.
- Faulstich, M.E. (1986). Assessment of depression in childhood and adolescence: An evaluation of the center for epidemiological studies depression scale for children [Abstract]. *American Journal of Psychiatry*, 143(8), 1024-1027.
- Fergusson, D. M., & Woodward, L. J. (2000). Educational, Psychosocial, and Sexual Outcomes of Girls with Conduct Problems in Early Adolescence. *Journal of Child Psychology and Psychiatry*, 41(6), 779-792.
- Finch, A. J., Jr., Saylor, C. F., Edwards, G. L., & McIntosh, J. A. (1987). Children's depression inventory: Reliability over repeated administrations. *Journal of Clinical Child Psychology*, 16(4), 339-341.
- 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.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). Educational research: An introduction (7th ed.). Boston: Allyn and Bacon.
- Gliem, J. A., & Gliem, R. R. (2003, October). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Paper presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH.
- Goldberg, M. E., Gorn, G. J., Peracchio, L. A., & Bamossy, G. (2003). Understanding materialism among youth. *Journal of Consumer Psychology*, 13(3), 278-288.
- Gupta, R., & Yick, A. (in press). Validation of the CES-D Scale for older Chinese immigrants. *Journal of Mental Health and Aging*, 7(2).
- Jackson C., Henriksen L., & Foshee, V. A. (1998). The authoritative parenting index: Predicting health risk behaviors among children and adolescents. *Health Education and Behavior*, 25(3), 319-337.
- Karakostas, K. X. (2004). Interpreting regression diagnostics. *Journal of Educational and Behavioral Statistics*, 29(3), 369-373.
- Kasser, T. (2002). *The high price of materialism*. Cambridge, MA: The MIT Press.

- Kasser, T. (2005). Frugality, generosity, and materialism in children and adolescents. In K. A. Moore & L. H. Lippman (Eds.), *What do children need to flourish? Conceptualizing and measuring indicators of positive development*, Vol. 3 (pp. 357-373). New York: Springer.
- Kasser, T., & Kanner, A. D. (Eds.). (2004). *Psychology and Consumer Culture: The Struggle for a Good Life in a Materialistic World*. Washington, DC: American Psychological Association.
- 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, 410-422.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates to intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280-287.
- Kasser, T., & Ryan, R. M. (2001). Be careful what you wish for: Optimal functioning and the relative attainment of intrinsic and extrinsic goals. In P. Schmuck & K.M. Sheldon (Eds.), *Life goals and well-being: Towards a positive psychology of human striving* (pp. 116-131). Goettingen, Germany: Hogrefe & Huber.
- Kindlon, D. (2001). *Too much of a good thing: Raising children in an indulgent age*. New York: Miramax Books.
- Kubiszyn, T. & Borich, G. (2003). Educational testing and measurement: Classroom application and practice (7th ed.) New York: John Wiley & Sons, Inc.
- Levin, D. E., & Linn, S. (2004). The commercialization of childhood: Understanding the problem and finding solutions. In T. Kasser & A. D. Kanner (Eds.), *Psychology and Consumer Culture: The Struggle for the Good Life in a Materialistic World* (pp. 213-232). Washington, DC: American Psychological Association.
- Levine, M. (2005). *Ready or not, here life comes*. New York: Simon & Schuster.
- Little, P. M. D., Wimer, C., & Weiss, H. B. (2008, February). After school programs in the 21<sup>st</sup> century: Their potential and what it takes to achieve it. (Issues and Opportunities in Out-of-School Time Evaluation No. 10). Retrieved September 18, 2008, from <http://www.hfrp.org/publications-resources/publications-series/issues-and-opportunities-in-out-of-school-time-evaluation>
- Lundy, S. M. (2007). The relationship between anxious/depressed and withdrawn symptoms of cognitive and academic measures in elementary school children (Doctoral dissertation, University of Arizona, 2007). *Dissertation Abstracts International*, 68(4B), 2658.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396.
- McIntosh, B. (1989). Spoiled child syndrome. *Pediatrics*, 83(1), 108-115.

- Merriam-Webster, Incorporated. Merriam-Webster Online Dictionary. (2005). Retrieved January 5, 2008, from <http://www.m-w.com/dictionary/materialism>
- Miller, P. (2002). *Theories of developmental psychology*. New York: W.H. Freeman & Co. Chapter 3: Social learning theory.
- Moschis, G. P., & Churchill, G. A., Jr. (1978). Consumer socialization: A theoretical and empirical analysis. *Journal of Marketing Research*, 15, 599-609.
- North Carolina Department of Public Instruction. (2008). Grade, race, and sex data. Retrieved July 28, 2008, from Financial and Business Services Division – Data and Reports, Student Accounting section, <http://www.ncpublicschools.org/fbs/accounting/data/>
- Oleson, M. (2004). Exploring the relationship between money attitudes and Maslow's hierarchy of needs. *International Journal of Consumer Studies*, 28(1), 83-92.
- Pearson Education, Inc. (2008). Pearson Assessments for Educational, Clinical and Psychological Use. Retrieved October 28, 2008, from <http://www.pearsonassessments.com/tests/cdi.htm>
- Phillips, G. A., Shadish, W. R., Murray, D. M., Kubik, M., Lytle, L. A., & Birnbaum, A. S. (2006). The center for epidemiologic studies depression scale with a young adolescent population: A confirmatory factor analysis [Abstract]. (ERIC Document Reproduction Service No. EJ739962).
- Pulliam, J. D. (1979, October). Mass media value and the future of education [Abstract]. Paper presented at World Future Society, Minneapolis, MN. (ERIC Document Reproduction Service No. ED180901).
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Radloff, L. S. (1991). The use of the center for epidemiologic studies depression scale in adolescents and young adults. *Journal of Youth and Adolescence*, 20(2), 149-166.
- Reynolds, C. R., & Richmond, B. O. (1979). Factor structure and construct validity of 'what I think and feel': The revised children's manifest anxiety scale. *Journal of Personality Assessment*, 43(3), 281-283.
- Richins, M. L. & Dawson, S. (1992). A consumer values orientation for materials and its measurement: Scale development and validation. *Journal of Consumer Research*, 12, 265-280.
- Roberts, J. A., Tanner, J. F., Jr., & Manolis, C. (2005). Materialism and the family-structure—stress relation. *Journal of Consumer Psychology*, 15(2), 183-190.
- Roberts, R. E., Andrews, J. A., Lewinsohn, P. M., & Hops, H. (1990). Assessment of depression in adolescents using the center for epidemiologic studies depression scale. *Journal of Consulting and Clinical Psychology*, 2(2), 122-128.

- Roeser, R. W., Eccles, J. S., & Strobel, K. P. (1998). Linking the study of schooling and mental health: Selected issues and empirical illustrations at the level of the individual. *Educational Psychologist*, 33(4), 153-176.
- Rotter, J. B. (1975). Some problems and misconceptions related to the construct of internal versus external control of reinforcement. *Journal of Consulting and Clinical Psychology*, 43(1), 56-67.
- Saylor, C. F., Finch, A. J., Jr., Baskin, C. H., Saylor, C. B., Darnell, G., & Furey, W. (1984a). Children's depression inventory: Investigation of procedures and correlates. *Journal of the American Academy of Child Psychiatry*, 23(5), 626-628.
- Saylor, C. F., Finch, A. J., Jr., Spirito, A., & Bennett, B. (1984b). The children's depression inventory: A systematic evaluation of psychometric properties. *Journal of consulting and clinical psychology*, 52(6), 955-967.
- Schor, J. B. (2004). *Born to buy: The commercialized child and the new consumer culture*. New York: Scribner.
- Schor, J. B. (2005). Work, family, and children's consumer culture. In J. Heymann & C. Beem (Eds.), *Unfinished work: building equality and democracy in an era of working families* (pp. 285-305). New York: New Press.
- Sheldon, K. M., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology*, 68, 531-543.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using Multivariate Statistics* Fourth Edition. Needham Heights, MA: Allyn & Bacon.
- Twenge, J. M., Zhang, L., & Im, C. (2004). It's beyond my control: A cross-temporal meta-analysis of increasing external locus of control, 1960-2002. *Personality and Social Psychology Review*, 8(3), 308-319.
- Williams, G. C., Cox, E. M., Hedberg, V. A., & Deci, E. L. (2000). Extrinsic life goals and health risk behaviors in adolescents. *Journal of Applied Social Psychology*, 30, 1756-1771.
- Workman, J. E., & Studak, C. M. (2005). Relationships among fashion consumer groups, locus of control, boredom proneness, boredom coping, and intrinsic enjoyment. *International Journal of Consumer Studies*, 31(1), 66-75.