Socioeconomic Status and Media Exposure as Factors in Empathic Development.

David E. Cox
East Tennessee State University

Follow this and additional works at: https://dc.etsu.edu/etd

Recommended Citation
The current study examined the empathic attainment of young children (mean age 7 years) as a function of the child’s socioeconomic status. Further, the potential intervening variable of violent media representations within product advertisements is assessed within and between the observed socioeconomic status groups. Three critical dimensions of empathy were assessed: cognitive, affective, and behavioral. Participants were 200 volunteers recruited from public and private schools in a small region in southern Appalachia. Respondents were rated on their response to animated video clips depicting an individual in emotional distress. Results suggested that media exposure has significant effect on measures of affective empathy and prosocial behavior with lower scores being obtained by children after viewing an action oriented commercial as opposed to a prosocial commercial message prior to the presentation of the target vignette. The degree to which the media presentation affected empathic responding was found to be associated with participants’ socioeconomic status.
DEDICATION

This manuscript is dedicated to my best friend, wife, and editor, Susan Suchomski-Cox.

Without her dedication support, and input, my education up to and including this thesis would have never occurred. Thank you Susan, I love you.
ACKNOWLEDGEMENTS

I would like to acknowledge all of the individuals that were instrumental in the completion of this project. I would like to thank Jon Ellis, Ph.D. and Ramsey McGowan, Ph.D. for their time and consideration as members of my thesis committee, James Hamilton and Lori Klinger for their instrumental earlier work in this area and moral support, Dr. Sandra Suchomski for serving as a role model of professionalism and excellence. I would especially like to Peggy Cantrell Ph.D. and Kenneth Tarnowski, Ph.D. Peggy Cantrell’s contributions to this project and my educational experience at East Tennessee State University were above and beyond what any student could expect. Without the guidance and support of Kenneth Tarnowski my academic career would have taken a very different and less rewarding course. Finally, I would like to acknowledge the support that my parents, Robert and Norma Cox and my wife’s parents, Larry and JoAnn Suchomski, as this endeavor could not have succeeded without it.
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>2</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>3</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>4</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>7</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>8</td>
</tr>
<tr>
<td>The cost of juvenile violence</td>
<td>8</td>
</tr>
<tr>
<td>Social implications</td>
<td>8</td>
</tr>
<tr>
<td>Economic cost</td>
<td>9</td>
</tr>
<tr>
<td>Research linking empathy and overt behavior</td>
<td>10</td>
</tr>
<tr>
<td>Defining empathy</td>
<td>11</td>
</tr>
<tr>
<td>General definitions</td>
<td>11</td>
</tr>
<tr>
<td>Theoretical bases</td>
<td>11</td>
</tr>
<tr>
<td>Jean Piaget</td>
<td>11</td>
</tr>
<tr>
<td>Lawrence Kohlberg</td>
<td>12</td>
</tr>
<tr>
<td>Current theoretical orientations</td>
<td>14</td>
</tr>
<tr>
<td>Levels of empathic development</td>
<td>15</td>
</tr>
<tr>
<td>Cognitive empathy</td>
<td>15</td>
</tr>
<tr>
<td>Affective empathy</td>
<td>16</td>
</tr>
<tr>
<td>Behavioral empathy</td>
<td>16</td>
</tr>
<tr>
<td>Factors affecting empathic development</td>
<td>17</td>
</tr>
</tbody>
</table>
Chapter | Page
--- | ---
Social learning | 17
Socioeconomic status | 19
Gender | 20
Measures | 21
Statement of the problem | 22
Hypotheses | 23
2. METHOD | 24
Participants | 24
Measures | 24
Materials | 25
Procedure | 26
Design and treatment of the data | 28
3. RESULTS | 29
Analysis of variance | 29
Chi square | 30
4. DISCUSSION | 33
Socioeconomic status | 33
Media exposure | 35
Conclusions | 37
REFERENCES | 39
APPENDIX A: Demographic questionnaire | 44
VITA | 45
<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MANOVA RESULTS</td>
<td>29</td>
</tr>
<tr>
<td>2. MANOVA RESULTS FOR MEDIA EXPOSURE</td>
<td>30</td>
</tr>
<tr>
<td>3. CHI SQUARE ANALYSIS OF AGGRESSIVE MEDIA</td>
<td>31</td>
</tr>
<tr>
<td>4. CHI SQUARE DIRECTIONAL ANALYSIS OF MEDIA</td>
<td>32</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

Although there has been an overall drop in violent crime rates during the past decade, the number of violent crimes committed by children under the age of 18 has risen by over 200% in the period from 1988 to 1999 in the United States (APA, 1999). Recent tragedies that have occurred in Columbine, Colorado, Paducah, Kentucky, and Jonesborough, Arkansas underscore the alarming trend in violent behavior by increasingly younger perpetrators. While such tragic examples poignantly illustrate the problem, the everyday violent behavior observed in classrooms and homes across the nation is creating a situation that places an enormous emotional, philosophical, and financial burden on American society.

The Cost of Juvenile Violence

Social Implications

It has been postulated that violence in today’s society has perpetuated a sort of social norming in which violent and aggressive behaviors breed similar imitative, defensive, or responsive behaviors (Hoffner, 1996). This reciprocal model of violent behavior filters through media representations and imitative behaviors down to the younger members of society, leading to an increasingly violent society across an age continuum (Meeus, 1996). Furthermore, it has been suggested that violent and aggressive behaviors by children have a deleterious effect on the quality and quantity of education on a number of different levels (Rothstein, 1990). Aside from the disruption the actual violent acts cause, fear of violence by students and teachers and the subsequent policies instituted to deal with this issue tend to impede or, at least retard, the educational process (Eron, 1994).
Economic Costs

Aside from the emotional distress that the occurrence of violent crimes by juvenile offenders causes, over 200 million taxpayer dollars were spent on the prosecution, housing, education, rehabilitation and reintegration of these perpetrators in 1997 alone (Myers, 1999). With the increase in juvenile crime, already burgeoning juvenile courts have been forced to expand and create additional sections to deal with various levels of crime, driving the cost of prosecution ever higher. Juvenile offenders may not be housed with adult offenders in detention facilities. Therefore, as violent juvenile crime has risen over the years, the number of facilities needed to house violent offenders has risen exponentially as well. While these facilities themselves represent a substantial burden on taxpayers, the programs that must be instituted in order to ensure juvenile offenders are offered educational opportunities and counseling services during their incarceration are an even greater burden (Myers, 1999). In addition to the costs associated with the offenders, recent developments in crisis intervention have led to intervention teams that are dispatched to provide counseling services to witnesses, victims, and survivors of the violent behaviors to decrease potential, residual psychological effects (APA, 1999). These services, although extremely beneficial, add to the overall cost of juvenile violence, making this area of criminal justice one of the most costly and rapidly growing in the field.

This alarming trend has directed the focus of psychological research toward investigating factors in early childhood that may be, at least partially, accountable for the development of aggressive tendencies among children. Although a great deal of scholarship has been dedicated to the development of violence prevention programs to be implemented in schools, these programs must take into consideration the basic environmental and psychological elements that
may be associated with violent, aggressive or antisocial behaviors (Grossman, Neckerman, Koepsell & Liu, 1997). As this research continues, greater specificity in correlated traits allows more in-depth investigation of these traits.

Research Linking Empathy and Overt Behavior

Research indicates that among the most constant traits found in individuals with a propensity toward violent acts is a lack of empathy (Loeber & Hay, 1997). Eisenberg, Fabes, Miller, Shell, Shea and May-Plumlee (1990) found a correlation between the spontaneous emotional responses of preschool children and their propensity for prosocial behavior, providing a clear relationship between the construct of empathy and overt behaviors. It has been suggested that this correlation between empathy and pro-social behavior may be evidenced in children as young as two years old (Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Further studies indicate that empathic responsiveness is not only related to social behavior at a very early age, but also that these patterns of behavior become enduring traits as the child enters early adolescence (Fergusson & Horwood, 1996). Such research seems to indicate that the role of empathy in pro-social behavior, and conversely antisocial behaviors, is clearly established. Therefore, if the increasing problem of childhood violence is having large-scale social ramifications in terms of heightened societal burdens and there is substantial evidence linking empathy and empathic development to this problem, then studies that investigate the particular environmental and psychological factors influencing these areas are of tremendous value.

Defining Empathy

General Definitions

At its most basic level, empathy can be defined as the ability of one individual to relate, at some level, to the affective state of another individual or group of individuals (Eisenberg et al.,
Empathy has also been described as the chief moderating device of the entire spectrum of behaviors. While empathy may be inclusive of both positive and negative affective states, most research has focused on empathic responses to another person’s emotional distress. The concentration upon the sharing of negative emotions seems to be of the greatest interest due to a correlation between a dearth of empathy and an individual’s propensity for violent or antisocial behaviors (Loeber & Hay, 1997).

**Theoretical Bases**

Jean Piaget

The early work of Jean Piaget represents some of the earliest theoretical work in the area of empathic development and provides the basic framework for developmental levels that is still utilized today. Piaget’s (1928) theoretical model of empathic development proposes a longitudinal process that coincides with a child’s social development. Within the framework of social development, Piaget’s theoretical social development model proposes a two-tiered process in which a child advances from a mere awareness of other’s feelings to an ability to understand the experiences of another as directed by the one’s own internal frame of reference (Duska & Whelan, 1975).

Piaget (1928) proposes that this social development begins between the ages of 2-6 years and at this earliest level, a child’s adherence to societal norms is governed by a dogmatic respect. He suggests that at this level of social development, empathic concern is limited to the child’s recognition that, although their behavior is intrinsically motivated, other individuals have separate motivations borne out of their own feelings. At this level of development, displays of empathic behavior would be limited to experiences in which the child is familiar with the situation and the socially appropriate response to it. Children at this level of development would
not be expected to have any understanding of the feelings of the individual in distress or the appropriate behavior that would accompany an empathic response (Turner & Helms, 1995).

This initial stage of social and empathic development ultimately gives way to a second level between the ages of 7-10 years. Piaget (as cited in Duska & Whelen, 1975) proposes that children advance to this second level of social development in which adherence to social norms is guided by the child’s realization that these norms provide a common ground or baseline for interaction with other individuals. At this level of social development, Piaget (1928) indicates that the child begins to understand the unique perspective of other individuals and develops a sense of what it is like to experience situations from someone else’s perspective.

**Lawrence Kohlberg**

Further advancing Piaget’s theory, Kohlberg (as cited in Duska & Whelen, 1975) proposed a multi-level theoretical model that examined empathic development in relation to a child’s moral growth and development. Kohlberg’s research identified three levels of moral development: preconventional, conventional and postconventional. Each level is further distinguished by two sub-stages that further define the moral developmental level of an individual. The behavioral manifestations implicit in each level and stage suggest a strong relationship to the development of empathy across the life span.

In the first stage of the preconventional level, children engage in prosocial behaviors merely for social acceptance and fail to act in inappropriate manners out of fear of negative consequences or the expectancy of positive consequences. According to Kohlberg (as cited in Etaugh & Rathus, 1995), in the second stage of the preconventional level of moral development prosocial behaviors are most likely to be motivated by id-driven gratification; behaviors are morally correct when they serve the individual’s needs. It would appear that during this period
of moral development, the perceived consequences of their actions would be a limiting factor in children’s empathic development. The primary characteristic of the preconventional level of moral development appears to be a dearth of knowledge or understanding of other’s feelings outside of an individual’s internal frame of reference.

Much like the first level of Piaget’s theory, the second level of moral development, the conventional level, is marked by the emergence of a child’s awareness of social expectations. In the first stage of this level of moral development, Kohlberg (as cited in Duska & Whelen, 1975) suggests that societal approval is the standard upon which constructs of good and bad are based. At this stage children recognize that behavior that serves to assist a person in distress is endorsed by society and affords them a sense of belonging. This sense of belonging to a coherent social group, complete with standardized rules and laws, allows the child to advance beyond the mere material rewards or escape from punishment that is characteristic of the preconventional stages (Etaugh & Rathus, 1995). In the second stage of the conventional level Kohlberg (as cited in Etaugh & Rathus, 1995) indicates that while a child’s behavior is still motivated by the adherence to social norms or laws, these constructs become absolute and indisputable. As the child becomes a part of the social unit, the rules and norms that govern that unit are seen as unyielding and breaking those rules are grounds for being ostracized from society. Prosocial or helping behaviors are not an option or a choice at this time, but rather they are required for membership in society.

The last level of development in Kohlberg’s theory, the postconventional level, involves complex integration of social demands, individual needs, overriding holistic ethical implications, and individual conscience (Duska & Whelen, 1975). Stage one of the postconventional level involves determining when the demands of society must be vehemently adhered to and when the
needs of the individual should become preemptive (Etaugh & Rathus, 1995). In the second stage of postconventional morality, the individual must achieve balance between all the aspects of ubiquitous ethical concerns and her/his own conscience. Empathic development at this level is characterized by the ability of an individual to put herself/himself in the place of another and assist her/him in their distress in accordance with global ethics and personal conscience without any external motivation (as cited in Etaugh & Rathus, 1995).

Current Theoretical Orientation

Although various theories of empathic development have been proposed, the most widely used theory that appears to offer the greatest validity and utility is a combination of the aforementioned work of Piaget and Kohlberg. The resulting theoretical model suggests a three-tiered model that proposes three components to empathy: cognitive, affective and pro-social action taking (Duska & Whelen, 1975). Kohlberg and Piaget’s constructs have been subject to numerous investigations of their inception. Current theorists such as Eisenberg et al. (1990) suggest that empathic development begins almost immediately at birth with the development of cognitive empathy and progresses through affective empathy and culminates with attainment of the pro-social behavior component of empathy. Current definitions of empathy are inextricable from this three-tiered model and therefore merit careful consideration in any empirical study.

Levels of Empathic Development

Cognitive Empathy

Cognitive empathy refers to the most basic level of empathy in which a person can identify another person’s feelings and is aware that these feelings may be different from their own (Zahn-Walker, Radke-Yarrow, Wagner & Chapman, 1992). Although the earliest investigations of this level of empathy suggested that it did not develop until mid-childhood
(Piaget, 1928), more recent investigations have shown that cognitive empathy may be present as early as two years of age. These findings also indicate that these empathic responses may be shown by the infant toward unfamiliar people as well as parents (Zahn-Waxler et al., 1992). Some recent studies seem to indicate that the cognitive component of empathy dominates in children from around the age of two until the development of the second component of affective empathy begins to emerge around the age of six to seven (Batson, Early, & Salvarani, 1997). Hamilton (2000) have suggested that while this is the age during which the affective component of empathy may begin to emerge, cognitive empathy begins to be subordinate to prosocial behaviors at an even earlier age. Practically, this research would seem to indicate that while cognitive empathy is present throughout the life span, it becomes secondary to one of the other components as children reach school age. Theoretically, the cognitive component of empathy provides the foundation for all empathic development (Eisenberg et al., 1990).

Affective Empathy

According to the developmental hypothesis, once children are able to intellectually recognize the feelings of another, they begin to move toward experiencing emotional responses to these feelings (Burleson, 1982). Affective empathy is characterized by the emotional mirroring of emotion in which one individual’s affective state is altered to reflect that emotion perceived in the other person (Batson, et al.,1997). This process differs from the cognitive level in that at the affective level there is a shared aspect rather than just an intellectual ability to identify the other’s situation (Mehrabian & Epstein, 1972).

Piaget’s and Kohlberg’s early research in this area proposes that affective empathy begins to develop around six to seven years of age. These theories suggest that the affective component evolves along a continuum from residual egocentricism in younger children, to an ability to
actually vicariously experience others’ distress through both a cognitive awareness and complete affective identification (Duska & Whelan, 1975). More recent research seems to suggest that affective empathy is actually preceded by prosocial behavior in younger children and may indicate that children learn the affective component through engaging in prosocial behaviors (Hamilton, 2000).

Behavioral Empathy

The final level of empathic development, according to traditional theory, refers to the overt and proactive response taken by the person experiencing the empathic response. According to this perspective, there appears to be a tendency, at a certain level of empathic development, wherein an individual begins to seek out problem-solving solutions to another person’s emotional distress (Eisenberg, Cameron, Tyron, & Dodez, 1981). The motivation to engage in a pro-social behavior differs from affective sharing in that the individual experiencing the empathic response is motivated to reduce the other’s suffering through action (Tamborini, Salmonson, & Bahk, 1993). It is this prosocial behavior that is most directly linked to measures of empathy, in that an increase in prosocial tendencies obviously leads to a decrease in violent, aggressive or antisocial behaviors.

Piaget (1928) suggests that such prosocial behaviors are an extension of the affective component of empathic development and emerges during early adolescence as the child fully develops affective identification. On the other hand, Kohlberg identifies prosocial behavior as a distinct level of empathic, or moral, development. Although Kohlberg suggests that prosocial behavior, arising from affective identification, may begin to be manifested in early to mid adolescence, his theory holds that this level of empathic development is not inevitable and may not ever fully develop in some individuals (Duska & Whelan, 1975).
Factors Affecting Empathic Development

Social Learning

Much of the research on empathy is dedicated to the development of empathic responses and the measurement of these responses (Dillard & Hunter, 1989). While tracking the developmental continuum is an important aspect of empathy research, it tends to ignore the more specific environmental elements that may affect the presence or magnitude of empathic responses of individuals. Early research on imitative learning suggests that individuals, particularly young children, are extremely vulnerable to the effects of observational learning (Bandura, Ross, & Ross, 1963). It has been proposed that individual factors such as media exposure (Felson, 1996; Hoffner, 1996; Williams, Zabrack, & Joy, 1982), peer influence (Meeus, 1996; Winefield & Harvey, 1996) and family role models (Hoffner & Haefner, 1997; Fantuzzo, et al., 1998; Jenkins, Tucker, Updegraff, McHale, & Crouter, 1999) play major roles in the development of empathic behaviors. These findings appear to be consistent with social learning theories of empathic development. A thorough investigation of the cumulative effects of such factors as they would be presented in an overall lifestyle has yet to be presented. Williams, Zabrack, and Joy (1982) found that an average of nine violent or aggressive acts occur during a typical hour of American television programming. This research suggested that the quantity of these acts had increased by over 70% in the 10-year period preceding the study. More disconcerting may be the incredible amount of violence and aggression portrayed in television advertisements for children’s products, which are presented during peak children’s viewing hours (Adler & Faber, 1980). It has been estimated that, at the current rate of violent presentations in commercial messages, an individual will be exposed to over fifty million violent or aggressive acts during the first 14 years of life (Roca, Siegel, & Cox, 1998). Under the
premise of social learning theory, it would appear that such prolific exposure to the violent portrayals within the context of children’s programming would lead to an increasingly violent population of children.

Recent governmental and American Psychological Association investigations have reached similar findings that indicate that the role of violent presentations in television programming plays a significant role in propagating societal violence (Klinger & Cantrell, in press). It has been suggested that the presentation of violent and aggressive behavior in the advertisements that occur during the programming may add to the cumulative effect in societal violence (Greenfield, 1984). Recent investigation into this relationship seems to indicate that children recognize the aggressive theme in toy advertisements and that furthermore, toys that use aggressive or violent representations in their media advertisements are perceived as more desirable by children (Klinger & Cantrell, in press). Such findings tend to suggest that when investigating empathic development and prosocial behaviors, the detrimental effects of the use of violence and aggression in product advertising during children’s programming should not be omitted as a powerful intervening variable.

**Socioeconomic Status**

It has been suggested that the ability to identify with others’ distress could be impeded if an individual is experiencing her/his own extreme distress (Diekmann, Jungbauer-Gans, Krassnig, & Lorenz, 1996). Therefore, it would appear as if the common ground uniting these factors across a developmental continuum would be socioeconomic status of individuals. Overwhelmingly, perpetrators of violent crimes have been shown to have a history of economic deprivation suggesting that, at the very least, there is a clear correlation between socioeconomic
status and incidents of antisocial behaviors (Cooper & Denner, 1998). It would seem that such deprivation could be a potential impediment to a fully integrated empathic development.

Lancelotta and Vaughn (1989) have suggested that there is a clear link between certain types of aggressive behaviors exhibited by adolescents and their socioeconomic status as measured by a teacher perception rating scale. Teachers rated children on a variety of aggressive behaviors and examined the correlation between these behaviors and the children’s socioeconomic status. This propensity for aggression, as assessed by teacher rating scales, has also been found to generalize to acts of physical violence among juvenile male populations (Haapasalo & Tremblay, 1994). Although the overt manifestations of these factors have been established, research regarding the psychological correlates are less clear. Cooper & Denner (1998) suggest that although there is a clear correlation between aggressive behavior and socioeconomic status, the strength of the relationship between psychological development and environmental conditions may be less than what is attributable to individual differences.

However, Fantuzzo et al. (1991) suggest that parental socioeconomic status and modeling behaviors were strongly correlated to their children’s level of adjustment difficulties and later psychological impairment. In their observation of preschool-age children, they found that in addition to increased physical and verbal aggression among children from lower socioeconomic family structures, there was an increase in emotional and adjustment problems. Problems with social competency, conduct disorders, and cognitive functioning were shown to have a negative correlation to socioeconomic status.

The primary reason that there appears to be a relationship between the overt manifestations of antisocial behaviors among lower socioeconomic status groups has been
hypothesized to be modeling behavior, or a variation of Bandura’s social learning theory (Fantuzzo et al., 1991). Children of lower socioeconomic status are subjected to greater amounts of violence through environmental exposure and therefore develop imitative behavior reflecting this (Myers, 1999). Conversely, psychological impairments that have been shown to be associated with socioeconomic status appear to have two primary sources, lack of access to resources and a sense of hopelessness (Orr & Dinur, 1995). Both of these factors would appear to be highly related to the projected empathic development of children.

**Gender**

Studies that have examined gender as a relevant variable in empathic development have produced various findings. Hamilton (2000) suggests that, among children between four and six years of age, there is no difference in the attainment of empathy at the cognitive, affective or prosocial levels. Likewise, Eisenberg et al. (1990) found no difference in empathic attainment among preschool-age children. Although some studies suggest that there is a correlation between gender and empathic responsiveness among adult populations (Burleson, 1982; Jenkins et al, 1999; and others), the lack of evidence of this correlation in young children precludes this as a variable to be considered in this study.

**Measures of Empathy**

Most of the earliest measures of empathic behavior were geared toward adults as the theoretical orientation dictated that it was not until adulthood that full empathy had developed (Eisenberg et al., 1990). Davis (1983) created a scale for late adolescence and early adulthood that allowed for a measurement of the different levels of empathy but still was not suitable for young children. A large degree of controversy has been voiced concerning this measure as it is entirely dependent upon self-report by the subjects regarding their tendency toward pro-social
behavior. Obviously this can be viewed as a confounding situation since few adolescents or adults would want to report an absence of such feelings (Davis, 1983). Social desirability scales have been used to control for such factors, with varying success being reported. Other scales such as the emotional empathy skill, self-consciousness scale and the self monitoring scale have shown to yield interesting and somewhat useful information but their scores fail to yield any quantifiable data that is of great use to researchers. Likewise, theses scales are of extremely limited use with children and completely useless with children under the age of 10 (Dillard & Hunter, 1989).

The *Index of Empathy for Children and Adolescents* provided one of the first scales for measuring empathy specifically in young children (under the age of 10) and provided a wealth of information on the topic (Bryant, 1982). The findings of Bryant’s (1982) research with this measure indicated that empathy develops at a much younger age than had previously been suspected. Unfortunately, Bryant’s index was limited to children who had already gained some proficiency in reading and writing. Therefore, investigating children of emerging literacy status was impossible with this measure. Hamilton (2000) have developed a rating system for measuring empathy in emerging literacy populations between the ages of 4 and 7, successfully allowing investigation of empathy in children of this younger cohort group. With such an appropriate measure available, the study of empathic development in young children may now be thoroughly investigated in relation to important factors other than the traditional age continuum.

Statement of the Problem

In light of the empirical evidence that supports the notion that there is a negative correlation between social status and aggressive, violent, and antisocial behavior, (Lancelotta & Vaughn, 1989) and studies that suggest that a lack of empathic development can be shown to be
related to such behavioral manifestations (Loeber & Hay, 1997), then an investigation of the relationship between empathic development and socioeconomic status is a logical proposal. The study being proposed here investigated the correlation between socioeconomic status and the development of empathy across the developmental continuum as described in current research. As media exposure, peer relations, and family modeling are expected to vary greatly among socioeconomic levels, this research can offer a great deal of insight into the effect of these variables as opposed to the individual differences. In concordance with the findings of Hamilton (2000) regarding the age at which children achieve a fully integrated empathic development, the current study will seek to examine the empathic attainment of young children (mean age 7 years) as influenced by socioeconomic status and media exposure. Furthermore, the potential intervening variable of violent media representations within product advertisements will be assessed among and between the observed socioeconomic statuses.

The investigation of the aforementioned variables generated specific hypotheses in regard to the relationship of socioeconomic status and media portrayals of violence and aggression to the empathic development of children.

**Hypotheses**

1) There will be a greater amount of all dimensions of empathy displayed by children of lower versus higher socioeconomic status.

2) Children exposed to aggressive commercial content will express decreased empathic responses compared to those exposed to prosocial messages, despite socioeconomic variables.

3) There will be interaction between socioeconomic status and media exposure.
4) There will be a greater number of participants with correct responses between the socioeconomic status groups. There will be fewer correct responses among all socioeconomic status groups following aggressive media exposure and as opposed to prosocial media exposure.
CHAPTER 2

METHOD

Participants

Participants were 212 volunteers between 6-8 years of age recruited from public and private schools in a small region in southern Appalachia (population 93,000).

Measures

The current study examined the traditional three dimensions of empathy; cognitive, affective, and prosocial behavioral manifestations. Cognitive empathy was defined as the ability to identify others’ feelings, the affective component was defined as the ability to spontaneously associate with those feelings and prosocial manifestation was defined as behaviors that display regard for such feelings (Eisenberg, et al, 1981; Hamilton, 2000). Hamilton’s (2000) 15-item questionnaire was utilized to examine each dimension of empathic development in response to the presentation of three video segments, separated by one of two levels of current-day commercial messages. This measure assessed the participants’ level of empathic development based on their response to three questions regarding each video clip. Following each video segment, the first question; “How does the main character of this scene feel at this time?” was asked after each clip to assess cognitive empathy. “How does this scene make you feel?” was asked next in order to assess affective empathy. Finally, “What would you do to or for the main character of this scene?” was asked as a measure of prosocial manifestation of empathy. Participants’ responses were recorded on an answer sheet that offered pictorial representations of the responses “sad”, “neutral”, or “happy” (cognitive and affective measures) or “help”, “tell someone”, “nothing”, “laugh or taunt” (behavioral measure).
In addition to the measure of empathy levels, participants completed a general informational questionnaire with teacher assistance to disclose age, gender, race and whether or not she/he received free or reduced lunch. This methodology is consistent with the original study by Hamilton (2000).

**Materials**

The principle materials utilized in the current study consisted of the primary video scenes and the commercial breaks between vignettes. The primary scenes, consistent with Hamilton (2000), were *A Charlie Brown Christmas* (Melendez & Melendez, 1965) and *Rudolph The Red-Nosed Reindeer* (Rankin & Roemer, 1964). The excerpts from each of these films demonstrated a main character that is in a state of emotional distress caused by being ostracized, taunted or harassed by their peers and were approximately 5 minutes each in duration.

The first video presentation, an excerpt from *A Charlie Brown Christmas* (Melendez & Melendez, 1965), depicted the main character (Charlie Brown) being taunted by his peers for his poor choice of a Christmas tree and being publicly humiliated. Charlie Brown’s distress and humiliation is apparent as the vignette ends with him being left alone, eyes cast downward in apparent mortification.

The next vignette in the sequence, from *Rudolph the Red-Nosed Reindeer* (Rankin & Roemer, 1973), showed the main character, an elf named Herbie, being publicly humiliated and denigrated by his superior for voicing his desire to do something other than the traditional work of elves. Like the previous vignette, this clip ends with Herbie abandoned by his peers and contemplating his obvious misery.

The third video clip was also from *Rudolph the Red-Nosed Reindeer* (Rankin & Roemer, 1973) and depicts the main character, Rudolph, struggling to hide his physical deformity (a
growing red nose) only to be exposed and cruelly taunted by his peers, adults and even Santa Claus. The conclusion of this scene, much like the other two, depicts Rudolph alone with his distress and apparent segregation.

Between these vignettes two levels of commercial messages were shown. In condition 1 the commercial messages consisted of a commercial for the Hasbro, Inc. “WWF Figures” toy and Mattel “Digimon” toy. Commercial messages in condition 2 consisted of Nickolodeon Network’s “Big Help” and “Nickelodeon Nation” announcement spots. All commercial messages were standard 30-second spots.

Procedure

Approval for the procedure was obtained from the school district personnel and individual school administrators as a part of general guidance curriculum. As the study was performed as part of the standard curriculum, in a normal classroom setting, Internal Review Board “exempt” status was granted.

Each subject was given 3 response sheets (see Appendix A) for each video presentation, one each that measured cognitive, affective, and pro-social components of empathy. The demographic questionnaire (see Appendix B) was included at the end of the questionnaires. The subjects were advised not to put their names on any of the materials they received. The teacher was present to assist in completing the final page at the end of the exercise. Directions for completing these response sheets were given exactly as stated below.

I am going to show you a video about Charlie Brown. After you watch the video, I will ask three questions for you to answer using the first three pages in your packet.
Subsequent to the reading of these directions, the first video clip will be shown. Following the completion of the vignette the subjects will be asked the following questions in this order:

1) How does the Charlie Brown feel during this scene? Answer by circling the picture on the answer sheet you think best shows how you think he is feeling.

2) How does this scene make you feel? Circle the picture on the Answer sheet that best shows how you feel.

3) What would you do if you were around when this was happening? Circle the picture on the answer sheet that best shows what you would do.

Following the completion of the third question, subjects were informed of the upcoming video presentation with the following instructions:

Now, we will watch another video

After we view the video, please answer the questions on pages four, five and six of your packet.

Prior to the presentation of the second vignette the first commercial message (“WWF action figures” in condition 1 and “The Big Help” in condition 2) was shown. The vignette then followed as in typical television viewing.

Following the commercial presentation and video segment, questions were read exactly as outlined above. Following the completion of question 3, instructions for video segment 3 were given as follows:

Now we are going to watch another video.

After we watch this clip, we will answer the questions on pages
seven, eight and nine of your packet.

Prior to the presentation of the third and final vignette the second commercial message (“Digimon” in condition 1 and “Nickelodeon Nation” in condition 2) were shown.

Following completion of these questions, subjects were instructed to turn to the final page (10) in their packet and fill in the information and wait for the teacher or assistant if they had any questions.

**Design and Treatment of the Data**

The data were divided according to socioeconomic status and level of commercial message. The independent variables on level one was socioeconomic status (high or low) as determined by participation/non-participation in the state free and reduced lunch program. The second level of independent variables involved the level of commercial message being presented between the video presentation (aggressive or pro-social). The dependent variables were the rating on the three levels of empathy (cognitive, affective, and pro-social action). A two-way (2x2) Multivariate Analysis of Variance (MANOVA) with three covariates (pre-media exposure measures of cognitive, affective, and prosocial action empathy) utilizing six dependent measures (measures of the same levels of empathy after the first and second media exposures) was utilized to determine interaction effects between media exposure and socioeconomic status while controlling for individual differences between pre and post measures of empathy as well as any relationship between the dependent variables.

A Chi-Square test was performed to measure the association between the independent variables of media exposure and socioeconomic status across all levels of the dependent variables (cognitive, affective and prosocial action empathy).
CHAPTER 3

RESULTS

Analysis of Variance

Hypothesis 1 was not supported by the results. No significant effect for socioeconomic status was found. Hypothesis 2 was supported by the results. A significant main effect for media exposure was revealed, $F(6, 200) = 5.34, p < .005$. (see Table 1).

### TABLE 1

**MANOVA RESULTS**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Hdf</th>
<th>Edf</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>6</td>
<td>200</td>
<td>3.602*</td>
</tr>
<tr>
<td>Affective</td>
<td>6</td>
<td>200</td>
<td>15.912*</td>
</tr>
<tr>
<td>Behavioral</td>
<td>6</td>
<td>200</td>
<td>18.558*</td>
</tr>
<tr>
<td>Media</td>
<td>6</td>
<td>200</td>
<td>5.340*</td>
</tr>
<tr>
<td>SES</td>
<td>6</td>
<td>200</td>
<td>.750</td>
</tr>
</tbody>
</table>

*p < .005

Analysis of the effect of the independent variables across each dependent variable indicated that socioeconomic status provided no significant effect across all dimensions of empathy. The results show that media exposure had significant effects on measures of affective empathy following both action oriented ($F(1) = 8.539, p < .005$) and behavioral ($F(1) = 15.891, p < .005$) media presentations (see Table 2). Media exposure also had significant effects on measures of the behavioral component of empathy following the action oriented ($F=9.614, 1, p < .005$) and prosocial ($F=10.547, 1, p < .005$) media exposures. These results did not support
hypothesis 3 which proposed that there would be an interaction between socioeconomic status and media effect (see table 2).

TABLE 2

MANOVA RESULTS FOR MEDIA EXPOSURE ACROSS ALL DEPENDENT VARIABLES

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Exposure</th>
<th>df</th>
<th>mse</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>1</td>
<td>1</td>
<td>1.492</td>
<td>6.970</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>.539</td>
<td>6.634</td>
</tr>
<tr>
<td>Affective</td>
<td>1</td>
<td>1</td>
<td>2.934</td>
<td>8.539*</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>5.067</td>
<td>15.891*</td>
</tr>
<tr>
<td>Behavioral</td>
<td>1</td>
<td>1</td>
<td>3.401</td>
<td>9.614*</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>3.336</td>
<td>10.547*</td>
</tr>
</tbody>
</table>

*p < .005

Chi-square

A chi-square test was used to examine the effect of media interventions on frequency of empathic responding across all dimensions of empathy and socioeconomic status levels. Subjects exposed to aggressive commercial messages expressed a significantly decreased frequency of empathic responding in both the cognitive and behavioral dimensions of empathy, following the first commercial exposure in both the lower ($\chi^2 = 23.354, 1, p < .001$) and higher ($\chi^2 = 22.678, 1, p < .001$) socioeconomic status groups (see Table 3).
TABLE 3

CHI-SQUARE ANALYSIS OF AGGRESSIVE MEDIA INTERVENTION ON NON-EMPATHIC RESPONDING

<table>
<thead>
<tr>
<th></th>
<th>Observed</th>
<th>Expected</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cognitive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low SES Group</td>
<td>17</td>
<td>5.9</td>
<td>23.354*</td>
</tr>
<tr>
<td>High SES Group</td>
<td>13</td>
<td>4.0</td>
<td>22.678*</td>
</tr>
<tr>
<td><strong>Behavioral</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low SES Group</td>
<td>11</td>
<td>5.2</td>
<td>7.032**</td>
</tr>
<tr>
<td>High SES Group</td>
<td>11</td>
<td>3.5</td>
<td>17.277*</td>
</tr>
</tbody>
</table>

*p < .001  **p < .005

The chi-square test also determined that after the second exposure to the prosocial commercial message, subjects displayed an increase of empathic responding in the affective dimension of empathy across both the lower ($\chi^2=33.168$, 1, $p < .001$) and higher ($\chi^2=18.964$, 1, $p < .001$) socioeconomic status groups. The results of the chi square analysis did not support the hypothesis that there would be a significant difference in the number of participants giving accurate empathic response between socioeconomic groups. This analysis did support hypothesis 5, revealing that there was a significant decrease in empathic responding by all participants after viewing the aggressive commercial message and an increase in empathic responding by all participants after viewing the prosocial commercial message across socioeconomic status groups (see Table 4).
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Observed</th>
<th>Expected</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGGRESSIVE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive (1)</td>
<td>79</td>
<td>95</td>
<td>46.023**</td>
</tr>
<tr>
<td>Behavioral (1)</td>
<td>87</td>
<td>100</td>
<td>21.868**</td>
</tr>
<tr>
<td>Prosocial (2)</td>
<td>92</td>
<td>100</td>
<td>8.485*</td>
</tr>
<tr>
<td>PROSOCIAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective (1)</td>
<td>48</td>
<td>37</td>
<td>5.179*</td>
</tr>
<tr>
<td>Cognitive (2)</td>
<td>100</td>
<td>94</td>
<td>4.620*</td>
</tr>
<tr>
<td>Affective (2)</td>
<td>72</td>
<td>37</td>
<td>51.938**</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01
CHAPTER 4
DISCUSSION

The results indicate that, contrary to the first and third hypotheses, there is no significant difference between socioeconomic status groups in appropriate empathic responding across all dimensions of empathy. Furthermore, the results did not indicate any significant interaction between socioeconomic status and media exposure. However, the results did indicate a significant difference in empathic responding following exposure to aggressive commercial presentation, across all dimensions of empathy in accordance with hypotheses two. Consistent with the fifth hypothesis, this difference was found to be directionally related to the type of media presentation, with a decrease in empathic responding among those exposed to the action-oriented commercial message and an increase in empathic responding among those exposed to the prosocial media.

Socioeconomic Status

Although analysis of variance did not find significance in the empathic responding between socioeconomic groups across all dimensions of empathy and both levels of commercial messages, nonparametric evaluation of each individual dimension across each level found significant differences in two areas. In measures of the affective dimension of empathy, following the second presentation of the aggressive commercial intervention, subjects from the lower socioeconomic status group displayed a much higher error rate than subjects from the higher socioeconomic group. In measures of the behavioral dimension of empathy, subjects in the higher socioeconomic status group displayed a rate of non-empathic responding that was significantly higher than what was expected and substantially higher than that of those in the lower socioeconomic groups.
The dimension of affective empathy has been found to be the last dimension to fully develop (Batson et al., 1997) and, therefore, may be more vulnerable to outside influences. The increased error rate among the lower socioeconomic status group, following the second aggressive commercial presentation, was counter-intuitive in that there was an increase in empathic responses and a decrease in non-empathic responses. However, this phenomenon may be due to desensitization to aggressive media presentation among a specific subgroup of children. As socioeconomic burdens force more parents to spend increased time at their jobs with insufficient or inadequate child care arrangements, children may have greater opportunities to be exposed to an increased amount of violent media. Logically, this situation would be most evident among the lower socioeconomic status groups where single parent families with decreased parental involvement are more prevalent (Myers, 1999). Consequently, children from higher socioeconomic backgrounds may not have the same degree of exposure to aggressive media presentations, which would allow the stimulus to remain novel and maintain the error rate in empathic responding.

Although the behavioral dimension of empathy appears to be the area where subjects were most likely to display correct empathic responding, social learning theories would predict a decrease following exposure to any aggressive presentation (Bandura, et al, 1963). Although it would appear that this prediction would be consistent across socioeconomic status groups, the results of this study indicated that only the higher socioeconomic group exhibited the expected response. The explanation for this may lie in the same desensitization to aggressive media that was discussed previously. Children from the lower socioeconomic status group may have developed a tolerance to such presentations to the degree that their behavioral manifestations require greater stimulation to effect a change. Conversely, children in the higher socioeconomic
status may have experienced less exposure to these types of presentations and therefore have a more immediate behavioral response to a much lower intensity stimulus.

Overall, the results indicate that there are no significant differences between socioeconomic status groups in pre-intervention measures of all dimensions of empathy. This uniformity in empathic responding is consistent with developmental models that suggest a continual developmental process with specific stages occurring in conjunction with cognitive maturation. However, the fact that the results support an interaction between socioeconomic status and the effects of the aggressive media exposure indicates that the developmental processes of children from lower socioeconomic backgrounds appear to be much more vulnerable to media-represented social norms than those of their higher socioeconomic background cohorts. Further research of this effect, utilizing a wider spectrum of socioeconomic statuses and ages, could serve to clarify if this vulnerability may be age-specific or exacerbated by the degree of socioeconomic separation.

Media Exposure

The results support the second hypothesis and clearly indicate that there is a difference in empathic responding between individuals viewing the aggressive commercial messages and those viewing the prosocial commercial messages. This difference was found to be significant across all dimensions of empathic development. Further examination indicates that the effect is directionally related to the type of media exposure as predicted by the fifth hypothesis. Children in this study who responded appropriately in the pre-media exposure condition and were exposed to action oriented commercial message showed a significant decrease in appropriate responses across all dimensions of empathy, with the exception of cognitive empathy, following action oriented media exposure. With the exception of cognitive empathy, children that did not respond
appropriately in the pre-media exposure condition and were exposed to the prosocial commercial message showed a significant increase in appropriate empathic responses across all other dimensions of empathy.

Nonparametric examination of the association between the commercial messages further clarified the directional nature of the relationship. The cognitive dimension of empathy was significantly affected, after the first exposure, by the presentation of the aggressive commercial message, while the presentation of the prosocial commercial message had no significant effect on this dimension of empathy. Following the second exposure, the cognitive dimension of empathy was unaffected in both the aggressive commercial exposure and prosocial commercial exposure conditions. This dichotomy suggests, again, that there may be some desensitization effect that occurs in relation to exposure to aggressive media images. These results also indicate that prosocial commercial messages may tend to have little or no effect on the cognitive dimension of empathy, regardless of repetitive exposure.

Nonparametric investigation of the effects of the media type on the affective measure of empathic responding clarifies the relationship between these variables. The significance of the relationship appears to be contained in observations following the second presentation of both commercial messages. However, because the variance is significant but not directionally related, this may suggest an increase in the overall error rate associated with the cumulative effects of the media exposures. As has been mentioned previously, the affective dimension is the last to develop, thus this component may be the least resilient and most vulnerable to any outside interference. This vulnerability may explain the atypical results found in this investigation.

The nonparametric examination of the behavioral dimension of empathy suggest that the significant relationship is primarily a result of the association between the first presentation of
the aggressive commercial message and the empathic responding among the higher socioeconomic status group. This finding is similar to the discovery made in the nonparametric investigation of the cognitive element dimension of empathy and supports the idea that the level of exposure, and subsequent desensitization to aggressive media may be greater among the lower socioeconomic status group.

Conclusions

These results, interpreted individually, present a rather vague and confusing picture of how socioeconomic status and media exposure may affect the empathic development of young children. However, when considered together, the association between these variables is one that may be inextricably linked to one another. The cumulative effects of aggressive media exposure seem to be such that initial exposure promotes imitative or residual aggressive cognition and behavior and subsequent exposures merely indicate a lower level of empathic functioning than was displayed in pre-exposure conditions. This sort of spontaneous recovery is typical in situations where habituation or desensitization to the stimulus is occurring (Jones, 1995). This would suggest that, although an enduring pattern of imitative or residual aggressive cognition or behavior elicited by repeated exposure to aggressive media cannot be detected between immediate, subsequent trials, there is a steady decline in the ability to respond in an empathic manner. Longitudinal investigation of this factor of empathic development could provide a clear understanding of the degree of habituation that may be occurring and the degree to which it affects empathic responding.

In conclusion, the results of this study indicate that there is a clear and direct relationship between exposure to media and the development of empathy and vulnerability to these media effects are related to socioeconomic status. If the previous research is correct in the suggestion
that aggressive acts, up to and including overt violence, can be traced to a lack of empathy and the findings of this study suggest that empathy may be increased by exposure to prosocial media messages or decreased by action oriented messages, there would appear to be some indication that change in media presentations is crucial to stemming the current flood of violence among this nation’s youth. The findings of this study may also provide a useful foundation that may stimulate further research that may assist in developing more effective intervention models to address the growing problem of juvenile violence.
REFERENCES


DEMOGRAPHIC QUESTIONNAIRE

1) How old are you? _____________

2) I am a: GIRL  Boy

3) I am: AFRICAN AMERICAN

   ASIAN

   HISPANIC

   WHITE

   OTHER ________________________________

4) I live with

   MOTHER___________  STEPMOTHER___________

   FATHER___________  STEPFATHER___________

   SISTER___________  BROTHER___________

   OTHERS__________________________________________________

FOR TEACHER ONLY: FL
VITA

DAVID E. COX

Personal Data: Date of Birth: May 10, 1966
Place of Birth: Cincinnati, OH
Marital Status: Married

Education: Florida Gulf Coast University, Ft. Myers, FL
Psychology, B.A., 1999
East Tennessee State University, Johnson City, Tennessee;
Clinical Psychology, M.A., 2001


Honors and Awards: Awarded Graduate Teaching Assistantship, ETSU, 1999; 2000
Graduated Cum Laude FGCU 1999
National Deans List 1999
Awarded Florida Gulf Coast University Recognition of Excellence 1998
Awarded FGCU Honors Organization Scholarship 1998
Deans List FGCU Fall, 1997; Spring, 1998; Fall, 1998; Spring 1999
Deans List ECC Fall, 1996; Spring 1997
Awarded Rose Kosches Scholarship ECC 1997.