

12-2011

# The Relation between Children's Perceived Containment and Parental Antisocial Behavior

Joye L. Henrie  
*University of Arkansas*

Follow this and additional works at: <http://scholarworks.uark.edu/etd>

 Part of the [Child Psychology Commons](#), [Clinical Psychology Commons](#), and the [Developmental Psychology Commons](#)

---

## Recommended Citation

Henrie, Joye L., "The Relation between Children's Perceived Containment and Parental Antisocial Behavior" (2011). *Theses and Dissertations*. 229.  
<http://scholarworks.uark.edu/etd/229>

This Thesis is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact [scholar@uark.edu](mailto:scholar@uark.edu), [ccmiddle@uark.edu](mailto:ccmiddle@uark.edu).

The Relation between Children's Perceived Containment and  
Parental Antisocial Behavior

The Relation between Children's Perceived Containment and  
Parental Antisocial Behavior

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of Arts in Psychology

By

Joye L. Henrie  
University of Utah  
Bachelor of Science in Psychology, 2008  
Bachelor of Science in Sociology, 2008

December 2011  
University of Arkansas

## Abstract

Researchers have invoked a variety of theories when discussing the relation between children's orientation to authority and the development of antisocial behavior (ASB). Here, the focus is children's sense of containment. Previous studies revealed an association between perceived containment and child externalizing behaviors. In this study, the degree to which a child's sense of containment is related to parents' level of ASB was examined. One hundred sixty aggressive children and their parents participated. I hypothesized that ineffective discipline would moderate the relation between parent ASB and child perceived containment. I expected to find an inverse relation between parents' level of ASB and their child's sense of containment, but only for those children whose parents tend to rely on ineffective discipline. No significant findings emerged. Thus, neither hypothesis was supported for this sample. The potential theoretical and methodological limitations related to these unexpected results are explored.

This thesis is approved for recommendation  
to the Graduate Council.

Thesis Director:

---

Dr. Douglas A. Behrend

Thesis Committee:

---

Dr. Ana Bridges

---

Dr. Denise R. Beike

## Thesis Duplication Release

I hereby authorize the University of Arkansas Libraries to duplicate this thesis when needed for research and/or scholarship.

Agreed

\_\_\_\_\_  
Joye L. Henrie

Refused

\_\_\_\_\_  
Joye L. Henrie

## Table of Contents

I. Orientation to Authority	1
A. Social Cognitive Perspective	5
B. Developmental Perspective	6
C. Perceived Containment	7
II. Current Study	11
A. Parental ASB and Links to Child Externalizing Behaviors	12
III. Method	18
A. Participants	18
B. Measures	19
1. Perceived Containment Questionnaire	19
2. Parents' Antisocial Symptoms Index	20
3. Ineffective Discipline	21
C. Procedures	22
IV. Results	22
A. Descriptive Statistics	22
B. Bivariate Correlations	23
C. Regression Analyses	23
V. Discussion	24
A. Conceptual Challenges in the Current Study	25
B. Methodological Limitations of the Current Study	28
C. Strengths of the Current Study	30
D. Conclusion	30
VI. References	32
VII. Tables	41
A. Participant Characteristics	41
B. Variables of Interest	42
C. Intercorrelations among the Primary Variables of Interest	43
D. Hierarchical Regression Analyses	44

## The Relation between Children's Perceived Containment and Parents' Antisocial Behaviors

This study attempts to address children's varying perceptions of authority, as advances in this area might aid the field in understanding the mechanisms through which some externalizing disorders (i.e., Oppositional Defiant Disorder and Conduct Disorder) develop. The construct of *orientation to authority* will be defined to clarify the broad scope of this body of research. This study will attempt to flesh out some of the dilemmas this area of research is currently encountering. The theoretical frameworks that inform researchers about how individuals might orient themselves to authority figures are described as a means to frame the mechanisms through which these processes might occur. The focus is then narrowed to one construct within the orientation to authority literature, that of *perceived containment* (Schneider, Cavell, & Hughes, 2003), and previous attempts to examine its hypothesized correlates are described. This study extends that research by examining parent antisocial behavior as another possible predictor of perceived containment.

### **Orientation to Authority**

Some children do not seem beholden to authority; instead, they appear to lack a conventional or prosocial view of hierarchical norms. The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR) includes two diagnoses that are particularly descriptive of these children: Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) (*Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition Text Revision*; American Psychiatric Association, 2000). Both disorders are marked by coercive acts and rule violations, and they are distinguished from one another by age and/or degree of severity. The prevalence of ODD ranges from 1 – 6 %, and the prevalence of CD ranges from 1 – 4 % (Shaffer, Fisher, Dulcan, & Davies,

1996). The literature suggests that youths demonstrating antisocial behaviors are less likely to submit to the authority of adult figures when compared with their peers (Kazdin, 1994), and 50 – 75 % of all clinical child and adolescent referrals are for disruptive and aggressive behaviors (Wells, 1994). Severe CD appears to be a precursor to Antisocial Personality Disorder (ASPD) (American Psychiatric Association, 2000; Mash & Wolfe, 2005).

These atypicalities present the field with the task of fleshing out the nuances related to children's perception of authority structures. Heaven & Furnham (1991) used the term *orientation to authority* to describe how adolescents view institutional authority. This term emphasizes a focus on how individuals are uniquely situated (e.g., cognitively, contextually, behaviorally) in relation to authority. For the purposes of this study, *orientation to authority* will be defined as incorporating one or more of the following features: (1) individuals' beliefs about their obligation to submit to authority (Darling, Cumsille, & Martínez, 2008), (2) individuals' beliefs about the ability of authority figures to impose their will (Schneider et al., 2003), (3) individuals' beliefs about the magnitude of consequences that would follow their failure to submit to authority (Luthar & Goldstein, 2008), or (4) individuals' objective submission to the directives of authority figures (Milgram, 1963). This definition loosely recapitulates previous authors' definitions of similar constructs.

A review of the existing literature on orientation to authority reveals three key dilemmas. First, as noted above, there is no consensus on an appropriate operationalization. Two primary ways of operationalizing the orientation to authority construct emerge in the self-report, cognitions-based literature. One approach asks about a person's thoughts about authority. The other asks about what will happen. These distinct questions can be conceptualized as proximal *de jure* (i.e., mandates exist, but do not necessarily come to fruition) and *de facto* (i.e., the reality

of what is happening) assessments. The de jure assessments tend to ask questions about whether it is acceptable for a particular authority figure to make certain rules (Smetana, 1988), whether certain authority figures have the right to preside over certain domains (Smetana, 1988), and the degree to which a participant anticipates an intense response from an authority figure due to a non-adherence to rules (Luthar & Goldstein, 2008). The de jure assessments might capture the rules and reactions that exist, but fail to capture perceived behavioral modifications that might result from orientation to authority. The de facto assessments tend to ask questions about whether individuals are obligated to obey key authority figures (Darling et al., 2008) and whether these authority figures will ultimately prevail in the case of a conflict (Schneider et al., 2003). Clearly, these are two distinct approaches that would be difficult to flawlessly merge into a singular body of research.

Second, there is no collaborative agreement on what term to use to encompass the construct. Similar constructs have been assigned a wide range of names: compliance (Sugimura, Phinney, Yamazaki, & Takeo, 2009), obedience (Milgram, 1963), obligation to obey (Darling et al., 2008), legitimacy of parental authority (Jackson, 2002), conformity (Mouttapa, Huang, Shakib, Sussman, & Unger, 2003), orientation to authority (Heaven & Furnham, 1991), sense of containment (Cavell, 2000), perceived containment (Schneider et al., 2003), parental authority (Ting & Qin-mei, 2006), conceptions of authority (Dawson & Gabrielian, 2003), perceptions of authority (McDonald, 1979), personal jurisdiction in children (Smetana, 2002), power dimensions (Peterson, 1986), maternal control (Gomez & Gomez, 2000), power contest (Bugental & Happaney, 2000), and perceived power (Mills, 1998). This is by no means an exhaustive list of coined phrases, so it is no wonder that many researchers in the field are essentially working in veritable isolation – often overlapping with existing research. Of course,

one difficulty is convincing established researchers to remove their proverbial flag from the phrase on which a significant portion of their research career may be staked. As long as the research body continues to be somewhat disjointed due to this complication, however, it might be difficult for the field to make efficient headway toward a more comprehensive understanding of how humans are oriented to authority.

Third, most research in the field has relied upon proximal indicators of orientation to authority. That is, researchers rely on self-reports from individuals to approximate their perceptions regarding authority, which necessarily asks individuals to tap into internal states and accurately translate these internal states into useable data points circumscribed by the particulars of the research methodology. There are many methodological problems with self-report measures, such as attempts to portray oneself in a positive light, responding to demand characteristics, apprehension of evaluation, and an inability to accurately recall past events (Howard, 1980; Phares, Compas, & Howell, 1989; Podsakoff & Organ, 1986). Funding, ethical, and logistical limitations can make more rigorous research designs difficult to pursue. Milgram (1963) and his contemporaries (Burger, 2009), however, have demonstrated multiple research designs in which behavioral responses to authority demands are both observable and quantifiable. When combined with the dilemmas of variant operationalizations and divergent names for the construct, the proximal indicators of orientation to authority are an additional layer of problematic assessment methodology, which presents a weighty problem for researchers reviewing the literature. Of the many theoretical frameworks, two are prominent.

## **Social Cognitive Perspective**

In social cognitive perspectives, individuals are seen as both a product of and an agent for the social context (Bandura, 1989). Thus, a person's orientation to authority is two-pronged. As a product of the social context, individuals are influenced by a staggering number of experiences and social groups. Consider, for example, the likely differences between the cognitive schemas regarding authority for an Air Force captain versus a teenaged fast food worker. Social learning theory would suggest that people adopt the norms of their respective group, and, since no person belongs to a single group, humans are left to integrate their various group norms into a larger, cohesive social schema. This integration can create complex schemas in which all contributing variables are difficult to parse apart. As agents of their social context, individuals weigh their own motives and learning contingencies against the context and membership of the group they are influencing. The Air Force captain might be motivated to advocate strict hierarchical models of authority adherence to preserve the status of his or her own rank, whereas the adolescent fast food worker who intends to pursue a different career path might have little reason for promoting adherence to a strict authority structure. Social cognitive perspectives, then, would hypothesize that as individuals age, they become more entrenched in various social groups. The duration and incidence rate of group memberships would thereby exponentially increase individuals' authority perspectives across the lifespan. Still, social psychologists might argue that as the duration and incidence rate of group membership increases, conflicting authority perspectives could arise making it difficult to adhere seamlessly to all groups' standards. Thus, individuals are left to exercise a fair degree of autonomy as they try to reconcile inconsistencies between group demands. Simple social learning theory, therefore, falls short in explaining how individuals are

able to juggle competing group contingencies. The emergence of autonomy is where social cognitive perspectives and developmental perspectives coincide.

### **Developmental Perspective**

Developmental perspectives on orientation to authority are derived in part from Piaget's theory of the Stages of Cognitive Development. Piaget's stages highlight increasing autonomy and ability to reason through complex, abstract dilemmas (Piaget, 1971). Developmental perspectives, then, might posit that as individuals age, their adherence to authority diminishes. This is likely a residual effect of becoming increasingly autonomous and adept at working with abstract concepts. The most commonly considered authority constructs in the developmental literature are in reference to adolescents. Adolescence is a time marked generally by increased conflict between the parent and child (Cicchetti & Rogosch, 2002; Smetana, Campione-Barr, & Metzger, 2006). This increase in conflict is normative and can result in less compliance with parents, which is seen by some researchers as a necessary phase if there is to be a realignment of the power structure within the family (Smetana et al., 2006). Particularly among European American adolescents, there is usually a shift in the structure of parent-child power relations from a hierarchical organization to one that is more egalitarian (Smetana et al., 2006). In short, adolescence is expected to be a time when youth seek independence of and make moves away from parental control (Psathas, 1957). Like the social cognitive perspective, the developmental perspective generally concedes that individuals are active agents in their environment. They are not merely learning from and subject to the environment but are also having influence on those environmental contexts, which in turn shapes those contexts and the contingencies they are likely to encounter in the future (Masten, 2004). Thus, adolescents' tendency toward conflict with

authority figures is simply an outgrowth of their efforts to function as active agents within relevant contexts.

The developmental field seems to lack research or theory regarding orientation to authority in the adult population, so one might be left to surmise that following adolescence, independence continues to increase, whereas obligation to authority decreases. Using the example above, the Air Force captain should be less beholden to authority constructs than the fast food worker, by virtue of age. A developmental psychologist might argue that the Air Force captain is older and less constrained by authority, whereas the adolescent fast food worker is still beholden to the authority of his or her parents and teachers. But as noted above, developmental perspectives have generally ignored the question of how authority orientation might manifest itself beyond adolescence.

### **Perceived Containment**

As noted previously, orientation to authority is a broad term encompassing many operationalizations and methodologies. This study's focus is specifically narrowed to consider the construct of perceived containment. Cavell (2000) posits that children have varying beliefs about the legitimacy of parental authority and adults' ability to impose their will. He referred to these beliefs as a child's *sense of containment* (p. 132) and with Schneider et al. (2003) defined *perceived containment* as "a child's belief that adults have the capacity to impose firm limits and to prevail if there is a conflict in goals" (p. 95). Thus, perceived containment is a more specified, de facto assessment of an individual's orientation to authority. Using this construct and its developed measure (as discussed below), researchers can assess whether children believe their behavior will be dictated by authority figures when there is conflict in goals. This approach

eschews children's opinions about the fairness of adult directives as well as their predictions about the consequences of failing to comply with those directives.

In a study involving second and third grade students ( $N = 263$ ), including 160 who had been identified as highly aggressive and 103 who were nominated by teachers as "good citizens", Schneider et al. (2003) developed and evaluated the Perceived Containment Questionnaire (PCQ). The PCQ was intended to assess the degree to which children believed that mothers, fathers, or teachers could prevail in the event of a conflict in goals. The PCQ contains two types of questions. The first type is designed to assess children's general beliefs about adults' capacity to exert authority (e.g., "My mom can make me obey even if I really don't want to"). The second type is designed to assess children's beliefs about their likelihood of prevailing over authority figures in situations where prevailing would be quite unlikely (e.g., "You really don't want to go to school today. Your mom says that you have to go anyway. Can your mom make you go to school?"). Schneider and colleagues (2003) found that the PCQ had adequate internal consistency (coefficient alpha = .80) and two-week retest reliability ( $r = .88, p < .01$ ). The researchers found no significant mean differences in PCQ scores by gender or race, and they noted that the majority of PCQ scores were clustered on the high end of perceived containment, which is consistent with the notion that relatively few school age children have serious doubts about adults' power or authority.

Schneider et al. (2003) hypothesized that PCQ scores would be inversely related to parents' and teachers' ratings of children's callous/unemotional (CU) traits. Children high in CU traits are seen as "lacking guilt, lacking empathy, constricted emotions" (Loney, Frick, Ellis, & McCoy, 1998, p. 234). As expected, children with low PCQ scores were generally rated as more callous and unemotional. There was also a significant negative relation between children's PCQ

scores and their level of externalizing problems as rated by parents and teachers. Importantly, this relation held even when controlling for parents' self-ratings of ineffective discipline. In fact, there was a significant interaction between PCQ scores and ineffective discipline when predicting children's externalizing problems: Ineffective discipline significantly predicted externalizing problems, but only for children who perceived adults as in charge. Children who lacked a sense of containment had relatively high levels of problem behavior that were unrelated to parental discipline. For this group of children, it was the quality of the mother-child relationship that significantly (and negatively) predicted level of externalizing problems.

Schneider and colleagues (2003) also hypothesized that PCQ scores would be related to parents' use of ineffective discipline and to the quality of the mother-child relationship. Results failed to support a direct relation between perceived containment and either ineffective discipline or mother-child relationship quality; however, the interaction of these two parenting variables significantly predicted a child's sense of containment. Thus, children whose parents combined effective discipline with a positive mother-child relationship reported a higher sense of containment.

Akins (2003) expanded on the work of Schneider et al. (2003) by testing whether specific dispositional variables would be directly related to children's sense of containment. Also examined was the degree to which these variables moderated the relation between ineffective parental discipline and children's containment-related beliefs. Akins (2003) hypothesized that symptoms of hyperactivity/impulsivity/attention (HIA) and CU traits as measured by the newly developed Antisocial Processes Screening Device (APSD; Frick & Hare, 2002) would be inversely related to children's sense of containment. Akins also predicted that children's internalizing problems would be positively related to PCQ scores. Using data from the same

sample as that of Schneider et al. (2003), Akins failed to find support for a direct relation between child dispositional variables and their sense of containment; however, there was evidence that children's internalizing problems interacted with ineffective parental discipline in significantly predicting perceived containment. For children rated as relatively low in internalizing problems, ineffective parental discipline was associated with a lower sense of containment. This finding, in concert with those reported by Schneider et al. (2003), suggests that poor discipline in combination with other factors (e.g., poor mother-child relationship quality, low internalizing problems) is associated with low perceived containment in children.

Mayfield (2008) expanded this line of research by creating a version of the PCQ designed to assess containment beliefs in young adults. The Perceived Containment Questionnaire-Young Adult (PCQ-YA) version contains 14 self-report items that are rated on a 7-point, Likert-type scale. Unlike the PCQ, which assesses children's beliefs about containment only with respect to parents and teachers, the PCQ-YA includes items that involve other potential authority figures in the lives of young adults. Among these are boss, religious leader, judge, sports coach, police, school administrator, postal clerk, security guard, doctor, and landlord. Mayfield examined the degree to which PCQ-YA scores were associated with heightened levels of antisocial behavior (ASB) and with three known correlates of antisocial behavior: narcissistic traits, symptoms of attention deficit/hyperactivity, and symptoms of early conduct disorder. Participants ( $N = 154$ ) were drawn from a larger sample of college students ( $N = 526$ ) and were recruited because their scores on the PCQ-YA were in the top or bottom 25%. As expected, and consistent with Schneider et al.'s (2003) findings, individuals who scored lower on the PCQ-YA reported engaging in more antisocial behaviors. Young adults' containment beliefs also correlated in expected directions with self-rated narcissism, symptoms of attention/hyperactivity problems,

and early conduct disorder symptoms. Mayfield (2008) also found that perceived containment moderated the commonly found relation between narcissism and self-reported ASB. For those participants with a relatively strong sense of containment, there was no relation between narcissism and ASB, but for those with a low sense of containment, there was a significant positive relation between narcissism and ASB. Mayfield (2008) postulated that high perceived containment is perhaps a protective factor for individuals with narcissistic traits such that the risk of deleterious outcomes (i.e., antisocial behavior) are tempered by their belief that authority figures will prevail in instances of conflicting goals.

### **Current Study**

As noted previously, perceived containment is one way to conceptualize and measure a subtype of orientation to authority. Perceived containment is a social-cognitive construct which attempts to tap into children's beliefs about their obligation (or lack thereof) to defer to the commands of key authority figures. While Milgram (1963) asked whether individuals would behaviorally submit to an authority figure, researchers of perceived containment question whether children *believe* they must submit to authority figures. In essence, we would like to know what cognitive processes occur prior to the overt, behavioral deference Milgram observed. Additionally, Milgram was most interested in people who over-comply, whereas perceived containment researchers are most interested in children who under-comply. Both categories of research investigate compliance and people's orientation to authority, but each seemingly takes a narrow view of opposite ends of the spectrum of orientation to authority. With increased knowledge of each phenomenon, the field will be better equipped to understand how, when, and under what conditions individuals comply with directives from authority figures. Milgram was interested in reducing abuses associated with the tendency of people to over-comply with

authority figures. Perceived containment researchers are interested in intervening with child outliers who under-comply. Both lines of research add important elements to a collective body of knowledge.

Thus, the current study extends the work of Schneider et al. (2003), Akins (2003), and Mayfield (2008) in an effort to enhance the field's understanding of perceived containment and its hypothesized correlates. The work of these authors suggests that perceived containment is a useful predictor of child externalizing behavior or young adult ASB and that there is value in trying to identify the antecedents or developmental precursors of perceived containment. Findings reported by Akins (2003) and Schneider et al. (2003) suggest that low perceived containment is not simply a product of ineffective discipline. Schneider et al (2003) found that ineffective discipline was not significantly linked to perceived containment; rather, ineffective discipline in concert with mother-child relationship quality predicted children's sense of containment. Similarly, Akins (2003) found that ineffective discipline predicted perceived containment only when considered along with children's level of internalizing problems. The current study continues that work by examining the relations among perceived containment, ineffective discipline, parents' involvement in ASB.

### **Parental ASB and Links to Child Externalizing Behaviors**

A large body of empirical studies has found linkages between parental ASB and child externalizing problems (Barnow, Lucht, & Freyberger, 2005; Christian, Frick, Hill, & Tyler, 1997; Frick, Kuper, Silverthorn, & Cotter, 1995; Frick & Loney, 2002; Huesmann, Eron, Lefkowitz, & Walder, 1984; Lahey, Russo, Walker, & Piacentini, 1989; Mason & Frick, 1994; Robins, West, & Herjanic, 1975). Early researchers discovered significant correlations between parent and child arrest histories (Robins et al., 1975). More recently, a review of the literature

suggests that the intergenerational link for ASB holds even when the outcome indicators vary (e.g., arrest history, substance abuse, DSM criteria) (Frick & Loney, 2002), which is consistent with previous work linking maternal antisocial elevations on the MMPI with child Conduct Disorder diagnoses (Lahey et al., 1989). Individual aggression has been found to be relatively stable across time, but importantly, a 22 year, longitudinal study of 600 participants found that the intergenerational link of aggression was more stable than intra-individual aggression (Huesmann et al., 1984).

Included in these studies are those that examine the degree to which parental or family history of criminal behavior predicts children's level of ASB. Two studies, for example, used a subset of questions from the *Diagnostic Interview Schedule- Version III-A (DIS-III A)* to assess symptomatology consistent with DSM-III-R (American Psychiatric Association, 1987) diagnosis of Antisocial Personality Disorder (Christian et al., 1997; Frick et al., 1995). In another study, parental arrest history was assessed via a semi-structured interview (Frick, O'Brien, Wootton, & McBurnett, 1994). Parents were asked to estimate the lifetime number of arrests for the relatives in question. Parental arrest history has been found to be a powerful predictor of child ASB (Robins et al., 1975).

The past few decades have yielded robust findings with regard to the processes underlying the development of ASB across the life span, and there is considerable evidence for both environmental and genetic influences (Hicks, South, DiRago, Iacono, & McGue, 2009; Rhee & Waldman, 2002; van Goozen, Fairchild, Snoek, & Harold, 2007). Parsing the role of genes versus environment is difficult, and published findings documenting positive correlations between parents' history of or current levels of ASB and children's externalizing behavior can be

viewed as evidence for the presence of both types of influence (Barnow et al., 2005; Dodge & Pettit, 2003; Patterson, 1997; Rhee & Waldman, 2002).

Behavioral geneticists have used twin and adoption studies to examine the degree to which genetic endowment plays a part in the development of ASB. In a twin study of the heritability of externalizing behaviors, researchers found substantial heritability for conduct disorder and substance dependence (Hicks, Krueger, Iacono, McGue, & Patrick, 2004). A meta-analysis of 15 twin and adoption studies found that approximately 50% of the variance of ASB was attributable to heritability, with stronger effects found for severe ASB (Mason & Frick, 1994). More recently, a meta-analysis of 51 twin and adoption studies revealed important proportions of variance attributable to genetics, shared environmental influences, and nonshared environmental influences (Rhee & Waldman, 2002). This finding is consistent with Scarr & McCartney's (1983) general developmental model that posits a series of interactions between parent genotype, child genotype, child phenotype, and rearing environment.

There is a notable body of literature pertaining to the role of CU traits in the development of ASB (Frick, 1995; Larsson, Viding, & Plomin, 2008; Oxford, Cavell, & Hughes, 2003; Schneider et al., 2003; Wootton, Frick, Shelton, & Silverthorn, 1997). It applies to a limited subset of children, however, who might be fledgling psychopaths (Frick, 1995). Children with CU traits have been found to have an elevated parental history of ASB (i.e., three times that of children lacking CU traits) (Christian et al., 1997). Importantly, CU traits have emerged as a moderator of the link between ineffective parenting and conduct problems, such that children with high levels of CU traits displayed high levels of conduct problems irrespective of parenting style (Frick, 1998; Oxford et al., 2003; Schneider et al., 2003; Wootton et al., 1997).

Importantly, these findings earmark the interaction between genetic and environmental influences, and CU traits serve as a key predictor of externalizing behaviors.

The preponderance of work on environmental factors associated with the development of ASB has focused on ineffective parenting, which generally includes both harsh and excessively punitive parenting, as well as parenting that is inconsistent, excessively lax, and permissive (Cavell, Hymel, Malcolm, & Seay, 2007; Frick, Christian, & Wootton, 1999; Patterson, 1997; Wootton et al., 1997). Historically, researchers hypothesized that aggressive children punished for their aggressive actions would behave less aggressively. It was discovered, however, that these children behaved more aggressively (Eron, Walder, & Lefkowitz, 1971; Frick et al., 1999) – findings that would seemingly support Bandura’s (1973, 1978) Social Learning Theory of aggression. Bandura (1973) posited that children learn aggression vicariously, and Abelson (1981) postulated that children develop aggressive scripts through which they orient themselves to the social context.

Contemporary psychological researchers have extended this body of work to examine additional mechanisms contributing to the development of child externalizing behaviors, some of which appear to operate in tandem with ineffective parenting. For example, one study revealed that high quality friendships and association with peers exhibiting few ASB served as a protective factor against ineffective parenting (Lansford, Criss, Pettit, Dodge, & Bates, 2003). Ingoldsby & Shaw (2002) examined neighborhood contextual factors in the emergence of ASB during middle- and late-childhood and affirmed linkages between deviant, neighborhood peer groups and developmental risk for ASB. Peer group influence research has recently been broadened to the school level, where researchers have found significant, but small, between-school differences in ASB (LeBlanc, Swisher, Vitaro, & Tremblay, 2008). Given the minimal

proportion of variance explained by the between-school model, LeBlanc and colleagues (2008) posit that their results highlight the need for the field to continue examining individual variables that contribute to the emergence of ASB.

Also key is the recognition that negative trajectories appear to unfold in a series of cascades (Dodge, Greenberg, & Malone, 2008; Frick & Jackson, 1993; Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). Specifically, Dodge and colleagues (2008) conducted a longitudinal study in which they found a predictive cascade of risk factors in the development of serious violence: early disadvantage predicted harsh and inconsistent parenting, which predicted social and cognitive skill impairments, which predicted the emergence of externalizing behavior problems, which predicted academic and social failure, which predicted parental withdrawal and decreased monitoring, which predicted an increase in association with deviant peers, which predicted adolescent violence. Such findings earmark a more inclusive model of the development of ASB, one in which parenting styles, peer influences, and child characteristics are acknowledged, and the temporal relation between these factors is clarified.

Contemporary literature urges scientists and practitioners to consider the fusion of genetic and environmental factors in considering idiosyncratic taxonomies in the emergence of disruptive behavior problems (Scarr & McCartney, 1983; Tremblay, 2010). Research has evolved such that there is now a recognition that nature and nurture typically interact to place children at risk, rather than either one operating alone (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Frick & Jackson, 1993; Hicks et al., 2009; Larsson, Viding, Rijdsdijk, & Plomin, 2008; Moffitt et al., 1996; Oxford et al., 2003; Dodge & Pettit, 2003; Rhee & Waldman, 2002; van Goozen et al., 2007). A growing number of studies identify genetic vulnerabilities to the development of antisocial externalizing behaviors, but most researchers are

careful to note that these vulnerabilities are typically expressed only when moderated by specific contingencies, such as parental attributes or parental monitoring (Beaver et al., 2007; Dick et al., 2009). Frick & Loney (2002) presented three models as viable explanations for the intergenerational link of ASB. First was a model of genetic predisposition, as described in the studies above. Second, was the acquisition of ASB via observational learning, and third was the influence of antisocial parents in the production of a dysfunctional family environment. The authors postulated that the three models work in concert with one another, creating a cascade of factors contributing to the expression of ASB.

Extant literature provides further support for Frick & Loney's (2002) conjectures that children may acquire ASB through observational learning and/or dysfunctional family environments driven by antisocial parents. Although the body of literature is relatively small, studies do exist that link parent and child social cognitions (e.g., hostile attributions) exhibited by individuals at risk for ASB (Bugental & Johnston, 2000; Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000). One study found that mothers' and sons' attributions about the others' intent were associated with the level of aggressive behavior expressed toward one another (MacKinnon-Lewis, Lamb, Hattie, & Baradaran, 2001). Another study revealed an association between mothers' and children's hostile attribution bias in social information processing, yet gender effects existed, such that this association held for mother/daughter dyads, but not for mother/son dyads (MacBrayer, Milich, & Hundley, 2003). A later study linked children's hostile attributional styles with parents' child-specific hostile attributions but not with parents' more general attributional styles (Halligan, Cooper, Healy, & Murray, 2007).

Parental ASB can model ASB for children (Frick & Loney, 2002) and also disrupt key parenting practices (Patterson, DeBaryshe, & Ramsey, 1989). The literature addressing this

disruption in parenting is quite small. The data that exist, however, show that antisocial parents are significantly more likely to use ineffective parenting practices than control parents, and there is evidence that parenting practices may be a critical mediating mechanism between parent and child ASB (Patterson et al., 1989). Importantly, this finding suggests that the mediating mechanism is environmental and not genetic.

As indicated above, extant literature has linked children's externalizing behaviors with parent antisocial behaviors, ineffective discipline, and children's perceived containment. Parent antisocial behaviors have been linked with ineffective discipline and children's externalizing behaviors. Ineffective discipline has been linked to children's perceived containment. These relations, as well as intergenerational aggression-related social cognitions, suggest that a relation may also exist between parent antisocial behaviors and children's beliefs about adult authority and their sense of containment. It is also plausible, however, that this link will vary as a function of parents' use of ineffective discipline (Akins, 2003; Schneider et al., 2003). Needed is a model that delineates these relations and the mechanisms through which they emerge. I hypothesize that ineffective discipline will moderate the relation between parent ASB and child perceived containment. More specifically, I expect to find an inverse relation between parents' level of ASB and their child's sense of containment, but only for those children whose parents tend to rely on ineffective discipline.

## **Method**

### **Participants**

Participants for this study were drawn from a sample of 169 aggressive children in the second and third grades (Mean age = 8.24 years,  $SD = 0.65$ ) whose parents consented to their participation in school-based programs designed to prevent later delinquency and substance

abuse (Schneider et al., 2003). Children were recruited into the prevention trial if they met the following criteria: (a) a score at or above 70T on the Aggressive Behavior subscale of the Teacher Report Form (Achenbach, 1991); (b) a score at or above 2 standard deviations above the classroom mean on peer nominations of aggression; or (c) a score at or above 60T on the Aggressive Behavior subscale of the TRF and a score above the classroom mean on peer-nominated aggression (Schneider et al., 2003). Of the 169 children whose parents consented to participation, 112 completed the PCQ and had parents who completed questionnaires regarding their own histories of antisocial behaviors. These 112 children (Mean age = 8.28 years,  $SD = 0.65$ ) were included in the present analyses. Of this sample, 33.9 percent were girls; ethnic/racial group membership was distributed as follows: African American, 57 (50.9%), Caucasian, 32 (28.6%), and Latino/Latina, 23 (20.5%). Mean years in school for mothers and fathers of aggressive children were 11.71 ( $SD = 2.62, N = 112$ ) and 11.44 ( $SD = 3.31, N = 84$ ), respectively. The modal occupational level for parents was “unskilled worker” (36%) for mothers and “skilled worker” (46%) for fathers, and only 11% of mothers and 15% of fathers reported an occupational level at or above “manager/lesser professional” (Schneider et al., 2003).

## Measures

**Perceived Containment Questionnaire (PCQ).** The PCQ (Schneider et al., 2003) is a 27-item, self-report instrument designed to measure children’s containment-related beliefs across three significant adult-child relationships: mother, father, and teacher. Items on the PCQ-mother and PCQ-father subscales are identical except for which parent is involved, whereas items on the PCQ-teacher subscale reflect the school context of the teacher-child relationship (e.g., “You are having fun talking with the kid next to you in class. Your teacher tells you to stop talking. Can your teacher make you stop talking?”). The PCQ contains two types of items. The first type

involves general statements about adults' capacity to exert their authority (e.g., "My mom can make me obey her even if I really don't want to.") that children rate on a 4-point, Likert-type scale (0 = *not at all like me*; 3 = *very much like me*). Each subscale (i.e., mother, father, teacher) contains five such items. A second type of item describes situations in which it would be unlikely that a child's wishes would prevail (e.g., "You really don't want to go to school today. Your mom says that you have to go anyway. Can your mom make you go to school?"). Children answer these items with a dichotomous, yes/no response, which was coded as either 1 or 4 to make scoring comparable to the Likert-scale items. Each subscale contains four dichotomous response items, bringing the total number of PCQ items per subscale to 9. Higher PCQ scores are indicative of greater perceived containment, after reverse coding selected items.

Schneider et al. (2003) reported that item-total correlations fell within a range of 0.19 to 0.50, a coefficient alpha of 0.80, and a 2-week retest reliability of 0.88. A large proportion of the respondents scored in the high range, resulting in a leptokurtic distribution (kurtosis = 3.00). This was expected given the nature of the construct as most children were expected to have a moderately high level of perceived containment. There were no significant differences in PCQ scores based on race or gender (Schneider et al., 2003). For additional information on the PCQ measure, see the section above on the Schneider et al (2003) study.

**Parents' Antisocial Symptoms Index (PASI).** The PASI is designed to assess parents' history of and recent involvement in antisocial behavior. The mother was typically the primary informant and was asked to respond for both herself and the child's biological father via a paper-based survey format. The first 15 items on the PASI were drawn from the behavior criteria for conduct disorder contained in the *Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition Text Revision* (DSM-IV-TR) (APA, 2000). These 15 items are henceforth referred to as

Antisocial Youth Symptoms (AYS). As in DSM-IV-TR symptomology framework, AYS questions cover various domains of maladaptive behavior (e.g., “Were you ever physically cruel to people?” for aggression toward people and “Beginning before the age of 13, did you often skip school?” for serious rule violations) in an effort to fully capture an early pattern of antisocial behavior. The mother is asked to give a yes/no response to each item. The internal consistency of this scale, based on data from the present sample, was 0.84 for fathers and 0.56 for mothers. Construct validity is assumed to parallel that afforded by the *DSM-IV-TR* criteria, as mentioned above. Antisocial behaviors in adolescence are commonly measured via a conduct disorder assessment (McCart, Priester, Davies, & Azen, 2006; Short & Shapiro, 1993).

The PASI also included two types of items assessing parents’ current level of substance use and arrest history. The first type assessed the arrest history of the mother and father by asking the informant to report total number of lifetime arrests. The second type of item assessed parents’ level of substance use in the previous twelve months (e.g. “Have you used illegal drugs in the past 12 months?”). These items were answered in a yes/no fashion.

**Ineffective Discipline (ID).** The Weinberger Parenting Inventory (WPI) (Feldman & Weinberger, 1994) was used to assess ineffective discipline. The WPI is a 49-item, self-report parenting inventory with 5 subscales: harsh, inconsistent, psychologically intrusive, permissive, and child centered. The harsh, inconsistent, and psychologically intrusive subscales were used in the current study to form an index of ineffective discipline. The selection of these subscales is consistent with Kochanska’s (1995) supposition that overly arousing styles of parenting interferes with children’s internalization of parent values (Schneider et al., 2003).

Participating parents rated items on the harsh (e.g., “I make sure her punishments are unpleasant enough that she will remember them for a long time.”), inconsistent (e.g., “The

punishments I decide on are often influenced by what mood I am in.”), and psychologically intrusive (e.g., “I sometimes depend on her emotional support more than I should.”) subscales using a 5-point Likert-type scale (0 = *false*, 4 = *true*; 0 = *almost never*, 4 = *almost always*). Higher scores are indicative of discipline that is more ineffective. The WPI has good internal consistency, with a Cronbach alpha coefficient of 0.85 for the current sample.

## **Procedures**

The PCQ was administered to children at school as part of a more extensive, individual interview battery administered by trained undergraduate or graduate student research assistants (Schneider et al., 2003). Parents and teachers completed questionnaires at home and at school, respectively. In nearly all cases, mothers completed the measures given to the parents. Because mothers of high risk children were often difficult to access and because some refused to complete all measures given, parent-report data were missing for some of these children.

## **Results**

### **Descriptive Statistics**

Table 1 presents participant demographics. Included in Table 2 are mean scores, standard deviations, ranges, and normality statistics for the variables of interest. Also included are the sample sizes available for each measure. Cases were dropped from the analyses if they were missing significant data. Included in these measures are mothers’ and fathers’ endorsement of antisocial youth symptoms, substance use, and number of lifetime arrests. Mothers’ reports of ineffective discipline resulted in a mean score of 1.70 ( $SD = 0.55$ ), with a possible high of 4 and higher scores being indicative of discipline that is more ineffective. Children reported a high degree of perceived containment ( $M = 2.45$ ,  $SD = 0.46$ ), which is consistent with prior research indicating that most children do have a high sense of containment (Schneider et al., 2003).

## Bivariate Correlations

Table 3 includes intercorrelation statistics among the variables of interest. There were no significant correlations between the measures of the variables of interest. Mother antisocial behavior (ASB) was not significantly correlated with father ASB ( $r = 0.12, p = 0.28$ ), ineffective discipline ( $r = -0.02, p = 0.88$ ), or child perceived containment ( $r = 0.07, p = 0.47$ ). Father ASB was not significantly related to ineffective discipline ( $r = 0.04, p = 0.67$ ) or child perceived containment ( $r = 0.04, p = 0.68$ ), and ineffective discipline was not significantly related to child perceived containment ( $r = -0.07, p = 0.49$ ).

## Regression Analyses

Hierarchical multiple regression analyses were used to examine the relation between child perceived containment scores (dependent variable), parent antisocial behavior (predictor variable), and ineffective discipline (predictor variable). Predictor variables were entered in the following order: 1) gender, race, and parent educational attainment; 2) parent history of antisocial youth, parent substance use, and parent arrest history (parent antisocial behavior index); 3) ineffective discipline as measured by the WPI; 4) the interaction of parent antisocial behavior and ineffective discipline. The results of the analyses are presented in Table 4. The demographic variables, child gender ( $\beta = -0.08, t(83) = -0.75, p = 0.45$ ), African American ethnicity ( $\beta = -0.01, t(83) = -0.08, p = 0.94$ ), Latino/a ethnicity ( $\beta = 0.24, t(83) = 1.43, p = 0.16$ ), and parent educational attainment ( $\beta = 0.02, t(83) = 0.97, p = 0.34$ ), did not emerge as significant predictors of child perceived containment. Mother's history of antisocial behaviors ( $\beta = 0.36, t(81) = 0.53, p = 0.60$ ), father's history of antisocial behaviors ( $\beta = 0.31, t(81) = 0.45, p = 0.66$ ), and ineffective discipline ( $\beta = -0.04, t(80) = -0.45, p = 0.65$ ) did not significantly

predict child perceived containment. The interaction between parent antisocial behaviors and ineffective discipline was examined. Neither the interaction between mother antisocial behavior and ineffective discipline ( $\beta = 0.15, t(78) = 1.09, p = 0.28$ ) nor the interaction between father antisocial behavior and ineffective discipline ( $\beta = 0.03, t(78) = 0.20, p = 0.84$ ) significantly predicted child perceived containment. The model as a whole appears to be insignificant ( $F(9, 78) = 0.63, p = 0.77$ ) for this sample.

### **Discussion**

The current study expands upon the work of Schneider et al. (2003), Akins (2003), and Mayfield (2008) by examining the hypothesized correlates of perceived containment. Specifically, the current study examined the relations among perceived containment, ineffective discipline, and parents' involvement in ASB. I hypothesized that ineffective discipline would moderate the relation between parent ASB and child perceived containment. I expected to find an inverse relation between parents' level of ASB and their child's sense of containment, but only for those children whose parents tended to rely on ineffective discipline. None of my hypotheses were supported with respect to the current sample. No significant relation between the primary variables emerged, and the predictor variables did not significantly predict perceived containment.

Despite the established intergenerational link for ASB, it is possible that parent ASB is not directly associated with a child's sense of containment. Scenarios presented on the PCQ included those where overt defiance and potential confrontation is involved. The ASB link highlighted in previous research does not specifically address whether the link holds for both overt and covert noncompliance. A child whose parent engages in ASB may still feel subject to direct commands and may engage in more noncompliant acts when no direct, immediate

challenge is presented. The type of direct noncompliance necessary to be labeled as having a “low sense of containment” on the PCQ may earmark a unique subset of children that are not well accounted for in previous intergenerational ASB research. Thus, parent ASB may not be associated with child perceived containment in the general population. More generally, it is also possible that the method of measurement in the PCQ dilutes any potential relation between parent and child ASB, due to the PCQ being used in this study as a proxy for child externalizing behaviors. The PCQ measures a specific cognitive phenomenon and may not be appropriate for inclusion in the general model that links parent and child ASB.

### **Conceptual Challenges in the Current Study**

It is plausible that there is no significant relation among these variables within the current sample. While Schneider et al. (2003) found a significant relation between child externalizing behavior and perceived containment, this sample differed substantially from the current study, because the Schneider et al. (2003) study included a sample of nonaggressive children. The current study excluded the nonaggressive sample, as parent ASB data were not collected for this group. Additionally, Schneider and colleagues (2003) did not examine parent ASB specifically, nor did the two other studies conducted on perceived containment that used this sample (Akins, 2003; Mayfield, 2008). Thus, the hypothesis that a significant link existed between parent ASB and perceived containment may have been premature. Little is known to date about perceived containment, so the use of this variable as a proxy for child externalizing behaviors to establish a link with parent ASB may have been unwise.

As noted previously, however, extant research suggests that a relation between parent ASB and child perceived containment might emerge. Given the results of the current study, some potential conceptual reasons for the lack of significant findings were explored. A first

reason may be related to the amount of contact children had with their fathers. Thornberry, Freeman-Gallant, and Lovegrove (2009) found that the intergenerational link in ASB was significant for fathers with frequent contact with the focus child. This link disappeared, however, when the father had no or infrequent contact with the child. (The same relation for mothers was not examined, as all mothers in the sample had frequent contact with the focus child.) In the current study, the frequency of contact with the mother and father was not measured. Furthermore, mothers were the reporters on measures relevant to father data, which creates two dilemmas: (1) The accuracy of the reporting may be flawed in meaningful ways, and (2) the father may not have had contact with the child since birth. While some studies noted previously posit a genetic explanation for the intergenerational ASB link, Thornberry et al.'s (2009) finding is consistent with Bandura's (1973, 1978) Social Learning Theory, as well as Eron's (1997) conjectures that ASB develops via basic learning principles. In explaining the onset and severity of ASB, Dishion and Patterson (1997) likewise endorse an ecological model in which internal mechanisms and learning interact to determine when and how ASB emerges.

Other factors related to family structure and functioning may have impacted the current results. Kaplan and Liu (1999) found that parent psychological distress strongly mediated the intergenerational relation of ASB, while another study found that financial stress mediated the same relation when examining mothers and their children (Thornberry, Freeman-Gallant, Lizotte, Krohn, & Smith, 2003). Parent psychological distress and financial stress were not included as measured variables in the current study. In addition, Robins, West, and Herjanic (1975) found that the intergenerational relation in ASB was significantly moderated by number of siblings among a sample of urban African-American youth, such that youth with two siblings

or less were unlikely to engage in delinquent acts, even when both parents had histories of elevated ASB. Number of siblings was not measured in the current study.

The age range of the children in the sample is also of some concern. Hicks et al. (2004) broke ASB down into its likely constituent parts to determine if certain subcategories of ASB were more strongly intergenerationally related than others. They found that Conduct Disordered behaviors and substance use disorders were most heritable. In the current study, these subcategories were measured for parents, but not for children due to the age (Mean age = 8.24 years,  $SD = 0.65$ ) of the children in the sample. It is unlikely that a meaningful proportion of the children in a sample of this age would be engaging in significantly Conduct Disordered behaviors or substance use. It is possible, then, that the current sample is too young to establish ASB linkages via the subcategories found most significant by Hicks et al. (2004). A general dilemma in the research of intergenerational transmissions of ASB is whether researchers are accurately and comparably quantifying ASB across lifespan developmental stages, thus allowing for the comparison of generations in different phrases of life. In one study, aggression at 8 years of age was predictive of aggression at 30 years of age (Huesmann et al., 1984), and importantly, the researchers found that when measured at comparable ages across generations, aggression was more stable intergenerationally than intra-individually. While the current study examined a sample of aggressive children, aggression in parents was not directly measured. Likewise, the factors included for the measurement of ASB in parents were not examined in the children. Measurement consistency across generations, particularly when relying upon extant research to establish relevant variables, could have potentially enhanced the current study and increased the likelihood that a significant relation would have emerged.

Finally, the questions of onset, severity, and type of ASB (and measurement methods that account for these variances) seem to be largely ignored by researchers in this area. Moffitt's (1993) seminal work made a clear distinction between early- and late-onset ASB (i.e., life-course-persistent and adolescence-limited ASB, respectively). When researchers declare that there is an intergenerational link in ASB, they often fail to state if this relation holds for early- and/or late-onset ASB. Given the etiology and trajectory distinctions between these subtypes of ASB, specificity in this area of research is critical. Boys, for example, are ten times more likely to develop early-onset ASB than girls, whereas the gender ratios are nearly identical for late-onset ASB (Moffitt & Caspi, 2001). Individuals who are foster care alumni are four times more likely than average youth to develop early-onset ASB, and individuals who have a family member that has been convicted of a felony are twice as likely as average youth to develop early-onset ASB (Alltucker, Bullis, Close, & Yovanoff, 2006). Additionally, the presence of CU traits is an important distinction in life-course-persistent ASB (Viding, Jones, Frick, Moffitt, & Plomin, 2008). Importantly, none of these variables were considered in the measures used for the current study. Differentiating between type of ASB for both parents and children might yield richer and more accurate research outcomes – paving the way for establishing the mechanisms by which intergenerational links in ASB occur.

### **Methodological Limitations of the Current Study**

The methodological limitations of this study are another potential contribution to the lack of significant findings. First, the sample in this study was composed of aggressive children. This may have restricted the variance in meaningful ways. That is, the data analytic plan for this study relies heavily upon variances and standard deviations to determine the magnitude of relations among the variables of interest. When the range of values is restricted substantially, the

magnitude of potential relations is reduced in a covarying fashion (Spicer, 2004). Future studies should include nonaggressive children to address the restricted range problem. Second, there are relatively low base rates of low perceived containment and antisocial behaviors among the general population. A larger sample may be needed to capture divergent relations among the variables of interest.

As mentioned earlier, there are numerous methodological problems with self-report measures, such as attempts to portray oneself in a positive light, responding to demand characteristics, apprehension of evaluation, and an inability to accurately recall past events (Howard, 1980; Phares, Compas, & Howell, 1989; Podsakoff & Organ, 1986). Research designs in which behavioral responses to authority demands are both observable and quantifiable are achievable (Burger, 2009; Milgram, 1963). Collateral informants could also enhance the rigor of interview- and questionnaire-based assessments.

Finally, the impact of ethnicity on the relation between ineffective discipline and child outcomes needs to be considered more thoroughly. While the measure of ineffective discipline in the current study was not exclusive to the use of physical punishment as a disciplinary strategy, it did measure harsh discipline, which included questions regarding the use of corporal punishment. Some studies have found that corporal punishment has differential effects on child outcomes when controlling for ethnicity (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Lansford et al., 2005) particularly for African-American youth and when the discipline is in the nonabusive range (Deater-Deckard et al., 1996). The current sample is 51% African-American, which is disproportionately high when compared with the U.S. population as a whole. The differential child outcomes could have thus impacted the findings and the generalizability of the

current study. Furthermore, generalizability of results from this sample is likely to be limited by the demographic composition of the participants.

### **Strengths of the Current Study**

Despite its limitations, the current study does have some notable strengths. First, perceived containment measures children's belief in the ability of authority figures to prevail in the case of conflict of goals. Thus, perceived containment is a social-cognitive construct, which was measured via a reliable and valid self-report questionnaire. Second, extant research was referenced to develop appropriate measures of ASB in both parents and children. As noted above, however, the measures were not generationally consistent, which posed a limitation. Third, parenting practices were examined for potential moderating effects. Given the expectation that a relation between parent ASB and child perceived containment would emerge, it was important to refer to existing research to account for alternate explanations for the relation and avoid highlighting a spurious relation. Fourth, while examining a sample of aggressive children may have created restriction of variance problems, it is conceptually sound to expect a strong relation to emerge between parent ASB and child perceived containment in this sample. Finally, the study used a range of both parent past and present behaviors to examine parent ASB. Some past studies have used one type of parent behavior to study and provide commentary on parent ASB more generally. This study's use of multiple indicators of parent ASB strengthened the confidence with which this sample of parents could be described.

### **Conclusion**

Further research on the correlates of perceived containment continues to be needed, as an enhanced understanding of how perceived containment impacts the development of externalizing and/or antisocial behaviors across the lifespan stands to benefit the field in meaningful ways.

Understanding how and why youth engage in nonnormative rule violating behavior could aid in developing better theoretical frameworks for constructing effective treatment strategies for youth with ODD and CD, as existing treatments have yielded only modest empirical support and under relatively limited conditions (Kazdin, 1994; Wells, 1994). Most immediately, an enhanced knowledge of the correlates of perceived containment could meaningfully add to the field's ability to earlier identify individuals who are likely to engage in antisocial acts. Earlier identification could lead to more effective intervention efforts.

## References

- Abelson, R. P. (1981). The psychological status of the subject concept. *American Psychologist*, 36, 715-729.
- Achenbach, T. M. (1991). *Manual for the teacher's report form and 1991 profile*. Burlington, VT: University of Vermont.
- Akins, C. L. (2003). *Social and emotional correlates of perceived containment: Individual risk and protective factors*. Unpublished Master's thesis, University of Arkansas, Fayetteville.
- Alltucker, K. W., Bullis, M., Close, D., & Yovanoff, P. (2006). Different Pathways to Juvenile Delinquency: Characteristics of Early and Late Starters in a Sample of Previously Incarcerated Youth. *Journal of Child and Family Studies*, 15(4), 479-492. doi:10.1007/s10826-006-9032-2
- American Psychiatric Association (1987), *Diagnostic and statistical manual of mental disorders*, (3rd ed. rev.). Washington, DC: American Psychiatric Association.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed. rev.). Washington, DC: American Psychiatric Association.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Oxford England: Prentice-Hall.
- Bandura, A. (1978). Social learning theory of aggression. *Journal of Communication*, 28(3), 12-29. doi:10.1111/j.1460-2466.1978.tb01621.x
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175-1184. doi:10.1037/0003-066X.44.9.1175
- Barnow, S., Lucht, M., & Freyberger, H. J. (2005). Correlates of Aggressive and Delinquent Conduct Problems in Adolescence. *Aggressive Behavior*, 31(1), 24-39. doi:10.1002/ab.20033
- Beaver, K., Wright, J., DeLisi, M., Walsh, A., Vaughn, M., Boisvert, D., et al. (2007). A gene  $\times$  gene interaction between DRD2 and DRD4 is associated with conduct disorder and antisocial behavior in males. *Behavioral and Brain Functions*, 3doi:10.1186/1744-9081-3-30
- Bugental, D., & Happaney, K. (2000). Parent-child interaction as a power contest. *Journal of Applied Developmental Psychology*, 21(3), 267-282. doi:10.1016/S0193-3973(99)00038-6
- Bugental, D., & Johnston, C. (2000). Parental and child cognitions in the context of the family. *Annual Review of Psychology*, 51, 315-344. doi:10.1146/annurev.psych.51.1.315

- Burger, J. (2009). Replicating Milgram: Would people still obey today?. *American Psychologist*, 64(1), 1-11. doi:10.1037/a0010932
- Cavell, T. A. (2000). *Working with parents of aggressive children: A practitioner's guide*. Washington, DC US: American Psychological Association. doi:10.1037/10372-000
- Cavell, T. A., Hymel, S., Malcolm, K. T., & Seay, A. (2007). Socialization and Interventions for Antisocial Youth. In J. E. Grusec, P. D. Hastings, J. E. Grusec, P. D. Hastings (Eds.) , *Handbook of socialization: Theory and research* (pp. 42-67). New York, NY US: Guilford Press.
- Christian, R. E., Frick, P. J., Hill, N. L., & Tyler, L. (1997). Psychopathy and conduct problems in children: II. Implications for subtyping children with conduct problems. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36(2), 233-241. doi:10.1097/00004583-199702000-00014
- Cicchetti, D., & Rogosch, F. (2002). A developmental psychopathology perspective on adolescence. *Journal of Consulting and Clinical Psychology*, 70(1), 6-20. doi:10.1037/0022-006X.70.1.6
- Collins, W., Maccoby, E. E., Steinberg, L., Hetherington, E., & Bornstein, M. H. (2000). Contemporary research on parenting: The case for nature and nurture. *American Psychologist*, 55(2), 218-232. doi:10.1037/0003-066X.55.2.218
- Darling, N., Cumsille, P., & Martínez, M. (2008). Individual differences in adolescents' beliefs about the legitimacy of parental authority and their own obligation to obey: A longitudinal investigation. *Child Development*, 79(4), 1103-1118. doi:10.1111/j.1467-8624.2008.01178.x
- Dawson, T., & Gabrielian, S. (2003). Developing conceptions of authority and contract across the lifespan: Two perspectives. *Developmental Review*, 23(2), 162-218. doi:10.1016/S0273-2297(03)00011-X
- Deater-Deckard, K., Dodge, K., Bates, J., & Pettit, G. (1996). Physical discipline among African American and European American mothers: Links to children's externalizing behaviors. *Developmental Psychology*, 32, 1065-1072. doi:10.1037/0012-1649.32.6.1065
- Dick, D., Latendresse, S., Lansford, J., Budde, J., Goate, A., Dodge, K., et al. (2009). Role of GABRA2 in trajectories of externalizing behavior across development and evidence of moderation by parental monitoring. *Archives of General Psychiatry*, 66(6), 649-657. doi:10.1001/archgenpsychiatry.2009.48
- Dishion, T. J., & Patterson, G. R. (1997). The timing and severity of antisocial behavior: Three hypotheses within an ecological framework. In D. M. Stoff, J. Breiling, J. D. Maser, D. M. Stoff, J. Breiling, J. D. Maser (Eds.) , *Handbook of antisocial behavior* (pp. 205-217). Hoboken, NJ US: John Wiley & Sons Inc.

- Dodge, K. A., & Pettit, G. S. (2003). A biopsychosocial model of the development of chronic conduct problems in adolescence. *Developmental Psychology*, 39(2), 349-371. doi:10.1037/0012-1649.39.2.349
- Dodge, K. A., Greenberg, M. T., & Malone, P. S. (2008). Testing an idealized dynamic cascade model of the development of serious violence in adolescence. *Child Development*, 79(6), 1907-1927. doi:10.1111/j.1467-8624.2008.01233.x
- Eron, L. D. (1997). The development of antisocial behavior from a learning perspective. In D. M. Stoff, J. Breiling, J. D. Maser, D. M. Stoff, J. Breiling, J. D. Maser (Eds.), *Handbook of antisocial behavior* (pp. 140-147). Hoboken, NJ US: John Wiley & Sons Inc.
- Eron, L. D., Walder, L. O., & Lefkowitz, M. M. (1971). *The learning of aggression in children*. Boston: Little Brown.
- Feldman, S., & Weinberger, D. A. (1994). Self-restraint as a mediator of family influences on boys' delinquent behavior: A longitudinal study. *Child Development*, 65(1), 195-211. doi:10.2307/1131375
- Frick, P. J. (1995). Callous-unemotional traits and conduct problems: A two-factor model of psychopathy in children. *Issues in Criminological & Legal Psychology*, 2447-51.
- Frick, P. J. (1998). Callous-unemotional traits and conduct problems: A two-factor model of psychopathy in children. In D. J. Cooke, A. Forth, & R. D. Hare (Eds.), *Psychopathy: Theory, research, and implications for society*, (pp. 161-187). Dordresch, Netherlands: Kluwer Press.
- Frick, P. J., Christian, R. E., & Wootton, J. M. (1999). Age trends in association between parenting practices and conduct problems. *Behavior Modification*, 23(1), 106-128. doi:10.1177/0145445599231005
- Frick, P. J., & Hare, R. D., (2002). *Antisocial Processes Screening Device (APSD)*. Toronto: Multi-Health Systems.
- Frick, P. J., & Jackson, Y. K. (1993). Family functioning and childhood antisocial behavior: Yet another reinterpretation. *Journal of Clinical Child Psychology*, 22(4), 410-419. doi:10.1207/s15374424jccp2204\_1
- Frick, P. J., Kuper, K., Silverthorn, P., & Cotter, M. (1995). Antisocial behavior, somatization, and sensation-seeking behavior in mothers of clinic-referred children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 34(6), 805-812. doi:10.1097/00004583-199506000-00022
- Frick, P. J., & Loney, B. R. (2002). Understanding the association between parent and child antisocial behavior. In R. J. McMahon, R. V. Peters, R. J. McMahon, R. V. Peters (Eds.),

*The effects of parental dysfunction on children* (pp. 105-126). New York, NY US: Kluwer Academic/Plenum Publishers.

- Frick, P. J., O'Brien, B. S., Wootton, J. M., & McBurnett, K. (1994). Psychopathy and conduct problems in children. *Journal of Abnormal Psychology*, 103(4), 700-707. doi:10.1037/0021-843X.103.4.700
- Gomez, R., & Gomez, A. (2000). Perceived maternal control and support as predictors of hostile-biased attribution of intent and response selection in aggressive boys. *Aggressive Behavior*, 26(2), 155-168. doi:10.1002/(SICI)1098-2337(2000)26:2<155::AID-AB2>3.0.CO;2-K
- Halligan, S. L., Cooper, P. J., Healy, S. J., & Murray, L. (2007). The attribution of hostile intent in mothers, fathers and their children. *Journal of Abnormal Child Psychology: An official publication of the International Society for Research in Child and Adolescent Psychopathology*, 35(4), 594-604. doi:10.1007/s10802-007-9115-6
- Heaven, P., & Furnham, A. (1991). Orientation to authority among adolescents: Relationships with personality and human values. *Personality and Individual Differences*, 12(10), 977-982. doi:10.1016/0191-8869(91)90026-8
- Hicks, B. M., Krueger, R. F., Iacono, W. G., McGue, M., & Patrick, C. J. (2004). Family transmission and heritability of externalizing disorders: A twin-family study. *Archives of General Psychiatry*, 61(9), 922-928. doi:10.1001/archpsyc.61.9.922
- Hicks, B. M., South, S. C., DiRago, A. C., Iacono, W. G., & McGue, M. (2009). Environmental adversity and increasing genetic risk for externalizing disorders. *Archives of General Psychiatry*, 66(6), 640-648. doi:10.1001/archgenpsychiatry.2008.554
- Howard, G. (1980). Response-shift bias: A problem in evaluating interventions with pre/post self-reports. *Evaluation Review*, 4(1), 93-106. doi:10.1177/0193841X8000400105
- Huesmann, L., Eron, L. D., Lefkowitz, M. M., & Walder, L. O. (1984). Stability of aggression over time and generations. *Developmental Psychology*, 20(6), 1120-1134. doi:10.1037/0012-1649.20.6.1120
- Ingoldsby, E. M., & Shaw, D. S. (2002). Neighborhood contextual factors and early-starting antisocial pathways. *Clinical Child and Family Psychology Review*, 5(1), 21-55. doi:10.1023/A:1014521724498
- Jackson, C. (2002). Perceived legitimacy of parental authority and tobacco and alcohol use during early adolescence. *Journal of Adolescent Health*, 31(5), 425-432. doi:10.1016/S1054-139X(02)00398-1
- Kaplan, H. B., & Liu, X. (1999). Explaining transgenerational continuity in antisocial behavior during early adolescence. In P. Cohen, C. Slomkowski, L. N. Robins, P. Cohen, C.

- Slomkowski, L. N. Robins (Eds.) , *Historical and geographical influences on psychopathology* (pp. 163-191). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Kazdin, A. E. (1994). Antisocial behavior and conduct disorder. In L. Craighead, W. Craighead, A. E. Kazdin, M. J. Mahoney, L. Craighead, W. Craighead, ... M. J. Mahoney (Eds.) , *Cognitive and behavioral interventions: An empirical approach to mental health problems* (pp. 267-299). Needham Heights, MA US: Allyn & Bacon.
- Kochanska, G. (1995). Children's temperament, mother's discipline, and security of attachment: Multiple pathways to emerging internalization. *Child Development*, 66(3), 597-615. doi:10.2307/1131937
- Lahey, B. B., Russo, M. F., Walker, J. L., & Piacentini, J. C. (1989). Personality characteristics of the mothers of children with disruptive behavior disorders. *Journal of Consulting and Clinical Psychology*, 57(4), 512-515. doi:10.1037/0022-006X.57.4.512
- Lansford, J. E., Chang, L., Dodge, K. A., Malone, P. S., Oburu, P., Palmérus, K.,... Quinn, D. (2005). Physical discipline and children's adjustment: Cultural normativeness as a moderator. *Child Development*, 76, 1234-1246.
- Lansford, J. E., Criss, M. M., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2003). Friendship quality, peer group affiliation, and peer antisocial behavior as moderators of the link between negative parenting and adolescent externalizing behavior. *Journal of Research on Adolescence*, 13(2), 161-184.
- Larsson, H., Viding, E., & Plomin, R. (2008). Callous-unemotional traits and antisocial behavior: Genetic, environmental, and early parenting characteristics. *Criminal Justice and Behavior*, 35(2), 197-211. doi:10.1177/0093854807310225
- Larsson, H., Viding, E., Rijdsdijk, F. V., & Plomin, R. (2008). Relationships between parental negativity and childhood antisocial behavior over time: A bidirectional effects model in a longitudinal genetically informative design. *Journal of Abnormal Child Psychology: An official publication of the International Society for Research in Child and Adolescent Psychopathology*, 36(5), 633-645. doi:10.1007/s10802-007-9151-2
- LeBlanc, L., Swisher, R., Vitaro, F., & Tremblay, R. E. (2008). High school social climate and antisocial behavior: A 10 year longitudinal and multilevel study. *Journal of Research on Adolescence*, 18(3), 395-419. doi:10.1111/j.1532-7795.2008.00565.x
- Loney, B., Frick, P., Ellis, M., & McCoy, M. (1998). Intelligence, callous-unemotional traits, and antisocial behavior. *Journal of Psychopathology and Behavioral Assessment*, 20(3), 231-247. doi:10.1023/A:1023015318156

- Luthar, S., & Goldstein, A. (2008). Substance use and related behaviors among suburban late adolescents: The importance of perceived parent containment. *Development and Psychopathology*, 20(2), 591-614. doi:10.1017/S0954579408000291
- MacBrayer, E., Milich, R., & Hundley, M. (2003). Attributional Biases in Aggressive Children and Their Mothers. *Journal of Abnormal Psychology*, 112(4), 698-708. doi:10.1037/0021-843X.112.4.598
- Mackinnon-Lewis, C., Lamb, M. E., Hattie, J., & Baradaran, L. P. (2001). A longitudinal examination of the associations between mothers' and sons' attributions and their aggression. *Development and Psychopathology*, 13(1), 69-81. doi:10.1017/S0954579401001055
- Mash, E. J., & Wolfe, D. A. (2005). *Abnormal Child Psychology* (3rd ed.). Thomson-Wadsworth; Belmont, CA.
- Mason, D. A., & Frick, P. J. (1994). The heritability of antisocial behavior: A meta-analysis of twin and adoption studies. *Journal of Psychopathology and Behavioral Assessment*, 16(4), 301-323. doi:10.1007/BF02239409
- Masten, A. S. (2004). Regulatory processes, risk, and resilience in adolescent development. In R. E. Dahl, L. Spear, R. E. Dahl, L. Spear (Eds.), *Adolescent brain development: Vulnerabilities and opportunities* (pp. 310-319). New York, NY US: New York Academy of Sciences.
- Mayfield, E. (2008). Perceived containment and the antisocial behavior of young adults. *Dissertation Abstracts International*, 69.
- McCart, M. R., Priester, P. E., Davies, W., & Azen, R. (2006). Differential Effectiveness of Behavioral Parent-Training and Cognitive-Behavioral Therapy for Antisocial Youth: A Meta-Analysis. *Journal of Abnormal Child Psychology: An official publication of the International Society for Research in Child and Adolescent Psychopathology*, 34(4), 527-543. doi:10.1007/s10802-006-9031-1
- McDonald, G. (1979). Determinants of adolescent perceptions of maternal and paternal power in the family. *Journal of Marriage & the Family*, 41(4), 757-770. doi:10.2307/351476
- Milgram, S. (1963). Behavioral Study of obedience. *The Journal of Abnormal and Social Psychology*, 67(4), 371-378. doi:10.1037/h0040525
- Mills, R. L. (1998). Paradoxical relations between perceived power and maternal control. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 44(4), 523-537.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100(4), 674-701. doi:10.1037/0033-295X.100.4.674

- Moffitt, T. E., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Development and Psychopathology*, 13(2), 355-375. doi:10.1017/S0954579401002097
- Moffitt, T. E., Caspi, A., Dickson, N., Silva, P., & Stanton, W. (1996). Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. *Development and Psychopathology*, 8(2), 399-424. doi:10.1017/S0954579400007161
- Mouftapa, M., Huang, T., Shakib, S., Sussman, S., & Unger, J. (2003). Authority-related Conformity as a Protective Factor Against Adolescent Health Risk Behaviors. *Journal of Adolescent Health*, 33(5), 320-321. doi:10.1016/S1054-139X(03)00252-0
- Oxford, M., Cavell, T., & Hughes, J. (2003). Callous/Unemotional Traits Moderate the Relation Between Ineffective Parenting and Child Externalizing Problems: A Partial Replication and Extension. *Journal of Clinical Child and Adolescent Psychology*, 32(4), 577-585. doi:10.1207/S15374424JCCP3204\_10
- Patterson, G. R. (1997). Performance models for parenting: A social interactional perspective. In J. E. Grusec, L. Kuczynski, J. E. Grusec, L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 193-226). Hoboken, NJ US: John Wiley & Sons Inc.
- Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, 44(2), 329-335. doi:10.1037/0003-066X.44.2.329
- Peterson, G. (1986). Parent-youth power dimensions and the behavioral autonomy of adolescents. *Journal of Adolescent Research*, 1(2), 231-249. doi:10.1177/074355488612008
- Phares, V., Compas, B., & Howell, D. (1989). Perspectives on child behavior problems: Comparisons of children's self-reports with parent and teacher reports. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(1), 68-71. doi:10.1037/1040-3590.1.1.68
- Piaget, J. (1971). The theory of stages in cognitive development. In D. R. Green, M. P. Ford, G. B. Flamer (Eds.), *Measurement and Piaget* New York, NY US: McGraw-Hill.
- Pinderhughes, E. E., Dodge, K. A., Bates, J. E., Pettit, G. S., & Zelli, A. (2000). Discipline responses: Influences of parents' socioeconomic status, ethnicity, beliefs about parenting, stress, and cognitive-emotional processes. *Journal of Family Psychology*, 14(3), 380-400. doi:10.1037/0893-3200.14.3.380

- Podsakoff, P., & Organ, D. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544. doi:10.1177/014920638601200408
- Psathas, G. (1957). Ethnicity, social class, and adolescent independence from parental control. *American Sociological Review*, 22415-423. doi:10.2307/2089159
- Rhee, S., & Waldman, I. D. (2002). Genetic and environmental influences on antisocial behavior: A meta-analysis of twin and adoption studies. *Psychological Bulletin*, 128(3), 490-529. doi:10.1037/0033-2909.128.3.490
- Robins, L. N., West, P. A., & Herjanic, B. L. (1975). Arrests and delinquency in two generations: A study of black urban families and their children. *Journal of Child Psychology and Psychiatry*, 16(2), 125-140. doi:10.1111/j.1469-7610.1975.tb01262.x
- Scarr, S., & McCartney, K. (1983). How people make environment effects. → their own environments: A theory of genotype *Child Development*, 54(2), 424-435.
- Schneider, W., Cavell, T. A., & Hughes, J. N. (2003). A sense of containment: Potential moderator of the relation between parenting practices and children's externalizing behaviors. *Development and Psychopathology*, 15(1), 95-117. doi:10.1017/S0954579403000063
- Shaffer, D., Fisher, P., Dulcan, M. K., & Davies, M. (1996). The NIMH Diagnostic Interview Schedule for Children Version 2.3 (DISC-2.3): Description, acceptability, prevalence rates, and performance in the MECA study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35(7), 865-877. doi:10.1097/00004583-199607000-00012
- Short, R. J., & Shapiro, S. K. (1993). Conduct disorders: A framework for understanding and intervention in schools and communities. *School Psychology Review*, 22(3), 362-375.
- Smetana, J. G. (2002). Culture, autonomy, and personal jurisdiction in adolescent-parent relationships. In R. V. Kail, H. W. Reese, R. V. Kail, H. W. Reese (Eds.), *Advances in child development and behavior*, Vol. 29 (pp. 51-87). San Diego, CA US: Academic Press.
- Smetana, J. (1988). Adolescents' and parents' conceptions of parental authority. *Child Development*, 59(2), 321-335. doi:10.2307/1130313
- Smetana, J., Campione-Barr, N., & Metzger, A. (2006). Adolescent development in interpersonal and societal contexts. *Annual Review of Psychology*, 57255-284. doi:10.1146/annurev.psych.57.102904.190124
- Spicer, J. (2004). *Making Sense of Multivariate Data Analysis: An Intuitive Approach*. Thousand Oaks, CA: Sage Publications, Inc.

- Sugimura, K., Phinney, J., Yamazaki, M., & Takeo, K. (2009). Compliance, negotiation, and self-assertion in Japanese adolescents' disagreements with parents. *International Journal of Behavioral Development*, 33(1), 77-87. doi:10.1177/0165025408098010
- Ting, W., & Qin-mei, X. (2006). Adolescents' Obedience to Parental Authority in Conflict Situations. *Chinese Journal of Clinical Psychology*, 14(1), 87-90.
- Thornberry, T. P., Freeman-Gallant, A., Lizotte, A. J., Krohn, M. D., & Smith, C. A. (2003). Linked lives: The intergenerational transmission of antisocial behavior. *Journal of Abnormal Child Psychology: An official publication of the International Society for Research in Child and Adolescent Psychopathology*, 31(2), 171-184. doi:10.1023/A:1022574208366
- Thornberry, T. P., Freeman-Gallant, A., & Lovegrove, P. J. (2009). Intergenerational linkages in antisocial behaviour. *Criminal Behaviour and Mental Health*, 19(2), 80-93. doi:10.1002/cbm.709
- Tremblay, R. (2010). Developmental origins of disruptive behaviour problems: The original sin hypothesis, epigenetics and their consequences for prevention. *Journal of Child Psychology and Psychiatry*, 51(4), 341-367. doi:10.1111/j.1469-7610.2010.02211.x
- van Goozen, S. M., Fairchild, G., Snoek, H., & Harold, G. T. (2007). The evidence for a neurobiological model of childhood antisocial behavior. *Psychological Bulletin*, 133(1), 149-182. doi:10.1037/0033-2909.133.1.149
- Viding, E., Jones, A. P., Frick, P. J., Moffitt, T. E., & Plomin, R. (2008). Heritability of antisocial behaviour at 9: Do callous-unemotional traits matter?. *Developmental Science*, 11(1), 17-22. doi:10.1111/j.1467-7687.2008.00672.x
- Wells, K. C. (1994). Parent and family management training. In L. Craighead, W. Craighead, A. E. Kazdin, M. J. Mahoney, L. Craighead, W. Craighead, ... M. J. Mahoney (Eds.), *Cognitive and behavioral interventions: An empirical approach to mental health problems* (pp. 251-266). Needham Heights, MA US: Allyn & Bacon.
- Wootton, J., Frick, P., Shelton, K., & Silverthorn, P. (1997). Ineffective parenting and childhood conduct problems: The moderating role of callous-unemotional traits. *Journal of Consulting and Clinical Psychology*, 65(2), 301-308. doi:10.1037/0022-006X.65.2.292.b

Table 1

*Participant Characteristics*

Characteristic	<i>n</i>	%	<i>M</i>	<i>SD</i>
<b>Children</b>				
<b>Gender</b>				
Male	74	66.1		
Female	38	33.9		
<b>Ethnicity</b>				
African-American	57	50.9		
Caucasian	32	28.6		
Latino/a	23	20.5		
Age in Years			8.28	0.65
Grade in School			2.55	0.50
<b>Parents</b>				
Years of Education – Mother	112		11.71 <sup>a</sup>	2.62
Years of Education – Father	84		11.44 <sup>a</sup>	3.31
<b>Occupation – Mother</b>				
Manager/Proprietor	2	1.8		
Semi-professional/Small Business Owner	8	7.1		
Clerical/Sales/Technician	24	21.4		
Skilled Worker	9	8.0		
Semi-skilled Worker	15	13.4		
Unskilled Worker	38	33.9		
<b>Occupation – Father</b>				
Manager/Proprietor	8	7.1		
Semi-professional/Small Business Owner	8	7.1		
Clerical/Sales/Technician	9	8.0		
Skilled Worker	28	25.0		
Semi-skilled Worker	12	10.7		
Unskilled Worker	5	4.5		

<sup>a</sup> Indicates mean item scores

Table 2

*Variables of Interest*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Min-Max</i>	<i>Skewness</i>	<i>Kurtosis</i>
Antisocial Youth Symptoms – Mother	109	0.49	0.99	0-5	2.29	5.24
Antisocial Youth Symptoms – Father	78	1.70	3.02	0-15	2.36	5.91
Substance Use – Mother	98	0.29	0.27	0-1	0.36	-1.09
Substance Use – Father	92	1.06	1.68	0-7.2	1.77	2.63
Number of Arrests – Mother	69	0.41	0.79	0-4	2.42	6.71
Number of Arrests – Father	64	1.56	3.14	0-20	3.99	19.67
Ineffective Discipline	93	1.70 <sub>a</sub>	0.55	.44-3.19	0.02	<0.01
Perceived Containment Questionnaire	89	2.45 <sub>a</sub>	0.46	.50-3	-1.32	2.31

<sub>a</sub> Indicates mean item scores

Table 3

*Intercorrelations among the Primary Variables of Interest*

Variable	1	2	3	4
1. Antisocial Youth Symptoms – Mother	---	0.12	-0.02	0.07
2. Antisocial Youth Symptoms – Father		---	0.04	0.04
3. Ineffective Discipline			---	-0.07
4. Perceived Containment Questionnaire – Child				---

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

Table 4

*Hierarchical Regression Analyses Predicting Perceived Containment from Parent Antisocial Youth Symptoms and Ineffective Discipline*

Predictor Variables	$\beta$	$R^2\Delta$	$F\Delta$
Step 1			
Gender	-0.08	0.04	0.95
Ethnicity			
African-American	-0.01		
Latino/a	0.24		
Years of Education – Parent	0.02		
Step 2			
Antisocial Symptoms Index (ASI) – Mother	0.36	0.01	0.28
Antisocial Symptoms Index (ASI) – Father	0.03		
Step 3			
Ineffective Discipline (ID)	-0.04	0.00	0.20
Step 4			
Interaction Terms			
ASI – Mother X ID	0.15	0.02	0.62
ASI – Father X ID	0.03		

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