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Relational Aggression, Social Aggression, and Antisocial Personality Features: An Investigation of Bullying Behavior in a Sample of Juvenile Offenders

George Ronald Bell

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RELATIONAL AGGRESSION, SOCIAL AGGRESSION, AND ANTISOCIAL
PERSONALITY FEATURES: AN INVESTIGATION OF BULLYING BEHAVIOR IN
A SAMPLE OF ADOLESCENT OFFENDERS

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

By

G. Ronald Bell

December 2013

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George Ronald Bell

2013

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ABSTRACT

RELATIONAL AGGRESSION, SOCIAL AGGRESSION, AND ANTISOCIAL PERSONALITY FEATURES: AN INVESTIGATION OF BULLYING BEHAVIOR IN A SAMPLE OF ADOLESCENT OFFENDERS

By

G. Ronald Bell

December 2013

Dissertation supervised by Laura M. Crothers, D.Ed.

Bullying is a destructive subtype of aggression that can take direct and indirect forms. This study investigated relationships between two indirect forms of bullying (relational aggression and social aggression), the aggressor's level of interpersonal maturity, and antisocial personality features (narcissism and callous-unemotional traits). Participants included 58 male and 21 female offenders between the ages of 13 and 18 from an urban school serving youth who were adjudicated through the juvenile justice system. Data were obtained from a de-identified data set that contained responses to questions from three self-report rating scales: the Young Adult Social Behavior Scale (YASB), the Antisocial Process Screening Device (APSD), and the Inventory of Callous-Unemotional Traits (ICU). Multiple regression analyses indicated that narcissism uniquely and significantly predicted both relational aggression and social aggression, while callous-unemotional traits uniquely and significantly predicted low levels of

interpersonal maturity. Correlation analyses indicated that there were no statistically significant differences between males and females in the combined presence of narcissism and relational aggression, social aggression, and interpersonal maturity, nor in the combined presence of callous-unemotional traits and relational aggression, social aggression, and interpersonal maturity. Results provide evidence that narcissism is associated with indirect forms of aggression, while callous-unemotional traits are associated with less ability or willingness to resolve interpersonal conflict, respect others' opinions, and maintain a confidence. Moreover, the lack of significant gender differences in this study parallels other research that suggests that adjudicated female youth may experience a greater degree of maladjustment overall than adjudicated male youth, thereby minimizing gender differences in the expression of aggression that have typically been found in studies utilizing community samples.

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CHAPTER 1

Introduction

In order to successfully treat childhood aggression, it is important to understand its subtypes and the potential links that may exist among them. Bullying is a particular subtype of aggression that has been identified by psychologists as one of the ten most serious issues confronting children in the 21st century (Crockett, 2004). It is serious because it is a calculated attempt to dominate and control others (Gottheil & Dubow, 2001), it can be profoundly damaging to both victims and perpetrators (e.g., Eron, Huesmann, Dubow, Romanoff, & Yarmel, 1987; Olweus, 1993), and it is probably the most common form of aggression in childhood (Batsche, 1997).

The impact of bullying should not be underestimated. Researchers have found that victims of bullying can suffer from a variety of emotional and psychosocial issues, leading to problems that range from depression and anxiety to suicide (Blaauw, Winkel, & Kerkhof, 2001; Craig, 1998). The ordeal of being victimized by a bully is also a common experience of children who later perpetrate school shootings (Vossekuil, Fein, Reddy, Borum, & Modzelski, 2002). From the perspective of the perpetrator, bullying has been identified as a precursor to lifelong patterns of aggression. Indeed, a significant proportion of individuals who bully when they are young go on to have criminal records in adulthood (Eron et al., 1987). Nor is bullying exclusive to childhood. Researchers have detailed the impact of bullying in such settings as the workplace, prisons, and the military (Monks et al., 2009). In sum, the impact of bullying on all parties involved and on all strata of society is pervasive.

Traditionally, bullying has been conceptualized as an act of overt, physical hostility that is primarily associated with male behavior. However, in the last few decades

researchers have become aware of other kinds of aggression that cause damage by less visible means. The *modus operandi* of these types of bullying is to attack a victim through indirect and often covert methods that may include manipulating, gossiping, spreading rumors, destroying relationships, and excluding victims from social groups (Olweus, 1993; Smith & Sharp, 1991). Research has shown that females may in fact be as aggressive as males, but they may simply express that aggression in these more indirect, covert forms rather than as direct, physical attacks (Crick & Grotpeter, 1995). This means that there may be different developmental pathways to aggression for each gender.

One theory behind the developmental pathways of aggression has hypothesized that the ability to use indirect forms of aggression is predicated on the development of superior language skills, social intelligence, and social networking (Björkqvist, 1994). In order to manipulate, one must be able to communicate well, understand the subtle nuances that exist within social relationships, and have a well-developed network of relationships. Girls appear to develop these skills much earlier than boys, which could explain why their use of social and relational aggression outpaces that of boys until adulthood, when it seems to equalize. This disparity is most apparent during late childhood and adolescence. For this reason, gender is included in this study as a variable.

Because variations of indirect bullying appear to be so similar, some researchers have argued that they are actually the same construct (Archer & Coyne, 2005). However, a recent study has demonstrated that two types of indirect bullying – relational aggression and social aggression – are distinct constructs that may have very different motivations behind them (Crothers, Schreiber, Field, & Kolbert, 2009). The goal of relational aggression is to harm a victim by destroying relationships (Archer & Coyne, 2005). Researchers have speculated that it may be a strategy used by interpersonally immature

individuals who lack effective conflict resolution skills (Crothers et al., 2009). On the other hand, the goal of social aggression may be to dominate the victim by way of manipulating the social context (Archer & Coyne, 2005; Crothers et al., 2009). If these differences are real, then they represent very different types of aggressors.

On another level, the presence of two underlying antisocial personality features – callous-unemotional traits and narcissism – may also help determine which of these aggressive strategies is chosen and the level of its severity. Callous-unemotional traits are affective characteristics that allow a person to coldly prey on others, such as lack of empathy, lack of guilt, lack of remorse, and underdeveloped emotions (e.g., Barry et al., 2000; Dadds, Fraser, Frost, & Hawes, 2005; Frick, Stickle, Dandreaux, Farrell, & Kimonis, 2005). Such characteristics are not only linked with serious conduct problems, but they preclude the development of sound relationships (Hughes, Gacono, Tansy, & Shaffer, 2013). Narcissism, on the other hand, is characterized by exaggerated self-love and an overriding need for admiration (e.g., Brown, Budzek, & Tamborski, 2009; Zeigler-Hill, Green, Arnau, Sisemore, & Myers, 2011). A number of studies have demonstrated that individuals who score high on narcissism may resort to aggressive acts when their grandiose self-image and social status within a group are threatened by others (e.g., Bushman & Baumeister, 1998; Twenge & Campbell, 2003).

Callous-unemotional traits and narcissism are considered two factors of psychopathy (Cooke & Michie, 2001). As a whole, psychopaths are highly predatory and aggressive individuals who represent a small subset of the criminal population but are responsible for a disproportionately large number of crimes. Studies have firmly established that the most antisocial 5-6% of males commit at least 50% of all crimes (e.g. Farrington, Ohlin, & Wilson, 1986; Wolfgang, Figlio, & Sellin, 1972). When compared

with other offenders, psychopaths are approximately twice as likely to commit violent crimes (Hare & Jutai, 1983), three times as likely to commit crimes within one year of release from prison, and four times as likely to use violence to commit those crimes (Hemphill, Hare, & Wong, 1998). Nevertheless, it is believed that most psychopaths are not violent. Rather, they live and work among the populace at large, and may even be respected members of society (Cleckley, 1941; 1976). These individuals are also highly aggressive, but they have learned to camouflage their aggression and use more manipulative methods to achieve their ends. Although long thought to be a disorder specific to adulthood, a new line of research was introduced in the 1990s that proposed that psychopathic traits do exist in children and adolescents as well. Moreover, there is reason to believe that the presence of callous-unemotional traits is the best distinguishing criterion for identifying psychopathy in youth.

This study will investigate potential links between these two antisocial personality features and relational aggression, social aggression, and the aggressor's level of interpersonal maturity. While relational and social aggression may rank among the most common forms of aggression, and psychopathy underlies the most severe patterns of aggressive behavior, few studies have explored these possible connections. Moreover, no study has examined relational aggression and social aggression as distinct constructs, and no such study has utilized a sample of adolescent male and female offenders. The latter is important because antisocial personality traits are likely to be present in children who have severe conduct problems (e.g., Hare & Jutai, 1983); moreover, adolescence is the period of life when gender differences in aggressive strategies appear to be most pronounced (e.g., Björkqvist, Lagerspetz, & Kaukiainen, 1992).

Problem Statement

The purpose of this study is to examine the degree to which callous-unemotional traits and narcissism predict relational aggression, social aggression, and interpersonal maturity in a sample of adolescent students attending a school designed to educate and treat those with behavior disorders.

Research Questions and Hypotheses

This study is exploratory in nature; therefore, no hypotheses will be put forward. However, two research questions will be explored in this research:

- Is there a relationship between callous-unemotional traits and relational aggression, social aggression, and interpersonal maturity?
- Is there a relationship between narcissism and relational aggression, social aggression, and interpersonal maturity?

Summary

Bullying is a serious manifestation of aggression that is now known to take less visible, indirect forms. These forms focus on the destruction of a victim's relationships and social status. Known as relational and social aggression, they are usually most common among females in late childhood and adolescence, possibly indicating a different developmental pathway to aggression than the pathway previously identified for males. Use of either of these forms of aggression may involve different motivations that differentially involve ineffective conflict resolution skills or the domination of the victim. Callous-unemotional traits and narcissism are factors of psychopathy, which is a serious personality disorder that is characterized by highly aggressive behaviors. There is reason to believe that these antisocial personality features and indirect forms of aggression are linked, but few studies have investigated this connection. Therefore, this study will

explore the potential relationship of callous-unemotional traits and narcissism to relational aggression, social aggression, and interpersonal maturity.

CHAPTER 2

Bullying and Indirect Forms of Aggression

Background and Characteristics of Bullying

Though an old problem, bullying is a new phenomenon as a focus of research. Before its psychological importance was first recognized in Scandinavia in the late 1960s, bullying was virtually ignored by social scientists and educators. The work of F.L. Burk in 1897 appears to be the only scholarly attention devoted to the subject before this time (Smith & Sharp, 1994). It seems entirely possible that this void was due to a belief still common today that bullying is a relatively harmless problem that is a “normal” part of growing up.

However, this view began to change when physician Peter Paul Heinemann initiated a national debate on the subject in Sweden in 1969. Shortly thereafter, the Norwegian psychologist Daniel Olweus began conducting the first systematic exploration of bullying as a form of aggression. The publication of his book *Aggression in the Schools* in 1978 represented the beginning of a line of research that has continued to this day. In 1982, research interest in bullying received new impetus when the tragic suicides of three school children in Norway, who had been victims of bullying, again drew national attention to the issue. This led to the institution of an anti-bullying campaign sponsored by the Norwegian government the next year (Olweus, 1993). Between 1983 and 1985 Olweus developed his *Bullying Prevention Program*, which has become a model for anti-bullying programs throughout the world.

Although the proliferation of research on bullying was initially slow to spread to nations outside Scandinavia, by the late 1980s and early 1990s it was being taken seriously in other parts of the world, including the United States. Since that time, a

respectable body of research has continued to accumulate based primarily on two avenues of investigation: the first method relies on teachers as sources of data, while the second involves direct studies of bullies and victims themselves (Smith & Sharp, 1994).

Prevalence.

The prevalence of bullying is difficult to establish with precision due to its geographic and cultural variability. However, existing evidence indicates that it is common and that its impact can be serious. In fact, bullying may be the most common form of violence in schools (Batsche, 1997). Olweus (1999) found that about 7% of the student populations he surveyed in Norway were bullies, about 9% were victims, and 1.6% were simultaneously bullies and victims. In Great Britain, Sharp and Smith (1991) reported that during the academic term that preceded their study, 27% of the students in primary grades in their survey and 10% of the students in secondary grades had been victimized by bullies on multiple occasions.

In the United States, a lack of data makes the discussion of prevalence more problematic, but several key studies have yielded alarming findings. For example, in their study of elementary school students, Perry, Kusel, and Perry (1988) found that 10% of children in grades 3 to 6 disclosed that they had been targets of repeated victimization. What is more, as students become older the frequency of bullying may increase. In one study (Nansel et al., 2001) nearly 30% of children in grades 6 to 10 reported being involved in some aspect of bullying, either as a victim, bully, or bully-victim. Another study had an even more remarkable finding. Bosworth and colleagues discovered that 29% of the middle school students in their study reported that they had participated in acts of bullying in the previous month alone (Bosworth, Espelage, DuBay, Dahlberg, & Daytner, 1996). In another study, nearly 8 out of 10 middle and high school students in

the American Midwest were identified as victims of bullying (Hoover, Oliver, & Hazler, 1992).

Psychological impact.

As children, victims of bullying may experience academic problems, loss of friendship, feelings of isolation (Hoover, Oliver, & Hazler, 1992), depression, and anxiety (Craig, 1998; Seals & Young, 2003). Some victims of bullying even commit suicide (Archer & Coyne, 2005; Blaauw, Winkel, & Kerkhof, 2001). The negative impact of bullying can be felt well into adulthood. For example, it has been shown that victims of bullying may struggle with depression and self-esteem issues as adults (Olweus, 1993). In addition, one study indicated that bullies themselves have a one in four chance of obtaining a criminal record by age 30 (Eron et al., 1987).

Bullying also appears to have important implications for school violence. One of the key findings of a United States Secret Service study on school shootings over a 26-year period (1974 – 2000) is that 71% of the shooters in these incidents had been victims of bullying (Vossekuil et al., 2002). While the methodology of the study did not allow for a causative association between bullying and school shootings to be established, much of the information that was found was nevertheless striking. For example, the study determined that much of the bullying experienced by the shooters would probably meet legal definitions of assault or harassment. Moreover, in some instances the decision to commit the shooting seemed to be influenced, at least in part, by the ordeal of being victimized by a bully. Although there is not necessarily a direct link with bullying, it is nevertheless significant that the most common motive behind the attacks was revenge (61%) and that most of the shooters (74%) had some kind of grievance against at least

one victim. Thus, some researchers have argued that bullying could be considered an antecedent of school shootings (Anderson et al., 2001).

Definition and characteristics.

While there is some debate over the formulation of an authoritative definition of bullying, it is generally conceded that bullying is distinguished from other forms of aggression by one core feature, the presence of a “systematic abuse of power” (Smith & Sharp, 1994, p. 2). According to the standard definition espoused by Olweus and accepted in most research, bullying must have three components: 1) the aggressor must intend to cause harm to the victim, 2) the aggressive behavior must be repeated across time, and 3) the aggression must involve an imbalance of power between aggressor and victim (Olweus, 1993; Olweus 1999a, b; Slee, 1995; Smith & Sharp, 1994). An imbalance of power exists when the victim has some real or perceived vulnerability in relation to the bully, such as physical weakness, or when the bully cannot be identified because he or she resorts to clandestine forms of manipulation (Olweus, 1999b). Olweus (1999b) and others (e.g., Slee, 1995) also suggest that the aggression must not be provoked by the victim.

This tripartite definition is important because it describes bullying as a specific kind of behavioral transaction rather than defining it in terms of a specific kind of person (bully or victim) or a specific set of behaviors (hitting, kicking, name-calling, etc.) (Swearer & Doll, 2001). Bullying is direct when it involves physical and verbal acts like hitting, kicking, pinching, pushing, shoving, restraining, damaging property, extorting, insulting, mocking, teasing, taunting, threatening, and name calling (Olweus, 1993; Sharp & Smith, 1991). It can also be indirect, in the form of manipulation, gossiping, spreading rumors, destroying relationships, and social exclusion (Olweus, 1993; Smith & Sharp,

1991). According to Olweus (1993, 1999a), single instances of aggression may also constitute bullying if the severity of the aggression is extreme. Monks and colleagues have argued that the severity of these single acts may be determined by “how long after the abusive event the abused person continues to feel coerced, degraded, humiliated, threatened, intimidated or frightened” (Monks et al., 2009, p. 1).

Because of these characteristics, bullying is inherently different from other forms of aggression. Indeed, it is perhaps more insidious because it is not the by-product of conflict between individuals, but rather the result of an individual’s calculated attempts to dominate and control others (Gottheil & Dubow, 2001). Thus, it can be classified as a form of proactive aggression (Coie & Dodge, 1987; Dodge, 1991). Such aggression is unprovoked, largely devoid of emotion, and used for personal gain or to dominate others. Olweus, among others, has argued that bullies have different motivations than other aggressors because they are driven by a need to dominate others, feelings of antagonism toward their surroundings, and the material or psychosocial rewards they obtain from engaging in aggressive behavior (Olweus, 1993). According to Olweus, bullies typically have personality features exemplified by impulsivity, limited empathy, a positive attitude toward violence, and a strong need to dominate others. In addition, they possess qualities that at first appear to be counterintuitive to what one would expect of aggressors, such as good self-esteem and a positive self-view, unusually little or average levels of anxiety and insecurity, and average or slightly lower than average popularity. Moreover, these motivations and personality features are not exclusive to children and the school setting; they can appear in all phases of life and in any number of circumstances, including the adult work environment, families, residential care, the military, and prisons (Monks et al., 2009).

Indirect Forms of Aggression

One of the most important issues in the study of aggression involves the limited operational definition that was used in earlier research literature (Werner & Crick, 1999). For years, that operational definition was logically confined to direct forms of aggression, since they are observable behaviors that focus on causing or threatening physical harm (Archer & Coyne, 2005). Direct aggression is also more traditionally associated with male behavior. As a result, studies of aggression concentrated almost exclusively on males. Olweus' early work on bullying, for example, did not include samples of girls because he equated aggression with physical aggression. Since girls are usually less physically aggressive than boys, he assumed that they are inherently less aggressive (Olweus, 1978).

More recently, however, researchers have recognized that aggression can follow less obvious patterns as well. These indirect varieties of aggression can take the form of manipulation, destruction of relationships, and social exclusion (Olweus, 1993), all of which are less noticeable and are often covert. Even though this form of aggression does not involve real or threatened physical harm, it nevertheless serves the same function: its purpose is to defeat or eliminate competition (Archer & Coyne, 2005). It is a more sophisticated form of aggression that, when recognized, is usually associated with female behavior. However, even though it appears that males tend to use direct forms of aggression and females tend to resort to indirect forms, it will be shown that this gender differential is not as clear-cut as is often supposed.

Conceptualizations of indirect aggression.

Our understanding of indirect forms of aggression has evolved over time. Buss (1961) was the first to categorize alternate forms of aggression that were termed *indirect*

aggression, meaning that the aggressor did not physically attack the victim, but instead assailed the victim verbally or through destruction of property. The work of Feshbach (1969) proposed a more contemporaneous understanding of indirect varieties of aggression as well as the existence of gender differences in how aggression is expressed. However, in 1988, a Finnish study (Lagerspetz, Björkqvist, & Peltonen, 1988) utilizing peer ratings and interviews investigated the occurrence of indirect aggression among 167 eleven- and twelve-year-old boys and girls in fifth grade. Researchers of this study found that boys tended to use direct forms of aggression while girls tended to use indirect forms. Indirect aggression as a construct was substantiated in their factor analysis. The results of this study provided a foundation for the modern conceptualization of indirect forms of aggression and the basis for subsequent theoretical advances.

Over the last two decades, researchers have proposed three separate constructs for indirect forms of aggression, which have been termed *indirect aggression*, *relational aggression*, and *social aggression*. The current understanding of the indirect aggression construct was proposed by the Björkqvist research group in their study of eight-, eleven-, and fifteen-year old school children (Björkqvist, Lagerspetz, & Kaukiainen, 1992), which built on their previous work (Lagerspetz et al., 1988). This study once again established the existence of gender differences in how aggression is expressed. Moreover, they advanced the idea that indirect aggression is a form of hostility that is covert rather than face-to-face, so that the aggressor can remain hidden (Björkqvist et al., 1992). These authors' definition includes gossiping, spreading rumors, backbiting, breaking confidences, criticizing another behind his/her back, ignoring, excluding, social ostracism, turning others against an enemy, becoming friends with another as revenge, imitating another behind his/her back, embarrassing another in public, writing

anonymous notes, doing practical jokes, making abusive phone calls, giving dirty looks, huddling, and rolling one's eyes (Archer & Coyne, 2005).

The next construct to appear was relational aggression, proposed by Crick and Grotpeter (1995) in a peer nomination study of 491 elementary school children in grades three to six. Relational aggression constitutes nearly all of the same behaviors, except that it does not include giving dirty looks, huddling, or rolling one's eyes (Archer & Coyne, 2005). The reason is that unlike indirect aggression, the central goal of relational aggression is to damage relationships. The authors not only confirmed relational aggression as a construct, but they also demonstrated that it is a method of aggressing that is more common among females than males. This construct has since been confirmed by other researchers (e.g., Rys & Bear, 1997).

Finally, Galen and Underwood (1997) proposed the construct of social aggression, which incorporates the behaviors of both indirect and relational aggression, including malicious nonverbal behavior, such as eye-rolling, huddling, and giving dirty looks (Archer & Coyne, 2005). They state that social aggression is "directed toward damaging another's self-esteem, social status, or both, and may take such direct forms as verbal rejection, negative facial expression or body movement, or more indirect forms such as slanderous rumors or social exclusion" (Galen & Underwood, 1997, p. 589). Significantly, their study of 234 first, fourth, seventh, and tenth graders, girls found social aggression to be more injurious than physical aggression, while for boys, the findings were precisely the opposite.

Factor analytic findings and theoretical developments.

These seminal studies confirmed that indirect forms of aggression are actual constructs, but there has been some debate over whether or not they are essentially the

Table 1

Characteristics of Relational Aggression, Social Aggression, and Indirect Aggression (Archer & Coyne, 2005)

<ul style="list-style-type: none">• Gossiping• Spreading rumors• Breaking confidences• Backbiting• Criticizing clothes and personality behind back• Ignoring• Deliberately leaving others out of the group• Turning others against• Social ostracism/exclusion	<ul style="list-style-type: none">• Becoming friends with another as revenge• Imitating behind back• Embarrassing in public• Anonymous jokes• Practical jokes• Abusive phone calls• Huddling• Dirty looks (<i>except relational aggression</i>)• Rolling eyes (<i>except relational aggression</i>)
--	---

same construct. In a review, Archer and Coyne (2005) proposed that they have very few intrinsic differences, making them nearly identical in terms of description, development, outcomes, and gender differences. One noticeable distinction is that researchers of relational and social aggression tend to be interested in the goals of the aggression, while researchers of indirect aggression tend to be interested in the covert *modus operandi* used by perpetrators. In addition, social aggression centers on destroying a victim's social status among peers, and is therefore endemic to group contexts, while relational aggression is directed toward destroying relationships in one-to-one (dyadic) contexts. Overall, however, it has been argued that all three are very alike in how they operationalize (Carpenter & Nangle, 2006).

Recent research has questioned whether indirect forms of aggression can be approached so broadly. In a groundbreaking study by Crothers and colleagues (Crothers et al., 2009), confirmatory factor analysis utilizing a sample of 629 male and female

college students provided evidence suggesting that relational aggression and social aggression are indeed distinct constructs. The authors of the study argue that the importance of distinguishing between these constructs may be intimately tied to the motives of the perpetrator.

It has already been established that motives play an important role in the study of aggression because acts that are harmful are not truly aggressive unless they are *intended* to be harmful. Unlike direct aggression, however, the motives of perpetrators who use indirect forms of aggression are more difficult to discern, and are therefore all the more important to understand (Archer & Coyne, 2005). The findings of the study by Crothers and colleagues (2009) add another dimension to that observation, because their factor analysis indicated that relational and social aggression are distinct from interpersonal maturity. The authors speculate that those who engage in relational aggression may resort to manipulative behaviors because they do not possess the maturity necessary to effectively deal with interpersonal conflict in dyadic relationships. This hypothesis seems to be supported by the finding by Grotjeter and Crick (1996) that relationally aggressive children tend to be aggressive toward their friends, whereas overtly aggressive children tend to collaborate with friends in acting aggressively toward individuals *outside* their friendships. On the other hand, Crothers and colleagues (2009) also proposed that those who engage in social aggression may indeed be interpersonally mature but are instead motivated by the desire to dominate the victim.

Therefore, even though indirect forms of aggression are nearly identical in description, development, outcomes, and gender differences, relational and social aggression, at least, may be fundamentally distinguished by the intentions of the perpetrator (it appears that no studies have yet attempted to investigate whether indirect

aggression is also a distinct construct). If the aforementioned hypotheses are true, perhaps we should be less interested in the *goal* of the aggressor (i.e., the destruction of relationships or social status) and more interested in the *reason* the aggressor chooses that goal in the first place. Even though these forms of aggression appear to be very similar, at least in how they operationalize, there is obviously a significant difference between aggression that is motivated by ineffective conflict resolution skills and aggression that is motivated by the need to dominate others.

Importance of Indirect Forms of Aggression

As more is being understood about aggression in general, the importance of relational aggression is becoming increasingly recognized due to its psychological impact, associations with antisocial behavior, and its impact on the operationalization of aggression and our understanding of developmental pathways.

Psychological impact and behavioral outcomes.

Even though indirect forms of aggression might appear innocuous, they can result in a constellation of psychosocial and behavioral problems for both victims and bullies and these problems can continue into adulthood. Victims can experience psychosocial maladjustment such as peer rejection (Crick, Casas, & Mosher, 1997; Crick & Bigbee, 1998) and future maladjustment (Crick, Ostrov, & Werner, 2006; Crick, 1996); internalizing problems like depression (Storch, Nock, Masia-Warner, & Barlas, 2003; Crick & Grotpeter, 1995), emotional distress and loneliness (Crick & Bigbee, 1998; Crick & Nelson, 2002; Cullerton-Sen & Crick, 2005), poor self esteem, low levels of happiness, difficulties with self-restraint, such as impulsive behaviors and anger inhibition (Crick & Bigbee, 1998); and externalizing problems such as delinquency, drug abuse (Sullivan, Farrell, & Kliewer, 2006), skipping school, running away, and suicide

(Batsche & Knoff, 1994; Craig, 1998; Crick & Grotpeter, 1995; Crick & Nelson, 2002).

In addition, it has been shown that bullies themselves may experience internalizing issues like anxiety, sadness, and somatic complaints (Crick, 1997), externalizing issues such as blaming, defiance, and impulsivity (Crick, 1997), and psychosocial problems like peer rejection (Rys & Bear, 1997).

These problems are underscored by other factors. For example, research has shown that relational aggression is a predictor of antisocial behavior (Herrenkohl, Catalano, Hemphill, & Toumourou, 2009). It is also common. In a study of 1,929 American 7th and 9th grade adolescents (Herrenkohl et al., 2007) approximately 6% had used physical aggression, 11.9% used relational aggression, and 3.4% used both, indicating that nearly twice the number of aggressors had chosen relational aggression over physical aggression. What is more, indirect forms of aggression often go unnoticed and unpunished (Xie, Farmer, & Cairns, 2003; Yoon, Barton, & Taiariol, 2004), and when a behavior goes unpunished, it is more likely to occur again (Yoon & Kerber, 2003).

Gender differences and developmental pathways.

The significant support that the relational aggression construct has received in existing research means that the operational definition of aggression (overt, physical) that has been conceptualized for many years must be revised significantly. In other words, it would indicate important problems with how definitions of aggression were formulated in the past (Werner & Crick, 1999). Rather than define aggression as overt physical acts that are mainly associated with male behavior, these findings suggest that aggression is common to both sexes and can take other forms as well. This conclusion, in turn, means that there may be important gender differences in the frequency and expression of

aggressive acts, which drastically changes the long-held assumptions about the nature of aggression and its development.

There is a considerable research base that supports the view that indirect forms of aggression are a more common feature of female aggression than male aggression (e.g., Björkqvist et al., 1992; Crick, 1995; Crick, 1996; Crick et al., 1997; Crick & Grotpeter, 1995; Crick et al., 2006; Herrenkohl et al., 2007; Lagerspetz et al., 1988; Murray-Close, Ostrov, & Crick, 2007; Rys & Bear, 1997). Research also supports the view that physical aggression is more common among males (e.g., Björkqvist et al., 1992; Crick et al., 2006; Lagerspetz et al., 1988; Zimmer-Gembeck, Geiger, & Crick, 2005). This difference was first observed empirically as far back as Feshbach (1969). She found that in the first four minutes of interacting, girls more often refused to admit new children to their group than boys. The gender dichotomy is also supported by the research of Crick, Casas, and Ku (1999), who found that boys tended to be victims of physical aggression but that girls tended to be victims of relational aggression.

However, upon closer inspection, it appears that these differences are not so clear-cut, but appear to vary according to age, gender, and developmental level. For preschoolers, the use of relational aggression appears increase as children become older, more socially adept, and more overtly aggressive (Carpenter & Nangle, 2006). Older girls in early elementary school appear to use more relational aggression than younger girls (Hipwell et al., 2002). When provoked, girls in fourth and fifth grades appear to use relational aggression more than girls in third grade (Crick, Bigbee, & Howes, 1996). Other research has shown that there is no gender difference in the use of relational aggression in third grade, but by sixth grade, girls use more relational aggression than

boys (Zimmer-Gembeck et al., 2005). Across all age levels it appears that males are more physically aggressive than females (Archer & Coyne, 2005).

How can we account for these differences? Björkqvist and colleagues (1994; Björkqvist et al., 1992) propose that indirect aggression is used within the context of a developmental trajectory that changes during the course of childhood, adolescence, and adulthood, and is dependent on the development of verbal skills, social skills, and social networks. For preverbal children whose speaking and social skills have not yet developed, direct physical acts are the only method available for acting aggressively, as they are for animals. However, as children grow, their verbal skills develop and their social skills and interactions become increasingly sophisticated, and so do their means of aggressing. New avenues become possible that do not necessarily involve the use of physical force. As children grow into adolescents and adults, physical aggression is also less socially acceptable, and is largely supplanted by indirect forms of aggression. As a result, indirect forms of aggression become more common in adulthood. What is more, girls' earlier maturation in the area of social and verbal skills allows them to make use of indirect forms of aggression earlier than boys, but as boys mature they eventually reach a similar level of activity.

There is evidence to support this theory. In their studies (Björkqvist et al., 1992; Lagerspetz et al., 1988), Björkqvist and colleagues found that girls' use of relational aggression increased from age 8 to ages 11 and 15, where it became clearly more prevalent among girls than boys. Social intelligence and language development have also been found to be positively associated with indirect forms of aggression (Björkqvist, Österman, & Kaukiainen, 1999; Bonica, Arnold, Fisher, & Zeljo, 2003). By adulthood, it appears that the use of relational aggression among males and females equalizes or is

used even more frequently by males than females (e.g., Loudin, Loukas, & Robinson, 2003; Richardson & Green, 1999). Referring to this situation, Björkqvist (1994, p. 179) writes that “There are good reasons to believe that, as far as adult interpersonal conflict is concerned, physical aggression is really the exception, not the rule.”

Summary

A number of conclusions can be drawn from the literature regarding indirect forms of aggression. First and most importantly, research indicates that indirect forms of aggression are viable constructs, and that they are harmful behaviors for both victims and aggressors. In addition, these alternate forms of aggression have been conceptualized in three ways, as indirect aggression, relational aggression, and social aggression. However, as Crothers and colleagues (Crothers et al., 2009) have shown, only relational aggression and social aggression appear to be distinct constructs at this time, although future research may determine that indirect aggression is also distinct from the other two. We also know that there appear to be gender and age differences in the expression of indirect forms of aggression. This has extremely important ramifications, because it completely changes the traditional operational definition of aggression and also opens the possibility of different developmental pathways to antisocial behavior. Understanding its correlates, such as verbal skills and social intelligence, will contribute significantly to the creation of efficacious treatments.

Psychopathy and Callous-Unemotional Traits

Psychopathy holds the distinction of being the first mental disturbance to be identified as a personality disorder. The value of this construct lies primarily in its usefulness for identifying and predicting criminal behavior, violence, and recidivism (Gacono & Hughes, 2004; Marsee, Silverthorn, & Frick, 2005). Within the criminal

justice system it can be used to distinguish violent from non-violent offenders (Marsee et al., 2005). It is also important for understanding the etiology of aggression and for designing treatments, since a treatment's effectiveness largely depends on how well it aligns with the root causes of the pathology, particularly in the case of children (Barry et al., 2000). This is especially important with regard to psychopathy, since this disorder has proven exceptionally difficult to treat (Barry et al., 2000; Gacono & Hughes, 2004).

Development and Definition

Psychopathy can be described generally. McCord and McCord (1964) offered a formulation that concisely sums up the chief characteristics of this disorder: "The psychopath is an asocial, aggressive, highly impulsive person, who feels little or no guilt and is unable to form lasting bonds of affection with other human beings" (McCord & McCord, 1964, p. 3). They argued that guiltlessness and the incapacity to love are the hallmark traits that distinguish psychopathy from other personality disorders (McCord & McCord, 1964). Lynam and Gudonis (2005, p. 381) have described it thus: "Behaviorally, the psychopath is an impulsive risk-taker involved in a variety of criminal activities. Interpersonally, the psychopath has been described as grandiose, eccentric, manipulative, forceful, and cold-hearted. Affectively, the psychopath displays shallow emotions, is unable to maintain close relationships, and lacks empathy, anxiety, and remorse." Referring to the work of Cleckley (1941/1976), Hare has described psychopathy as "a socially devastating disorder defined by a constellation of affective, interpersonal, and behavioral characteristics, including egocentricity; impulsivity; irresponsibility; shallow emotions; lack of empathy, guilt or remorse; pathological lying; manipulateness; and the persistent violation of social norms and expectations" (Hare, 1998, p. 188). What is common to all of these descriptions is that they depict

psychopathy as a personality disorder with behavioral, affective, and interpersonal dimensions that are profoundly antisocial in nature.

Attempts to describe psychopathy specifically, on the other hand, are inseparable from the long historic debate over the formulation of a clinical definition and nosologic classification. Indeed, for all of its long history, it has defied precise categorization. What is more, issues of moral condemnation have intruded into these debates, further clouding attempts to reach scientific conclusions about the nature of this disorder. Overall, the history of psychopathy can be roughly divided into periods that encompass: 1) clinical speculation about the disorder, 2) creation of diagnostic criteria, and 3) proposed models of psychopathy derived from measurement of the construct.

Early conceptions of psychopathy.

For more than a hundred years, attempts to define the construct of psychopathy were based primarily on clinical speculation. In 1801, the French psychiatrist Phillippe Pinel recognized that some individuals exhibited a contradictory combination of irrational, socially destructive behaviors and clear powers of reason that he called *insanity without delirium* (“*manie sans delire*”; McCord & McCord, 1964; Millon, Simonsen, & Birket-Smith, 1998). Pinel was important because he was probably the first to propose a definition of psychopathy and also the first to recognize that loss of reason should not be a criterion for identifying the presence of mental illness (Cooke, Michie, & Hart, 2006; Millon et al., 1998). The American founding father and physician Benjamin Rush later advanced the idea that psychopathy had a hereditary or biological basis (Millon, 1981). However, he also introduced the wider issue of moral culpability, thus attaching a moral stigma to the disorder (McCord & McCord, 1964; Millon et al., 1998). Clinicians continued to theorize over the nature of psychopathy for the remainder of the

19th century. This theorizing was punctuated by a debate between those who viewed the disorder in terms of a moral debilitation, represented by individuals like J.C. Pritchard and Henry Maudsley, and those who sought to remove the legal and philosophical issue of morality to maintain Pinel's clinical objectivity, as represented by Daniel Hack Tuke and J.L. Koch (Millon, 1981). In the end, what was common to all of the characterizations of psychopathy at this time is that they were exceptionally broad and vaguely defined (McCord & McCord, 1964).

Development of diagnostic criteria.

By the early 20th century an important change of focus occurred when theoretical speculation over the classification of psychopathy was jettisoned in favor of direct observation (McCord & McCord, 1964; Millon, 1981). At that time, serious attempts were made to narrow and clarify a set of diagnostic criteria, culminating in the work of Hervey Cleckley (1941).

In his book *The Mask of Sanity*, Cleckley distilled sixteen pervasive traits from a series of case studies that he believed represented the core features of the behavior and personality structure of the psychopath. These included traits like superficial charm and good intelligence; the absence of irrational thinking; unreliability; untruthfulness and insincerity; the lack of remorse or shame; antisocial behavior without apparent compunction; failure to learn from experience; pathological egocentricity and incapacity to love; and the failure to follow any life plan (Cleckley, 1941/1976). Another important contribution Cleckley made was his contention that psychopathic individuals are not necessarily violent or hardened criminals, but individuals who seem to be normal and even respectable, such as businessmen, scientists, doctors, “gentlemen,” “men of the world,” and – most disturbingly – psychiatrists. Hare later termed these individuals

subclinical psychopaths (Hare, 1993). The difference between the two groups, Cleckley contended, is that individuals who are respectable psychopaths are simply more skilled at appearing “normal” (Cleckley, 1941, p. 136). The importance of Cleckley’s work lay in his descriptive case studies, the diagnostic criteria he formulated out of those studies, which ultimately served as the basis for Hare’s Psychopathy Checklist, and his etiological model of psychopathy, all of which have served as a foundation for contemporary researchers (Patrick, 2006).

The first attempt to codify psychopathy as a disorder in an official nosology was made in the first edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1952). Like Cleckley, the compilers of the DSM included personality traits in their description of psychopathy, but also stressed the influence of environmental factors on the psychopath’s behavior. To emphasize this fact, the disorder was renamed *Sociopathic Personality Disorder*. A similar line of thinking continued with the publication of the DSM-II in 1968, which again provided descriptions of personality traits that bore some semblance to Cleckley’s characterizations (Widiger, 2006). However, this publication has been criticized for failing to enumerate a discrete set of diagnostic criteria (Hare, 1998). Because personality is an internal phenomenon, it cannot be physically observed and therefore is difficult to quantify. As a result, acquiring an understanding of personality may require a more intuitive approach. The inclusion of personality traits in these two versions of the DSM meant that diagnosing psychopathy would remain a highly subjective, even erratic, enterprise at this time (Lykken, 2006).

This situation changed in 1980 with the publication of the third edition of the DSM. In the DSM-III, psychopathy was renamed *Antisocial Personality Disorder* and explicit diagnostic criteria were provided. However, criteria had to be based exclusively

on behavioral traits, which are observable, rather than personality traits, which are not. This resulted in a classification that was too broad and which abandoned validity in favor of reliability (Hare, 1998). In 1994, the authors of the DSM-IV attempted to provide clarification by including a disclaimer that reminded clinicians that Antisocial Personality Disorder is also known as psychopathy, sociopathy, and dissocial personality disorder. The attempt to clarify the description inadvertently established two sets of criteria, however, and resulted in confusion over whether they are the same or different constructs (Hare 1998). Such confusion has created a situation in which a majority of psychopathy cases may meet the Antisocial Personality Disorder criteria in forensic situations, while only about 50% of Antisocial Personality Disorder diagnoses meet the psychopathy criteria (Widiger, 2006).

The DSM saga embodies the debate over the degree to which behavioral traits and personality traits individually contribute to the psychopathy construct. Some have argued that psychopathy and personality are one and the same thing (e.g., Lynam & Derefinko, 2006). Others emphatically disagree, arguing that psychopathy is a construct that comprises personality traits and antisocial behavior, which are different domains (e.g., Hare & Neumann, 2006). This, in turn, leads to the debate over the factor structure of psychopathy.

Models of psychopathy.

In an attempt to reconcile the shortcomings of the DSMs *vis a vis* their reliability and validity issues, Hare attempted to operationalize the psychopathy construct by creating an assessment instrument that was, in its early stages at least, largely based on the clinical observations by Cleckley. In 1980, he produced the Psychopathy Checklists (PCL), and five years later a revised version (PCL-R). The latter version was developed

as a 20-item rating scale that was based on a two-factor model of psychopathy. Factor 1 contains loadings that pertain to the personality traits of psychopathy. These are affective deficits characterized by exploitative and emotionally impaired mental functioning, such as glibness and superficial charm, grandiose sense of self worth, conning and manipulation, lack of remorse or guilt, lack of empathy, and the failure to accept responsibility for one's actions. On the other hand, Factor 2 contains the behavioral traits of psychopathy, the social deviance that is characterized by antisocial acts, loss of inhibition, and impulsivity. Factor 2 traits include the need for stimulation, a parasitic lifestyle, poor behavioral controls, lack of realistic long-term goals, and impulsivity. The three remaining traits – promiscuous sexual behavior, multiple short-term marital relationships, and criminal versatility – do not load on either factor.

Many consider the two-factor model to be the gold standard of structural paradigms for the psychopathy construct (e.g., Fowles & Dindo, 2006; Sullivan & Kosson, 2006). However, others have argued that it is based on faulty statistical methods derived from the use of the congruence coefficient (Cooke & Michie, 2001). They have also criticized its weakness as a “top-down” approach to construct representation, since it arrives at that representation using a narrow, predetermined set of traits, rather than a “bottom-up” approach that is inclusive and not yet determined (Cooke, Michie, & Hart, 2006). As a result, other factor structures have been proposed.

In 2001, a hierarchical three-factor model was proposed by Cooke and Michie (2001). They have noted that the affective, interpersonal, and behavioral components often identified in clinical observations suggest a three-factor structure, at least superficially. What is more, their research confirms the robustness of a three factor model that de-emphasizes the elements of criminality, since those elements are considered to be

derived from behavior rather than comprising a distinct domain in their own right. In this model, Factor 1 is Arrogant and Deceitful Interpersonal Style (Narcissism), Factor 2 is Deficient Affective Experience (Callous-Unemotional Traits), and Factor 3 is Impulsive and Irresponsible Behavioral Style (Impulsivity).

Table 2
Corresponding Dimensions of the 3-Factor Psychopathy Model (Cooke & Michie, 2001)

<u>Dimension</u>	<u>3-Factor Model</u>
Narcissism	Factor 1: Arrogant/Deceitful Interpersonal Style <ul style="list-style-type: none"> • Superficial charm • Grandiosity • Pathological lying • Manipulation
CU Traits	Factor 2: Deficient Affective Experience <ul style="list-style-type: none"> • Lack of remorse • Shallow affect • Callousness • Failure to accept responsibility
Impulsivity	Factor 3: Impulsive and Irresponsible Style <ul style="list-style-type: none"> • Need for stimulation • Parasitic lifestyle • Lack of goals • Impulsivity • Irresponsibility

In a new edition of the PCL-R, Hare (2003) returned with a four-factor model that retained the two original factors but divided them into four subfactors that he labeled Interpersonal, Affective, Impulsive Lifestyle, and Antisocial Behavior. Subsequent research has found support for the three- and four-factor models (Salekin, Brannen, Zalot, Leistico, & Neumann, 2006; for the Youth Version, see also Jones, Cauffman, Miller, &

Mulvey, 2006). These models are actually quite similar, since three of Hare’s subfactors correspond with the factors in the three-factor model, while adding the antisocial element that was removed by Cooke & Michie. A comparison is provided in Table 3:

Table 3
Comparison of Models of Psychopathy

<u>2-Factor Model</u> (Hare, 1985)	<u>3-Factor Model</u> (Cooke & Michie, 2001)	<u>4-Factor Model</u> (Hare, 2003)
<p><u>Factor 1: Personality</u></p> <ul style="list-style-type: none"> • Glibness/superficial charm • Grandiose self worth • Pathological lying • Conning/manipulation • Lack of remorse/guilt • Shallow affect • Callous/lack empathy • Failure to accept responsibility 	<p><u>Factor 1: Arrogant and Deceitful Interpersonal Style</u></p> <ul style="list-style-type: none"> • Superficial charm • Grandiosity • Pathological lying • Manipulation 	<p><u>Factor 1: Personality</u></p> <ol style="list-style-type: none"> 1. <i>Interpersonal</i> <ul style="list-style-type: none"> • Superficial charm • Grandiosity • Pathological lying • Manipulation 2. <i>Affective</i> <ul style="list-style-type: none"> • Shallow affect • Lack of empathy • Lack of remorse • Failure to accept responsibility
<p><u>Factor 2: Behavioral</u></p> <ul style="list-style-type: none"> • Need for stimulation/prone to boredom • Parasitic lifestyle • Poor behav. controls • Early behav. problems • Lack of realistic longterm goals • Impulsivity • Juvenile delinquency • Revocation of conditional release 	<p><u>Factor 2: Deficient Affective Experience</u></p> <ul style="list-style-type: none"> • Lack of remorse • Shallow affect • Callousness • Failure to accept responsibility 	<p><u>Factor 2: Behavioral/Impulsive</u></p> <ol style="list-style-type: none"> 3. <i>Impulsive Lifestyle</i> <ul style="list-style-type: none"> • Stimulation seeking • Impulsivity • Irresponsibility • Parasitic lifestyle 4. <i>Antisocial Behavior</i> <ul style="list-style-type: none"> • Early behavioral problems • Serious criminal behavior • Serious violations of conditional release • Criminal versatility

Do not load on factors:

- Promiscuous sexual behavior
- Multiple short-term marriages
- Criminal versatility

Factor 3: Impulsive and Irresponsible Style

- Need for stimulation
 - Parasitic lifestyle
 - Lack of goals
 - Impulsivity
 - Irresponsibility
-

Extending Psychopathy to Youth: Issues and Evidence

Until fairly recently, practically all research on psychopathy focused on adults. It was not until the 1990s that a new line of research was spearheaded by Lynam (1998) and Frick (Frick, Barry, & Bodin, 2000) aimed at extending (“downwardly translating”) the psychopathy construct to youth. Fundamentally, this work has had important implications for the early identification and treatment of psychopathy, and it has produced some significant findings. In the process, it has identified a number of ethical, developmental, and methodological considerations that are unique to juvenile psychopathy.

Ethical considerations.

Extending psychopathy to youth is not without controversy, since there have been ethical concerns over the potential for social stigmatization that can result from labeling a child as psychopathic (e.g., Frick, Bodin, & Barry, 2000). This charge must be taken seriously. However, there are two points to be considered. First, in actual applied settings, children who are assessed for psychopathy are usually ranked on a continuum measuring the *degree* of psychopathic traits present, rather than placing them in discrete categories in which they are labeled either psychopathic or not psychopathic (Hughes & Gacono, 2004). This dimensional approach to classifying psychopathic features in youth has been

empirically validated using taxometric analysis (Murrie et al., 2007). Thus, the child is not actually branded a “psychopath,” but is described as being high on psychopathic traits. But more importantly, failure to apply the psychopathy construct to youth may be ignoring a fundamental truth that would be even more detrimental in the long run: if “fledgling” psychopathy does exist, as the evidence suggests, then it means that conduct disordered youth are not a homogeneous group. If they are not a homogeneous group, then it means there are different etiologies and developmental pathways to antisocial behavior. If those etiologies and pathways are not identified and understood, then effective treatments cannot be devised.

Developmental considerations.

One justification for applying psychopathy to youth is that there is a growing body of supporting evidence from the developmental perspective indicating that psychopathy can and does exist in children. For example, there is mounting evidence that basic emotions, conscience development, the learning of societal values, high degrees of arrogant and deceitful behavior, and the influence of temperament on behavior all appear within the first few years of life (see Salekin, 2006, for a review). This suggests that abnormalities in these areas are also possible early in life, and they have important implications for the development of psychopathy. There is also evidence that core personality traits of psychopathy are heritable, and are therefore likely to present early in life (see Falkenbach, Poythress, & Heide, 2003 for a short discussion). In addition, Moffit (1993) has provided evidence that most antisocial behavior in the general population occurs during adolescence as a temporary phase of adjustment between biological and social maturity. This population consists of individuals who, during other stages of life, do not engage in antisocial behavior (“adolescence-limited antisocial behavior”). On the

other hand, there appears to be a small subgroup of individuals whose antisocial behavior is stable and consistent across the life span (“life-course-persistent antisocial behavior”). These disparities suggest different subgroups with different etiologies and developmental pathways to antisocial behavior. As will be seen, the subgroup with persistent antisocial behavior is strongly suggestive of psychopathy.

Temporal stability of psychopathic traits in youth.

Another crucial issue associated with extending psychopathy to youth is establishing its temporal stability as a personality trait (Seagrave & Grisso, 2002). Due to developmental influences, the personality traits of children are usually more subject to change than those of adults (Roberts & DeVecchio, 2000). However, at least a moderate level of stability should be evident for psychopathy to be considered a personality trait in children (Frick, Kimonis, Dandreaux, & Farrell, 2003). The first study to examine the stability of juvenile psychopathy (Frick et al., 2003) utilized the APSD to investigate a sample of 98 non-referred boys and girls in grades 3, 4, 6, and 7 across a period of four years. Results of the study indicated moderate stability of juvenile psychopathic traits, with improvement for some youth over time. Although other informants lowered stability estimates, Frick and colleagues used the results of their parent ratings to make some interesting comparisons. They noted that the stability of psychopathic traits in adult studies was actually similar or lower than the stability of psychopathic traits of youth in this study. In addition, the stability of various psychological traits in other child studies, as rated by parents, was also significantly lower than the parent ratings of psychopathy in this study. They also found that the stability of juvenile psychopathy was comparable to the stability of other personality traits in adults and higher than the personality traits of other children and adolescents.

Other studies have yielded similar results. Juvenile psychopathy has shown stability across extended periods of time, as indicated in a study using the CPS and PCL-SV that followed 250 males from age 13 to age 24 (Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber, 2007). Psychopathy has also been found to be stable in moderately aggressive and lower income children (Barry, Barry, Deming, & Lochman, 2008). One study (Lynam, Loeber, & Stouthamer-Loeber, 2008) sought to go a step further by identifying characteristics, experiences, or environments that moderate the stability of juvenile psychopathy across time. In their study, Lynam and colleagues examined the impact of 13 moderators on psychopathy over a period of 11 years. They found that the trait stability of boys who measured high on psychopathy from any environment or boys who measured low on psychopathy from healthy environments tended to remain the same. Boys who were low in psychopathy but experienced negative influences (lower economic status, antisocial friends, and physical punishment from parents) tended to become more psychopathic across time, and therefore reduced the overall stability of psychopathy in the study. However, in the end, only eight of the 65 possible interactions were significant, which again indicated moderate stability overall.

Measurement of psychopathy in youth.

Another issue concerns whether psychopathy can be reliably measured in youth. There is considerable evidence that the instrument most commonly used with adults, the PCL-R, is psychometrically sound (see Hare, 1998, for a discussion). The PCL-R utilizes institution records and a structured interview to determine the presence of psychopathy. One instrument that has been directly adapted from the PCL-R for use with children and adolescents is the Psychopathy Checklist-Youth Version (PCL-YV), which was designed to assess for psychopathy in adolescents age 13-18. It too has shown good reliability and

validity (e.g., Brandt, Kennedy, Patrick, & Curtin, 1997; Forth & Burke, 1998; cited in Lynam & Gudonis, 2005).

Despite their wide use and good psychometric properties, however, an important drawback of using versions of the PCL is the time-consuming process and need for availability of case file data that are required to complete an assessment (Vaughan & Howard, 2005). In juvenile justice settings such requirements are not always practical or possible. The effort required to administer this instrument also does not make it convenient for screening purposes (Murrie & Cornell, 2002). Using criminal history data to rate personality traits can also result in confabulated correlations (Kruh, Frick & Clements, 2005; Munoz & Frick, 2007). Moreover, the PCL is only useful with juveniles who have already committed a crime, and not for those who may rank high on psychopathic traits but who have no criminal record (Andershed et al., 2002).

For these reasons, a number of psychopathy rating scales have been developed to provide a more expedient and wide-ranging method for assessing psychopathic traits. Two of the most common and psychometrically sound measures are the Antisocial Process Screening Device (APSD) and the Inventory of Callous-Unemotional Traits (ICU), both of which have parent, teacher, and self-report versions. The psychometric properties of these instruments will be discussed in Chapter 3.

Callous-Unemotional Traits as Distinguishing Criteria

From the results of the aforementioned studies, we know there is good evidence that psychopathy is a stable personality trait in youth, that evidence from developmental research supports the existence of conditions that make psychopathy possible at a very young age, and that it can be reliably measured in children, even by age four (Dadds, Fraser, Frost, & Hawes, 2005). Thus, the question is not whether psychopathy exists in

youth, since the evidence suggests that it does, but how it is best distinguished from typical conduct disorder in youth. Psychopaths do appear to be intrinsically different from other conduct disordered individuals on a number of levels, ranging from difficulties processing emotional information (Christianson et al., 1996) and neuropsychological deficits (e.g., Marsh, Finger, Mitchell, & Reid, 2008) to exhibiting a reward-dominant response style (O'Brien & Frick, 1996).

As previously mentioned, Lynam (1998) and Frick (Frick et al., 2000) made the first efforts to extend psychopathy to youth, and they pursued two independent avenues of research that proposed different theories regarding the nature of juvenile psychopathy. Lynam provided evidence for similarities between adult psychopaths and children with comorbid ADHD and extreme conduct problems (ODD/CD). He argued that they exhibited similar neuropsychological deficits and similar manifestations of severe antisocial behavior. On the other hand, the research conducted by Frick focused on the Factor 2 dimension of psychopathic personality characteristics that are termed Callous-Unemotional (CU) traits. CU traits are the set of affective attributes that include a lack of empathy, guiltlessness, lack of remorse, and stunted emotions that lend themselves to the callous manipulation of others (e.g. Barry et al., 2000; Dadds et al., 2005; Frick et al., 2003; Frick et al., 2005). Their presence denotes particularly severe antisocial behaviors. The debate has centered on which of these criteria – impulsivity/over-activity/inattention or CU traits – provides the best criteria for differentiating between the subgroup of psychopathic youth and youth with more “traditional” conduct disorder.

Based on the evidence we have, the presence of CU traits appears to be the decisive factor. In their key study of these two lines of research, Barry and colleagues (Barry et al., 2000) attempted to test a combination of both theories by using the presence

of CU traits to locate a psychopathic subgroup in a sample of 154 children with ADHD and ODD/CD. They speculated that only children with comorbid ADHD and ODD/CD who were also high on CU traits would most closely resemble the characteristics of adult psychopaths, and this prediction was confirmed. The results of this study indicate that both Lynam and Frick were essentially correct, but that the presence of CU traits was ultimately the decisive element. They also found that unlike other conduct disordered children, the children with CU traits had few intellectual deficits, exhibited high levels of fearlessness and thrill-seeking, had low levels of anxiety, tended to demonstrate a reward-dominant response style, and experienced little distress over their problem behaviors.

A number of landmark studies have contributed to the literature regarding the concurrent and predictive distinguishing power of CU traits. For example, in a study of conduct-disordered children in grades three, four, six, and seven that was conducted across a period of four years, Frick and colleagues (Frick et al., 2005) found that children with CU traits had a higher frequency of conduct problems and reported higher rates of delinquency than those without CU traits. During the last three years of the study, they were also involved in half of all police contacts.

Another study (Frick et al., 2003) that used a sample of children with conduct problems and children with both conduct problems and CU traits had similar results. When compared with the children who had only conduct problems, children with conduct problems *and* CU traits had more conduct problems and a wider variety of manifestations, including the tendency to use proactive aggression. Even though the level of conduct severity at the outset of the study might have been at least partially responsible for these results, the latter group still demonstrated more aggression. Interestingly, there was a strong association between the presence of CU traits in girls

and predicted conduct problems later on, even though the girls were initially low on conduct problems. This hints at possible gender differences in forms and expression of conduct problems.

Other studies have found that adolescent offenders with high CU traits and deficits in emotional processing also evidenced high levels of violence and aggression (Kimonis, Frick, Munoz, & Aucoin, 2007), and that the predictive validity of CU traits with regard to antisocial behavior and conduct disorder appears to depend on sex and age (Dadds et al., 2005). In the latter case, researchers used a sample of children age four to nine, and found that older girls were less stable in their aggression than older boys, which suggests distinct developmental pathways for each gender.

In sum, CU traits appear to distinguish between two heterogeneous groups of children and adolescents who appear to represent different developmental pathways to aggression. Conduct-disordered youth without CU traits primarily appear to have difficulties with emotion regulation that causes them to act impulsively. These children tend to be reactively aggressive and are generally less aggressive overall (Frick et al., 2003). In addition, they tend to have deficits in verbal intelligence (Loney, Frick, Ellis, & McCoy, 1998), come from dysfunctional families (Wooten, Frick, Shelton, & Silverthorn, 1997), and have elevated levels of emotional stress (Frick et al., 1999). On the other hand, the underlying characteristics of conduct-disordered youth *with* CU traits appears to be something different altogether. These children tend to have more severe and stable patterns of aggression (Frick et al., 2003; Frick et al., 2005; Frick & Dickens, 2006; Kimonis et al., 2007). They show deficits in emotional processing (Kimonis et al., 2007; O'Brien & Frick, 1996), have high levels of thrill seeking and low fearfulness (Barry et al., 2000; Frick et al., 2003; Frick et al., 1999), have a reward-dominant

response style, as well as low anxiety, few if any intellectual deficits, and an absence of distress over their problem behaviors (Barry et al., 2000).

Summary

Psychopathy is a very old but extremely important construct for its value in the identification and prediction of criminal behavior, violence, and recidivism, and also for its importance in understanding the etiology of aggression. However, it is also a multifaceted disorder that is the center of a great deal of scientific debate. A satisfactory nosologic conceptualization has never been achieved. Nevertheless, research evidence has indicated that attempts to operationalize psychopathy via instruments like the Psychopathy Checklist has met with a high degree of success, both psychometrically and in its use for risk assessment.

Extending psychopathy to youth has been perhaps a logical but controversial line of research. However, empirical evidence suggests that developmental research supports the general concept, that it has temporal stability, and that it can be reliably measured. The issue then moves to how psychopathic youth can best be distinguished from youth who engage in traditional patterns of conduct disorder. A number of studies have supported the view that the presence of callous-unemotional traits are the decisive distinguishing factor that predicts a more stable and severe set of antisocial behaviors. Differentiating between youth with conduct disorder and youth with conduct disorder who are psychopathic is a crucial step toward developing effective treatments for antisocial behaviors.

Psychopathy and Narcissism

The term *narcissism* was taken from the Greek myth of Narcissus, a hunter who fell in love with himself when he saw his own reflection in a pool of water; thinking this

ephemeral image of himself was real, he remained fixated on it until he perished. In a similar fashion, narcissists are fixated on an image of themselves that is not real. Their psychological and interpersonal lives are subordinated to maintaining the fiction of their own superiority, resulting in patterns of cognition, emotion, and behavior that are ultimately destructive to themselves and to others.

As an antisocial personality feature, narcissism is commonly known to “bristle with complexities” (Yorke, 1991, p. 35), and its connection to psychopathy is no different. On one hand, narcissism can be viewed as a separate construct in its own right. Along with psychopathy and Machiavellianism, it belongs to the so-called “Dark Triad” of personality constructs (Paulhus & Williams, 2002). These three constructs appear to be distinct from one another, but they share overlapping characteristics (Kerig & Stellwagen, 2010; Lee & Ashton, 2005; Paulhus & Williams, 2002). On the other hand, narcissism is also identified as a component (Factor 1) of the three-factor model of psychopathy (Cooke & Michie, 2001). To confuse matters even further, psychopathy itself has frequently been viewed as an extreme form of pathological narcissism or Narcissistic Personality Disorder (e.g., Bleiberg, 1994; Falkenbach, Howe, & Falki, 2013; Kernberg, 1975; Meloy & Gacono, 1998; Ronningstam, 2009). It is not surprising, then, that measures of narcissism, Narcissistic Personality Disorder, and psychopathy are usually highly correlated (Cale & Lilienfeld, 2006). Moreover, Narcissistic Personality Disorder has been comorbidly linked with over 50% of the other DSM-IV personality disorders (Zimmerman, Rothschild, & Chelminski, 2005), suggesting that there is an important underlying association between narcissism and personality pathology in general. Thus, the interrelationship between narcissism, personality constructs, and Cluster B personality disorders is not well understood, and a full exploration of this topic

is far beyond the scope of this investigation. In this study, narcissism is approached as a factor of the psychopathy construct. However, a brief review of its development as a separate construct is necessary to understand its important contribution to aggressive behavior and to psychopathy.

Definition and Presentation

Narcissism is commonly defined as extreme love of self. However, many theorists and researchers agree that it exists in both an adaptive, “healthy” form and a maladaptive, pathological form. In children, pathological narcissism is structurally different from high self esteem (Ang & Yusof, 2005; Barry, Frick, & Killian, 2003; Barry, Grafeman, Adler, & Pickard, 2007; Barry et al. 2007). It has also been distinguished from high self-esteem by its emphasis on the *drive* to like oneself and on the insistence that others acknowledge one’s superiority, as opposed to simply liking oneself, independent of the opinion of others (Bushman & Baumeister, 1998). Thus, narcissism implies an unstable sense of Self that must be constantly buttressed and re-constructed (Morf & Rhodewalt, 2001). Moreover, because superiority necessarily involves defining one’s position in relation to others, narcissism has a socially-construed reference point, and it relies on a social audience.

Descriptions of pathological narcissism usually include traits like grandiosity, feelings of inflated self-importance, the need for the attention and admiration of others, arrogance, lack of empathy, feelings of entitlement, muted rage, and antisocial patterns of behavior that involve the domination and exploitation of others (e.g., Bennett, 2006; Bogart, Benotsch, & Pavlovic, 2004; Thomaes, Brummelman, Reijntjes, & Bushman, 2013; Twenge & Campbell, 2003; Zeigler-Hill, Green, Arnau, Sisemore, & Myers, 2011). On a theoretical level, it is often viewed as a problem with self-esteem regulation

(Reich, 1960) that results when an individual fails to mature beyond an infantile, self-centered stage of development (Morf & Rhodewalt, 2001). Narcissists are caught in a personality dynamic that causes them to “simultaneously entertain notions of their own grandeur while also seeking constant external affirmations of their self-concept” (Samuel & Widiger, 2008, p. 364). Thus, deep-rooted problems with self-perception and interpersonal relationships form the very nucleus of this disorder (Rhodewalt & Morf, 1995). In its most acute manifestation, pathological narcissism can be diagnosed as Narcissistic Personality Disorder (NPD; American Psychiatric Association, 2000).

Pathological narcissism in children appears to have a similar presentation as that seen in adults. Kernberg (1989), for example, has noted such typical characteristics as grandiosity, envy, self-absorption, arrogance, self-aggrandizement, and a dismissive attitude toward others. A number of related tendencies are also frequently seen in children, including impaired social interaction, a very literal obsession with self-image, and gaze aversion to shield their chronic lying from detection; they are often poor students who fail in school (a sign of the grandiose perception that the work is below them), and may have contempt for relying on others while simultaneously suffering from separation anxiety (see Kernberg, 1989; Ronningstam, 2005). Elementary-age children who are pathologically narcissistic are frequently bored with play or engage in play fantasies that are intensely aggressive and violent (Kernberg, 1989).

Development of the Narcissism Construct

Practically all of the early work on narcissism was derived from clinical observation. Then as now, the concept was known for the ambiguity and controversy that it generated. Although variants of the term were used in the psychiatric literature of the late 19th century (e.g., Ellis, 1898), it was not until 1911 that Otto Rank began to

associate narcissism with vanity and to describe it in terms of a psychological defense (Pulver, 1970). From this point, psychoanalysis provided the main vehicle for understanding narcissism, and it gave rise to several influential theories of personality and developmental pathology. These theories essentially viewed narcissism as an unconscious process (Bennett, 2006) that resulted from defective parenting (e.g., Kernberg, 1975; Kohut, 1971).

In 1914, Freud devoted attention to the concept in his treatise *On Narcissism: An Introduction* (Freud, 1914/1991). He proposed that *primary narcissism* is the normal but entirely self-centered condition of early infancy. In this state, “His Majesty the Baby” is unaware that other people are separate individuals, although they provide all of the infant’s needs as if he or she is the “centre and core of creation” (p. 91). With normal development, subject-object relationships form as the infant begins to recognize the reality of others’ distinctness, and libidinal investment is turned outward toward them. Freud felt that narcissism becomes pathological when an individual’s libido becomes regressively fixed on the self (*secondary narcissism*), representing a fundamental retreat from other people and from the unpleasant reality of one’s limitations. In effect, it is a return to the omnipotent “narcissistic perfection of childhood” (p. 94).

The next major development came from the ideas of Otto Kernberg and Heinz Kohut, beginning in the late 1960s. Like Freud, Kernberg (1975) believed that narcissism represents a defensive retreat from libidinal investment in others, but he considered pathological narcissism to be categorically different from infantile regression. In his view, a child’s exaggerated self-love is a defense against feelings of rejection and rage toward indifferent or covertly malicious parents. The narcissistic child concludes that only the self can be loved; the objectionable and pathologically idealized elements of the

self are split from (but coexist with) each other. In Kernberg's view, envy plays a central role in shaping the narcissist's dismissive, condescending, and exploitative interpersonal attitudes. Kohut, however, primarily viewed narcissism as a developmental arrest (1978; 1971). For him, parental rejection leads to a child's failure to both idealize and be mirrored by his or her parents; the resulting feelings of devastation and inferiority become paired with the child's natural grandiosity. This process prevents the development of a healthy self-esteem, with the twin poles of self-love and self-loathing being unconsciously managed through the defense of splitting.

More recently, other theorists have attempted to consolidate the ideas Kernberg and Kohut by connecting their common emphasis on object relations with the role of attachment in the development of self-esteem (e.g., Bennett, 2006; Blatt & Levy, 2003). However, the work of Kernberg and Kohut can perhaps be considered the zenith of the influence of psychoanalysis on the early development of the narcissism construct. Their contributions were directly responsible for the inclusion of Narcissistic Personality Disorder as a DSM diagnostic category in 1980 (Ronningstam, 2009), which is precisely when narcissism began to garner real empirical attention (Dickinson & Pincus, 2003). Creation of the DSM diagnostic criteria also directly resulted in the development of the most widely-used instrument for measuring the narcissism construct to date, the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979).

In the 1980s, other theories of narcissism were introduced that broke with the psychoanalytic tradition. For example, Millon (1981) proposed a social learning perspective which holds that narcissism can result when indulgent parents teach a child to believe that he or she is absolutely perfect and special, an illusion which the child comes to view as a reality. In a cognitive-constructivist model, Dimaggio and colleagues argued

that narcissism fundamentally arises from a combination of alternating states of mind (*grandiose, in transition, depressed or frightened, or emptiness*) and a debilitating metacognitive deficit (Dimaggio et al., 2002). The latter is believed to cause deep-rooted feelings of exclusion that give rise to grandiosity. Perhaps the most influential theory to date, though, is the dynamic self-regulatory processing model (Morf & Rhodewalt, 2001). Morf and Rhodewalt argue that narcissism is best understood as a system of personality processes and self-regulation strategies that are used by individuals whose self-concept is constitutionally both grandiose and vulnerable. Due to this brittle self-concept, such individuals require unceasing affirmation from others, who they simultaneously view as inferior and as competitors or even enemies. This leads to what Morf and Rhodewalt call the “narcissistic paradox.” In their endless drive to obtain recognition and validation from others, narcissists inevitably sabotage the very relationships they desperately need for that recognition and validation. Thus, a narcissist is involved in an unending process of creating a false self, needing others to affirm the false self (which may happen at first), being rejected by others, and needing to prop up the false self again through the affirmation of others, who will again reject them.

Measurement and Classification Issues

Despite this long and intricate history, the empirical study of narcissism is currently in a state of fragmentation. One of the main sources of confusion is that the divergent schools of thought just mentioned represent an inter-disciplinary division between social-personality psychology, which emphasizes the “normal,” subclinical aspects of narcissism, and clinical psychology, which emphasizes its pathological aspects (e.g., Cain, Pincus, & Ansell, 2008; Zeigler-Hill et al., 2011). The idea that “normal” narcissism exists, in fact, harkens back to Freud and his concept of primary narcissism

(1914/1991). Thus, the “normal” and “pathological” traditions both originate in early formulations of narcissism, but their divergence has seriously plagued efforts to define, research, and measure it.

This has not always been a logical divergence. For example, the clinical psychodynamic tradition, which itself has competing theories of narcissism and constructs that are difficult to operationalize (Miller & Campbell, 2008), provided criteria that led to the development of the Narcissistic Personality Inventory (Raskin & Hall, 1979). Ironically, the NPI has become the main instrument used in social psychology studies (Foster & Campbell, 2007), and almost no clinical studies have employed it since publication (Pincus & Lukowitsky, 2010). Clinical psychology, for its part, tends to measure pathological narcissism using semi-structured interviews or self-report rating scales as a construct that is operationalized from NPD criteria (Pincus & Lukowitsky, 2010). Alternatively, it can be measured as the interpersonal factor of the three-factor model of psychopathy (Cooke & Michie, 2001) on instruments like the PCL-YV and APSD.

Another source of confusion involves classification. First, there are different views on taxonomy, with clinical psychology generally (though not uniformly) approaching narcissism as a taxon, while social-personality psychology almost uniformly considers it to be a dimensional construct (Foster & Campbell, 2007). This issue has been compounded by the ponderous number of narcissism types that have been proposed over the years (see Levy, 2012, for a review). Much has been made of the fact that Cain and colleagues found more than 50 existing labels, resulting in what they have mordantly called a “tower of babble” (Cain, Pincus, & Ansell, 2008). However, these various types can generally be classified according to *nature* (normal vs. pathological), *expression*

(overt vs. covert), *structure* (categorical vs. dimensional vs. prototypical), and *phenotype* (grandiose vs. vulnerable; Pincus & Lukowitsky, 2010).

One of the most empirically validated classifications of narcissism centers on its phenotypic expression. In the literature, there do seem to be distinct presentations that align under what Cain and colleagues have called *grandiose* narcissism and *vulnerable* narcissism (Cain, Pincus, & Ansell, 2008; Dickenson & Pincus, 2003; Lapsley & Aalsma, 2006; Rathvon & Holmstrom, 1996; Wink, 1991). Grandiose narcissism has overt, more conspicuous characteristics such as high dominance, high self-esteem, low neuroticism, extraversion, inflated self-image, exhibitionism, aggression, exploitation, and lack of empathy (Houlcroft, Bore, & Munro, 2012; Krizan & Johar, 2012; Miller et al. 2012; Pincus, Ansell et al., 2009; Zeigler-Hill, Green, Arnau, Sisemore, & Myers, 2011). The vulnerable type, on the other hand, is characterized by lack of self-confidence, low self-esteem, introversion, high neuroticism, shame, interpersonal coldness, lack of initiative, disinterest in work, negative emotions, and emptiness (Buss & Chiodo, 1991; Houlcroft, Bore, & Munro, 2012; Krizan & Johar, 2012; Miller et al., 2012; Wink, 1991; Pincus, Ansell et al., 2009; Zeigler-Hill, Green, Arnau, Sisemore, & Myers, 2011). Barely beneath this covert veneer, however, vulnerable narcissists harbor grandiose fantasies and desires (Kernberg, 1986), and are consumed with envy and *schadenfreude* (Krizan & Johar, 2012).

The feature that seems to distinguish grandiose narcissism from vulnerable narcissism is level of self-esteem (Horvath & Morf, 2010), while the core traits that both phenotypes share include egocentricity, grandiosity, feelings of entitlement, and exploitative disregard for others (Krizan & Johar, 2012; Levy, 2012; Wink, 1991). Since the very crux of the disorder is the exaltation of a devalued self – what are essentially two

sides of a contradiction – it may be that grandiose and vulnerable narcissism are actually interrelated manifestations that alternate or coexist within the same person, as many clinicians and researchers have long contended (e.g., Levy, 2012; Kernberg, 1975; Kohut, 1971; Pincus et al., 2009; Pincus & Lukowitsky, 2010; Ronningstam, 2011). This dichotomy appears to be visible in the “rapid oscillations of self esteem, perpetual shifts from positive to negative feelings about the self” that have been observed in narcissists (Reich, 1960, p. 226). As Roberts and Huprich (2012) write, “the distinction between grandiose and vulnerable subtypes is somewhat artificial, given that pathologically narcissistic individuals believe they are ‘vulnerable’ to some extent, and that the grandiosity serves as a defense against the vulnerability that is also a more easily identifiable behavioral indicator” (p. 899).

Psychopathic Narcissism and Aggression

The existing research on narcissism has consistently linked it with aggression and antisocial behavior. The association with aggression has been found across age groups, from small children to adults (e.g., Fite, Stoppelbein, & Greening, 2009; Kerig & Stellwagen, 2010; Lau, Marsee, Kunimatsu, & Fassnacht, 2011; Sullivan & Geaslin, 2001), and cross-culturally, regardless of the influence of culture on narcissism. For example, a relationship between narcissism and aggression has been found in countries as diverse as Britain, Singapore, and Turkey (Ang & Yusof, 2005; Ha, Petersen, & Sharp, 2008; Öngen, 2010). Among children and adolescents, maladaptive narcissism was found to predict delinquency longitudinally (Barry, Frick, Adler, & Grafeman, 2007), and the narcissistic need for superior status and positive appraisal from others has also been found to predict conduct problems and callous-unemotional traits in children (Barry, Frick, & Killian, 2003). In addition, the narcissism factor of psychopathy has been

associated with Oppositional Defiant Disorder, Conduct Disorder, and Attention Deficit/Hyperactivity Disorder (Frick, Bodin, & Barry, 2000). Significantly, Stone (2009) has pointed out that more than half of the DSM criteria for Narcissistic Personality Disorder are traits that are consistently found among career criminals.

In the clinical literature, psychopathy has sometimes been viewed as an antisocial subtype of narcissism or severely antisocial form of Narcissistic Personality Disorder (e.g., Kernberg, 1975). According to Ronningstam (2009), narcissists who fall within this antisocial dimension often use aggression to reinforce their self-esteem, including those who fit the profile for psychopathy and malignant narcissism, and those who meet criteria for Antisocial Personality Disorder. They are able to exploit others without compunction and are motivated by envy, revenge, feelings of entitlement, and even sadism (Ronningstam, 2009). While they demonstrate many of the core features of grandiose narcissism, they are noteworthy for their callousness, manipulative behavior, absence of remorse, rage, and criminal behavior (Ronningstam, 2005). Bleiberg (1994) writes that children in this group are defined by their “dissociation and denial of pain, helplessness, and vulnerability; rigid, desperate efforts to maintain a sense of self based on an illusion of control and invulnerability; and ruthless exploitation, intimidation, and manipulation of others” (p. 45). Millon (1981) also refers to a group of individuals with a narcissistic-antisocial “personality blend” who readily use their treachery, cunning, and charm to advance their superior status.

The case for a psychopathic subtype of narcissism has been supported in the empirical literature as well. In their study utilizing a clinical sample of adults meeting criteria for NPD, Russ and colleagues used Q-factor analysis to identify three subtypes of

narcissism, two of which were comparable to the grandiose and vulnerable subtypes (*high functioning/exhibitionistic* and *fragile*), and a third they called *grandiose/malignant* (Russ, Shedler, Bradley, & Westen, 2008). They describe this psychopathic subtype as having the central characteristics of narcissism, but also note the absence of a core of inadequacy. In short, what distinguishes this group is that “their grandiosity appears to be primary rather than defensive or compensatory” (p. 1477). In their sample of undergraduate freshmen, Houlcroft and colleagues (Houlcroft, Bore, & Munro, 2012) also found evidence for a psychopathic type they called *aggressive narcissism*. This group was likewise distinguished from the others by its antisocial character.

As a factor of psychopathy, narcissism has been consistently linked with both proactive and reactive aggression (Barry et al., 2007; Fite, Stoppelbein, & Greening, 2009; Kerig & Stellwagen, 2010). The connection with reactive aggression could be derived from the narcissist’s need to protect his or her status over others, and fits well with the threatened egotism hypothesis put forth by Baumeister and colleagues (Salmivalli, 2001; Washburn, McMahon, King, Reinecke, & Silver, 2004). These researchers argued that aggressors tend to have high self-esteem, and that aggression often results when this high self-esteem is threatened by someone else’s negative appraisal, particularly when the high self-esteem is unstable and requires a great deal of affirmation from others (Baumeister, Smart, & Boden, 1996). The threatened egotism hypothesis has in fact been substantiated in a number of studies that specifically focus on narcissistic aggression (Bushman & Baumeister, 1998; Stucke and Sporer, 2002; Thomaes, Bushman, Stegge, & Olthof, 2008). On the other hand, narcissistic use of proactive aggression may stem from the narcissist’s need to continually assert his or her superiority over others or to maintain a positive self-image (Falkenbach, Howe, & Falki,

2013; Salmivalli, 2001; Washburn, McMahon, King, Reinecke, & Silver, 2004). Thus, in certain situations, narcissistic aggression may not be motivated by a threat, as is the case with reactive aggression, but rather by the goal of achieving power over others, a goal which is easily achieved due to the narcissist's lack of empathy and exploitative nature (Salmivalli, 2001).

Although narcissism as an individual construct is associated with aggression, the combination of Narcissism with CU Traits and Impulsivity, as dimensions of the psychopathy construct, appears to have a particularly unique and strong association with aggression and bullying. A longitudinal study of children ages 12 to 14, for example, found that those children who pose the greatest danger for engaging in bullying behaviors are likely those who exhibit the combination of all three factors of psychopathy, since each make independent contributions to its prediction. (Fanti & Kimonis, 2012; see also Scholte, Stoutjesdijk, Van Oudheusden, Lodewijks, & Van der Ploeg, 2010). Moreover, like psychopathic Narcissism, both CU traits and bullying have been associated with combined use of proactive and reactive aggression (e.g., Fanti, Frick, & Georgiou, 2009; Pelligrini, Bartini, & Brooks, 1999; Salmivalli & Nieminen, 2002). Research indicates that some children utilize reactive aggression alone, while others utilize a combination of proactive and reactive aggression (e.g., Crapanzano, Frick, & Terranova, 2010; Frick, Cornell, Barry, Bodin, & Dane, 2003; Munoz, Frick, Kimonis, & Aucoin, 2008; Stickle, Marini, & Thomas, 2012). These represent distinct subgroups of aggressive types, and it is the proactive-reactive combination that has consistently been associated with the highest levels of aggression (Frick et al., 2003; Munoz et al., 2008; Stickle et al., 2012). Significantly, psychopathic narcissism, CU Traits, and bullying all converge within this group.

Summary

Pathological narcissism is a complex antisocial personality feature with a long and important history. In spite of its progression from the realm of clinical theory to that of empirical research, narcissism in children and adolescents was still virtually ignored until recently, and the existing body of literature remains sparse. The construct has been consistently linked with aggression. As a factor of psychopathy, narcissism has been connected with the simultaneous use of proactive *and* reactive aggression, and has strong associations with conduct disorder and bullying.

Antisocial Personality Features and Indirect Forms of Aggression

Links Between Psychopathy and Indirect Forms of Aggression

A number of associations suggest important relationships between the Callous-Unemotional and Narcissism dimensions of psychopathy, and indirect forms of aggression.

For example, a cursory comparison of CU traits and indirect bullying reveals some compelling similarities. Conduct-disordered children who are high in CU traits have deficits in emotional processing (Kimonis et al., 2007; O'Brien & Frick, 1996) and a lack of empathy that allows them to coldly prey on their victims (Barry et al., 2000; Dadds et al., 2005; Frick et al., 2003; Frick et al., 2005). They also exhibit low levels of anxiety, are not distressed by their problem behaviors, and generally have good intelligence (Barry et al., 2000). Likewise, Olweus contended that bullies who use indirect forms of aggression typically have little empathy for their victims, a relatively positive view of themselves, and feel little anxiety or insecurity (Olweus, 1993). And like bullies who use indirect forms of aggression, most psychopathic individuals are not violent, but they *are* very aggressive (Cleckley, 1941/1976).

On a more substantive level, a study by the Björkqvist research group (Kaukiainen et al., 1999) yielded some compelling findings. They investigated the relationship between empathy, social intelligence, and the use of different forms of aggression, including indirect aggression, in a sample of pre-adolescents and adolescents (ages 10, 12, and 14). They found a negative correlation between empathy and indirect aggression for all groups except 12-year-olds, and a positive correlation between social intelligence and indirect aggression. These results suggest that the profile of an individual who uses indirect aggression would likely demonstrate high levels of social intelligence and low levels of empathy. These findings have been corroborated in other studies (e.g. Björkqvist, Österman, & Kaukiainen, 1999).

If one considers narcissism, too, there are important connections with indirect forms of aggression. Not only has narcissism been associated with relational aggression (Lau, Marsee, Kunimatsu, & Fassnacht, 2011), but the association may be stronger than with physical aggression (Bukowski, Schwartzman, Santo, Bagwell, & Adams, 2009). In a sample of at-risk adolescents, maladaptive narcissism was also found to predict peer-nominated relational aggression, and for adolescents with high self-esteem, the association between narcissism and peer-nominated relational aggression was especially strong (Golmaryami & Barry, 2010). Olweus, too, found that relational bullies tend to have good self-esteem and some degree of popularity (Olweus, 1993). The latter may be evidence that the covert methods used in indirect forms of aggression may allow narcissistic bullies the ability to retain a good social image while aggressing against others (Bukowski et al., 2009).

The research on narcissism also creates a striking a composite portrait of an individual who is both outfitted for aggression and who would be predisposed to use its

indirect forms. Interpersonally, the main goal of narcissists is to achieve superiority over others (Campbell, Brunell, & Finkel, 2006), which inextricably ties them to their social world and drives them to compete for the highest position of status. In decision-making, narcissists appear to be more overconfident, more willing to take risks, and more likely to overestimate their future performance (Campbell, Goodie, & Foster, 2004). They are more sensitive to social comparison and feel more hostility toward others who they perceive as “better off” (Bogart, Benotsch, & Pavlovic, 2004). They are also more likely than others to report feeling transgressed – to either *notice* hostility or to *attribute* hostility to others’ actions – revealing a potential hypersensitivity to their social milieu (McCullough, Emmons, Kilpatrick, & Mooney, 2003). They react with more aggression and anger when socially rejected (Twenge & Campbell, 2003) and also appear to be more likely than non-narcissists to seek revenge (Brown, 2004). Thus, while narcissists ruthlessly strive to achieve superiority over others and require continuous validation from individuals in their social world, they may be more susceptible to perceived slights from others, are more prepared to exact retribution, and are more likely to believe they will achieve a successful outcome.

In addition, other research has pointed to a gender differential. Werner and Crick (1999) conducted a study of college students that found a correlation between antisocial personality features and relational aggression. In the study, they found significant gender differences with regard to stimulus-seeking and antisocial behavior. Both of these characteristics are important features of Antisocial Personality Disorder. However, this disparity was no longer evident after relational aggression was factored in. Frick and Dickens (2006) have noted that overt aggression in boys and relational aggression in girls share many of the same risk factors, including impulsivity and CU traits, which are

emblematic of early-onset antisocial behavior. They argue that girls' antisocial behavior may not be noticed because it does not meet current criteria, which are based on antisocial behaviors that are perhaps more characteristic of males. Indeed, the study by Frick and colleagues (Frick et al., 2003) showed a strong association between the presence of CU traits in girls and predicted conduct problems later on, even though the girls were initially perceived to be low on conduct problems. These results seem to indicate that alternative descriptions of antisocial behavior are needed to sufficiently identify antisocial behavior in females.

When these characteristics are placed within the context of female friendships, in particular, it is easy to understand why indirect forms of aggression may be a logical strategic choice for aggressive girls. In the quality of their friendships, girls tend to view narcissistic peers less favorably than boys do (Zhou, Zhang, & Zeng (2012). Girls also view aggression in peers less favorably than boys. In fact, the association between aggression and friendship quality, at least in the years indirect forms of aggression develop (late elementary and early middle school years) is linear for girls, but curvilinear for boys (Fanti, Brookmeyer, Henrich, & Kupermine, 2009). In other words, nonaggressive boys and very aggressive boys both tend to view aggressive friends in a positive light, while moderately aggressive boys do not. However, girls *uniformly* do not view aggression positively as a friendship quality. Thus, the use of indirect forms of aggression allows a bully to preserve her social status among her peers. In addition, girls tend to form closely-knit social networks of friendships, which they highly value (Besag, 2006), and the impact of these friendships on their psychosocial functioning is equally profound: for example, research has shown that the majority of conflict 10-12-year-old girls experience in their lives stems from their friendships; the potential loss of such

friendships appears to be highly distressing; and the aggression of bullies within this tight network (who probably know a great deal of personal information about a victim) is extremely difficult to avoid (Besag, 2006).

Existing Studies

In spite of the apparent links in the research, at this point in time it appears that only a handful of studies have examined the relationship between indirect forms of aggression and callous-unemotional traits, narcissism, or psychopathy in general.

The first study, conducted by Marsee, Silverthorn, and Frick (2005), looked at the association between aggression, delinquency, and psychopathic traits in a sample of school children ages 10 to 17 (grades 5 through 9). The study was conducted at two urban public schools in the Southeastern U.S. Eighty-six boys and 114 girls participated in the study, which utilized teacher and self-report ratings derived from the APSD (Frick & Hare, 2001), Ratings of Children's Social Behavior (RCSB; Crick, 1996), and Self-Report of Delinquency (SRD; Elliot, Huizinga, & Ageton, 1985). The authors sought to address a number of gaps in the literature by focusing their investigation on a non-referred population of children and exploring which dimension or dimensions (Narcissism, CU Traits, Impulsivity) had the most unique association with delinquency and aggression. In addition, they also looked at the role of gender as a moderating factor in the association between antisocial behavior and psychopathic traits. The study found that teacher-reported psychopathic traits were associated with higher levels of aggression, while self-reported psychopathic traits were associated with aggression *and* delinquency. More importantly, they found no significant difference between callous-unemotional traits, narcissism, and impulsivity when they tested to see which dimensions showed the strongest association with delinquency and aggression in youth. This result obviously

contradicts the group of findings indicating that callous-unemotional traits have the strongest association. However, the authors of the study examined callous-unemotional traits alone rather than in combination with high levels of impulsivity and narcissism, as has been the case in the other studies. Therefore, these results do not necessarily repudiate findings that identify callous-unemotional traits as the decisive factor. Significantly, in exploring the moderating role of gender, only one difference emerged: in the prediction of aggression and delinquency from psychopathic traits, the association between aggression and delinquency was demonstrably more powerful for girls than boys. Perhaps the most important contribution of this study is that it has provided the first evidence of a unique association between psychopathy and relational aggression for young females.

Another study (Marsee & Frick, 2007) focused on comparing subtypes of aggression (overt vs. relational and proactive vs. reactive) in a sample of 58 detained females in Louisiana. The girls ranged in age from 12 to 18, and nearly 80% had committed a previous offense, including 35% who had committed a violent crime. Using self-report measures that included the Peer Conflict Scale, Inventory of Callous-Unemotional Traits, Abbreviated Dysregulation Inventory, Adolescent Stories, and Outcome Expectations Questionnaire, this study did not look at associations between aggression and psychopathy, but did focus on the role of CU traits. The authors of the study sought to investigate cognitive and emotional characteristics that may have unique associations with reactive and proactive aggression. They also sought to find features that differentiate between reactive and proactive aggression and overtly and relational aggression. Of the four combinations of aggression type and function (proactive overt, proactive relational, reactive overt, reactive relational), both proactive forms of

aggression had unique relationships with CU traits. However, of these two, the relationship between proactive relational aggression and CU traits was the most pronounced for girls. This finding again supports the contention (at least indirectly) of a unique association between relational aggression and psychopathy for young females, thereby suggesting an alternate developmental pathway to antisocial behavior.

The third study, which was conducted by Schmeelk, Sylvers, and Lilienfeld (2008), focused on relational aggression among adult undergraduates. This study examined the correlation between relational aggression, psychopathy, and the DSM-IV classifications of personality disorders. It utilized a sample of 152 females and 68 males with a mean age of 18.9 years. Measures used in the study were the Relational Aggression Scale, the relational aggression subscale of the Self-Report of Aggression and Social Behavior, the Aggression Questionnaire, 4th Edition, the short form of the Psychopathic Personality Inventory (PPI), and the Marlowe-Crowne Social Desirability Scale. Significantly, the authors of the study found the most covariance between relational aggression and Cluster B personality disorders, which are characterized by emotional, dramatic, and erratic features. This cluster includes Antisocial, Borderline, Histrionic, and Narcissistic Personality Disorders, which are obviously associated with psychopathy. Another important finding was a significant correlation between relational aggression and psychopathy. This correlation was significant for Factor 2 of the Psychopathic Personality Inventory (PPI) (short form/developed mainly for clinical samples), which relates to antisocial behavior and impulse control, rather than factor 1, which was not significant and relates to affective and interpersonal dimensions of psychopathy. Finally, gender had practically no moderating effect on DSM personality disorder traits and relational aggression. This lack of a moderating effect for adults is in

keeping with disappearance of significant gender differences in the use of that form of aggression in adulthood.

Kerig and Stellwagen (2010) conducted an important study that investigated how Machiavellianism and the three dimensions of psychopathy contribute to childhood aggression, and also attempted to determine their associations with various forms of aggression. Using a sample of sixth to eighth graders, they looked at Impulsivity, Narcissism, CU Traits, and Machiavellianism, and their relationships with proactive and reactive aggression, and physical and relational aggression. They used teacher ratings from the Antisocial Process Screening Device, Machiavellian Rating Scale for Young Children, the Children's Social Experiences Scale, and the Scales of Proactive-Reactive Aggression. While the dimensions of CU Traits, Narcissism, and Machiavellianism predicted different forms of aggression, Kerig and Stellwagen also found that all of these constructs are highly intercorrelated, which appears to indicate that the differences, where they exist, are small but still significant. While girls' use of relational aggression was not found to be statistically higher than that of boys, boys did rate higher than girls on all other forms of aggression. Thus, although not significantly different, relational aggression nonetheless appears to be the one form of aggression that is more associated with female behavior than the other forms. In this study, CU traits and Narcissism both predicted proactive aggression, but only Narcissism predicted reactive aggression as well (Impulsivity and Machiavellianism also predicted proactive aggression, but only Impulsivity predicted reactive aggression). One of the most important findings of this study was that Machiavellianism was a mediator between narcissism and relational aggression, indicating that Machiavellianism may be a key ingredient that determines the choice of relational aggression over physical aggression. In other words, CU Traits and

Narcissism were associated with physical aggression, while CU Traits and Narcissism plus Machiavellianism were associated with relational aggression. The authors write, “whereas the callousness and narcissism associated with psychopathy may provide the motivation to harm other children, Machiavellian intelligence may provide the means to do so – and to do so with impunity” (Kerig & Stellwagen, 2010, p. 350).

Viding and colleagues provided an important study that investigated the contributions of CU Traits, conduct problems, and gender to bullying behavior (Viding, Simmonds, Petrides, & Frederickson, 2009). The study employed a large community sample of 11-13 year old children from the United Kingdom. The study made use of self-report or peer-report measures of three instruments: the Inventory of Callous-Unemotional Traits (ICU), the ‘Guess Who’ measure of bullying, and the Strengths and Difficulties Questionnaire (SDQ). Girls were found to use more indirect forms of aggression, while the opposite was true for boys. Interestingly, only direct aggression was positively associated with CU Traits alone, but the combination of conduct problems and CU Traits predicted both indirect and direct forms of aggression. Moreover, CU Traits and conduct problems were themselves found to be correlated, while CU Traits and emotional symptoms were not. Overall, the authors argue that these results support the contention that the presence of CU Traits is an important way to distinguish among children with conduct problems.

Following in the footsteps of the Viding study, another British study took a finely-focused look at bullying and forms of aggression by investigating the role of empathy, aspects of CU Traits, and their association with direct and indirect forms of bullying (Munoz, Qualter, & Padgett, 2011). Using a community sample of 11 and 12-year-old children from the United Kingdom, the researchers obtained self-reports of behavior

using the Inventory of Callous-Unemotional Traits, Basic Empathy Scale (BES), and the Revised Olweus Bully/Victim Questionnaire (OBVQ). Results of analyses revealed that the subscales of the ICU had varied associations with indirect and direct bullying: specifically, the Unemotional subscale was not associated with bullying, but the Uncaring and Callousness subscales were. Moreover, children who ranked highest in CU Traits engaged in more direct bullying. These results indicated that having disregard for the feelings of others is more associated with bullying than lack of empathy. As such, the study makes the distinction between “knowing” about the emotions of others and “caring” about those emotions, with uncaring traits being the aspect of CU Traits that is most associated with bullying. Thus, the authors of the study conclude that “being an uncaring child is more important for engaging in bullying behaviors than recognizing or even feeling other people’s emotions” (pp. 193).

Finally, a study by Stickle and colleagues (Stickle et al., 2012) looked at gender differences in aggression in a sample of children and adolescents who ranged in age between 11 and 17 years. One of the important features of this study is that it is one of the few that has utilized a sample of adjudicated youth. Measures used in this study were the Inventory of Callous-Unemotional Traits (ICU), Antisocial Process Screening Device (APSD), The Proactive/Reactive Aggression Rating Scale, the Attribution and Response to Ambiguous Provocation Scale (ARAPS), the Affective Intensity Measure (AIM), and the Revised Child Anxiety and Depression Scale (RCADS). This study provided additional evidence that gender and aggression type are two important factors that can provide researchers with deeper insight into the nature of aggression. As far as aggression type is concerned, combined use of proactive and reactive aggression was associated with higher levels of aggression, and also with CU traits and impulsivity. This was true for

both males and females. As far as gender is concerned, several important and unexpected findings were noted. First, there was a higher level of CU Traits among boys generally, but for girls who engaged in combined proactive and reactive aggression, the level of CU Traits was even higher. Also, girls engaged in the highest levels of physical and relational aggression and demonstrated a greater range of aggression, as their self-reported targets included both girls and boys, while boys only reported targeting other boys. The girls in this study also demonstrated greater empathy, greater anxiety, more negative affect, and were more distraught over social provocations. The authors of the study theorize that this conglomeration of high levels of CU Traits, empathy, and heightened emotionality may be evidence of greater maladjustment overall, thus suggesting that these adjudicated girls represent a qualitatively different (and perhaps more gender atypical) population, when compared with adjudicated boys.

Gaps in the Literature

At this time, little research has been conducted on the relationship between indirect forms of aggression and antisocial personality features within the context of juvenile psychopathy. As Schmeelk and colleagues wrote just a few years ago, “virtually all published work on psychopathy and aggression has focused on overt rather than covert forms of aggression, including relational aggression” (Schmeelk et al., 2008, p. 271). This remains largely true today. To date, only a handful of studies have directly investigated the association between indirect forms of aggression and the Callous-Unemotional and Narcissism dimensions of psychopathy. In particular, the role that the narcissism factor of psychopathy plays in aggression has been largely neglected in the literature. Moreover, I am aware of only one study that has focused on adolescent male and female offenders, and none that have examined relational and social aggression as

distinct constructs. The question of gender differences is also an important one, both for studies of aggression and for psychopathy. At this time, the research appears to confirm that aggression takes different forms in males and females at different points in development. Widom (1984) has also suggested that there may be fundamentally distinctive male and female versions of psychopathy as well. However, while “male psychopathy” and “female psychopathy” may look different, Cale and Lilienfeld argue that “It is plausible that males and females differ in their manifestation of antisocial behaviors rather than in the core affective and interpersonal features of psychopathy” (2002, p. 1191). These remain open questions. However, they are important to consider if there are gender-moderated pathways to antisocial behavior. As a result, this study will attempt to fill gaps in the literature by investigating the role of antisocial personality features in predicting relational aggression, social aggression, and interpersonal maturity in a sample of adolescent male and female offenders.

CHAPTER 3

Method

Participants

The data used in this study were obtained from an existing data set that was de-identified by the institution that provided it. The participants of the study consisted of a convenience sample of 81 adolescents between the ages of 13 and 18 from an urban school serving behavior-disordered youth in the Mid-Atlantic United States. All participants were adjudicated through the juvenile justice system, although information concerning the nature of specific crimes was not available. The original sample consisted of 60 males and 21 females ranging in age from 13 to 18 years. No demographic data were available other than age and gender, but all of the youth in this study had histories of behavioral issues and criminal activity in order to be enrolled at the school. Approval for the study was obtained from the Institutional Review Board of Duquesne University.

Measures

This investigation utilized three self-report instruments, the Young Adult Social Behavior Scale (YASB), the Antisocial Process Screening Device (APSD), and the Inventory of Callous-Unemotional Traits (ICU).

Debate about the proper place and use of ratings scales in the assessment of psychopathy is ongoing (e.g., Murrie & Cornell, 2002). However, researchers have noted several reasons why self-report rating scales are important, particularly when the focus population involves adolescent offenders. First, the self-report format can be successfully used to identify both male and female youths with psychopathic traits (Andershed, Gustafson, Kerr, & Stattin, 2002; Lynam, Whiteside, & Jones, 1999). Second, parent- and teacher-report rating scales become less valid in adolescence, while self-report versions

become increasingly reliable and valid in adolescence, particularly when the focus of assessment involves unobservable antisocial behaviors (Frick, Bodin, & Barry, 2000; Kamphaus & Frick, 1996). Furthermore, parents and teachers of children in juvenile justice settings are often not available to participate in the assessment or are sometimes not cooperative (Falkenbach, Poythress, & Heide, 2003; Poythress, Dembo, Wareham, & Greenbaum, 2006). They also may not be familiar with the adolescent's behaviors because they either do not know the child well (in the case of teachers) or the adolescent has been away from home in multiple placements (in the case of parents) (Loney, Frick, Clements, Ellis, & Kerlin, 2003). Even if the behaviors are observable, there is some question as to whether a parent or teacher can properly interpret another person's inner emotional experiences, like remorselessness or grandiosity (Andershed et al., 2002). Therefore, there is good basis for using data collected from these measures.

Relational aggression, social aggression, and interpersonal maturity.

The *Young Adult Social Behavior Scale* (YASB) is a 14-item self-report instrument designed to measure behaviors in the relationships of adolescents and adults. Due to the brevity and limited uses of the few existing instruments that measure indirect forms of aggression, the YASB was created by Crothers and colleagues to uniquely measure relational and social aggression (Crothers et al., 2009). The items contain questions related to healthy and maladaptive behaviors that were developed from qualitative discussions with adolescent females concerning peer conflict. Items were then constructed to include socially aggressive behaviors, relationally aggressive behaviors, and healthy social skills. For this instrument, social aggression was defined as “gossiping, social exclusion, isolation, or alienation, writing notes or talking about someone, and stealing friends or romantic partners” (Crothers et al., 2009, pp. 20).

Relational aggression was defined as “the use of confrontational strategies to achieve interpersonal damage, including not talking to or hanging around with someone, deliberately ignoring someone, threatening to withdraw emotional support or friendship, and excluding someone from a group by informing them he or she is not welcome” (Crothers et al., 2009, p. 20; Xie, Swift, Cairns, & Cairns, 2002). Interpersonal maturity is defined as “healthy social skills” (Crothers et al., p. 20). The items of the Interpersonal Maturity scale address issues concerning honesty in dealing with interpersonal conflict, willingness to work through conflicts, maintaining confidentiality, and respecting the opinions of others. The YASB makes use of a 5-point Likert scale requiring responses from 5 (“Never”) to 1 (“Always”).

Confirmatory factor analysis of the YASB (Crothers et al., 2009) indicates that it measures three distinct constructs: direct relationally aggressive behaviors, socially aggressive behaviors, and interpersonally mature behaviors. Therefore, the YASB is used in this study to uniquely assess relational and social aggression.

Statistical analysis of the YASB was completed using EQS 6.1 Multivariate Software. It treated the data as ordered categorical and used a polychoric correlation matrix with robust standard errors (Leen, Poon, & Bentler, 1995). Results indicated that the model had a Satorra-Bentler Corrected Chi-Square value of 110.79 with 71 degrees of freedom, and RMSEA of .029 CI (.018, .039), CFI of .97 and TLI (NNFI) of .96, which indicate a good fit of the data to the theorized model. It utilized traditionally accepted cut off values of Hu and Bentler (1999) as well as cutoff values suggested by Sivo, Fan, Witta, and Willse (2006).

Narcissism.

The Self Report version of the *Antisocial Process Screening Device* (APSD) is a 20-item rating scale that was designed to measure psychopathic traits in adolescents. It is one of the most commonly used rating scales in the assessment of psychopathy, and also one of the most studied (Bijttebier & Decoene, 2009). It utilizes a 3-point Likert scale ranging from 0 (“Not true at all”) to 2 (“Definitely true”).

The APSD was originally developed from items derived from the PCL-R and was first known as the Psychopathy Screening Device (PSD). The first published version of the APSD appeared in 2001 and consisted solely of Parent and Teacher versions that were designed for use with children between the ages of 6 and 13 (Frick & Hare, 2001). Some dimensional adjustments were made from the PCL to adapt it to this younger age group (Falkenbach et al., 2003). The Parent and Teacher versions of the APSD are based on a three-factor model consisting of Narcissism, Callous/Unemotional, and Impulsivity dimensions, and have demonstrated solid psychometric properties (Frick & Hare, 2001).

The Self Report version of the APSD was later developed by re-wording the 20 items of the APSD so they would read in the first person (Caputo, Frick & Brodsky 1999). It is an unpublished version that was designed for use with adolescents between the ages of 13 and 18 (Caputo, Frick, & Brodsky, 1999; Silverthorn, Frick, & Reynolds, 2001). Thus, it parallels the focus population of the PCL:YV (ages 14 and older; Frick & Hare, 2001). At the present time, the Self Report APSD is the most widely used self-report measure of psychopathy (Murrie et al., 2007; Vaughan & Howard, 2005), and it is the only version of the APSD that is validated for use with juvenile offenders (Vitacco, Rogers, & Neumann, 2003). It has been successfully used to investigate the association between social cognitive deficits and CU traits and impulsivity/conduct problems in adjudicated boys and girls (Pardini, Lochman, & Frick, 2003) and age of onset in the

development of conduct disorder in adjudicated boys and girls (Silverthorn, Frick, & Reynolds, 2001). It has also been used to identify emotional processing deficits in adolescent male delinquents (Loney et al., 2003) and more extreme patterns of offending among adolescent and young adult prison inmates (Kruh, Frick, & Clements, 2005).

Although a two-factor solution demonstrated a better fit in a European sample (Bijttebier & Decoene, 2009), two separate confirmatory factor analyses using American samples have indicated a three-factor model consisting of Narcissism, Impulsivity, and Callous-Unemotional dimensions (Poythress et al., 2006; Vitacco et al., 2003). Significantly, this is the same factor structure found for the Parent and Teacher versions of the APSD and the PCL-R itself (Munoz & Frick, 2007). In their study, Vitacco and colleagues found “excellent” construct validity for the three-factor model (Vitacco et al., 2003, pp. 146). In the study by Poythress and colleagues, items 19 and 20 were removed to obtain an acceptable fit, due to their low loadings (Poythress et al., 2006). With the exception of these two items (both from the Callous-Unemotional dimension), all items loaded on precisely the same factors in both studies.

Other evidence supports the validity of the Self Report APSD. It has correlated well with the self report version of the modified Child Psychopathy Scale (mCPS) (Falkenbach et al., 2003), and a high correlation was found between the Self Report APSD and Youth Psychopathic Traits Inventory (YPI) Total scores ($r = .76, p < .01$), with mostly moderate to good correlations among the subscales (ranging from .24 to .73; Poythress et al., 2006). Associations with criteria like age of delinquency, past year delinquent behavior, and internalizing and externalizing behavior were also found (Poythress et al., 2006). In a study of psychopathic personality correlates among adolescents, results from the Self Report and Parent Report versions of the APSD were

also similar to those that have been obtained for adults using the PCL-R (Sadeh, Verona, Javdani, & Olson, 2009).

In their sample of non-referred adolescents, Munoz and Frick found correlations with other measures of antisocial behavior, and moderate correlations between the Self Report and Parent versions of the APSD (Munoz & Frick, 2007). As these authors note, the association between the APSD Parent and Self ratings was stronger than what is normally found in cross-informant ratings of children, and was typical of those found in the personality assessment of adults. While correlations with the PCL have usually not been strong (.30 to .40; Lee, Vincent, Hart, & Corrado, 2003; Murrie & Cornell, 2002), Kimonis and colleagues have pointed out that this is not unusual when different methodologies are used to assess a construct (Kimonis, Frick, Fazekas, & Loney, 2006). Moreover, one study found that Total scores from the Self Report APSD showed a moderate correlation (.62) with Total scores from the PCL:YV (Vitacco et al., 2003). Another study investigating the validity of the psychopathy construct found that the Self Report APSD was similarly correlated to total number of criminal charges and number of violent charges as the PCL:YV (.33 and .25 for APSD, .36 and .28 for PCL:YV, $p < .05$; Salekin, Leistico, Neumann, DiCicco, & Duros, 2004). In a taxometric analysis of youth psychopathy, findings from the Self Report APSD paralleled those obtained with the PCL:YV (Murrie et al., 2007).

There is also accumulating evidence for the predictive utility of the Self Report APSD. Although one study found limited predictive validity for its use in youth risk assessment (Boccaccini et al., 2007), a number of other studies provide support for its predictive validity. For example, the Self Report APSD has demonstrated predictive validity in a study of sexual offenders (Caputo et al., 1999). It also predicted extreme

patterns of offending among incarcerated youth (Kruh, Frick, & Clements, 2005), treatment involvement and positive changes in behavior (Caldwell, McCormick, Wolfe, & Umstead, 2012), and treatment compliance and re-arrest at 1 year follow-up (Falkenbach et al., 2003). Munoz and Frick (2007) likewise found predictive associations with measures of antisocial behavior, and the Self Report APSD has performed better than the PCL:YV in predicting antisocial behavior and treatment progress (Spain, Douglas, Poythress, & Epstein, 2004).

Overall, the Self Report APSD has demonstrated good Total score reliability, with variable reliability among the subscales. In studies conducted thus far, the Total score internal consistency alphas have been found to range between .71 and .82 (Falkenbach et al., 2003; Lee et al., 2003; Munoz & Frick, 2007; Murrie, Cornell, Kaplan, McConville, & Levy-Elkon, 2004; Spain et al., 2004). An examination of the internal consistency of the subscales across 11 studies shows that alphas of the Narcissism subscale range between .59 and .75, with a median of .69 (Poythress et al., 2006). Taken together, these results appear to indicate satisfactory reliability. In the same review, the alphas of the Impulsivity subscale ranged from .44 to .61, with a median of .53, indicating moderate reliability. In contrast, however, the alphas of the Callous-Unemotional subscale ranged from .22 to .60, with a median of .46, indicating poor reliability. In a more recent study, however, Caldwell and colleagues obtained acceptable or near-acceptable internal consistency across all measures after item 19 was removed (Total = .78, Narcissism = .69, Impulsivity = .71, CU = .67; Caldwell, McCormick, Wolfe, & Umstead, 2012). Moreover, it has shown good temporal stability in several studies (e.g., Frick, Kimonis, Dandreaux, & Farrell, 2003), comparing favorably with PCL:YV Total scores (Lee,

Klaver, Hart, Moretti, & Douglas, 2009) and other self-report personality measures (Munoz & Frick, 2007).

In sum, the Self Report APSD (along with the PCL:YV) is the most psychometrically-supported instrument available for measuring psychopathic traits in adolescent offenders (Murrie et al., 2007), and it is the most widely-used self-report measure as well (Vaughan & Howard, 2005).

Callous-unemotional traits.

The self-report *Inventory of Callous-Unemotional Traits* (ICU) is an unpublished 24-item rating scale that was designed to measure Callous-Unemotional Traits in adolescents. The ICU was created to overcome the psychometric limitations of the Callous-Unemotional subscale of the APSD, and was developed from the items that comprise that subscale. It is not surprising, then, that the ICU has been used in conjunction with the APSD in a number of studies (e.g., Fanti & Kimonis, 2012; Dandreaux & Frick, 2009; Kimonis et al., 2008; Roose, Bijttebier, Decoene, Claes, & Frick, 2009; Masi et al., 2011; Stickle et al., 2012). It utilizes a 4-point Likert scale that ranges from 0 (“Not at all true”) to 3 (“Definitely true”).

The ICU has been employed extensively in research. It has been used to investigate:

- Associations between psychopathic traits and personality dimensions (Decuyper, De Bolle, De Fruyt, & De Clercq, 2011)
- Self-benefiting behavior among adolescents with conduct problems and callous-unemotional traits (Sakai, Dalwani, Gelhorn, Mikulich-Gilbertson, & Crowley, 2012)

- The extent of overlap between conduct disorder and callous-unemotional traits (Kumsta, Sonuga-Barke, & Rutter, 2012)
- Mother and child contributions to disruptive conduct in early childhood (Kochanska, Barry, Aksan, & Boldt, 2008)
- Reward responsiveness among adjudicated adolescents who are high in CU traits (Marini & Stickle, 2010)
- The role of parental power and attachment in antisocial conduct (Kochanska, Barry, Stellern, & O'Bleness, 2009)
- Empathy in children and adolescents with CD and ASD (Schwenck et al., 2012)
- Associations between CU Traits and sex offending (Lawing, Frick, & Cruise, 2010)
- The role of guilt and effortful control in predicting disruptive behavior (Kochanska, Barry, Jimenez, Hollatz, & Woodard, 2009)
- The relationship between CU Traits and deficits in recognizing the emotion of fear in facial expressions and body postures (Munoz, 2009)
- The role of CU traits in the prediction of community violence (Kimonis, Ray, Branch, & Cauffman, 2011)
- The relationship between the presence of CU Traits, provocation response, and aggression type among juvenile delinquent boys (Munoz, Frick, Kimonis, & Aucoin, 2008)
- Associations between multiple risk factors (including CU Traits) and antisocial behavior (Stickle, Kirkpatrick, & Brush, 2009)

- Gender differences in types of aggression and the presence of psychopathic traits in adjudicated adolescents (Stickle et al., 2012)

To date, research that has examined the construct validity of the ICU has indicated a remarkably stable factor structure across diverse samples of adolescents. Studies involving American and European samples of non-referred and adjudicated adolescents have consistently indicated a bifactor model consisting of Uncaring, Callousness, and Unemotional dimensions, as well as an overarching general dimension (Essau, Sasagawa, & Frick, 2006; Fanti, Frick, & Georgiou, 2009; Kimonis et al., 2008; Roose et al., 2009). This factor structure was also supported in studies involving college students (Kimonis, Branch, Hagman, Graham, & Miller, 2013) and young adults (Byrd, Kahn, & Pardini, 2013), although goodness of fit in the latter study was minimal. At this time, only one study utilizing a sample of adolescents has yielded an alternate factor structure: in their exploratory factor analysis, Feilhauer and colleagues found a five-factor solution consisting of Lack of Conscience, Uncaring, Unemotional, Callousness, and Lack of Empathy dimensions in a mixed sample of offending and non-offending Dutch youth (Feilhauer, Cima, & Arntz, 2012). Another study found tenuous support for the three factor structure in a sample of non-referred young children age 7 to 12 years, but stronger support for a two factor structure consisting of Uncaring and Callous-Unemotional factors (Houghton, Hunter, & Crow, 2013).

In terms of convergent and discriminant validity, the ICU was found to be positively correlated with other self-report measures of psychopathy (PPI-R, LSRP, SRP-III; Byrd, Kahn, & Pardini, 2013; Kimonis, Branch, Hagman, Graham, & Miller, 2013). It also showed positive associations with external correlates like alcohol and drug use, criminal charges, self-reported delinquency, depression, ADHD, antisocial personality

symptomatology, and impaired work functioning (Byrd et al., 2013). The ICU was negatively correlated with empathy (Kimonis et al., 2013).

Internal consistency has been almost uniformly satisfactory, with coefficients for Total scores ranging between .71 to .83 (Byrd et al., 2013; Essau et al., 2006; Fanti et al., 2009; Feilhauer et al., 2012; Kimonis et al., 2013; Kimonis et al., 2008; Munoz, Qualter, & Padgett, 2011; Roose et al., 2009). With the exception of the Unemotional subscale, each dimension has also uniformly demonstrated acceptable internal consistency (Callousness = .70 to .80; Uncaring = .73 to .84; Unemotional = .51 to .73; Byrd et al., 2013; Essau et al., 2006; Fanti et al., 2009; Kimonis et al., 2008; Munoz et al., 2011; Roose et al., 2009). The ICU has also demonstrated moderate to good test-retest reliability (Feilhauer et al., 2012).

Research Design

This study employs a quantitative, quasi-experimental research design. The independent variables are CU Traits and Narcissism. The dependent variables are relational aggression, social aggression, and interpersonal maturity.

There are several potential threats to internal and external validity. Two threats to internal validity may have occurred during administration of the questionnaires: first, there was the possible threat of maturation, in the sense that respondents could have become fatigued or bored during the administration; and second is the threat of experimenter effects, in the sense that those who administered the questionnaires could have had influenced the subjects in such a way that could have impacted their responses. However, the most significant threat to internal validity in this study is subject effects. Given that the sample in this study is composed of adjudicated youth, it is possible that the subjects attempted to present themselves in a more positive light or provide socially

acceptable answers, or alternatively, to provide answers that exaggerate bad behaviors, or simply to not take the questionnaires seriously and provide random answers. On the other hand, threats to external validity include generalizability to other individuals (population external validity) and conditions (ecological external validity), since the sample was composed of adolescent offenders.

Procedures

This study made use of a pre-existing data set obtained from a school serving adjudicated youth in the Mid-Atlantic United States. Thus, there was no recruitment of students. The data were derived from psychometrically-validated instruments (YASB, ICU, APSD) administered to the adolescents by the school itself, as part of the assessment protocol of the institution. All information was de-identified by the institution prior to making it available to the researchers. There was no opportunity to access institution records to obtain background information on the participants. Copies of the instruments are included in the Appendix.

Data Analysis

Two research questions are posed in this study:

- Is there a relationship between callous-unemotional traits and relational aggression, social aggression, and interpersonal maturity?
- Is there a relationship between narcissism and relational aggression, social aggression, and interpersonal maturity?

No hypotheses are proposed since the study is exploratory in nature. Data was analyzed using the Statistical Package for the Social Sciences (SPSS) version 21.0 statistical software. The data analyses utilized descriptive statistics (e.g., number of male and female students) and multiple regression analyses to determine the presence of and

potential associations between ratings of the two antisocial personality features and relational aggression, social aggression, and interpersonal maturity. A correlation was also performed to assess statistically significant differences between males and females in this study.

CHAPTER 4

Results

In the present study, multiple regression and correlation analyses were used to investigate 1) the potential relationships between narcissism and relational aggression, social aggression, and interpersonal maturity, and 2) the potential relationships between CU traits and relational aggression, social aggression, and interpersonal maturity.

Descriptive Statistics

Data for this study were obtained from an existing data set containing information from 81 adolescent offenders between the ages of 13 and 18. At the outset, the sample contained 59 males and 21 females. The gender of one subject was unidentified. In addition, data from one of the males was excluded because it represented an extreme outlier on all variables. Thus, the study utilized a total sample of 58 males and 21 females, for an N of 79. Due to missing data and pairwise exclusion (discussed below), N for each instrument ranged from 69 to 78. These numbers are indicated in Table 4:

Table 4
Descriptive Statistics

<u>Scale</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
APSD Narcissism	77	4.97	2.86
ICU Total	69	29.53	9.59
YASB RA	76	0.91	0.14
YASB SA	78	0.94	0.14
YASB IM	77	3.05	0.70

Preliminary Analyses

Missing Data and Outliers

All data were screened for errors prior to analysis. Less than 5% of the data were missing for items on the YASB and APSD. Since this can be considered a proportionally small quantity (Tabachnick & Fidell, 2013), no further analysis was performed and the data were retained in their original form. In research involving a small amount of randomly missing data, it is recommended that variables with the missing data simply be excluded from analysis (Tabachnick & Fidell, 2013, p. 63). Thus, for statistical analyses in the present study, missing data were excluded pairwise so that a maximum amount of data could be retained for each statistical operation.

With the ICU items, only four were missing more than 5% of the data. Of these, two were missing 6.3 %, and two were missing 7.5%. As a result, total missing data from the ICU items was mostly small, but did require further investigation to determine if patterns existed. To do so, a Missing Values Analysis was performed that included Little's MCAR Test. The results were not significant ($.54, p < .05$), indicating that the data were Missing Completely At Random (MCAR) and that a pattern was unlikely. However, because the quantity of missing data was greater than 5% for the four items, values for these items (items 4, 9, 18, and 19) were replaced using mean estimation (Mertler & Vannatta, 2005).

The data were also examined for outliers. Given the important impact that outliers have on multiple regression analysis, one case was immediately excluded because it was an extreme outlier on all variables. In addition, one case in the YASB Relational Aggression subscale was excluded from analysis because it was identified as an extreme outlier on this variable. No other outliers had this level of extreme impact on the data, so

they were retained in the analysis, with the possibility that variables might need to be transformed in order to meet the assumption of normality.

Reverse Scoring

In the scoring process, negatively-worded items (i.e., wording that represents the opposite of the construct being measured) were reversed-scored for all scales. A complete list of these items can be referenced in Table 5.

Table 5
Items Requiring Reverse-Scoring

<u>YASB Item Numbers</u>	<u>APSD Item Numbers</u>	<u>ICU Item Numbers</u>
1	3	1
2	7	3
4	12	5
5	18	8
7	20	13
8		14
9		15
11		16
12		17
13		19
		23
		24

For accuracy, negatively-worded items on the ICU were first reverse-scored and then cross-referenced with the reverse-scoring used in the study by Kimonis and colleagues (Kimonis et al., 2008, p. 248). The items chosen in the present study and those chosen by the Kimonis research group matched precisely. No information could be located on reverse-scoring for the APSD, so cross-referencing was not possible.

The scoring system for the YASB ran counter to the Likert system that is typically used, where high scores equate with high levels of the construct being measured. On the YASB, low scores indicate high levels of the construct. In addition, all items on the YASB are worded in a positive direction (i.e., the question directly reflects the construct being measured). As a result, all items were reverse-scored *except* items 3, 6, 10, and 14. These items comprise the Interpersonal Maturity subscale. Because this subscale is associated with positive, pro-social behaviors, while all other scales and subscales used in the present study were associated with antisocial behaviors, it was reasoned that high scores on this subscale should correspond with low levels of interpersonal maturity, in order to align them with all the other scales. As a result, the Interpersonal Maturity items were scored as they were originally provided in the YASB (*high* score equals *low* construct), while the items on the Relational Aggression and Social Aggression subscales were reverse-scored (*high* score equals *high* construct).

Assumptions

Data were initially examined for conformity to the assumptions of univariate normality, linearity, and homoscedasticity. The most significant departures from normality were the YASB Total, Relational Aggression, Social Aggression, and Interpersonal Maturity scales. As a result, these scales were transformed using Square Root (Total and Interpersonal Maturity scales) and Logarithmic (Relational Aggression and Social Aggression scales) transformations. Transformations were also attempted with the APSD Narcissism and ICU Total scales, but no satisfactory solution was found. Due to the robustness of the assumptions, it was determined that the univariate violations were not significant enough to prevent good results, since moderate assumption violations dilute the results of analysis but do not invalidate them (Tabachnick & Fidell, 2013).

More importantly, examination of residuals scatterplots and Normal Probability Plots for multivariate assumptions revealed good conformity to normality, linearity, and homoscedasticity. In the end, it was determined that conformity to the assumptions was sufficient to obtain good results.

Subscales and Reliability

The items that comprise the Narcissism subscale of the self-report APSD were obtained from the confirmatory factor analyses conducted by Vitacco and colleagues (Vitacco et al., 2003) and Poythress and colleagues (Poythress et al., 2006). Both studies used samples of adolescent offenders and both identified exactly the same items for the Narcissism factor. In the latter study, items 19 and 20 were removed from the APSD in order to improve goodness of fit; however, these items were not identified as components of the Narcissism subscale. As a result, these issues did not impact the Narcissism subscale in the present study. The items of this subscale are provided in Table 6.

Table 6
Items of the APSD Narcissism Subscale

Narcissism

- 5. Your emotions are shallow and fake.
 - 8. You brag a lot about your abilities, accomplishments, or possessions.
 - 10. You use or “con” other people to get what you want.
 - 11. You tease or make fun of other people.
 - 14. You act charming and nice to get things you want.
 - 15. You get angry when corrected or punished.
 - 16. You think you are better or more important than other people.
-

Subscales for the YASB were created from the confirmatory factor analysis by Crothers and colleagues (Crothers et al., 2009). These items are detailed in Table 7 below:

Table 7
Items of the YASB Subscales

Relational Aggression

1. When I am angry with someone, that person is often the last to know. I will talk to others first.
2. When I am frustrated with my partner/colleague/friend, I give that person the silent treatment.
9. I criticize people who are close to me.
11. I intentionally exclude friends from activities to make a point with them.
13. When I am angry with a friend, I have threatened to sever the relationship in hopes that the person will comply with my wishes.

Social Aggression

4. When I do not like someone's personality, I derive a certain degree of pleasure when a friend listens to and agrees to my assessment of the person's personality.
5. I contribute to the rumor mill at school/work or with my friends and family.
7. I break a friend's confidentiality to have a good story to tell.
8. I confront people in public to achieve maximum damage.
12. I have attempted to steal a rival's friend.

Interpersonal Maturity

3. I deal with interpersonal conflict in an honest, straightforward manner.

6. I honor my friend's need for secrets of confidentiality.
 10. I respect my friend's opinions, even when they are quite different from my own.
 14. Working through conflicts with friends makes our friendship stronger.
-

Table 8 provides a summary of the results of the analysis of internal consistency reliability for all scales, including the APSD Total and YASB Total scales. A Cronbach's Alpha of .7 is generally considered good (Nunnally, 1978).

As expected, the ICU evidenced the strongest reliability of all scales utilized in this study (.80). Previous research has indicated that removal of items 2 and 10 has improved internal consistency (e.g., Munoz et al., 2011). However, even though a negative corrected item-total correlation was obtained for Item 2 in this study (and a weak but positive correlation for Item 10), removal of this item resulted only in a miniscule gain in reliability (to .81). Therefore, items 2 and 10 were left in the analysis.

According to previous research, internal consistency for the self-report APSD Total score has been satisfactory, with the Narcissism subscale demonstrating the highest internal consistency of all the subscales (median of .69 across 11 studies; Poythress et al., 2006; see Chapter 3 for a discussion). In the present study, internal consistency for both the self-report APSD Total score and Narcissism subscale were acceptable. For the Narcissism subscale, removal of items did not result in any gains in internal consistency.

Internal consistency for the YASB Total score and two of the three subscales were found to be low. Although the YASB Total approached acceptability, the Cronbach's Alphas for the Relational Aggression and Social Aggression subscales were

Table 8
Internal Consistency of Scales

	APSD Total	APSD NAR Subscale	ICU Total	YASB Total	YASB RA Subscale	YASB SA Subscale	YASB IM Subscale
Cronbach's Alpha	.73	.73	.80	.66	.47	.51	.75

low. Cronbach's Alpha values may have been negatively impacted by the number of items on the YASB, which is small when compared with the ICU and APSD, particularly where the subscales are concerned. Therefore, mean inter-item correlations for the YASB subscales are also reported in Table 9.

Table 9
Mean Inter-Item Correlations for YASB Subscales

Subscale	YASB RA Subscale	YASB SA Subscale	YASB IM Subscale
Mean Inter-Item Correlation	.17	.17	.43

Since desired values for these correlations are between .2 and .4 (Briggs & Cheek, 1986), the Relational Aggression and Social Aggression subscales still fell short of a satisfactory range. In contrast, however, the Interpersonal Maturity subscale demonstrated good internal consistency (.75).

Results of Analyses

Multiple Regression Analyses

For regression analyses, narcissism and CU Traits were the independent variables, and relational aggression, social aggression, and interpersonal maturity were the dependent variables. Thus, each of the dependent variables was assessed individually using the combination of narcissism and CU Traits as predictors.

There is wide disagreement regarding adequate sample size needed for conducting a multiple regression. The size of the sample in this study exceeded that recommended by Stevens (1996; 15 cases per predictor) and Khamis and Kepler (2010; using the formula $n = 20 + 5k$, where k is the number of predictors). For this study, both approaches would require a total of 30 subjects. The size of the sample used in this study likewise exceeded that which was indicated through calculations made using G*Power version 2.0 (Erfelder & Faul, 1992) with a power of .8 and a medium effect size. It also approximates the sample size recommended by Miles and Shevlin (2001) for two predictors, which is about 70 cases using a power of .8 with a medium effect size. Either way, the sample size appears acceptable for the analyses being performed.

An examination of multicollinearity indicated a small correlation between the independent variables (.19). Analysis of the tolerance statistic (.97) and variance inflation factor (VIF; 1.04) were also satisfactory. In sum, all measures demonstrated an acceptably low level of collinearity.

Is there a relationship between narcissism, callous-unemotional traits, and relational aggression?

A standard multiple regression was conducted using narcissism and CU traits as predictors and relational aggression as the outcome variable. Evaluation of the residuals scatterplot and Normal Probability Plot indicated good normality, linearity, and

homoscedasticity. No standardized residual values fell outside the range of -3.3 and +3.3, and Mahalanobis Distance (9.64) showed that no cases exceeded the chi-square critical value of 13.82 for two predictors ($\alpha = .001$). Thus, no outliers were identified.

Results indicated that the model significantly predicted relational aggression, R Squared = .315, $F(2, 64) = 14.74, p < .05$. The model accounted for 31.5% of the variance of relational aggression, with Adjusted R Squared showing slight shrinkage (.29), which demonstrated good generalizability from the sample to the population. Standardized β coefficients showed that narcissism made the strongest unique contribution to explaining relational aggression (.53), and it was significant (.000, $p < .05$). However, the contribution of CU traits (.12) was not. Moreover, the semipartial correlation coefficient for narcissism (.52) uniquely explained 26.8% of the variance in relational aggression. By contrast, the semipartial correlation coefficient for CU traits (.12) explained only .01% of the variance. Therefore, of the two predictor variables, narcissism contributed uniquely and significantly to the prediction of relational aggression, while CU traits did not. Thus, it appears that narcissism, but not CU traits, is important in identifying the use of relational aggression. Results of the regression analysis are provided in Table 10.

Table 10
*Summary of Standard Regression Analysis for Variables
 Predicting Relational Aggression*

	<i>B</i>	<i>SE B</i>	β
Narcissism	.03	.01	.53
CU Traits	.00	.00	.12

Is there a relationship between narcissism, callous-unemotional traits, and social aggression?

A standard multiple regression was conducted using narcissism and CU traits as predictors and social aggression as the outcome variable. Good adherence to normality, linearity, and homoscedasticity was found through evaluation of the residuals scatterplot and Normal Probability Plot. Once again, no outliers were indicated through Mahalanobis Distance (9.64, with chi-square critical value of 13.82, $\alpha = .001$) and standardized residual values.

Once again, the model represented a significant fit of the data, and explained 24.2% of the variance in social aggression (R Squared = .242, $F(2, 65) = 10.35, p < .05$). Results of the multiple regression are provided in Table 11.

Table 11
Summary of Standard Regression Analysis for Variables Predicting Social Aggression

	<i>B</i>	<i>SE B</i>	β
Narcissism	.02	.01	.48
CU Traits	.00	.00	.06

Adjusted R Squared also showed some shrinkage (.22), but it still demonstrated good generalizability from the sample to the population. Standardized β coefficients showed that narcissism made the strongest unique prediction to explaining social aggression (.48), and it was also significant (.00, $p < .05$). CU traits (.06) did not make a significant

unique contribution. Narcissism uniquely explained 21.99% of the variance in social aggression, as determined by the semipartial correlation coefficient, while CU traits (.06) accounted for only .32% of the variance. Here again, narcissism figured prominently in identifying the use of social aggression, but CU traits did not.

Is there a relationship between narcissism, callous-unemotional traits, and interpersonal maturity?

Finally, in the third regression analysis, a standard multiple regression was conducted using narcissism and CU traits as predictors and interpersonal maturity as the outcome variable. Again, the assumptions of normality, linearity, and homoscedasticity were met as indicated through examination of the residuals scatterplot and Normal Probability Plot. No outliers were indicated, as was evidenced through standardized residual values and Mahalanobis Distance (9.64, with chi-square critical value of 13.82 for two predictors, $\alpha = .001$).

Results demonstrated that the regression model represented a significant fit of the data. In this case, the model explained 11.1% of the variance in interpersonal maturity, with $R^2 = .111$, $F(2, 65) = 4.06$, $p < .05$. Adjusted R^2 showed more shrinkage, at .084. Standardized β coefficients showed that CU Traits made the strongest unique contribution to explaining low levels of interpersonal maturity (.34). This was a significant unique contribution (.006, $p < .05$). In contrast, narcissism (-.06) did not make a significant unique contribution. Moreover, the semipartial correlation coefficient for CU traits (.33) indicated that this independent variable uniquely explains 11.09% of the variance in interpersonal maturity. In contrast, the semipartial correlation coefficient for narcissism (-.06) explained only .34% of the variance in interpersonal maturity.

Regression results are provided in Table 12.

Table 12
*Summary of Standard Regression Analysis for Variables
 Predicting (Low) Interpersonal Maturity*

	<i>B</i>	<i>SE B</i>	β
Narcissism	-.01	.03	-.06
CU Traits	.03	.01	.34

Correlation Analyses

Previous research has demonstrated that important gender differences exist in the various types of aggression being investigated in the present study. In order to compare associations between genders, a correlation analysis using the Pearson product-moment coefficient (r) was conducted. Data were examined for linearity and homoscedasticity. The results of the correlation are presented in Table 13. As indicated, for the males, there were strong, positive correlations between narcissism and relational aggression ($r = .54, n = 52, p < .01$) and narcissism and social aggression ($r = .58, n = 54, p < .01$). These significant correlations represented 28.84% and 33.18% of shared variance, respectively. For females, there were moderate, positive, non-significant correlations between narcissism and relational aggression ($r = .42, n = 21$), with 17.56% of shared variance, and between CU traits and low interpersonal maturity ($r = .36, n = 19$), with 12.82% shared variance. Non-significance was likely due to the smaller number of females in this study.

Table 13
Intercorrelations Between Scales by Gender

	<u>Males</u>		
	Relational Aggression	Social Aggression	(Low) Interpersonal Maturity
Narcissism	.54**	.58**	-.01
CU Traits	.30*	.21	.27

	<u>Females</u>		
	Relational Aggression	Social Aggression	(Low) Interpersonal Maturity
Narcissism	.42	.24	-.04
CU Traits	.07	-.12	.36

*Correlation is significant at the .05 level (two-tailed)
 ** Correlation is significant at the .01 level (two-tailed)

To assess whether the differences between males and females were significant, *r* values were standardized to *z* scores and then entered into an equation to find observed values of *z*. Values less than -1.96 or greater than 1.96 were considered statistically significant. The results are displayed in Table 14. Results indicated that while the correlation of narcissism and social aggression was the only correlation that approached rejection of the null hypothesis, *no* observed values of *z* were statistically significant, and so the null hypothesis was not rejected for any correlation of variables. In plain language,

Table 14
Statistically Significant Gender Differences by Correlation

	Narcissism and RA	Narcissism and SA	Narcissism and IM	CU Traits and RA	CU Traits and SA	CU Traits and IM
Observed Value of <i>z</i>	.67	1.52	.46	.78	.33	-.37

Note. Statistically significant values are either less than -1.96 or greater than 1.96 .

there were no statistically significant differences between males and females in the combined presence of narcissism and relational aggression, social aggression, and interpersonal maturity, and in the combined presence of CU Traits and relational aggression, social aggression, and interpersonal maturity. Thus, there were no significant gender differences found in the sample that was used in this study.

Summary

The results of the analyses conducted in the study yielded several important findings. First, in this sample of male and female juvenile offenders, narcissism – but not CU traits – predicted both relational and social aggression. In contrast, however, CU traits predicted (to a lesser extent) low levels of interpersonal maturity. Importantly, all three regression models represented a significant fit of the data. Secondly, significant positive correlations between narcissism and relational and social aggression were found for males, while moderate correlations between narcissism and relational aggression and CU traits and low levels of interpersonal maturity were found for females. In the end, however, there were no statistically significant differences between the genders in these correlations.

Chapter 5

Discussion

Bullying has been identified as one of the most serious and psychologically destructive issues facing children today (Crockett, 2004). Indirect forms of bullying have only recently begun to receive attention as a focus of research, though they can be the source of severe psychosocial and behavioral problems that continue well past childhood (e.g., Batsche & Knoff, 1994; Craig, 1998; Crick, 1996; Crick, 1997; Crick et al., 1997; Crick & Bigbee, 1998; Crick & Grotpeter, 1995; Crick & Nelson, 2002; Crick et al., 2006; Cullerton-Sen & Crick, 2005; Storch et al., 2003; Sullivan et al., 2006). The apparent associations between psychopathy and indirect bullying seem compelling, especially when one considers the singular link relational aggression has with Cluster B personality disorders, when compared with overt forms of aggression (Schmeelk et al., 2008). However, they have received scant attention in the literature. The aim of the present study was to add to the research on this topic.

This study investigated possible relationships between the narcissism and callous-unemotional dimensions of psychopathy, and relational aggression, social aggression, and interpersonal maturity. It also looked at possible gender differences in those relationships. To my knowledge, this is the first study to investigate the association of these antisocial personality features with indirect forms of aggression and interpersonal maturity using a sample of male and female adolescent offenders. It also appears to be the first study to explore relational aggression and social aggression as distinct constructs.

The results yielded some interesting findings. First, narcissism made a significant and unique contribution to the prediction of *both* relational aggression and social aggression, accounting for the vast majority of unique variance in the prediction of these

indirect forms of aggression. Conversely, CU traits – but not narcissism – made a significant and unique contribution to the prediction of lower levels of interpersonal maturity. Furthermore, in contrast to the large number of studies indicating important gender differences in the expression of aggression, no significant gender differences in the present study were found.

Conclusions

CU traits have been the primary focus of most of the research on psychopathy and aggression in adolescence. In this study, CU traits uniquely and significantly predicted lower levels of interpersonal maturity, but did not predict indirect forms of aggression. The items of the YASB Interpersonal Maturity scale used in this study were derived from a variety of healthy social behaviors; it makes sense that the lack of empathy and lack of remorse that allow an individual to coldly prey on others would be related to less ability or willingness to work through interpersonal conflict, honestly resolve interpersonal conflict, maintain others' need for confidentiality, and respect others' opinions. However, the finding that CU traits did not uniquely and significantly predict relational or social aggression was not entirely in line with studies that have shown important connections between CU traits and relational aggression (e.g., Marsee & Frick, 2007; Viding et al., 2009). However, it seems likely that the relationship may be tempered by the involvement of other variables, since CU traits have often been connected to direct aggression too (e.g., Marsee & Frick, 2007; Munoz et al., 2011). For example, in the Viding study, CU traits predicted relational aggression, but only when combined with conduct problems, whereas CU traits were related to *direct* aggression both with and without the presence of conduct problems. Clearly, these connections are complex. Be that as it may, the finding here that CU traits predicted lower levels of interpersonal

maturity is perhaps not at all surprising. Rather, it seems logical to conclude that CU traits have a negative influence on the development of one's ability to engage in normal social interaction. As Hughes and colleagues eloquently put it, CU traits "prevent the formation of meaningful attachments with others and mute the influence of guilt and empathy in directing behavior" (Hughes, Gacono, Tansy, & Shaffer, 2013, p. 83).

On the other hand, narcissism uniquely and significantly predicted both relational and social aggression in this study. These findings are consistent with other research that has found correlations between narcissism and relational aggression. In other studies, narcissism has predicted relational aggression in samples of at-risk youth (Barry, Pickard, & Ansel, 2009; Golmaryami & Barry, 2010), showed more association with relational aggression than physical aggression (Bukowski et al., 2009), and demonstrated an association with relational aggression across high and low levels of self esteem (Lau et al., 2011). The connection between narcissism and indirect forms of aggression found here and in other studies seems germane. Narcissism is a socially-oriented construct, in the sense that narcissists require validation from others while at the same time focus on aggressively advancing or preserving their status in relation to others. In this social milieu, it is advantageous for an aggressor to be able to retain a good image or even some level of popularity within the group while continuing to aggress against victims, and indirect forms of aggression allow them to do this (Bukowski et al., 2009) as long as the aggressor has the ability to skillfully navigate the social world in this manner.

Thus, the findings here regarding narcissism and relational and social aggression fit neatly with findings on social intelligence and the theory of developmental aggression (Bjorkqvist, 1994). The theory proposes that the ability to use indirect forms of aggression depends on a more sophisticated development of language skills, social

networking, and social intelligence (Bjorkqvist, 1994). In subsequent studies, social intelligence was found to be related to indirect aggression, but had little relation to physical aggression (Bjorkqvist et al., 2000; Kaukiainen et al., 1999). Furthermore, the social awareness and social information processing aspects of social intelligence were shown to predict relational aggression, while the lack of social skills predicted overt aggression (Andreou, 2006). Moreover, Schmeelk and colleagues (Schmeelk et al., 2008) have suggested that the unique concomitance they found between relational aggression and Cluster B personality disorders is likely due to the manipulative nature of those disorders. Thus, it makes sense to argue that narcissism, indirect forms of aggression, and social intelligence share some kind of common connection.

Taken together, the findings in this study regarding the callous-unemotional and narcissism dimensions of psychopathy appear to parallel the findings of Kaukiainen and colleagues on social intelligence and empathy. Namely, Kaukiainen found that individuals with high levels of social intelligence (which arguably can be found in someone high on narcissism) and low levels of empathy (as might be found in someone high in CU traits) are likely the type of individuals who will use indirect forms of aggression (Kaukiainen et al., 1999). Moreover, the findings here seem to point to and support the excellent line of research introduced by Kerig and Stellwagen (2010) in their important study on psychopathic traits and types of aggression in childhood. They, too, found that narcissism predicted relational aggression, but this relationship was mediated by the third member of the so-called “Dark Triad,” Machiavellianism – which had the strongest relationship with relational aggression. They suggest that the presence of Machiavellianism may make the difference between whether a psychopathic individual chooses overt or indirect aggression: “Perhaps it is in the absence of Machiavellian

manipulative skill, interpersonal acuity, and sensitivity to social hierarchies that psychopathic traits comprise the most potent risk for overt forms of antisocial behavior and interpersonal violence” (Kerig & Stellwagen, 2010, p. 350). Indeed, this may be an important or even decisive factor in determining the difference between the violent psychopath and Cleckley’s “normal” appearing subclinical psychopath. It makes sense that the narcissistic sense of superiority combined with the callous-unemotional lack of guilt and empathy results in severe patterns of aggression, but precisely *how* that aggression is manifested may depend on the individual’s level of social insight and facility.

Two other points are worth noting. First, a unique contribution of this study is that the term *relational aggression* is more narrowly defined than in most other research, since a distinction is made between relational aggression and social aggression. While these types of indirect aggression have been found to be related but distinct constructs (Crothers et al., 2009), this study found that their correlates *vis a vis* psychopathic traits were the same. Narcissism did contribute different levels of unique variance to their prediction, so the results here also appear to add some additional support for continuing to approach relational and social aggression as distinct constructs. Second, because the correlates of narcissism and CU traits in this study were so different, they provide more support for broadening the focus of research on psychopathy and childhood aggression to include all three factors, and not just CU traits (e.g., Fanti & Kimonis, 2012; Kerig & Stellwagen, 2010; Marsee et al., 2005).

Finally, unlike many other aggression studies, no significant gender differences were found in the present research. The preponderance of literature on indirect forms of aggression indicates that during adolescence, girls tend to use more indirect aggression

than boys (Björkqvist et al., 1992; Crick, 1995; Crick, 1996; Crick, Casas, & Mosher, 1997; Crick & Grotpeter, 1995; Crick et al., 2006; Herrenkohl et al., 2007; Lagerspetz et al., 1988; Murray-Close, Ostrov, & Crick, 2007; Rys & Bear, 1997). Moreover, in studies linking psychopathic traits and relational aggression, girls usually have a stronger connection to relational aggression than boys (e.g., Kerig & Stellwagen, 2010; Marsee & Frick, 2007; Marsee et al., 2005; Viding et al., 2009; Werner & Crick, 1999). However, these studies all made use of community samples. In what appears to be the only study that involved a sample of juvenile male and female offenders, Stickle and colleagues found some strong contrasts to this more typical pattern (Stickle et al., 2012). Namely, girls in the study not only engaged in more relational aggression than boys, but they also engaged in more physical aggression, had higher rates of CU traits for those using combined proactive-reactive aggression, and had a greater range of targets for their aggression. In addition, the girls in this sample appeared to have been proportionally more disturbed than the boys (e.g., greater anxiety, more negative affect, more distraught over social provocations). It seems possible that female adjudicated youth experience a greater degree of maladjustment overall than adjudicated male youth, which can erase or even reverse gender differences. The contradiction with the community research in this study seems to indicate one of two possibilities at present: 1) most research has taken place using community samples, and there may be qualitative differences with forensic populations, or 2) adjudicated youth underreport and over-report their true level of aggression, distorting the true differences. In the end, the lack of gender differences in a sample of offenders may ironically be another indication that gender actually *is* an important factor to consider when studying aggression in adolescence.

Limitations

One of the most important limitations of this study is that it used data obtained entirely from self-report instruments. Self-report measures have the advantage of providing access to the internal states of the subjects in a study, while parent and teacher-report instruments, for example, may provide only limited insight; however, one of the obvious drawbacks is that the responses contain only the subjects' perspectives, making the study vulnerable to subject effects. Therefore, the subjects in the present study may in some cases have provided socially appropriate answers. This could even be more likely in a sample of offenders, who may have the motivation to present overly-positive or even overly-negative impressions of themselves. On the other hand, parent and teacher-report measures are also vulnerable to distortion. For example, Munoz and Frick found that the adolescents in their study actually reported higher levels of psychopathic traits on the APSD for themselves than their parents did, perhaps providing more honest answers than their parents (Munoz & Frick, 2007). Regardless of the informant, there are dangers of using data obtained from only one perspective. Another problem with using data derived only from self-report measures is shared method variance, which can result in exaggerated correlations. Therefore, data obtained from multiple perspectives would have been a far better option, had it been possible.

Less significant but still problematic are two other issues of internal validity. First, there is a possibility that the subjects in this study became bored or fatigued during administration of the questionnaires, thus resulting in a maturation effect. Second, there is the threat of experimenter effects. Those who administered the instruments could have influenced the respondents in ways that impacted their responses. This is especially true

in situations involving offenders, who may be more oppositional or suspicious of staff than subjects chosen from community samples.

Another limitation of this study is the low reliability found for the Relational Aggression and Social Aggression subscales of the YASB. Low reliability indicates poorer consistency of scores. At first glance, this problem could be attributed to the small number of items that comprise these subscales (five each). However, the Interpersonal Maturity subscale was even smaller, with only four items, but it demonstrated acceptable internal consistency. Another factor that could have contributed to low reliability is the fact that all items of these subscales are worded in a positive direction. However, the Interpersonal Maturity subscale items are also all worded in a positive direction, but they are “positive-sounding” when compared with the aggression items and are interspersed throughout the YASB to provide an important prosocial contrast. Thus, the low reliability found here may be related to a more homogeneous set of responses or the fact that the characteristics of this sample are different from the group on which the YASB was normed.

A final limitation of the present study concerns external validity, since there is limited generalizability of the results. While the results have value because they provide information about the offender population, they obviously provide limited insight into antisocial personality traits and indirect forms of aggression in non-referred populations. In short, the children in this study had serious problems, and so the information obtained from them is likely to be quite different from other segments of society.

Recommendations for Future Research

The findings of this research, when placed within the context of other research, lead to a number of avenues of investigation that are important to understanding bullying

and childhood aggression. Since there is currently only a small body of existing research in these areas, only general recommendations are offered.

Undoubtedly, the topic as a whole demands further investigation because it has significant ramifications for designing effective treatments. If indeed there are different developmental pathways to aggression, and if aggressive youth do not represent a homogeneous population, then our efforts to treat them will be futile to some degree, unless we make important distinctions. In the case of youth high in psychopathic traits, current anti-bullying programs will likely be ineffective. In fact, rather than reduce aggressive behaviors, it seems entirely possible that the empathy training commonly featured in anti-bullying programs (see Espelage & Swearer, 2003, for a discussion) may actually increase aggressive behaviors in psychopathic individuals. The perspective-taking, social skills, and emotional knowledge learned in these programs may equip the psychopathic bully with more insight into his or her victim's mental functioning, thereby providing an even greater advantage over victims, as some have argued has occurred in therapeutic community treatments (Harris & Rice, 2006). Thus, there may be a subset of bullies who are not amenable to traditional school-based anti-bullying programs. The research also has similar implications for self-esteem programs, since links have been established between high self-esteem and aggression; however, these links appear to be complex, and there is significant disagreement over how self-esteem and narcissism interact in aggressive behavior, for example. More attention needs to be devoted to this topic.

The research here and in other studies emphasizes the need for better understanding of the individual subtypes of indirect aggression. Typically, indirect forms of aggression are broadly defined and loosely used in the literature. They are often

referred to collectively as *relational aggression*. Because there is evidence that relational aggression and social aggression are distinct from one another, our understanding of their true nature needs to be explored. The place of indirect aggression as defined by the Björkqvist research group (Björkqvist et al., 1992) needs to be clarified as well, since it appears that no factor analytic studies have been conducted to date. As it is, indirect forms of aggression are often treated as if they are basically the same, but we may actually be talking about different concepts.

Finally, future research should continue to explore how the factors of psychopathy and aspects of the “Dark Triad” contribute to childhood and adolescent bullying. At this time, most attention has been devoted to the role of CU traits in aggression and conduct disorder. Although this line of investigation needs to continue, more attention should to be devoted to the contribution of the other factors of psychopathy to aggression, since they appear to make unique contributions. Narcissism, in particular, seems to exercise a very important influence, but very little empirical research has been conducted on narcissism in childhood generally, let alone as it relates to specific forms of childhood aggression. In addition, Kerig and Stellwagen have offered an important theory concerning the role of Machiavellianism in indirect forms of aggression and how it may work in conjunction with psychopathic traits. Machiavellianism as an individual construct has been the subject of research for many years (Kerig & Stellwagen, 2010). However, attempts should be made to replicate and extend their findings on its moderating role between narcissism and relational aggression. Along these lines, it should also be mentioned that promising new measures of the Dark Triad have been developed recently, like The Dirty Dozen (see Jonason & Webster, 2010), and more research is likewise needed on their psychometric properties.

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Appendix A

Young Adult Social Behavior Scale

1. When I am angry with someone, that person is often the last to know. I will talk to others first.
2. When I am frustrated with my partner/colleague/friend, I give that person the silent treatment.
3. I deal with interpersonal conflict in an honest, straightforward manner.
4. When I do not like someone's personality, I derive a certain degree of pleasure when a friend listens to and agrees to my assessment of the person's personality.
5. I contribute to the rumor mill at school/work or with my friends and family.
6. I honor my friend's need for secrets of confidentiality.
7. I break a friend's confidentiality to have a good story to tell.
8. I confront people in public to achieve maximum damage.
9. I criticize people who are close to me.
10. I respect my friend's opinions, even when they are quite different from my own.
11. I intentionally exclude friends from activities to make a point with them.
12. I have attempted to steal a rival's friend.
13. When I am angry with a friend, I have threatened to sever the relationship in hopes that the person will comply with my wishes.
14. Working through conflicts with friends makes out friendship stronger.

Appendix B

Antisocial Process Screening Device

1. You blame others for your mistakes.
2. You engage in illegal activities.
3. You care about how well you do at school/work.
4. You act without thinking of the consequences.
5. Your emotions are shallow and fake.
6. You lie easily and skillfully.
7. You are good at keeping promises.
8. You brag a lot about your abilities, accomplishments, or possessions.
9. You get bored easily.
10. You use or “con” other people to get what you want.
11. You tease or make fun of other people.
12. You feel bad or guilty when you do something wrong.
13. You do risky or dangerous things.
14. You act charming and nice to get things you want.
15. You get angry when corrected or punished.
16. You think you are better or more important than other people.
17. You do not plan ahead or you leave things until the “last minute.”
18. You are concerned about the feelings of others.
19. You hide your feelings or emotions from others.
20. You keep the same friends.

Appendix C

Inventory of Callous-Unemotional Traits

1. I express my feelings openly.
2. What I think is “right” and “wrong” is different from what other people think.
3. I care about how well I do at school or work.
4. I do not care who I hurt to get what I want.
5. I feel bad or guilty when I do something wrong.
6. I do not show my emotions to others.
7. I do not care about being on time.
8. I am concerned about the feelings of others.
9. I do not care if I get into trouble.
10. I do not let my feelings to control me.
11. I do not care about doing things well.
12. I seem very cold and uncaring to others.
13. I easily admit to being wrong.
14. It is easy for others to tell how I am feeling.
15. I always try my best.
16. I apologize (“say I am sorry”) to persons I hurt.
17. I try not to hurt others’ feelings.
18. I do not feel remorseful when I do something wrong.
19. I am very expressive and emotional.
20. I do not like to put the time into doing things well.
21. The feelings of others are unimportant to me.

22. I hide my feelings from others.

23. I work hard on everything I do.

24. I do things to make others feel good.