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Interpersonal Perception of Narcissism in an At-Risk Adolescent Sample: A Social Relations Analysis

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The University of Southern Mississippi

INTERPERSONAL PERCEPTION OF NARCISSISM IN AN AT-RISK

ADOLESCENT SAMPLE:

A SOCIAL RELATIONS ANALYSIS

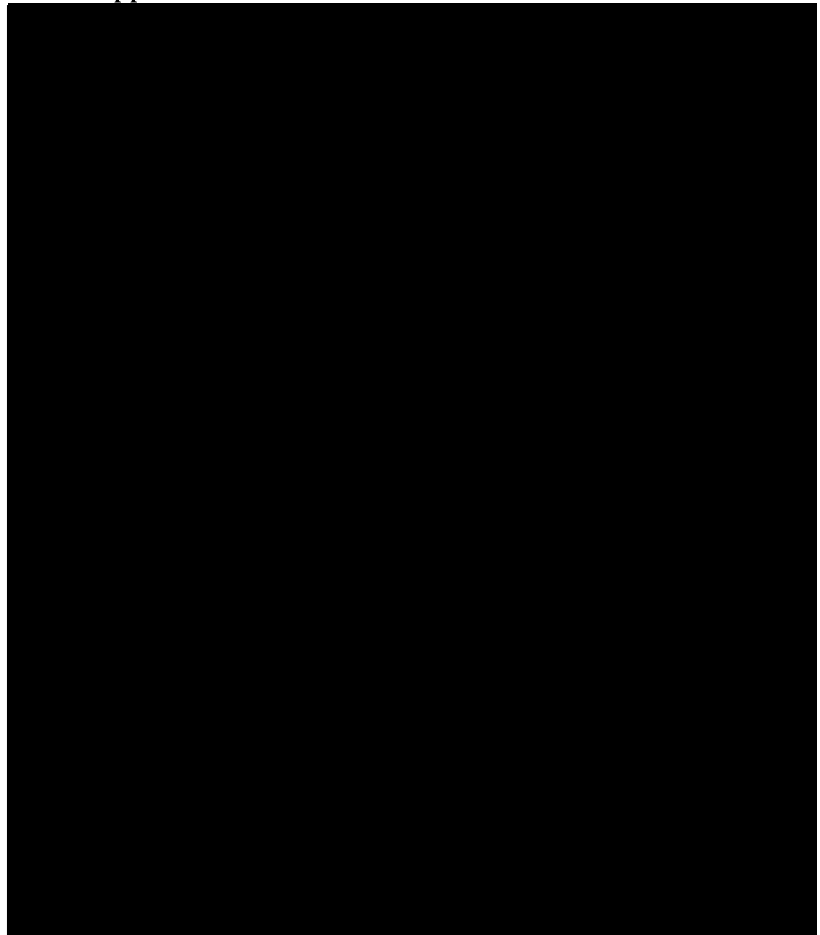
by

Sarah June Grafeman

A Dissertation

Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved:



December 2009

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The University of Southern Mississippi

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Abstract of a Dissertation
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ABSTRACT

INTERPERSONAL PERCEPTION OF NARCISSISM IN AN AT-RISK

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The current study utilized Kenny's (1994) social relations model to explore the interpersonal consequences of narcissism in an at-risk adolescent residential sample. Members of two platoons ($N = 47$) attending a 22-week military-style intervention program completed a self-report measure of narcissism and rated one another on narcissism-related traits as well as social status within the peer group. Interpersonal ratings demonstrated small but significant consensus as well as self-other agreement for narcissism-related traits. Individuals with relatively high levels of self-reported narcissism were perceived by peers as hostile, competitive, and likely to engage in future delinquent behaviors. Self-reported narcissism was also associated with peer perceptions of narcissism-related traits such as attention seeking, wanting to be a leader, and controlling others. As such, the social consequence of possessing relatively high levels of narcissism is the elicitation of peer perceptions, which may have a negative impact on the establishment and maintenance of healthy peer relationships. Therefore, this social relations analysis indicates that although narcissists seek the admiration and approval of peers, the end result of their actions may be self-defeating.

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CHAPTER I

INTRODUCTION

The term narcissism describes a constellation of emotional and motivational personality features evidenced by grandiose self-views, impression management, and low empathy (Raskin & Terry, 1988). Current theoretical models put forth the image of an individual who exaggerates his or her achievements, disregards the feelings of others, expects to have his or her desires met, behaves in ways that demand attention, uses others for his or her own gain, believes him or herself to be unique, and is primarily interested only in him or herself (Buss & Chiodo, 1991; Morf & Rhodewalt, 2001). In short, the narcissist acts in a self-centered manner, acknowledges it, and does not appear to think or care about the impact that this may have on others.

However, the world of narcissism is one filled with paradoxes. The narcissist is someone who appears charming, warm, and outgoing while actually using others to boost his or her ego (Campbell, Foster, & Finkel, 2002; Emmons, 1984; Morf & Rhodewalt, 2001). Moreover, research suggests that individuals with high levels of narcissism are likely to present as outgoing in social settings with many short-term acquaintances yet as lacking the empathy and sincere interest in others that is needed to sustain more meaningful relationships (Raskin & Hall, 1981). Although these individuals present with confidence and arrogance, research has suggested that such inflated self-views are difficult to maintain and leave the narcissist vulnerable to threats in the social arena (Morf & Rhodewalt, 2001; Vazire & Funder, 2006). Morf and Rhodewalt (2001) describe the narcissist as an individual who lives on an “interpersonal stage with exhibitionist

behavior and demands for attention and admiration but respond(s) to threats to self-esteem with feelings of rage, defiance, shame, and humiliation” (p. 177).

Given the apparent delicacy of the narcissistic sense of self-worth, individuals with relatively high levels of narcissism often manifest a need to maintain a positive sense of self and often engage in ego defensive behaviors in order to do so (Raskin, Novacek, & Hogan, 1991a). It is this constant pursuit of proving one’s competency to the self and others that is thought to frequently cause relational problems (Rhodewalt & Morf, 1995). For example, narcissists may at times exhibit exploitative behaviors such as taking advantage of others or demanding special treatment in efforts to enhance their self-views or simply to indulge their own desires (Soyer, Rovenpor, Kopelman, Mullins, & Watson, 2001). It has been posited that narcissism is “best conceptualized as a dynamic self-regulatory system where positive self-views are maintained and enhanced in large part by using the social environment” (Campbell, Bush, Brunell, & Shelton, 2005, p. 1358). As such, it is not difficult to imagine that narcissism has a negative impact on one’s interpersonal contacts, including the perceptions of others toward the person with narcissistic tendencies. Indeed, narcissism is related to social rejection (Carroll, Hoenigmann-Stovall, & Whitehead, 1996a) and a lack of closeness in interpersonal relationships (Campbell et al., 2002). Further, given the interpersonal correlates of narcissism and the importance of social relationships for youth, adolescents who exhibit high levels of narcissism may be at risk for peer rejection and consequently, other academic, behavioral, and psychiatric difficulties.

The current study represents an attempt to extensively examine the relational problems associated with aspects of narcissism based on the interpersonal perceptions of

peers in a residential adolescent sample. In contrast to previous literature conducted with vignette presentations of narcissism, the current study utilized Kenny's (1994) social relations model to explore the interpersonal consequences of narcissism from the perspective of those in close contact with narcissistic individuals. Research examining the specific nature of acceptance and rejection in peer relations, especially in regards to the relational consequences of personality characteristics such as narcissism may help inform further theory and potentially interventions by determining the nature of social consequences brought about by narcissistic presentations.

Correlates of Narcissism

As is the case with many personality constructs, narcissism is thought to occur along a continuum and to be present, on some level, in relatively healthy individuals (Emmons, 1984; Raskin & Hall, 1979). As such, the construct of narcissism in non-clinical samples of adults has been extensively researched. In adults, narcissism is positively associated with high levels of self-esteem (Emmons, 1984; Kernis & Sun, 1994; Morf & Rhodewalt, 1993; Raskin, Novacek, & Hogan, 1991b; Raskin & Terry, 1988; Rhodewalt & Morf, 1995), assertiveness (Emmons, 1984; Raskin & Terry, 1988), openness (Paulhus & Williams, 2002), and extraversion (Emmons, 1984; Paulhus & Williams, 2002; Raskin & Hall, 1981; Raskin & Shaw, 1988; Raskin & Terry, 1988). In addition, narcissism is negatively related to abasement (Emmons, 1984; Locke, 2009; Raskin & Terry, 1988), neuroticism (Emmons, 1984; Rhodewalt & Morf, 1995), and social anxiety (Emmons, 1984).

However, narcissism is not generally considered to be a healthy personality feature, perhaps due to its relation to several negative personality and behavioral

variables. For example, narcissism has demonstrated an association with exploitative behavior (Raskin & Terry, 1988), grandiosity (Raskin et al., 1991a), dominance (Raskin & Terry, 1988), and a need for power (Carroll, 1987). Furthermore, narcissism is generally considered to be negatively related to social desirability and empathy (Watson, Grisham, Trotter, & Biderman, 1984; Watson & Morris, 1991). More specifically, Watson and colleagues (1984) examined the relation between narcissism and the intellectual, emotional, and cognitive aspects of empathy. The results of this study suggested that individuals with high levels of narcissism, particularly high levels of exploitativeness and entitlement, also reported significantly low levels of all three aspects of empathy (Watson et al., 1984).

Narcissism also appears to be related to other interpersonally insensitive characteristics among adults. In non-clinical samples, narcissism has been associated with measures of Machiavellianism (Paulhus & Williams, 2002; Soyer et al., 2001) as well as psychopathy (Paulhus & Williams). Although these findings suggest that narcissism might entail an individual being disagreeable, cold, manipulative, opportunistic, and non-empathic, narcissism differs from Machiavellianism and psychopathy in important ways (Paulhus & Williams). For example, low insight into the self (i.e., exaggeration of one's abilities) is related to narcissism, whereas overly positive self-presentations do not appear to be a central feature of either Machiavellianism or psychopathy (Paulhus & Williams). In addition, research suggests that narcissism is specifically related to self-enhancement strategies (Campbell, Reeder, Sedikes, & Elliot, 2000; Paulhus & Williams). For example, compared to the evaluations of others, individuals with relatively high levels of narcissism tend to overestimate the importance and quality of their problem-solving

abilities as well as their academic abilities (John & Robins, 1994; Robins & Beer, 2001). It has been suggested that narcissists engage in grandiose self-presentations (e.g., boasting) as a means of regulating self-esteem (Raskin et al., 1991a), which has not been associated with psychopathy or Machiavellianism.

Individuals with high levels of narcissism also tend to be particularly sensitive to interpersonal situations and feedback or evaluations that occur within social contexts (Bushman & Baumeister, 1998; Rhodewalt & Morf, 1995). More specifically, research examining the relation between narcissism and responses to evaluative feedback found that, in a laboratory setting, individuals with high levels of self-reported narcissism responded in an aggressive way when given negative information related to their performance or competencies on tasks (Barry, Chaplin, & Grafeman, 2006; Bushman & Baumeister, 1998; Bushman et al., 2009; Rhodewalt & Morf, 1998; Martinez, Ziechner, Reidy, & Miller, 2008; Terrell, Hill, & Nagoshi, 2008; Twenge & Campbell, 2003). In particular, individuals with relatively high levels of narcissism tend to show increased aggression when negative performance feedback is based on social comparison or a competitive focus (Barry et al., 2006; Terrell et al., 2008). In fact, when individuals with high levels of narcissism are faced with failures or negative feedback, they tend to blame others such as co-workers (Campbell et al., 2000) or the evaluators (Kernis & Sun, 1994) for such shortcomings. Narcissism is also associated with reactions of anger following social rejection or performance evaluations even in the absence of direct provocation (Martinez et al., 2008; Papps & O'Carroll, 1998; Twenge & Campbell, 2003). Further, in one study, individuals with relatively high levels of narcissism responded to anticipated evaluations more aggressively than under conditions in which they received immediate

feedback (Martinez et al.). Taken together, these findings suggest that individuals with high levels of narcissism may respond to ego threats in an angry, hostile, and aggressive manner.

In sum, narcissism appears to be a constellation of emotional and motivational personality features that occur along a continuum in the general population (Raskin & Terry, 1988), and it appears to be related both to constructs considered positive (e.g., self-esteem, assertiveness) and negative (e.g., psychopathy, aggression). It is not difficult to imagine that many of the negative correlates of narcissism would be related to interpersonal difficulties. Indeed, the pattern of associations involving narcissism represents one of its great paradoxes: to be utterly dependent on admiration while neglecting to desire acceptance (Emmons, 1984; Raskin et al., 1991b). Of particular interest in the proposed study are the interpersonal consequences of possessing such a constellation of personality and motivational features among well-acquainted adolescent peers.

Interpersonal Impact of Narcissism

Given the social nature of narcissism, its interpersonal consequences have been extensively researched (e.g., Carroll et al., 1996a; Carroll, Hoenigman-Stovall, & Whitehead, 1996b; Rhodewalt & Morf, 1995; Ruiz, Smith, & Rhodewalt, 2001). This research has suggested, for example, that individuals with high levels of narcissism report experiencing more interpersonal wrongdoings and that they may perceive ordinary transgressions differently than do non-narcissistic individuals (McCullough, Emmons, Kilpatrick, & Mooney, 2003). Indeed, some researchers have concluded that the social interactions of individuals with high levels of reported narcissism are distinct from those

of others (Rhodewalt & Morf, 1995). “Often in their relations with others, narcissists communicate a sense of entitlement and tend toward exploitativeness while failing to empathize with the feelings of others” (Rhodewalt & Morf, 1995, p. 2). In addition, individuals tend to express greater rejection of, and less desire to interact with, narcissistic individuals as compared to non-narcissistic individuals (Carroll et al., 1996a).

Raskin and Hall (1981) found that in adults, narcissism was positively related to the combination of extraversion and psychoticism (i.e., being solitary, not caring for others, lacking empathy), suggesting that individuals with high levels of narcissism are likely to present as outgoing in social settings with many short-term acquaintances yet lack the empathy and sincere interest in others that is needed to sustain more meaningful relationships. Consistent with such a proposal is the finding that individuals with relatively high levels of narcissism report that their interpersonal conflicts are related to issues of dominance and retaliation (Dickinson & Pincus, 2003; Pincus & Wiggins, 1990). However, these individuals also report that their interpersonal conflicts do not cause them significant distress (Dickinson & Pincus, 2003), suggesting that they are not concerned with the negative impact that they have on others. Furthermore, research has also established that individuals with high levels of narcissism are generally dominant and extraverted in their interpersonal interactions with others (Emmons, 1984; Ruiz et al., 2001). Raskin and Hall (1981) further suggest that this unique combination of personality constructs sets the stage for interpersonal difficulties because the narcissist may view others as objects to be used in gaining attention and admiration.

Rhodewalt and Morf (1995) conducted a series of studies examining interpersonal processes as related to narcissism and found that personality traits such as hostility and

antagonism were related to high levels of narcissism. The authors suggested that this pattern may, in part, be related to an underlying desire of the vulnerable or insecure individual to present in a self-assured manner (Rhodewalt & Morf, 1995). Further, Rhodewalt and Morf found that, in general, individuals with high levels of narcissism report that the people with whom they have relationships hold them in high regard, yet they are “cynically mistrustful” of others (p. 18). Taken together, these results suggest that the narcissistic individual strives for the admiration of others, yet due to an underlying distrust of the intentions of others, reacts in an aggressive and hostile manner to perceived threats to that admiration. Indeed, interpersonally, individuals with high levels of narcissism are described by peers and acquaintances as being initially charming and as making positive first impressions, but over time, this view from others changes into more negative regard (Morf & Rhodewalt, 2001; Paulhus, 1998). However, the primary focus of these studies has been evaluating the perceptions tied to narcissism through the use of controlled vignettes rather than directly examining the interactions that occur between people. As such, a study examining the interpersonal effects of narcissism as related to more long-term interpersonal interactions appears to be lacking from the literature base.

As noted above, interpersonal difficulties as related to narcissism appear to stem from defensive management of self-esteem in response to ego threats in the social arena (Bushman & Baumeister, 1998; Morf & Rhodewalt, 2001). Although narcissists engage in socially obnoxious behaviors such as bragging and overstating their abilities presumably in an attempt to boost their self-esteem by eliciting admiration (Buss & Chiodo, 1991; Morf & Rhodewalt, 2001), the connection between narcissism and the

understanding of consequences of such behavior has not been extensively studied.

However, recent research has suggested that individuals with relatively high levels of narcissism may engage in socially damaging behaviors despite their longing for admiration due to differences in motivational systems (Foster & Trimm, 2008).

Specifically, “narcissists are strongly motivated toward the attainment of reward and relatively uninhibited by fear of punishment” (Foster & Trimm, p. 1011). Therefore, it may be that the reward of reinstating feelings of superiority in response to a perceived ego threat by lashing out at peers is more salient to the narcissist than are the negative consequences of such behaviors. In other words, despite narcissists’ striving for the admiration of others, they respond impulsively to perceived ego threats (Foster & Trimm), which in turn, likely further damages their chances of receiving such admiration.

Nevertheless, such tendencies leave unanswered the question as to the intended target and function of these socially noxious behaviors. In an attempt to determine if narcissistic arrogance and boastfulness were directed at an internal or external audience, Paulhus (1998) examined the peer ratings of individuals participating in a series of seven cooperative discussion groups. Paulhus collected self-reports of narcissism prior to the initial group meeting as well as self and peer ratings of personality characteristics, group performance, and emotional well-being after the first and seventh meetings. This study represents one of the few investigations of the interpersonal impact of narcissism to occur in a naturalistic group setting and to collect both self and peer reports. Paulhus found that individuals with relatively high levels of narcissism were initially thought of as smart, outgoing, and confident; however, by the seventh session, peers considered these same individuals to be defensive, hostile, cold, and boastful. In addition, Paulhus noted that

individuals with relatively high levels of narcissism were not actively engaging in impression management (i.e., narcissism was significantly positively related to self-deception). In other words, narcissists were not “exaggerating their talents merely to manipulate public impressions in a conscious way- they really believe that they are superior” (Paulhus, 1998, p. 1205).

Paulhus’s findings are important in that they show a pattern of interpersonal perception of narcissism that is inconsistent with the notion that narcissists are initially perceived negatively (Carroll et al., 1996a, 1996b; Colvin, Block, & Funder, 1995). Furthermore, the findings indicate that as people continue to interact with individuals who have narcissistic tendencies, their perceptions change. Paulhus (1998) suggests that when individuals are put into cooperative working groups, the initial extraverted and confident appearances of narcissists are seen as positive attributes and that it is not until later through further interaction that their more negative interaction style is noticed. Further, Paulhus argues that previous research had not examined the interpersonal interactions of narcissists in social contexts in which cooperation is desired, which may account for findings concerning positive initial perceptions involving narcissism. In short, the results of this study suggest that both the time and the social context in which interpersonal perception is measured influence peers’ perceptions of narcissism.

Brunell and colleagues (2008) recently conducted a similar series of studies that support Paulhus’ findings. They examined the relation between self-reported narcissism and leadership utilizing both self and peer reports of perceived group leadership. Using several groups consisting of four unacquainted undergraduate students (Study 1, $N = 432$; Study 2, $N = 408$), Brunell and colleagues collected self-reported narcissism scores, peer

ratings of the degree to which each participant assumed a leadership role, self-ratings on assumed leadership, and self-reported desire to be the leader. In each of the two studies, participants were asked to collaborate on a team project. Findings from both studies indicated that narcissism significantly predicted the desire to lead, self-rated leadership, and peer-rated leadership. Interestingly, although individuals with relatively high levels of narcissism were viewed by themselves and others as leaders, narcissism was not related to success on either of the group tasks. Therefore, although narcissists are initially viewed as emerging as leaders in cooperative group settings, narcissism is not positively related to actual performance. It is possible that the cooperative nature of the groups as well as the short duration of the discussion groups utilized, as noted by the authors, may not have allowed time for peers to develop a less positive view of narcissistic leaders as was demonstrated by Paulhus (1998).

Consistent with this point-of-view is research examining the interpersonal costs of narcissism in competitive situations. Campbell and colleagues (2005) investigated the relation of narcissism with cooperative and competitive behaviors by conducting a laboratory experiment in which individuals were asked to engage in a computer simulated social dilemma. The task required that individuals consider not only their own short-term gains but also long-term consequences for the greater good. Specifically, participants were asked to harvest as much of a fictitious forest as possible while keeping in mind both that there were other people harvesting as well as the rate at which the forest would regenerate (Campbell et al., 2005). Campbell and colleagues (2005) found that those individuals with relatively high levels of self-reported narcissism harvested more and depleted resources earlier than people with low levels of narcissism. When narcissists

competed against each other, the overall harvests were lower and depletion rates quicker than when non-narcissists competed. These findings suggest that although the narcissistic strategy of self-concern was successful in the short-term, it was not successful in the long-term for the narcissist or others (Campbell et al.). Thus, it appears that narcissism is associated with greater importance being placed on individual goals than the goals of others (Campbell et al.) and that when given the option between serving oneself or the needs of a collective, individuals with narcissistic tendencies tend to engage in self-serving social behaviors (Morf & Rhodewalt, 2001). Adults with high levels of narcissism also tend to overestimate the importance and quality of their contributions on group problem-solving tasks, evaluating themselves higher than peers evaluate these individuals (Robins & Beer, 2001). In addition, narcissists tend to overvalue the importance and quality of their contributions on a cooperative task, even when doing so requires insulting their partner (Campbell et al., 2000).

Overall, the adult narcissism literature suggests that narcissists' lack of empathy and feelings of entitlement may negatively manifest in their interpersonal relationships. The interpersonal relationships of narcissists are likely to involve selfish, dishonest, and manipulative acts (Buss & Chiodo, 1991; Campbell et al., 2002) related to an interpersonal style involving a sense of entitlement, indifference toward the feelings of others, and exploitation of their peers (Campbell et al., 2000). Further, narcissism is associated with engagement in strategies such as being overly competitive, hostile, aggressive, impulsive, and boastful which may be destructive to interpersonal relationships (Campbell et al., 2000; Colvin et al., 1995; Baumeister, Smart, & Boden, 1996; Vazire & Funder, 2006). In short, the tendency of individuals with high levels of

narcissism to use others in exploitative and aggressive ways without regard for others' feelings portends a negative impact on those with whom they come in close contact.

Narcissism as a Multi-faceted Construct

Narcissism is also largely considered a multifaceted construct that is comprised of aspects that are considered relatively adaptive or maladaptive (Emmons, 1984, 1987; Raskin & Novacek, 1989). Emmons (1984) posited that narcissism, as measured by the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979), is not a unitary measure but rather assesses a constellation of interrelated aspects of narcissism. Indeed, the adaptive and maladaptive dimensions are intercorrelated suggesting that both facets occur simultaneously in many individuals (Emmons, 1984; Rhodewalt & Morf, 1995). Furthermore, some facets of narcissism may be more important in determining the negative interpersonal consequences than others (Carroll et al., 1996a). Indeed, research examining the interpersonal correlates of narcissism indicated that acquaintances of narcissists described self-centeredness, grandiosity, and exploitation as most central to the narcissistic character (Buss & Chiodo, 1991).

Early research examining the various aspects of narcissism as assessed by the NPI purported the presence of four facets, entitlement and exploitativeness (E/E), leadership and authority (L/A), superiority and arrogance (S/A), and self-absorption and self-admiration (S/S) (Emmons, 1984). Validity studies have demonstrated the relatively adaptive and maladaptive nature of these factors; however, the S/A factor appeared somewhat ambiguous in its associations and the S/S factor has failed to demonstrate significant associations with either adaptive or maladaptive constructs (Watson & Morris, 1991). The L/A factor appeared to be related to adaptive constructs. Specifically, the L/A

aspects of narcissism are related to the enjoyment of leadership and being thought of as an authority figure (Emmons, 1984) and are not associated with hostility or antagonism (Rhodewalt & Morf, 1995). The L/A facets of narcissism have also been positively associated with self-confidence (Raskin & Terry, 1988), assertiveness, and negatively associated with personal distress (Watson & Morris, 1991). Taken together, these findings suggest that these particular features of narcissism may be less related to interpersonally negative behaviors.

On the other hand, the E/E facets of narcissism are typically thought to be maladaptive (Emmons, 1984, 1987). The E/E facets of narcissism are negatively associated with pro-social constructs such as empathy, social desirability, social responsibility, and perspective taking (Watson et al., 1984; Watson & Morris, 1991). In addition, the E/E characteristics also appear to be related to aggressive, sadistic, rebellious, and distrustful interpersonal styles (Emmons, 1984). These findings suggest that individuals with higher levels of maladaptive narcissism may discount social norms, which, in turn, may permit them to be exploitative in interpersonal interactions (Watson et al., 1984).

As an extension of this earlier work, the distinction between adaptive and maladaptive facets of narcissism in the adult literature has been more closely tied to the correlates of specific subscales of the NPI. Raskin and Terry (1988) conducted a large validation study of the NPI and determined the presence of seven dimensions that comprise the construct of narcissism. The seven components are authority, exhibitionism, superiority, vanity, exploitativeness, entitlement, and self-sufficiency (Raskin & Terry, 1988). Findings related to the vanity and superiority dimensions did not yield clear

adaptive or maladaptive associations; however, the authority and self-sufficiency subscales demonstrated associations with the adaptive constructs of confidence, determination, self-satisfaction, and achievement (Raskin & Terry, 1988). The subscales of entitlement, exploitativeness, and exhibitionism were more closely related to maladaptive behaviors and characteristics such as sensation seeking, aggression, stubbornness, and poor impulse control (Raskin & Terry, 1988).

Further research has provided validity for the adaptive and maladaptive nature of these subscales, as authority and self-sufficiency were positively associated with achievement, self-esteem, overall satisfaction, autonomy, and empathy (Buss & Chiodo, 1991; Raskin et al., 1991a; Soyer et al., 2001) as well as negatively related to neuroticism (Samuel & Widiger, 2008). The entitlement, exhibitionism, and exploitativeness features of narcissism again appear to be related to maladaptive characteristics, demonstrating positive associations with disagreeableness, self-centeredness, lack of empathy, psychopathy, competitiveness, and desires for power and revenge (Buss & Chiodo, 1991; Pryor, Miller, & Guaghan, 2008; Raskin & Novacek, 1991; Samuel & Widiger, 2008). Thus, past research suggests that characteristics of exploitativeness, entitlement, and exhibitionism would seem to be particularly associated with negative interpersonal consequences of narcissism.

Continuing this vein of research, the distinction between the relatively adaptive and maladaptive facets of narcissism has been explored by a number of researchers positing that narcissism, as measured by the NPI, is best conceptualized as a two-factor construct. Kubarych and colleagues (2004) suggest that narcissism is a general personality trait that includes distinct dimensions of power and exhibitionism. Consistent

with this research, Corry, Merritt, Mrug, and Pamp (2008) conducted a confirmatory factor analysis using the NPI and found that narcissism consists of a relatively adaptive facet (Leadership/Authority) and a relatively maladaptive facet (Exhibitionism/Entitlement). Brown, Budzek, and Tamborski (2009) argued that these factors reflect two overarching clusters of narcissistic traits: “one that is primarily *intrapersonal* and concerned with grandiose sense of self-importance, and one that is more *interpersonal* and concerned with an entitled, socially objectifying sense of the self in relation to others” (p. 953). Indeed, research examining these two facets has found differential associations with personality traits (Corry et al.), leadership (Brunell et al., 2008), and cheating behaviors (Study 3: Brown et al.). Together, these findings suggest that there may be an important distinction between the maladaptive and adaptive aspects of narcissistic traits as they relate to interpersonal interactions.

Narcissism in Adolescence

Although the behavioral and emotional correlates of narcissism have been well-examined in the adult literature, there is a paucity of such research with adolescents, which is largely surprising given the notion that narcissism may serve a developmental function during this time (Lapsley & Aalsma, 2006). Specifically, it has been speculated that “teenagers are particularly disposed to narcissistic displays, perhaps as a defensive maneuver to cope with various aspects of personality development during adolescence” (Aalsma, Lapsley, & Flannery, 2006, p. 482). That is, as adolescents struggle to meet the developmental goals of individuation, narcissistic behaviors may serve to protect against vulnerabilities while helping the adolescent exercise autonomy (Lapsley & Aalsma). Further, the presence of high levels of narcissism may be a distinguishing factor between

individuals who are appropriately meeting developmental goals and those who are not (Aalsma et al.; Lapsley & Aalsma). As such, it would be expected that narcissism would constitute an extensively studied topic in adolescent research; however, it has simply not been the case.

Much of the available research on narcissism in adolescents has been conducted using older adolescent samples such as university undergraduates (e.g., Cramer, 1995; Lapsley & Aalsma, 2006), incarcerated youth (e.g., Calhoun, Glaser, Stefurak & Bradshaw, 2000; Perez, Thoreson, Patton & Heppner, 1997), psychiatric patients (e.g., Westen, Dutra & Shedler, 2005), or children combined with young adolescents (e.g., Ang & Yusof, 2005, 2006; Barry, Frick & Killian, 2003; Barry, Frick, Adler, & Grafeman, 2007; Thomaes, Bushman, Stegge, & Olthof, 2008; Thomaes, Stegge, Bushman, Olthof, & Denisse, 2008; Washburn, McMahon, King, Reinecke & Silver, 2004). Such research has found overall narcissism scores to be related to conduct problems and aggression (Ang & Yusof, 2005, 2006; Barry et al., 2003; Barry, Frick, et al., 2007; Thomaes, Stegge et al., 2008; Washburn et al., 2004). Research utilizing young adolescent samples also indicates that narcissism is related to both peer and self-reported aggression (Thomaes, Stegge et al.). Further, Thomaes and colleagues found that, in a laboratory setting, children and young adolescents with high levels of self-reported narcissism responded in a vengeful way when given negative feedback about their performance on a competitive task (Thomaes, Bushman et al.). These findings are consistent with the adult literature in that there is a positive relation between narcissism and aggressive/hostile responses to evaluative feedback.

In addition, narcissism appears to be negatively related to empathy or concern for others (Thomaes, Stegge et al., 2008) among children and young adolescents. Children with high levels of narcissism have reported inflated acceptance by teachers and relationships with peers as well as an increased self-reported desire for power, suggesting that children with high levels of narcissism have an inaccurate and overly positive perception of their social impact (Ang & Yusof, 2006). Taken with findings that narcissists respond aggressively to negative feedback, which they may be relatively likely to encounter based on their inflated self-views, as well as their tendency to have relatively low levels of empathy, they may experience particularly negative interpersonal consequences. Indeed, Thomaes and colleagues (2008) stated that children and adolescents with relatively high levels of narcissism “have an adversarial interpersonal orientation” (p. 388). As such, relatively high levels of narcissism may put adolescents at risk for engaging in behaviors or engendering perceptions by others that may negatively impact their social interactions.

Overall, narcissism in adolescent samples has been positively related to drug use, risk-taking behaviors, self-esteem, and delinquency (Aalsma et al., 2006; Barry, Grafeman, et al., 2007; Barry, Pickard, & Ansel, 2009). Further, researchers have developed narcissism measures based on the NPI (Raskin & Hall, 1979) for use in you with both younger and specific samples (Ang & Yusof, 2006; Barry et al., 2003; Calhoun et al., 2000; Washburn, et al., 2004) and have established some validity for the adaptive/maladaptive distinction. For example, the adaptive facets of narcissism are positively related to self-esteem (Barry et al., 2003; Barry, Grafeman et al., 2007), whereas maladaptive facets have been related to conduct problems, low self-esteem,

delinquency, hyperactivity, and impulsivity (Barry et al., 2003; Barry, Frick et al., 2007; Barry et al., 2009; Washburn et al., 2004). The negative behavioral correlates of adolescent narcissism suggest that narcissism could be related to interpersonal difficulties. As such, a study examining the effects of narcissism as related to long-term interpersonal interactions is needed and appears to be lacking from the adolescent literature base, with few exceptions. Furthermore, although the adult literature has established links between narcissism and interpersonal difficulties (i.e., rejection), no such association has been directly examined in the adolescent literature. Now that research has established that narcissism can be reliably measured in adolescent samples, this work should begin to focus on its social consequences.

In light of the literature describing narcissists' interpersonal relationships as likely to involve selfish, dishonest, and manipulative acts (Buss & Chiodo, 1991; Campbell et al., 2002), as well as exploitation of peers (Campbell et al., 2000), the examination of relational aggression (i.e., acts aimed at lowering the social status of a peer such as spreading rumors, gossiping, and telling people to dislike someone) may shed light on the interpersonal behaviors of narcissists. Two recent studies have investigated the interpersonal nature of narcissism as related to relational aggression (Barry et al., 2009; Golmaryami & Barry, in press). It should be noted that the individuals who participated in the Golmaryami and Barry study simultaneously participated in the current study. As such, the samples are largely identical. In both of these studies, self-reported narcissism was positively related to self-reported relational aggression. Further, regression analysis revealed that maladaptive narcissism uniquely predicted relational aggression (Barry et al.).

Golmaryami and Barry (in press) also found that narcissism was positively associated with peer-nominated relational aggression. In fact, narcissism uniquely predicted peer nominations of relational aggression but self-reported relational aggression did not. Taken together, these studies suggest that adolescents with relatively high levels of narcissism are likely to engage in relational aggression and are perceived by peers as relationally aggressive toward others. In other words, adolescents with relatively high levels of narcissism not only report acting in relationally aggressive ways, but their peers also report that they engage in behaviors that are aimed at manipulating or lowering the social status of others. Finally, the findings of Golmaryami and Barry indicate that self-reported narcissism contributes to peer perceptions of negative social behaviors in a way that self-reports of those same behaviors cannot.

Adolescent Peer Relations

Social interactions with peers take on particular importance throughout adolescent development (Harter, 1999, 2003). During adolescence, peer interactions may play a role in the honing of social problem-solving and negotiation skills as individuals pull away from parents and begin to spend increasingly more time with their peer group (Berndt, 1998; Buhrmester, 1998; Harter, 1999, 2003). More specifically, it is during this time that interactions with others help guide the development of the self which leads to further clarification of the characteristics that one attributes to the self and social roles (Harter, 1999, 2003). As such, Harter (2003) described late adolescence, starting near age 15 or 16, as a “vulnerable period” in which adolescents are “preoccupied” (p. 623) with how peers view them, because this social information is used to construct their theory of self.

This line of research has demonstrated that peer approval and support are predicted by the peer perceptions of competency in domains such as appearance, athletics, and social interactions (Harter, 1999, 2003). These findings suggest that social competency and likeability may be predictive of access to peer support (Harter, 2003) and may also increase acceptance from peers (Harter, 1999). In addition, other researchers have suggested that those children who are generally accepted by peers (i.e., popular) receive more attention, reinforcement, and support from peers than children who are not as popular (Gottman, Gonso, & Rasmussen, 1975).

During adolescence, the importance of positive peer interactions is likely to be amplified given that these relationships are becoming an increasingly larger portion of the social arena (Berndt, 1998; Buhrmester, 1998). Furthermore, because the importance of social interactions is related to the development of self (Harter, 1999, 2003), it follows that being perceived in a positive light by peers may play an important role in social and emotional health during adolescence. Indeed, problems in peer relationships have been found to be related to many indicators of problematic functioning in adolescents. For example, research has suggested that adolescents who are perceived by peers as overly needy of support or as socially withdrawn and quiet are at an increased risk for development of depressive symptoms (Allen et al., 2006). In addition, in this study, adolescent depressive symptoms were predicted by interpersonal behaviors such as anger and hostility toward peers (Allen et al.). Capaldi (1992) has posited that young adolescent males who engage in conduct problem behaviors may be at an increased risk for the development of depressive symptoms as a result of those behaviors. Specifically, Capaldi suggests that positive social interaction skills may not be developed due to peer rejection

created by these children's aggressive behaviors, which in turn, may increase the risk of depressive symptoms. Finally, difficulties with social interactions and low sociometric status have also been linked to increased risks for academic problems, psychiatric disorders, and substance abuse in adolescence (see Parker & Asher, 1987). These findings clearly suggest that poor peer relations and low acceptance during adolescence are related to problematic functioning in many domains. Therefore, given the relation of narcissism to problematic interpersonal characteristics such as hostility (Rhodewalt & Morf, 1995), lack of empathy (Watson et al., 1984), and exploitativeness (Raskin & Terry, 1988), adolescents who exhibit high levels of narcissism may be at risk for peer rejection and consequently, other academic, behavioral, and psychiatric difficulties.

As described above, narcissism in adolescent samples has been positively related to drug use, risk-taking behaviors, and delinquency (e.g., Aalsma et al., 2006; Barry, Grafeman et al., 2007; Barry et al., 2009). However, research has not been able to develop a causal or temporal link between these variables. As such, the presumed social consequences of narcissism may be related to the concurrent presence of additional difficulties including delinquent behaviors. Although some research has indicated that some level of risk-taking or reckless behavior is developmentally appropriate and associated with social competence, individuals who engage in excessive risk-taking behaviors may exhibit lower social competence (Shedler & Block, 1990). More specifically, Shedler and Block found that individuals who engaged in frequent drug use as late adolescents (i.e., age 18) exhibited interpersonal difficulties that both coincided and preceded the drug use. The findings of this longitudinal study also indicated that adolescents who were described as feeling that they do not receive all that they are owed,

were overly focused on their status, and sought reassurance from others while disregarding the feelings of others were the adolescents who engaged in the highest levels of drug use (Shedler & Block, 1990). Although narcissism was not measured in this study, this description of the adolescent who frequently engages in drug use includes features consistent with narcissism and may suggest that individual characteristics such as narcissism may influence one's perception of social support and future negative behavior.

In sum, the peer relations and developmental literature both suggest that interpersonal relations during adolescence are not only important for short-term, but perhaps also long-term, adjustment. Given the various benefits of positive peer interactions and the potential costs of poor peer relations in adolescence, it is important to understand the individual and dyadic factors that may contribute to peer acceptance or rejection during this developmental period. Given the interpersonal correlates of narcissism, it is likely that narcissism may be both a relevant individual and dyadic factor in peer relations. Research examining the specific nature of acceptance and rejection in peer relations, especially in regards to the relational consequences of personality characteristics such as narcissism may help inform further theory and potentially interventions by determining the nature of social consequences brought about by narcissistic presentations. Furthermore, if peers differentiate between the adaptive and maladaptive facets of narcissism when determining the social impact of a peer's behavior and their perceptions of that peer, future interventions may be able to specifically target the aspects of narcissism that generate the highest social costs. It is possible that the social impact of adaptive narcissism may be related to an overall acceptance by peers,

whereas maladaptive narcissism may have more of a negative impact on individual relationships. Examination not only of overall peer ratings of such characteristics but also an examination of the specific nature of these ratings is needed, particularly among adolescent samples.

Interpersonal Perception and the Social Relations Model

The presence of interpersonal difficulties has been the focus of numerous research studies. Of particular interest in the fields of clinical and social psychology have been the personality traits which seem to be predominant among socially challenging individuals. Until recently, however, much of the research on these interpersonal consequences was confined to the examination of time-limited and experimentally controlled interactions. Further, because this research has typically been conducted using confederates or vignettes, the study of so-called social interactions has been limited to one-sided information (Kenny & La Voie, 1984). For example, using videotapes of narcissistic people would yield information that would be limited to the reactions of the participants rather than lending itself to evaluating actual interactions of participants with narcissists. In addition, the one-sided interpersonal model limits interpretations of behavior to the experimental variable of interest while largely ignoring the interpersonal processes that may take place in natural settings (Kenny & La Voie).

Warner, Kenny, and Stoto (1979) first introduced the idea of a round-robin research design thirty years ago as a solution to social psychology research that failed to take into account the interactive facets of social phenomena. These authors suggested that the research methods of the time (e.g., intraclass correlations and two-way ANOVAs) did not allow for the examination of the “reciprocity or mutual contingency” (p. 1742) that

they felt were at the very core of social psychology research. Warner and colleagues posited a non-experimental research design, which allowed for the natural occurrence and examination of social interactions. The ideas of examining non-independent variance and co-variance using the round-robin research design suggested that social phenomena could be researched in a way that, unlike other methods, allowed for the examination of the effects of unique relationships between the participants. The use of the round-robin design and the presented statistical analyses meant that interdependence of social interaction data could now be a focus of investigation rather than viewed as simply a violation of statistical assumption (Warner et al., 1979). From the initial proposal of the round-robin design, grew the Social Relations Model (SRM; Kenny & La Voie, 1984). Contrary to previous research (Carroll et al., 1996a, 1996b) which involved the controlled presentation of the target to the perceiver through the use of video or written vignettes, the use of Kenny's SRM allows for the examination of how dyadic effects are related to narcissistic traits which may only become apparent in the context of actual interpersonal interactions.

The SRM designed by Kenny breaks interpersonal perceptions into three components: perceiver effects, target effects, and relationship effects (Kenny, 1994). That is, in the reporting of characteristics or behaviors of others, there are portions of the variance in these reports that are created by the characteristics of the perceiver or the rater, portions that can be attributed to the target (i.e., the person being rated), and portions that are created by the relationship or interaction of the individuals involved. According to Kenny (1994), the perception that any one individual has of another specific individual is a function of how person A generally perceives people (perceiver effects),

how person B is generally perceived (target effects), and the unique relationship between person A and person B (relationship effects). Relatedly, the SRM operates under the assumption that social behavior occurs simultaneously on the individual, dyadic, and group level. Perceiver and target effects occur at the individual level, whereas relationship effects (the remaining variance not attributed to the perceiver, the target, or error) occur at the dyadic level (Kenny, 1994). According to Kenny and La Voie (1984), the social relations model purports that “very different principles operate at these different levels, and it is only by simultaneously examining social behavior at different levels that we can fully appreciate the complexity and simplicity of social life” (p.178).

In addition to allowing for the examination of partitioned variance, Kenny’s SRM (1994) considers nine basic issues related to interpersonal perceptions which are represented by the constructs of assimilation, consensus, uniqueness, reciprocity, target accuracy, assumed reciprocity, meta-accuracy, assumed similarity, and self-other agreement (see Appendix). These nine issues can be addressed by looking at the relation between the target variance, perceiver variance, and self-reported dyadic information, in various combinations. As such, the SRM allows for the construct of narcissism and its potential interpersonal consequences to be examined through a round-robin design utilizing naturalistic peer interactions (i.e., the peer group) as the unit of analysis.

Research conducted using Kenny’s SRM has produced both basic findings relevant to the use of the model itself as well as applied findings related to a variety of interpersonal constructs. In the area of basic research, studies have demonstrated that although acquaintances show higher levels of consensus regarding the traits of a target than do strangers, consensus does not continue to increase with length of relationship

(Biesanz, West, & Millevoi, 2007; Kenny, 1994; Kenny, Albright, Malloy, & Kashy, 1994). These findings suggest that although it is important that members of a sample know each other, it is not necessary that they have long-term relationships in order to agree on their ratings of a target. In addition, research has indicated that some personality characteristics may be more visible than others (e.g., extraversion is easily detected; Kenny et al., 1994). Overall, from the adult literature, there appears to be a relatively consistent pattern of the variance in the ratings of personality traits. Specifically, Kenny has posited that the majority of ratings of personality traits can be accounted for by relationship/ error variance (65%), with perceiver variance accounting for roughly 20% and target variance accounting for approximately 15% of ratings (1994).

Although the majority of research using the SRM has utilized adult samples there have been several studies examining the interpersonal perceptions of children and adolescents. Malloy and colleagues have conducted several studies examining the interpersonal perceptions of children and found that not only are children as young as first graders able to understand and rate peers on dyadic variables but that their ratings are typically stable over time (Malloy, Sugarman, Montvilo, & Ben-Zeev, 1995; Malloy, Yaras, Montvilo, & Sugarman, 1996). Further, children's accuracy, peer and self-report agreement, and consensus regarding which peers possess specific behaviors or traits appear to increase with age (Malloy et al., 1995; Malloy et al., 1996).

Applying the SRM to the study of narcissism within the context of a residential (i.e., well-acquainted) sample of adolescents allows for the examination of several interpersonal phenomena. More specifically, the use of social relations analysis enables the variance in peer perceptions to be parceled into perceiver, target, and relationship

components. The examination of the proportion of total variance that is accounted for by each component, along with self-ratings, can then be examined to address the nine research questions as stated above (Kenny, 1994). The current study specifically focused on the questions of assimilation, consensus, assumed similarity, and self-other agreement. In addition, the current study investigated the relation between the personality variable of narcissism and perceiver as well as target effects.

The amount of perceiver variance (i.e., the proportion of total variance that is accounted for by the perceiver) can be examined to determine the presence of *assimilation* (Kenny, 1994). *Assimilation* or the degree to which individuals rate all others (targets) in a similar fashion, asks the question, “Do some cadets tend to see most of their fellow cadets as relatively narcissistic, whereas others tend to see them as not narcissistic?” That is to say, *assimilation* asks, to what degree are ratings of a specific social behavior a function of the person who is completing the ratings (perceiver)?

The proportion of total variance that can be accounted for by the target (i.e., target variance) can be examined to determine the presence of *consensus* (Kenny, 1994). The question of *consensus* or the degree to which individuals in the group agree in their ratings of a peer, asks the question, “Do cadets agree on who is seen as relatively narcissistic?” In other words, to what degree are the ratings of narcissistic traits (e.g., wanting to be the center of attention, wanting to control others) within the group a function of the target eliciting this interpersonal perception? In short, the presence of consensus indicates that there is agreement on the extent to which the trait is perceived among peers.

Relationship variance is used to examine the question of *uniqueness*. The question of *uniqueness* asks to what extent a perceiver views a target idiosyncratically (Kenny, 1994). In other words, to what extent are cadet A's ratings of cadet B not a function of perceiver or target effects. Questions of uniqueness examine the way in which a specific perceiver assesses a specific target in a manner which is inconsistent with how the perceiver assesses others and with how others perceive the same target, (Kenny). However, in order to have a valid measure of *uniqueness* the error variance must be removed from the relationship variance. The current study did not include multiple measures of the dyadic variables. As such, questions of *uniqueness* as well as other dyadic-level questions were not addressed.

The SRM can also investigate whether individuals match or complement their ratings on dyadic variables through examining *reciprocity* between dyad members (Kenny, 1994). *Reciprocity* addresses the degree to which there is a relation between perceiver and target effects, at the individual level, and a relation between relationship effects at the dyadic level. At the dyadic level, *reciprocity* (i.e., relation between the relationship effects of two specific individuals) asks, "If cadet A uniquely sees cadet B as narcissistic does cadet B uniquely see cadet A as narcissistic?" (Kenny). Reciprocity at the individual level is called *generalized reciprocity* and addresses the question of whether people who are seen as possessing a particular trait also see others as possessing that same trait (i.e., the relations between perceiver and target effects). That is, "Do cadets who are seen by others as narcissistic also see others as narcissistic?" In more clear terms, do people see others the way that they are seen by others?

In addition to answering questions related to the portion of variance attributed to the perceiver and/or target and the relation of these variances which can provide many answers regarding social perceptions of narcissistic traits, the SRM also allows for the examination of the relation between self-ratings and perceiver and target effects. For example, the question of *assumed similarity* (i.e., the relation between self-ratings and perceiver effects) asks “Do cadets who see themselves as competitive also see their peers as competitive?” In other words, do individuals perceive others in the same way that they perceive themselves? Applying the question of *assumed similarity* to the study of narcissism may provide insight into the way in which adolescents who self-report engaging in social behaviors associated with narcissism such as delinquency and risk-taking (Barry, Grafeman et al., 2007; Barry et al., 2009) view their peers (e.g., Do individuals who perceive themselves as likely to engage in future delinquency see others as likely to do so as well?).

The use of Kenny’s SRM also permits closer investigation into whether traits associated with narcissism are perceived the same by the self as they are by others. The question of *self-other agreement* directly addresses the extent to which self-reports are related to peer reports (i.e., the relation between self-ratings and target effects). That is to ask, “Is the way that a cadet sees him or herself the same as the way that he or she is seen by others?” The question of *self-other agreement* is of interest in the current study because it can provide information related to the notion that individuals with narcissistic traits often describe themselves differently than they are described by peers (Ang & Yusof, 2006; Clifton, Turkheimer, & Oltmanns, 2005; Oltmanns & Turkheimer, 2006). The issue of *self-other agreement* can address the question, “Are adolescents who report

high levels of narcissism (self-ratings) also seen as having high levels of narcissism (target effects)?”

In addition to the five basic research questions described above that utilize perceiver effects, target effects, and self-ratings on dyadic variables, the SRM also allows for correlation of personality variables (e.g., scores on the Narcissistic Personality Inventory for Children; NPIC) with individual-level variance components (i.e., perceiver effects and targets effects; Marcus, & Kashy, 1995). It is this ability to examine the correlation between self-reported personality variables and the perceptions of peers that makes the use of the SRM critical in the investigation of the social impact of narcissistic traits. In other words, using the SRM, it is possible to examine the interpersonal consequences of narcissism by correlating narcissism (NPIC) scores and the target effects for specific social outcomes. For example, it is possible to assess if the degree of narcissism is related to how accepted or rejected group members are. That is, examining dyadic and personality variables in this manner can answer the question, “Are relatively high scores on narcissism related to peer perceptions of rejection?”

It is also possible to examine the relation between narcissism and perception of others by correlating narcissism (NPIC) scores and the perceiver effects for specific dyadic variables (i.e., social behaviors). For example, the correlation between NPIC scores and perceiver effects could be examined to determine whether relatively more narcissistic individuals report perceiving their peers as competitive. That is, the SRM can test for the degree to which possessing narcissistic traits is related to perceiving others as competitive, hostile, or accepted. Examining dyadic interactions in this manner could

illuminate the possibility that individuals with relatively high levels of narcissism tend to perceive the individuals with whom they interact as relatively hostile and/or aggressive.

The Current Study

The current study was an initial attempt to examine the interpersonal impact of narcissistic traits in a residential at-risk adolescent sample using Kenny's social relations model. In light of previous research demonstrating that narcissism is related to peer rejection (Carroll et al., 1996a), delinquency (Aalsma et al., 2006; Barry, Frick, et al., 2007), and challenging personal relationships (Campbell et al., 2000), peer perceptions regarding variables such as peer acceptance, rejection, friendship, and expectance of future delinquency were of particular interest in the current study. In addition, questions regarding the peer perception of individuals as leaders, competitive, hostile, self-liking, arrogant, and narcissistic were also of interest in light of evidence that narcissism is associated with being overly competitive, hostile, aggressive, impulsive, and boastful which may be destructive to interpersonal relationships (Ang & Yusof, 2005, 2006; Barry et al., 2003; Barry, Frick, et al., 2007; Barry, Grafeman et al., 2007; Barry et al., 2009; Baumeister et al., 1996; Campbell et al., 2000; Colvin et al., 1995; Thomaes, Stegge, et al., 2008; Vazire & Funder, 2006; Washburn et al., 2004). Although the correlates of narcissism discussed above suggest that the presence of narcissistic characteristics may have an impact on interpersonal interactions, there has been very little research focusing on the interpersonal perception of narcissism in terms of dyadic relationships. Applying Kenny's round-robin design and SRM analysis to a naturally occurring social group allows for the examination of a variety of interpersonal perceptions that may provide insight into the nature of narcissism in an adolescent sample.

Narcissism and its anticipated social consequences have not, to date, been the focus of studies using the SRM. However, Mahaffey and Marcus (2006) investigated the interpersonal perceptions associated with psychopathy—a broader constellation of personality and behavioral features that includes narcissism—in a group of convicted sex offenders. This round-robin SRM analysis of inmates receiving group therapy demonstrated that there was a strong tendency for assumed similarity. In other words, individuals who self-reported relatively high levels of psychopathic traits also viewed others as having these same psychopathic traits. This finding suggests a potential misinterpretation of the characteristics of others by those possessing psychopathic traits. In addition, Mahaffey and Marcus (2006) also found high levels of consensus regarding the peer perception of the presence of psychopathic traits as well as positive correlations between peer consensus and self-report of these traits. Further, group members' predictions of recidivism were also positively related to self-report of psychopathy (Mahaffey & Marcus, 2006). The findings of this study suggest that psychopathic traits and the behaviors related to them are fairly visible to other group members. Given the association between narcissism and psychopathy, it might be expected that the construct of narcissism would have a similar impact on interpersonal perception among a residential sample of adolescents.

The current study utilized a residential sample which is important in light of the findings that individuals with relatively high levels of narcissism are initially described as charming but that longer periods of time reveal the more interpersonally aversive aspects of their personalities (Paulhus, 1998). In addition, because the length of relationship tends to increase consensus of peer ratings (Biesanz et al., 2007; Kenny, 2004; Kenny et al.,

1994), such a residential sample provides an appropriate context for SRM research. The participants in this study were recruited from a 22-week military style intervention program that asked these individuals not only to live with one another but also to work cooperatively to achieve goals and gain access to rewards. In a situation in which individuals are forced to interact with each other on a daily basis as well as to cooperate in order to achieve group goals, the effects of narcissistic characteristics could be even greater than found in previous research. For example, research has indicated that individuals with high levels of narcissism often act in a manner that is consistent with the achievement of individual short-term goals even at the expense of goals shared with other individuals (Campbell et al., 2005).

In addition to the relevance of the residential sample, the previously stated importance of peer relations during this time of development makes the examination of interpersonal perceptions in an adolescent sample of particular interest. Not only is the developmental period of adolescence a time of increased self-focus and independence, it is also a critical time for the development of personality and social relations (Harter, 1999, 2003). It is possible that in an adolescent population, the relations of narcissistic characteristics to rejection and acceptance may differ from those in adults in that adolescents may be either more or less tolerant of specific interpersonal behaviors. For example, narcissistic features such as competitiveness and arrogance may be less unattractive in adolescent populations and therefore have less of a negative social impact than these same behaviors in adults. Consistent with other studies using Kenny's SRM, the current study involves self and peer ratings on attributes (e.g., hostility, arrogance,

likelihood of future delinquency, leadership) in addition to self-reported narcissism, which may be related to the perceived and actual social consequences of narcissism.

Hypotheses

Assimilation. It was hypothesized that there would be significant perceiver variance for all of the dyadic narcissism variables as well as the social impact variables (Hypothesis 1). That is, it was expected that the perceiver would account for a significant portion of the variance for all of the dyadic variables. This hypothesis is largely based on the assumption put forth in by Kenny (1994) that perceivers rate peers based on a general view of others or using group stereotypes (Kenny, 1994). In other words, people have a general tendency to see all others as alike. This presumption is supported by research indicating significant perceiver variance for personality traits ranging from 20% (Kenny, 1994) to 32% (Marcus & Holahan, 1994). Mahaffey and Marcus (2006) found significant perceiver variance for psychopathy traits (30%) and predicted recidivism (26%) in a residential adult sample. In addition, assimilation has been demonstrated for leadership (15%; Livi, Kenny, Albright, & Pierro, 2008), competitive behaviors (23%; Kenny, Keiffer, Smith, Ceplenski, & Kulo, 1996), as well as dominance (36%) and friendliness (26%; Moskowitz, 1988). Further, researchers have found significant perceiver effects in the ratings of children for aggression (11%; Coie, et al., 1999), happiness (20-36%; Malloy et al., 1995), classroom behavior (8-19%; Malloy et al.) and popularity (12-22%: Malloy et al.).

Consensus. It was hypothesized that there would be significant target variance for all of the dyadic narcissism variables as well as the social impact variables. That is, it was expected that the cadet being rated (target) would account for a significant portion of the

variance for all of the dyadic variables. Specifically, it was expected that there would be consensus among peer ratings on the dyadic narcissism variables (e.g., being good at getting others to do what one wants, liking to be the center of attention, liking to be a leader, and wanting to control others; Hypothesis 2). This hypothesis was based on the premise that traits associated with narcissism are detectable and can be accurately perceived by non-expert peers (Buss & Chiodo, 1991; Emmons, 1984). This hypothesis was based on previous findings in the adult literature that there is consensus in ratings of personality traits. Kenny has suggested that target variance accounts for roughly 20 (Kenny, 1994) to 28 (Kenny et al., 1995) percent of peer ratings. More recent research has found that the target variance accounts for between 15% and 54% of personality ratings, depending on the trait, among short-term (i.e., less than one year) acquaintances (Biesanz et al., 2007).

In addition, it was expected that there would be significant target variance in the ratings of several of the social variables of interest (i.e., peer reported rejection, arrogance, competitiveness, hostility, lack of being followed by peers, self-liking, and predicted future delinquency; Hypothesis 3). Specific studies examining leadership (48%; Livi et al., 2007), competitive behavior (16%; Kenny et al., 1996), and friendliness (33%; Moskowitz, 1988) have also found evidence of consensus in peer ratings. Marcus and Holahan (1994) found significant target variance for ratings of dominance (27%), hostility (26%), and friendliness (27%). Studies utilizing child samples have found significant agreement between peer ratings (i.e., consensus) for proactive aggression (10%; Coie et al., 1999), as well as happiness (3-27%), rule following (30-51%) and having friends (7-48%; Malloy et al., 1995).

This hypothesis was based on research indicating that consensus generally increases with length of acquaintance, with extraversion and agreeableness being the exceptions, (Kenny et al., 1995). Given that the current study utilized a residential sample near the end of a 22-week program (i.e., level of acquaintance among cadets was relatively high), it was expected that peers would generally agree on the ratings of these traits. However, because of the relational nature of the construct of friendship (Kenny, 1994), consensus on this dyadic variable (friend/enemy) was not hypothesized.

Assumed-Similarity. The current study included the collection of self data on all of the dyadic variables. As such, it was possible to examine the relation between self-ratings and perceiver effects (i.e., assumed similarity). It was expected that self-ratings on all of the dyadic variables with significant perceiver variance would be significantly positively related to perceiver ratings on the respective dyadic variables (i.e., the four narcissism-related variables as well as rejection, arrogance, competitiveness, hostility, lack of being followed by peers, self-liking, and predicted future delinquency; Hypothesis 4). That is, it was predicted that cadets would perceive their peers as similar to themselves (i.e., ratings for peers would be positively related to self-ratings). For example, it was expected that cadets who perceived themselves as being likely to engage in future delinquency would also perceive their peers as likely to engage in future delinquency. This hypothesis was largely driven by the findings of Mahaffey and Marcus (2006), in which residential group members demonstrated assumed similarity on psychopathic traits as well as predicted recidivism. In addition, Kenny (1994) reported significant assumed similarity for agreeableness among adult peers. However, it is

possible that there will be a lack of assumed similarity for narcissism-related variables because of the very nature of narcissism itself (see below).

Self-other agreement. It was expected that there would be a significant positive correlation between self-ratings and target effects (i.e., self-other agreement) on all of the dyadic variables that demonstrated significant target variance (Hypothesis 5). In other words, it was predicted that there would be a tendency for targets to rate themselves in the same way that other cadets rated them on specific traits. More specifically, it was hypothesized that self-reported narcissism, as measured by the dyadic narcissism variables, would be positively related to peer-reported narcissism on the respective variables. In addition, based on the research of Malloy and colleagues, it was anticipated that there would be self-other agreement on traits of rejection, competitive, arrogant, friends, hostile, and leadership (Malloy et al., 1996). More recent research also supports self-other agreement among short-term acquaintances on personality traits (Biesanz et al., 2007) and leadership (Livi et al., 2008). In addition, research utilizing an overlapping sample as that used in the present study (Golmaryami & Barry, in press) was able to establish moderate agreement between peer-nominated and self-reported relational aggression.

Relation between self-reported narcissism and dyadic variables. Provided the presence of significant perceiver variance (i.e., assimilation) and significant target variance (i.e., consensus) as described above, several hypotheses were made related to self-reported narcissism-by-perceiver and self-reported narcissism-by-target correlations. The relation between scores on narcissism and perceiver variance on the dyadic narcissism-related variables was expected to be negative (Hypothesis 6). Specifically, it

was hypothesized that relatively high levels of self-reported narcissism (NPIC total, Adaptive, and Maladaptive scores) would be negatively related to the perceiver variance of the dyadic measures of narcissism. In other words, it was expected that those individuals with higher levels of self-reported narcissism would perceive their peers as relatively low in narcissistic traits such as being good at getting others to do what he or she wants, liking to be the center of attention, wanting to be a leader, and wanting to control others. This hypothesis is largely exploratory; however, given the comparative nature of narcissism and the tendency for individuals with high levels of narcissism to inflate their social status (Ang & Yusof, 2006), it may follow that relatively high levels of narcissism are likely to be negatively related to these same perceptions of peers. Further, given the lack of research available addressing the manner in which narcissistic individuals perceive their peers, no specific hypotheses related to the remaining dyadic variables were developed.

It was expected that relatively high levels of self-reported narcissism (NPIC total, Adaptive, and Maladaptive scores) would be positively related to the target variance of the dyadic narcissism-related variables (Hypothesis 7). More specifically, given previous research indicating that narcissistic traits are easily detectable by non-expert peers (Carroll et al., 1996a; Emmons, 1984), it was hypothesized that individuals who self-reported high level of narcissism on the NPIC would be perceived by peers as possessing these traits, as measured by the peer-rated narcissism items. In addition, these hypotheses are consistent with the findings of Mahaffey and Marcus (2006) related to self-reported and peer perceived psychopathy.

It was also expected that there would be a significant positive relation between self-rated narcissism scores and target variance (i.e., personality-by-target effects) on a number of the social status dyadic variables. Specifically, it was hypothesized that relatively high level of self-reported narcissism (NPIC) would be positively related to the target effect of peer ratings of rejection, competitiveness, arrogance, hostility, and future delinquency (Hypothesis 8). These hypotheses are based on the previous findings that these characteristics are related to narcissism in the adult (Raskin & Terry, 1988; Rhodewalt & Morf, 1995) and, to some extent adolescent, literature (Barry, Grafeman et al., 2007). In addition, the overlapping sample of Golmaryami and Barry (in press) found that self-reported narcissism was positively related to peer-nominated relational aggression. It is further expected that relatively high levels of self-reported narcissism (NPIC) will be negatively related to the target effects of peer ratings of leadership, friendship, and self-liking (Hypothesis 9). In other words, it was expected that there would be a negative personality-by-target effects correlation for these variables. These hypotheses are based on the findings that these characteristics are negatively related to narcissism in the adult literature (Carroll et al., 1996a; Paulhus & Williams, 2002; Rhodewalt & Morf, 1995).

CHAPTER II

METHODOLOGY

Participants

Forty-eight adolescents, referred to as “cadets,” ages 16 to 18 (*mean* age of 16.68 years, *SD* = .75 years) enrolled in a 22-week military-style intervention program for youth who have dropped out of high school were recruited to participate in this study. Of these 48 cadets, one was excluded due to missing dyadic data. As such, analyses were conducted using the remaining 47 participants (24 male, 23 female). The sample was 75% White, 23% Black, and 2% unspecified.

One female and one male platoon of cadets were randomly selected to participate in the interpersonal perception phase of the current study. The measures were administered in groups of 12 (i.e., two groups in each platoon), resulting in four separate groups for the round-robin design. Neither the cadets nor the intervention program received compensation for participating in the study, and participation did not affect cadets’ status in the intervention program.

Previous research on the power of samples using the SRM has suggested that the round-robin design and large group sizes (i.e., round-robins greater than eight) produce more statistical power (Lashley & Bond, 1997; Lashley & Kenny, 1998) than larger overall sample sizes utilizing smaller groups.

Materials

Narcissistic Personality Inventory for Children (NPIC; Barry et al., 2003).

The NPIC is a 40-item child and adolescent extension of the adult Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). For each item, the adolescent was asked to endorse one of a pair of statements (e.g., “I try not to show off” or “I usually

show off when I get the chance”) and then rate that statement as being “sort of true” or “really true” for him/herself. This format results in a four-point response scale for each item. Scores are calculated by adding the score of each item (0-3) together, resulting in total NPIC scores ranging from 0 to 120. The internal consistency for the 40 item scale for this sample was good, $\alpha = .88$.

Consistent with previous research by Barry and colleagues (Barry et al., 2003; Barry, Frick, et al., 2007; Barry, Grafeman, et al., 2007), Adaptive and Maladaptive composites of narcissism were formed from the NPIC. Items corresponding to the Authority and Self-Sufficiency scales from the adult NPI (Raskin & Terry, 1988) were summed to form the Adaptive composite, and items corresponding to the Entitlement, Exploitativeness and Exhibitionism subscales (Raskin & Terry) were summed to form the Maladaptive composite. For this sample, the internal consistency coefficients of the Adaptive and Maladaptive composites were moderate but adequate ($\alpha = .73$ and $\alpha = .77$, respectively). Based on previous research, these composites may indicate different manifestations of narcissism. For example, Barry and colleagues have found that maladaptive but not adaptive narcissism is related to reports of delinquency and that the distinction between adaptive and maladaptive narcissism is important in the prediction of both current conduct problems and later delinquency (Barry et al., 2003; Barry, Frick, et al., 2007).

Peer Report of Narcissism.

As a measure of peer reported narcissism, a four-item scale was developed using two-items from the Maladaptive and two items from the Adaptive composite of the NPIC. The items having the highest item-total correlation using NPIC data from previous

research collected ($n = 1020$) at the same residential intervention program were selected. The Adaptive items selected were “I am good at getting other people to do what I want ($r = .58$) and “I would rather be a leader ($r = .56$). The selected Maladaptive items were “I like to be the center of attention ($r = .63$) and “I want to control other people” ($r = .58$). The selected items were then modified to read in third person and to list the name of each specific cadet in the item (e.g., “Cadet A likes to be the center of attention”). Each adolescent endorsed how well each item described a specific cadet, including him or herself, based on a seven-point Likert-type scale with 1 being “not at all” and 7 being “very much.”

Narcissistic Interpersonal Impact Scale.

As a measure of the interpersonal impact of the behaviors that research has shown to be related to high levels of narcissism, an 8-item scale including statements regarding future delinquent behavior, social status, and group behavior was developed. Specifically, the eight items included on this scale comprise the dyadic variables of rejected, competitive, arrogant, enemy, hostile, leader, self-liking, and predicted future delinquency. Each item included an anchor statement on each side and a seven-point Likert-type scale between the anchor statements. The items included the name of the specific cadet (e.g., “I consider Cadet A to be a friend... I consider Cadet A to be an enemy”). The question regarding future delinquency was also presented with a seven-point Likert-type scale; however, the ratings ranged from 1 “not likely” to 7 “very likely” (e.g., “What is the likelihood that Cadet A will get into trouble with the law after leaving the program?”). Please see the Appendix B for a full list of the included items.

Procedure

The data for the current study were collected in two phases. In the first phase, the self-report phase, cadets were asked to complete the NPIC as a self-reported measure of narcissism. In the second phase, the interpersonal perception phase, the cadets were asked to complete measures of narcissism and interpersonal behaviors of their peers. The interpersonal perception phase involved the round-robin design in which each cadet rated each member of his or her group (i.e., 11 other individuals) on several items as well as provided ratings on him or herself.

Self-Report Phase.

Parents of the cadets gave consent for their child's participation in the research project at the time of the cadets' arrival at the intervention program. Individual informed assent/consent was obtained in a classroom setting. The self-report NPIC data were collected in a classroom setting with approximately 12-18 participants in each group. The questionnaires were administered orally with the items also being provided on paper. Questionnaires for this study and the larger project of which it was a part were administered over the course of four, 45-minute sessions. This stage of data collection occurred over a two-week period approximately six to eight weeks after the cadets arrived, with the NPIC being administered in the first session.

Interpersonal Perception Phase.

During this phase of data collection, informed assent/consent was reviewed with the cadets. The cadets completed pencil-and-paper questionnaires in a classroom setting in groups of 12. Each of the cadets received a packet containing the Peer Report of Narcissism and the Interpersonal Impact Scales. The cadets completed a separate copy of

each of these scales based on every other cadet in the group. For example, Cadet A completed the Peer Report of Narcissism and the Interpersonal Peer Impact Scale for each of the other 11 members of his or her group. Therefore, Cadet A completed these scales based on his or her interactions with Cadet B, Cadet C, Cadet D, and so forth. Each of the interpersonal perception measures was pre-printed with each cadet's last name on them to decrease the opportunity for confusion and errors in completion of the measures. Each cadet also completed a self-report version of the Peer Report of Narcissism and the Interpersonal Impact Scale. Data collection for this phase took place in one, forty-five minute session and occurred during the twentieth week after the cadets' arrival at the program.

CHAPTER III

RESULTS

Descriptive statistics for the study self-reported variables are provided in Table 1. As indicated in Table 1, there did not appear to be any restriction of range related to responses on the any of the self-reported variables. As noted in Table 1, no significant departures from normality were found among NPIC scores including the composites.

Table 1

Descriptive Statistics of Self-Reported Variables (N = 47)

	Mean	Standard Deviation	Minimum	Maximum	Possible Range	Skewness
Age	16.68	0.75	16	18		
NPIC total	52.13	16.26	10	107	0-120	.29
NPIC adaptive	18.85	6.77	6	36	0-42	.27
NPIC maladaptive	21.83	7.93	4	50	0-54	.54

Note: Standard error for skewness = .35.

Statistical analyses of the dyadic data were performed using the SOREMO computer program designed specifically for the analysis of round-robin data (Kenny, 2007). The analysis of SRM data involved a two-step process of variance partitioning and correlations as outlined in Kenny (1994) and Kenny, Kashy, and Cook (2006). In the first step, the total variance of scores on the dyadic rating scales was partitioned using random effects ANOVA. This procedure yielded main effects for the perceiver and the target, as well as an interaction term representing the relationship effects. Given that the current study did not include multiple administrations of the dyadic ratings, the relationship effects also included error variance. As such, relationship variance was not interpreted in the current study. Significance testing of the variance components was conducted to determine which of the effects (i.e., perceiver, target) significantly differed from zero.

According to the procedure outlined by Kenny and colleagues (2006), significance testing was performed using the null hypothesis that variance is equal to zero based on a one-tailed *t* test. In the second step, dyadic variables with variance components (i.e., perceiver and target) that significantly differed from zero were correlated with cadets' self-report on the dyadic variables to examine assumed similarity and self-other agreement. Further analyses to examine hypotheses related to the relation between interpersonal perceptions and the cadets' self-reported narcissism, as measured by the NPIC, were also conducted.

Variance Partitioning

The relative variance partitioning and absolute total variance for the dyadic variables (i.e., Peer Report of Narcissism and Narcissistic Interpersonal Impact) are presented in Table 2. The relative variance components indicate the percentage of each peer-rated interpersonal perception that can be attributed to the perceiver (i.e., rater), target (i.e., cadet being rated), and to the unique dyadic relationship, including error. Significance testing using the group as the unit of analysis was performed. Although the results in Table 2 present the relative variance components, significance testing was performed on the absolute variance for each of the dyadic variables. The relative variance for each component can be multiplied by the total variance for each variable (see Table 2) to determine the absolute variance for each component. The relative variance that is attributed to each of the components (i.e., perceiver, target, relationship) was further examined to determine the presence of assimilation and consensus (Kenny et al., 2006), as described below.

Table 2

Variance Partitioning for Dyadic Variables

	Perceiver Variance	Target Variance	Relationship/ Error Variance	Total Absolute Variance
Manipulation (adaptive)	.19*	.24*	.57	4.13
Attention (maladaptive)	.20*	.31*	.49	5.52
Leader (adaptive)	.17*	.25*	.58	4.99
Control (maladaptive)	.21*	.21*	.58	5.46
Rejected	.10*	.06	.85	5.19
Competitive	.11*	.08*	.82	4.37
Arrogant	.11	.12	.77	4.44
Enemy	.12*	.05	.83	4.93
Hostile	.11*	.11*	.78	5.08
Non-Leader	.12	.08	.80	3.77
Dislike Self	.25*	.11*	.63	4.06
Future Delinquency	.20*	.22*	.58	4.68

Note: * $p < .05$. Because relationship and error variance were combined, relationship variance was not submitted to significance testing.

The results presented in the first column of Table 2 indicate that the perceiver accounted for a significant portion of the variance for all but two (Arrogant and Non-leader) of the dyadic variables (Hypothesis 1). Specifically, the perceiver accounted for between 10% (Rejected) and 25% (Dislike Self) of the variance in these interpersonal perceptions. These results indicate that the cadets' ratings on most of the dyadic variables were at least partially a function of the rater. Further, the presence of significant perceiver variance indicates assimilation for these dyadic variables, as hypothesized.

Results presented in the second column of Table 2 indicate that the target accounted for a significant portion of the variance for all of the *Peer Report of Narcissism* items (Hypothesis 2) as well as several of the *Narcissistic Interpersonal*

Impact items (e.g. Competitive, Hostile, Dislike Self, and predicted Future Delinquency; Hypothesis 3). Specifically, the target accounted for from 8% (Competitive) to 31% (PRN 2, wanting to be the center of attention) of cadets' ratings. These results indicate that ratings of social status and behavior within the group were at least partially a function of the individual being rated. In other words, the cadets' ratings indicate that a significant portion of scores on these items were from the target eliciting this perception from peers (Kenny, 1994). Therefore, as predicted there was consensus on these dyadic variables.

In light of significant perceiver and target variance for the majority of the dyadic variables, correlational analyses at the individual level using the variables with significant perceiver and/ or target variance were performed. As such, the dyadic variables of Arrogant and Non-Leader were not included in any further analyses as these variables did not demonstrate significant perceiver and target variance.

Self-Rating Correlations

Given that the current study included self-ratings on the dyadic variables, further analyses testing the specific hypotheses related to self-perceptions were then performed. Specifically, self-perceptions were correlated with perceiver effects and target effects to examine the presence of assumed similarity and self-other agreement, respectively. Assumed similarity (i.e., self-by-perceiver correlation) addresses the question of "Do cadets perceive other members of the platoon as they perceive themselves?" For example, do cadets who perceive themselves as likely to engage in future delinquency see their peers as likely to engage in future delinquency? It was hypothesized that there would be significant correlations between self-ratings on the dyadic variables and perceiver effects

(Hypothesis 4). This hypothesis was generally not supported, with three exceptions. The results presented in the first column of Table 3 indicate assumed similarity for two of the dyadic variables (i.e., Dislike Self and Future delinquency). There was a moderately strong tendency for cadets who reported higher levels of self-disliking to perceive others as not liking themselves also, $r = .47, p < .05$. Assumed similarity was also found for predicted future trouble with the law, $r = .38, p < .05$, indicating that those cadets who perceived themselves as likely to engage in future delinquency assumed that others were likely to be in trouble with the law in the future, as well. Interestingly, there was a significant negative correlation of the self-ratings and perceiver effects for rejection. That is, cadets who reported perceiving themselves as rejected by peers perceived others as accepted, $r = -.41, p < .05$.

The question of self-other agreement (self-by-target correlation) asks, “Do cadets see themselves the way that they are perceived by others?” For example, are cadets who perceive themselves as wanting to be the center of attention perceived by peers as wanting to be the center of attention? Results in the second column of Table 3 indicate significant self-other agreement on three of the Peer Report of Narcissism items. Specifically, cadets who perceived themselves as being good at getting other people to do what they want, $r = .42, p < .05$, were also perceived by their peers as being good at getting other people to do what they want. Significant self-other agreement was also found for liking to be the center of attention, $r = .32, p < .05$, and liking to be a leader, $r = .46, p < .05$, indicating that cadets who rated themselves as high on these traits were also perceived this way by peers. Interestingly, the hypothesis concerning self-other agreement on the social behavior dyadic variables was not supported (Hypothesis 5).

These results indicate that there was not a significant relation between cadets' self-reports of competitiveness, hostility, disliking oneself, and future delinquency and the way that they were perceived by peers.

Table 3

Self Correlations

	Assumed Similarity [^]	Self-Other Agreement ^{^^}
Manipulation (adaptive)	-.10	.42*
Attention (maladaptive)	.00	.32*
Leader (adaptive)	.17	.46*
Control (maladaptive)	-.03	.29
Rejected	-.41*	--
Competitive	-.08	.12
Enemy	.06	--
Hostile	.08	.19
Dislike Self	.47*	.14
Future Delinquency	.38*	.20

Note: * $p < .05$, [^] = self-by-perceiver correlations, ^{^^} = self-by-target correlations, -- = dyadic variable failed to demonstrate significant target variance and therefore correlational analyses were not performed.

Personality Correlations

Given assimilation among the cadets for ratings of ten of the narcissism-related dyadic variables, the relation between interpersonal perceptions and self-reported narcissistic traits, as measured by the NPIC was explored. Table 4 provides the correlations between perceiver effects for the interpersonal variables that yielded significant levels of assimilation and scores on the NPIC including the NPIC Adaptive and Maladaptive composite scores. For the correlational analyses performed, the correlations for each group were computed and then pooled. It should be noted that the correlations presented in Tables 4 and 5 are disattenuated correlations based on the

reliability of the variance components. However, significance testing was performed on the raw correlations, so at times apparently large correlations may not reach statistical significance. The degrees of freedom are the total number of cadets minus the number of groups minus one (i.e., $df = 42$). The correlation between self-reported narcissism scores and perceiver effects indicate the degree to which reporting relatively high levels of narcissism is related to a cadet's perceptions of peers. In short, this analysis addresses whether or not relatively narcissistic cadets demonstrate a tendency to perceive their peers in a particular fashion.

The results presented in Table 4 indicate a significant negative relation between total scores on the NPIC and perceiving peers as having relatively maladaptive narcissistic traits (Hypothesis 6). Specifically, reporting high levels of narcissism (NPIC total score) was negatively related to perceiving peers as liking to be the center of attention, $r = -.36, p < .05$, and as wanting to control others, $r = -.36, p < .05$. In other words, reporting relatively high levels of narcissism was associated with viewing one's peers as relatively low on maladaptive narcissism items. The same was true for relatively high self-reported levels of Maladaptive narcissism and perceiving peers as not liking to be the center of attention, $r = -.33, p < .05$.

Table 4

Narcissistic Personality Inventory for Children Scores (column) by Perceiver (row)

Correlations

Perceiver Effects	Total NPIC Score	Adaptive Composite	Maladaptive Composite
Manipulation (adaptive)	-.06	.05	-.14
Attention (maladaptive)	-.36*	-.19	-.33*
Leader (adaptive)	-.87	-.02	-.12
Control (maladaptive)	-.36*	-.24	-.33
Rejected	-.03	.13	-.09
Competitive	-.08	.07	-.07
Enemy	-.17	-.04	-.16
Hostile	-.23	-.13	-.15
Dislike Self	.02	.00	.07
Future Delinquency	-.24	-.16	-.10

*Note: *p < .05.*

Given consensus among the cadets for ratings of eight of the narcissism-related dyadic variables, the relation between interpersonal perceptions and self-reported narcissistic traits, as measured by the NPIC, was examined. Table 5 provides the correlations between target effects for the interpersonal variables that yielded significant level of consensus and scores on the NPIC including the NPIC Adaptive and Maladaptive composite scores. As predicted, the personality-by-target correlations revealed significant correlations between self-reported narcissism and all four of the peer perceived narcissism items (Hypothesis 7). Specifically, cadets who self-reported high total scores

on the NPIC were seen by peers as good at getting other people to do they want, $r = .44$, $p < .01$, wanting to be the center of attention, $r = .42$, $p < .01$, liking to be a leader, $r = .44$, $p < .01$, and wanting to control others, $r = .49$, $p < .01$. In other words, individuals who self-reported narcissistic traits on the NPIC were viewed as possessing at least certain narcissistic traits by their peers who had no knowledge of one another's NPIC scores.

Table 5

Narcissistic Personality Inventory for Children Scores (column) by Target (row)

Correlations

Target Effects	Total NPIC Score	Adaptive Composite	Maladaptive Composite
Manipulation (adaptive)	.44**	.51**	.32
Attention (maladaptive)	.42**	.55**	.37*
Leader (adaptive)	.44**	.48**	.31
Control (maladaptive)	.49**	.56**	.37*
Competitive	.47*	.56*	.51*
Hostile	.52**	.49*	.51**
Dislike Self	-.17	-.28	-.11
Future Delinquency	.44**	.45**	.41*

Note: * $p < .05$, ** $p < .01$.

Consistent with expectations, self-reported Adaptive narcissism on the NPIC was significantly positively related to being viewed as good at getting other people to do what one wants, $r = .51$, $p < .01$, as wanting to be the center of attention, $r = .55$, $p < .01$, and liking to be a leader, $r = .48$, $p < .01$, by peers. Self-reported Maladaptive narcissism on

the NPIC was moderately related to peer perception of wanting to be the center of attention, $r = .37, p < .05$, and wanting to control others, $r = .37, p < .05$.

Perhaps most central to the current study was the predicted negative relation between relatively high levels of self-reported narcissism on the NPIC and peer ratings of positive social impact. Specifically, it was predicted that high levels of narcissism would be related to negative peer perceptions such as rejection, competitiveness, arrogance, hostility, and likelihood of future delinquency (Hypotheses 8). Consistent with these hypotheses, cadets with relatively high levels of self-reported narcissism (NPIC total) were perceived by peers as being hostile, $r = .52, p > .01$. In addition, self-reported Adaptive, $r = .49, p > .05$, and Maladaptive, $r = .51, p > .01$, narcissism were also positively correlated with being seen by peers as hostile. Further, self-reported high levels of narcissism were positively related to being viewed as competitive. Cadets' self-reported high levels of overall narcissism, $r = .47, p < .05$, Adaptive narcissism, $r = .56, p < .05$, and Maladaptive narcissism, $r = .51, p < .05$, were all positively related to being perceived as competitive by peers. Moreover, as hypothesized, the relation between peer perceptions (i.e., target effects) of delinquency and self-reported narcissism was also positive. Individuals with relatively high NPIC total scores, $r = .44, p < .01$, NPIC Adaptive scores, $r = .45, p < .01$, and NPIC Maladaptive scores, $r = .41, p < .05$, were perceived as likely to be in trouble with the law after leaving their residential program. It should be noted that the variables of rejection and arrogance were not included in these analyses due to a lack of significant target variance.

Finally, it was predicted that relatively high levels of self-reported narcissism (NPIC total) would be negatively related to the target effects of peer ratings of leadership,

friendship, and self-liking (Hypothesis 9). Contrary to this hypothesis, narcissism scores were not significantly associated with self-liking. Due to a lack of consensus for the variables of leadership (i.e., non- leader) and friendship (i.e., enemy) these hypotheses were not tested.

CHAPTER IV

DISCUSSION

This study represents one of the first attempts to investigate the social impact of narcissism using Kenny's (1994) SRM. Further, this study is also the first known social relations analysis to use a residential at-risk adolescent sample. The results of the current study illuminate, at least in part, the social consequences of engaging in narcissistic behaviors and contribute new information related to the interpersonal perceptions of adolescents. For example, not only are adolescent peers able to detect narcissistic tendencies, it also appears that individuals with relatively high levels of narcissism are generally perceived as hostile, competitive, and likely to engage in delinquent behaviors by their interpersonal partners. Interestingly, adolescents in the present study did not appear to differentiate between the adaptive and maladaptive facets of narcissism when determining the social impact of a peer's behavior and their perceptions of that peer. Further, the results of the current study indicate that narcissism is not associated with a particular style of perceiving others (i.e., hostile attribution bias). Collectively, the results of the current study suggest that individuals with narcissistic tendencies simply do not achieve some of the social goals (e.g., positive regard by others) that they appear determined to reach.

Adolescent Interpersonal Perceptions

Assimilation and Assumed Similarity.

In the current study, there was significant perceiver variance for all of the dyadic narcissism variables (i.e., being good at getting others to do what one wants, liking to be the center of attention, liking to be a leader, and wanting to control others). Roughly 20%

of the variance in narcissism-related traits could be accounted for by the perceiver, which is consistent with findings from previous interpersonal relations studies of personality traits (e.g., Kenny, 1994; Mahaffey & Marcus, 1996). Overall, there was small but significant assimilation in adolescents' ratings on the social status variables in the current study. As such, adolescents' perceptions of peers on traits such as rejected, competitive, hostile, disliking oneself, being an enemy, and likelihood of getting in trouble with the law in the future, were at least in part a function of the rater. On average, the perceiver accounted for approximately 14% of variance in these social ratings, suggesting that the adolescents in the current study approached the task of rating peers with some degree of a generalized or stereotyped view of others. These results are relatively consistent with previous findings (Coie et al., 1999; Mahaffey & Marcus, 2006; Malloy et al., 1995).

The presence of assimilation in the current may have practical implications related to the use of peer-reported adolescent behaviors in research. For example, one might consider the possibility of using adolescent peer reports to provide concurrent validity for the NPIC as a narcissism assessment measure. In using peer ratings (i.e., without parceling the perceiver effects from target effects), the correlations would be artificially weakened by perceiver variance, which accounts for nearly one fifth of the variance in the adolescent peer ratings. In other words, it is possible that nearly 20% of the variance in the ratings will not be a measure of narcissism elicited from the target but rather a function of how the rater completed the ratings. As such, the relation between peer reports and NPIC scores would likely be attenuated.

Although assimilation presents an explanation for the significant perceiver variance found in the current study, it is important to note that there are alternative

explanations for this occurrence. One of the most compelling arguments is that assimilation is merely a reflection of a response set rather than a representation of the psychological processes described above (Kenny, 1994). In other words, rather than viewing the tendency of perceivers to rate all targets in a similar fashion as a reflection of their stereotyped view of others, it may be better conceptualized as a tendency to mark questionnaires in a similar fashion (i.e., response set). Although, there is some empirical evidence to support the assimilation hypothesis (Kenny), one can never know the “true” meanings of participants’ responses in any research study. As such, it remains possible that the response set hypothesis could account for the significant perceiver variance in the current study.

Given the assumption that the psychological process of assimilation is a plausible explanation for the presence of variance in peer ratings, a logical continuation is to consider what might be a source of this variance. One possible explanation may be the presence of a shared response set among peers. An alternative possible explanation may be assumed similarity (i.e., cadets seeing others as they see themselves). That is, it is possible that cadets may have assumed that other members of their group were similar to themselves. Indeed, as individuals begin to view themselves as members of a group they tend to assume that they are similar to the other members of the group (Kenny, 1994). In other words, it is possible that as a result of residing in a residential program for five months, cadets began to identify themselves as members of a somewhat homogenous group. The consequence of such an assumption would be that as cadets identify with the group, the perceiver effects begin to reflect how individuals see themselves (Kenny,

1994). However, the results of the current study do not suggest a significant trend of assumed similarity in the cadets' interpersonal perceptions.

More specifically, in addition to the lack of assumed similarity for any of the narcissism-related features, the social traits of competitive, enemy, and hostile also failed to demonstrate significant assumed similarity. These findings were unexpected, yet it is possible that the specific traits assessed by these items do not lend themselves to assumed similarity. For example, narcissistic features such as seeing oneself as good at getting people to do what one wants may be reflective of a grandiose sense of self and therefore not reciprocal in nature. In other words, individuals may hold a self-view that they are uniquely able to manipulate others and therefore would not assume that other individuals possess such a talent.

Alternatively, it is possible that these traits were not salient in forming the group's identity. Perhaps other characteristics are more central to identifying oneself as a member of the group in this context, as predicted delinquency and liking oneself did demonstrate assumed similarity. For example, cadets who perceived themselves as not likely to be in trouble with the law after completing the program viewed their peers as also not likely to engage in delinquent behaviors in the future. This attribute may have been particularly relevant to cadets near graduation from the residential treatment program. The residential treatment program has many goals; however, the primary goals are to assist adolescents in earning their high school diploma and to better their futures. As such, near the end of the program, it is likely that those individuals who have achieved program goals are optimistic regarding their future behaviors and may hold positive self-views. Indeed, research conducted at this military-style intervention program has found

significant increases in hope and self-esteem at the end of the program relative to early in the program (Grafeman et al., 2006). Hypothetically, at the time the current study was conducted, group identity may have been based on characteristics more relevant to program goals such as future delinquency and liking oneself, whereas other social traits were not as salient. As such, one possible explanation for the differing approaches to ratings on these variables may be due to viewing members of the group as similar to oneself only for those variables on which group identity was based.

Consensus.

As expected, there was consensus (i.e., agreement among the cadets) for all of the narcissism-related traits. In other words, the cadets were able to agree on which cadets were perceived as good at getting others to do what they want, liking to be the center of attention, liking to be a leader, and wanting to control others. These results indicate that adolescent peers are able to detect and agree upon the presence of these behaviors in a residential peer group. The practical implication of this finding is that there is a tendency among individuals to elicit perceptions from their peers regarding narcissism in a manner in which peers can agree. As such, possessing such traits may have an impact on social interactions.

On average, the target accounted for 25% of the variance in the cadets' perceptions of the narcissism-related traits. This proportion of variance is slightly higher than expected given a review by Kenny (1994) which suggested that the average target variance for personality traits among acquainted peers was roughly 15%. Interestingly, the target variance in the narcissism-related traits in this study is also higher than those found for psychopathic traits by Mahaffey and Marcus (2006). One possible explanation

for the higher target variance found in the current study may be that narcissistic traits are more visible than the more subtle and less socially obvious traits associated with psychopathy (e.g., lack of empathy, coldness). Given the paucity of social analysis research utilizing a residential at-risk adolescent sample or examining narcissism, these findings, if replicated, may suggest that these traits are rather visible within a well-acquainted adolescent peer group.

Surprisingly, of the eight social status items, only four demonstrated consensus (i.e., competitive, hostile, dislike self, and future delinquency). Kenny and colleagues (1994) have argued that there are several reasons why perceivers may not agree in their ratings of targets. The first of these explanations is non-overlap, which suggests that the perceivers do not observe the same behaviors in the target. The second source of disagreement is a different meaning system in which perceivers observe the same behaviors but assign various meanings to the behavior. In other words, although all members of the platoon may observe that a specific cadet is always by herself, some cadets may assume that she chooses to be alone, whereas others may assume that the group has rejected her. The third source of disagreement is the use of unique or unshared information by perceivers. Although one cannot know for certain what generated the lack of consensus for several variables in the current study, the use of unshared information appears a likely candidate. For example, the variables of enemy/friend and accepted/rejected (i.e., wanting to spend time with Cadet A) in the current study are likely relational variables, and as such, ratings of these traits may have been based on idiosyncratic interactions with targets. Indeed, SRM research has demonstrated that liking/friendship is primarily a relationship-level construct (Kenny, 1994).

Self-Other Agreement.

As noted earlier, self-other agreement, or the overlap between self-perceptions and target effects, attempts to understand if people see themselves the way that others see them (Kenny, 1994). Three of the narcissism-related dyadic variables (i.e., good at getting others to do what one wants, liking to be the center of attention, and liking to be a leader) demonstrated self-other agreement. These findings suggest that individuals who perceive themselves as possessing such characteristics are also viewed that way by their adolescent peers.

The lack of self-other agreement for all of the remaining dyadic variables was unexpected. These results are especially surprising in the light of research suggesting that self-other agreement is the norm rather than the exception (Biesanz et al., 2007; Malloy, Yarlas et al., 1996). In addition, empirical research has suggested that self-other agreement should increase with length of acquaintance (Kenny, 1994). Indeed, in a study utilizing an overlapping sample conducted simultaneously with the current study (Golmaryami & Barry, in press), peer reports were positively related to self-reports of relational aggression. As such, the lack of self-other agreement in the ratings of peers as competitive, hostile, disliking themselves, wanting to control others, and likely to engage in future delinquency is puzzling and an explanation is not easily determined, especially given consensus for these variables.

Although self-other agreement is largely expected, peer-peer agreement is typically higher than self-peer agreement (Kenny, 1994). Therefore, examining the potential reasons for such differences may help illuminate the lack of self-other agreement in all but three of the dyadic variables in the current study. One possibility is

that peer ratings are more closely linked to observable behavior and that self-ratings are more closely linked to “deep seated self-theories” (Kenny, 1994; p. 193). In other words, self-ratings may be based on a different set of information than those of peers. In some situations, the internal and external sources of information may be congruent with one another as may be the case with the narcissism variables. For example, the source of information used for self-ratings may be an internal grandiose desire to get others to do what one wants, be the center of attention, and be a leader. However; the observable behaviors of such grandiose desires may be more closely related to being seen as gregarious or extraverted. The result may be self-other agreement in that peers view someone who is outgoing as enjoying attention as well as seeking to lead or be the center of attention.

In other situations, the use of different sources of information may result in a lack of self-other agreement. For instance, a cadet with a history of delinquent behavior may view himself as not changed by the intervention program and therefore think that he will return to his previous delinquent ways. However, his platoon members, unaware of his history of delinquency, may use his academic success and non-disruptive classroom behavior as the source of information in rating him as not likely to engage in future delinquent behaviors. In this hypothetical situation, the cadet would rely on internal cues in determining his self-ratings, whereas his peers would rely on the shared information of his behaviors to determine their ratings. The results of this hypothetical situation are the presence of consensus and a lack of self-other agreement, as is the case in the current study. Alternatively, it is possible that self-serving bias could also account for the lack of self-other agreement on the social impact traits in the current study, as people do not

generally perceive themselves as possessing negative qualities. That is, individuals may have rated themselves in a biased or overly positive manner which is inconsistent with peer perceptions. For example, although individuals may have perceived their peers as relatively cooperative they may have rated themselves in a biased manner (i.e., highly cooperative), resulting in a lack of self-other agreement.

Narcissism and Interpersonal Perceptions

Narcissism and Perceptions of Peers.

The examination of the relation between self-reported narcissism and perceiver effects may illuminate the interpersonal perceptions of individuals with relatively narcissistic self-views. For example, relatively high levels of narcissism, including the adaptive and maladaptive composites, were not associated with perceiving peers in a particular manner on any of the social status variables. These findings suggest that narcissism, although theoretically emotional and motivational in nature, does not constitute a perceptual bias toward peers. That is to say, some relatively narcissistic cadets viewed group members as hostile, whereas other narcissistic cadets perceived these same group members as agreeable.

In light of findings that narcissism is associated with conduct problems, anger, and aggression one might ask the question, “If the narcissist does not perceive others as hostile, competitive, or rejecting then why would the narcissist respond to others with anger and aggression?” Although the current findings may initially appear somewhat contradictory to research indicating that narcissistic individuals are aggressive, hostile, and competitive toward others it is important to note that previous findings have not suggested that such behaviors are a function of hostile attribution bias. Rather, research

has suggested that these behaviors are egocentric in nature. For example, individuals with relatively high levels of narcissism respond aggressively and vengefully to ego threats (Bárry et al., 2006; Bushman & Baumeister, 1998; Bushman et al., 2009; Rhodewalt & Morf, 1998; Martinez et al., 2008; Terrell et al., 2008; Thomaes, Stegge et al., 2008; Twenge & Campbell, 2003). These findings as well as those of the current study are consistent with a threatened egotism conceptualization of narcissism (Morf & Rhodewalt, 1995) in which the grandiose and inflated self-views of the narcissist are difficult to maintain and leave the narcissist vulnerable to threats in the social arena. As such, aggression serves as a means to defend high self-views against those that threaten it. In other words, it appears that the narcissist is prone to embarrassment and shame but not prone to thinking that the world is out to get him/her.

Interestingly, there was a significant negative association between self-reported narcissism and perceiving peers as wanting to be the center of attention and wanting to control others. That is to say that individuals with relatively high levels of narcissism who likely reported wanting to be the center of attention and to control others themselves perceived their peers as somewhat disinterested in doing so. Although not clearly indicated from the current study, these findings could suggest that narcissists are aware that their motivational systems are different from those of their peers. On the other hand, these results may be indicative of an arrogant self-view in which the narcissist views others as not wanting to control others or be the center of attention because he/she feels peers are inept at doing so.

Narcissism and Peer Perceptions.

The relation between self-reported narcissism and peer perceptions (i.e., target effects) was the crux of the current study. As such, it is unfortunate that peer rejection did not yield significant target variance and thus that the association of peer acceptance and narcissism could not be examined. Nevertheless, the current study did yield information related to the interpersonal consequences of possessing narcissistic personality features among well-acquainted adolescent peers.

Self-reported narcissism, including both adaptive and maladaptive narcissism, was significantly related to peers' perceptions of narcissistic traits. The higher cadets scored on the NPIC, the more likely they were to be perceived by peers as particularly wanting to control others, liking to be the center of attention, liking to be a leader, and being good at getting others to do what he or she wanted. These findings suggest that narcissistic personality features are visible among adolescent peers, and they provide unique evidence of convergent validity for the NPIC. Although the NPIC has been correlated with a number of self-report measures, the results of the current study indicate a direct relation between self-reported narcissism and the way individuals are perceived by peers. Further, these correlations are especially striking when considering that individuals with high levels of narcissism were rated in this manner by peers who had no knowledge of one another's self-reported narcissism and that the variance that is attributable to the rater as well as relationship/error has been parceled from these correlations. In sum, these correlations indicate that in a naturalistic setting, scores on the NPIC are associated with being perceived as narcissistic by others.

In addition to providing potentially useful information related to the perceptions of narcissism, the current study also provides distinctive insight into the social consequences of such narcissistic tendencies. In sum, self-reported narcissism, including both the adaptive and maladaptive composites, was associated with being seen by peers as hostile, competitive, and delinquent. Therefore, the results of the current study clearly indicate that there are social consequences associated with the presence of narcissistic personality features. One could infer that being perceived in this manner may have a negative impact on the establishment and maintenance of healthy peer relationships. As such, it appears that although narcissists seek the admiration and positive regard of peers, the end result of their actions may be self-defeating.

Furthermore, it does not appear that adolescents differentiate between the adaptive and maladaptive facets of narcissism when determining the social impact of a peer's behavior and their perceptions of that peer. The distinction between adaptive and maladaptive narcissism may be meaningful as it relates to self-reported conduct problems, delinquency, relational and physical aggression (Barry et al., 2003; Barry, Frick et al., 2007; Barry et al., 2009; Barry, Grafeman et al., 2007; Washburn et al., 2004); however, it may not be a meaningful distinction when it comes to peer perceptions. As such, future research should continue to investigate whether a multidimensional (i.e., adaptive /maladaptive) conceptualization of narcissism has relevance for at-risk adolescent peer interactions.

Limitations

The findings of this study should be viewed in the context of several limitations related to the use of the SRM as well as the exploratory nature of the study itself.

Although the use of round-robin data is advantageous, it is certainly not without limitations. First, this study was correlational and cross-sectional in nature, and thus, the findings are not able to directly answer many of the important questions that were raised by its findings. The findings reported above are not able to determine, for example, if the presence of narcissism created peer perceptions of competitiveness and hostility over time or if these perceptions were in place at the time of initial contact at the intervention program. Additionally, the current study could not isolate whether the narcissistic traits themselves elicited specific peer perceptions. The current study could merely indicate that a relation between narcissism and specific peer perceptions exists.

Although the current study cannot provide definitive answers as to the causal relation between narcissism and peer perceptions, the temporal relation between self report and dyadic ratings in the current study is likely important in understanding the potential direction of these associations. Self-reported narcissism was collected roughly three months prior to the collection of dyadic ratings. As such, it is unlikely that being perceived as competitive or hostile by members of the platoon would have influenced cadets self-reported narcissism scores at that time. Therefore, although not impossible, it appears unlikely that perceptions caused self-reported narcissism in the current study.

There are several other interesting research questions that the SRM could not address in the present study. For example, it would be particularly interesting to determine if personality variables, such as narcissism, moderate the degree of self-other agreement. Unfortunately, these analyses require extensive computations, which were beyond the scope of the current study. A further limitation related to the use of the SRM is that the model itself assumes that dyadic interactions are independent of one another.

The model further assumes that individuals do not influence the interactions of dyads in which they are not a part. Given that the cadets had been living, eating, studying, and recreating together for five months, it is unlikely that the members of a platoon did not have numerous influences on one another. Further, the cadets likely communicated not only with their platoon members but also with cadets in other platoons. As such, it is plausible to assume that cadets may have developed reputations not only within their platoons but also within the intervention program. Quite simply, the level of interdependence of the dyads in the current study cannot be determined. Moreover, there are not any known ways to control for these effects. The results of the present study should be interpreted with caution in light of this issue.

A second set of limitations are related to the fact that this study represents one of the first attempts to measure the interpersonal perceptions of an at-risk adolescent sample in a residential setting. In addition, it represents one of the few studies to examine the role of narcissism in interpersonal perceptions utilizing Kenny's (1994) SRM. The limitations here are two-fold. With regard to being an exploratory investigation, some of the measures used in this study have limited psychometric evidence. Although preliminary research has shown support for the NPIC as a reliable and valid measure of narcissism in adolescents, it is still in its psychometric infancy. An additional difficulty related to the novelty of the present study, particularly with regard to the sample used, is the lack of context in which to interpret the current findings. Lastly, the results of the current study should be interpreted in the context of the small residential sample, in which cadets likely had more contact with one another than is typical even among well-acquainted peer studies.

Conclusions

Although not without limitations, the results of the current study provide valuable insight into the interpersonal perceptions of adolescents. Consistent with social relations analysis research (Kenny, 1994), the majority of variance in the peer ratings of well-acquainted adolescents in the current study was largely attributable to relationship/error variance. However, for many of the variables in the current study there were also significant perceiver and target effects. Overall, peer ratings demonstrated agreement among cadets (i.e., consensus) and a general lack of self-peer agreement (i.e., self-other agreement). In fact, there was no significant self-other agreement for any of the social impact variables in the current study. On the other hand, it appeared that individuals who perceived themselves as possessing such narcissistic characteristics were also viewed that way by their adolescent peers.

The current study also provided unique information related to the associations of narcissism and adolescent interpersonal perceptions. For example, narcissism was not associated with perceiving peers in a particular manner on any of the social status variables. As such, relatively high levels of narcissism were not associated with a particular perceptual bias toward peers. One potential extension of the current findings would be to determine if the perceptions of individuals with relatively high levels of narcissism change as a function of ego threat. Although the current study did not demonstrate a significant perceptual bias associated with narcissism, it is possible that these patterns may differ under comparative feedback conditions. For example, individuals with relatively high levels of narcissism may perceive peers as competitive and/or hostile if ratings were collected directly after receiving public verbal feedback on

task performance. In light of research indicating that narcissistic individuals respond to ego threats with anger and aggression (e.g., Barry et al., 2006; Bushman & Baumeister, 1998; Papps & O'Carroll, 1998), it appears likely that their perceptions of peers may become hostile under such conditions.

As noted above, longitudinal studies examining the long-term interpersonal consequences of holding relatively narcissistic self-views are needed. Further, although the assumption in the current study is that being viewed as competitive, hostile, and likely to engage in future delinquency by peers has negative outcomes, it is possible that there are no long-term associations between being perceived by peers in this manner and actual emotional, behavioral, and social outcomes. Moreover, the narcissistic individual may not view such peer perceptions as a negative social consequence at all but rather a necessary artifact of attaining dominance and getting respect (i.e., an acceptable means to an end). The results of the current study also do not provide information related to the stability of peer perceptions or what, if any, possibility may exist to change these perceptions.

Future research examining not only the accuracy of peer perceptions (e.g., whether peers perceived as likely to be delinquent actually engage in delinquent activity) but also the stability of these perceptions over time are needed. Although it is certainly important to determine the relation between narcissism and negative peer perceptions, it is perhaps even more important from a clinical viewpoint that we understand the mechanisms involved in, as well as the long-term consequences of, the interpersonal difficulties tied to narcissism. Of particular interest in the treatment of adolescent narcissism may be the mechanisms that are responsible for eliciting negative peer perceptions. For example, it is possible that holding unrealistically high and grandiose

self-views and subsequently stating these views in an overly assertive manner may cause peers to perceive an individual as overly competitive. On the other hand, it may be that feelings of inferiority create an internal desire to mask these feelings through an outward competitive stance. The treatment implications for these scenarios are vastly different. As such, information on the factors involved in the association between narcissism and its negative social impact is needed to determine how narcissistic self-views might be considered a focus of clinical interventions.

APPENDIX A

NINE BASIC QUESTIONS OF INTERPERSONAL PERCEPTION

SRM Question	Research Question
Assimilation*	Do the cadets perceive others as alike on specific traits?
Consensus*	Do the cadets agree that others have specific traits?
Uniqueness	Is the way that cadet A and cadet B perceive each other idiosyncratic?
Reciprocity	Do cadets who are perceived by others as possessing a given trait also see others as possessing that same trait?
Target Accuracy	Is the way that cadet A perceives cadet B correct?
Assumed Reciprocity	Does cadet B assume that others perceive him the way that he sees them?
Meta-Accuracy	Does cadet B know how he is perceived?
Assumed Similarity*	Does cadet A perceive others the way that she perceives herself?
Self-other Agreement*	Does cadet A perceive herself the way that others perceive her?

Note. This table has been adapted from Kenny (1994). Only those questions marked with an asterisk are addressed in the current study.

APPENDIX B
INTERPERSONAL PERCEPTION MEASURES

PEER REPORT OF NARCISSISM

Please record your impressions of cadet **A** on the scales below. Provide your honest judgments. This form is completely confidential and cadet **A** will not be told what you report. Try not to be influenced by what you think others are saying. Record your independent impressions. Do not put your name on this form.

Now, please take a moment to think about cadet **A**. Then, put an "X" along each line at the point that best describes cadet **A**.

1. Cadet **A** is good at getting other people to do what he wants.

Not at all true _____:_____:_____:_____:_____:_____ Very much true

2. Cadet **A** likes to be the center of attention.

Not at all true _____:_____:_____:_____:_____:_____ Very much true

3. Cadet **A** likes to be a leader.

Not at all true _____:_____:_____:_____:_____:_____ Very much true

4. Cadet **A** wants to control other people.

Not at all true _____:_____:_____:_____:_____:_____ Very much true

PEER REPORT OF NARCISSISM (SELF-REPORTED)

Please record your impressions of yourself on the scales below. Provide your honest judgments. This form is completely confidential. Try not to be influenced by what you think others are saying. Record your independent impressions. Do not put your name on this form.

Now, please take a moment to think about yourself and then, put an "X" along each line at the point that best describes you.

- 1. I am good at getting other people to do what I want.

Not at all true _____ : _____ : _____ : _____ : _____ : _____ : _____ Very much true

- 2. I like to be the center of attention.

Not at all true _____ : _____ : _____ : _____ : _____ : _____ : _____ Very much true

- 3. I like to be a leader.

Not at all true _____ : _____ : _____ : _____ : _____ : _____ : _____ Very much true

- 4. I want to control other people.

Not at all true _____ : _____ : _____ : _____ : _____ : _____ : _____ Very much true

- 5. I am well liked by the members of my platoon.

Not at all true _____ : _____ : _____ : _____ : _____ : _____ : _____ Very much true

NARCISSISTIC INTERPERSONAL IMPACT SCALE

Please record your impressions of cadet **A** on the scales below. Provide your honest judgments. This form is completely confidential and cadet **A** will not be told what you report. Try not to be influenced by what you think others are saying. Record your independent impressions. Do not put your name on this form.

Now, please take a moment to think about cadet **A**. Then, put an "X" along each line at the point that best describes cadet **A**.

- | | | |
|---|---|---|
| 1. I would like to spend time with cadet A | _____ : _____ : _____ : _____ : _____ : _____ | I wouldn't want to be around cadet A |
| 2. Cadet A is cooperative and helpful | _____ : _____ : _____ : _____ : _____ : _____ | Cadet A is competitive |
| 3. Cadet A thinks that he is better than other people in the platoon | _____ : _____ : _____ : _____ : _____ : _____ | Cadet A thinks that he is NOT as good as others in the platoon |
| 4. I consider cadet A to be a friend | _____ : _____ : _____ : _____ : _____ : _____ | I consider cadet A to be an enemy |
| 5. Cadet A is easy to get along with | _____ : _____ : _____ : _____ : _____ : _____ | Cadet A starts arguments and fights |
| 6. People listen to cadet A and follow his lead | _____ : _____ : _____ : _____ : _____ : _____ | People do Not listen to cadet A and do Not follow him |
| 7. Cadet A likes himself | _____ : _____ : _____ : _____ : _____ : _____ | Cadet A does Not like himself |
| 8. What is the likelihood that cadet A will get into trouble with the law after leaving the YCP program? | | |
| Not likely | _____ : _____ : _____ : _____ : _____ : _____ | Very likely |

NARCISSISTIC INTERPERSONAL IMPACT SCALE (SELF-REPORTED)

Please record your impressions of yourself on the scales below. Provide your honest judgments. This form is completely confidential. Try not to be influenced by what you think others are saying. Record your independent impressions. Do not put your name on this form.

Now, please take a moment to think about yourself and then, put an "X" along each line at the point that best describes you.

1. The cadets like to spend time with me _____ : _____ : _____ : _____ : _____ : _____ : _____ The cadets wouldn't want to be around me

2. I am cooperative and helpful _____ : _____ : _____ : _____ : _____ : _____ : _____ I am competitive

3. I think that I am better than other people in the platoon _____ : _____ : _____ : _____ : _____ : _____ : _____ I think that I am NOT as good as others in the platoon

4. I consider myself a friend to the other cadets _____ : _____ : _____ : _____ : _____ : _____ : _____ I consider myself an enemy of the other cadets

5. I am easy to get along with _____ : _____ : _____ : _____ : _____ : _____ : _____ I start arguments and fights

6. People listen to me and follow my lead _____ : _____ : _____ : _____ : _____ : _____ : _____ People do Not listen to me and do Not follow me

7. I like myself _____ : _____ : _____ : _____ : _____ : _____ : _____ I do NOT like myself

8. What is the likelihood that You will get into trouble with the law after leaving the YCP program?

Not likely _____ : _____ : _____ : _____ : _____ : _____ : _____ Very likely

APPENDIX C

INSTITUTIONAL REVIEW BOARD DOCUMENTATION



THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147
 Hattiesburg, MS 39406-0001
 Tel: 601.266.6820
 Fax: 601.266.5509
 www.usm.edu/irb

**HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
 NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 27112901

PROJECT TITLE: **Interpersonal Perception of Narcissism in an At-Risk**

Adolescent Sample: A Social Relations Analysis

PROPOSED PROJECT DATES: 11/01/07 to 08/31/08

PROJECT TYPE: **Dissertation or Thesis**

PRINCIPAL INVESTIGATORS: **Sarah J. Grafeman**

COLLEGE/DIVISION: **College of Education & Psychology**

DEPARTMENT: **Clinical Psychology**

FUNDING AGENCY: **N/A**

HSPRC COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: 11/29/07 to 11/28/08

Lawrence A. Hosman

 Lawrence A. Hosman, Ph.D.
 HSPRC Chair

12-09-07

 Date

HUMAN SUBJECTS REVIEW FORM
 UNIVERSITY OF SOUTHERN MISSISSIPPI
 (SUBMIT THIS FORM IN DUPLICATE)

Protocol # 27112901
 (office use only)

Name Sarah J. Grafeman Phone 601-467-3115

E-Mail Address sarah.grafeman@usm.edu

Mailing Address 118 College Drive BOX 5025 Hattiesburg MS 39406
 (address to receive information regarding this application)

College/Division Psychology and Education Dept Clinical Psychology

Department Box # 5025 Phone 601-266-4588

Proposed Project Dates: From 11/2007 To 8/2008
 (specific month, day and year of the beginning and ending dates of full project, not just data collection)

Title Interpersonal Perception of Narcissism in an At-Risk Adolescent Sample: A Social Relations Analysis

Funding Agencies or Research Sponsors _____

Grant Number (when applicable) _____

New Project

Dissertation or Thesis

Renewal or Continuation: Protocol # _____

Change in Previously Approved Project: Protocol # _____

[Signature] Principal Investigator Date 11/16/07

[Signature] Advisor Date 11/16/07

[Signature] Department Chair Date 11/16/07

RECOMMENDATION OF HSPRC MEMBER

Category I, Exempt under Subpart A, Section 46.101 () (), 45CFR46.

Category II, Expedited Review, Subpart A, Section 46.110 and Subparagraph ().

Category III, Full Committee Review.

[Signature] HSPRC College/Division Member DATE 11/19/2007

Laurend A. Hoaman HSPRC Chair DATE 12-07-07

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