

5-2015

# Narcissism and Late Adolescent Friendships: Perceived Closeness, Cooperation, Competitiveness, and Friendship Quality

Suzanne Chinyere Amadi

Follow this and additional works at: [http://aquila.usm.edu/honors\\_theses](http://aquila.usm.edu/honors_theses)



Part of the [Personality and Social Contexts Commons](#)

---

## Recommended Citation

Amadi, Suzanne Chinyere, "Narcissism and Late Adolescent Friendships: Perceived Closeness, Cooperation, Competitiveness, and Friendship Quality" (2015). *Honors Theses*. Paper 335.

This Honors College Thesis is brought to you for free and open access by the Honors College at The Aquila Digital Community. It has been accepted for inclusion in Honors Theses by an authorized administrator of The Aquila Digital Community. For more information, please contact [Joshua.Cromwell@usm.edu](mailto:Joshua.Cromwell@usm.edu).

The University of Southern Mississippi

Narcissism and Late Adolescent Friendships: Perceived Closeness, Cooperation,  
Competitiveness, and Friendship Quality

by

Suzanne Chinyere Amadi

A Thesis  
Submitted to the Honors College of  
The University of Southern Mississippi  
in Partial Fulfillment  
of the Requirements for the Degree of  
Bachelor of Science  
in the Department of Psychology

May 2015



Approved by

---

Christopher T. Barry, Ph.D., Thesis Advisor  
Associate Professor of Psychology

---

D. Joe Olmi, Ph.D., Chair  
Department of Psychology

---

Ellen Weinauer, Ph.D., Dean  
Honors College

## Abstract

Pathological and non-pathological dimensions of narcissism are correlated with indices of adolescent internalizing symptoms and externalizing behaviors, especially in the context of peer relationships. The current study examined 219 (181 females, 38 males) 18 year-olds' perceptions of their friendships, including closeness, cooperation, competitiveness, and friendship quality in relation to pathological (i.e., grandiose, vulnerable) and non-pathological (i.e., normal) narcissism. Data were collected through online, self-report questionnaires. Grandiose narcissism was significantly correlated with perceived closeness, cooperation, and competitiveness but not with friendship quality. Vulnerable narcissism was significantly positively correlated with perceived competitiveness but unassociated with perceptions of closeness, cooperation, and friendship quality. Non-pathological narcissism was positively correlated with perceived competitiveness, negatively correlated with cooperation, and unassociated with closeness and friendship quality. Hypothesized findings concerning gender were not supported. The current findings suggest that grandiose narcissism is associated with reporting favorable perceptions of friendships, whereas vulnerable and non-pathological narcissism were each associated with a sense of competitiveness in friendships. Implications of the findings, limitations, and direction for future research are discussed.

Key words: narcissism, friendships, competitiveness, cooperation, closeness, personality

## **Dedication**

I dedicate my honors thesis to my family and friends. Thanks, Emmanuel and Theresa Amadi, for supporting me throughout my undergraduate career and providing great care which enables me to excel in my academics. I also want to give thanks to my little sister, Sherrie, for proofreading and providing feedback on my thesis. To my older brother, Henry, thanks for the encouragement to do my best in what I do.

## **Acknowledgements**

I would like to express thanks to Dr. Christopher T. Barry for advising me through the process of completing this study. His time, effort, and concern put towards my study are very much appreciated. This research and thesis would not be possible without Dr. Barry's commitment and scholarly feedback. Words truly cannot express how grateful I am to have had Dr. Barry as my research advisor. Thank you, Dr. Chris Barry.

In addition, I would like to thank the psychology faculty under whom I have taken courses at Southern Miss and the psychology department staff who have been of great support. The support and advice that I received from my professors and staff members was extraordinary. Last, but not least, I want to thank the Honors College faculty and staff. The Honors College support is one like no other, and the choice to be an honors student and conduct my study has been one of the best decisions of my undergraduate academic career.

Many thanks also goes to Garret Ashley from the University of Southern Mississippi's writing center, members of the Youth Personality and Behavior lab, and fellow lab members Hannah Doucette and Chris Gillen for assisting with my honors thesis. Thanks everyone for everything that you do.

## Table of Contents

List of Tables .....	viii
List of Abbreviations .....	ix
Statement of the Problem.....	1
Review of Literature .....	2
Narcissism.....	2
Pathological and Non-Pathological Narcissism.....	3
Narcissism and Perceived Closeness, Cooperation, and Competitiveness .....	9
Narcissism, Gender, Adolescent Friendships, and Friendship Quality .....	11
Current Study .....	13
Hypothesis.....	13
Methods.....	15
Participants.....	15
Materials .....	15
Procedures.....	18
Data Analyses .....	18
Results.....	18
Discussion.....	20
Limitations .....	23
Future Directions .....	25
References.....	27
Appendices.....	39



## List of Tables

Table 1: Descriptive Statistics .....	39
Table 2: Bivariate Correlations .....	40
Table 3: Bivariate Correlations by Gender: Males .....	41
Table 4: Bivariate Correlations by Gender Females.....	42

## List of Abbreviations

PNI	Pathological Narcissism Inventory
NPIC	Narcissistic Personality Inventory for Children
NPI	Narcissistic Personality Inventory
IFS	Intimate Friendship Scale
CCAS	Competitive-Cooperative Attitude Scale
FQS	Friendship Quality Scale
<i>r</i>	Pearson linear correlation coefficient
<i>b</i>	regression coefficient
<i>se</i>	standard error
<i>p</i>	p value
e.g.	“for example”
et al.	“and others”

# Narcissism and Late Adolescent Friendships: Perceived Closeness, Cooperation, Competitiveness, and Friendship Quality

## Statement of the Problem

“Just because I hate everyone doesn’t mean they have to hate me too”

-*Santana Lopez* (Glee, 2011)

Why is it that some individuals believe in disparaging others while at the same time expecting adoration? Individuals who have this attitude possess traits of narcissism, which is a personality style that may impede an individual’s effort to grasp the social and emotional consequences of their arrogant behavior. Narcissism, which is also characterized by an inflated self-concept and interpersonal exploitation, has been related to a number of adolescent behavioral, social, and emotional difficulties (e.g., Kerr, Patton, Lapan, Hills, 1994; Thomaes, Bushman, Stegge, & Olthof, 2008). For instance, adolescent narcissism has been associated with aggression and delinquency (Barry, Pickard, & Ansel, 2009), conduct problems (Barry, Frick, Killian, 2003; Ha, Petersen, & Sharp, 2008), peer nominated relational aggression (Golmaryami & Barry, 2010), and anxiety (Barry & Malkin, 2010). Research supporting the association between narcissism and adolescents’ behavioral, emotional, and peer problems is emerging, but the impact narcissism may have on more intimate relationships, such as friendships, in late adolescence should be considered.

The embodiment of self-centeredness and superiority may pose adolescents with difficulty in sustaining positive peer relations due to the disconnection between reality and grand self-perceptions. As adolescents reach the stage of development in which intimate peer relationships are desired and fostered, a predilection for narcissism may, overtime, engender conflict, tumult, and superficial relationships which may in turn affect

aspects of emotional health and interpersonal well-being. The current study evaluated the relations among late adolescent narcissism and perceived closeness, cooperation, and competitiveness to assess the impact of narcissism on the perceived quality of friendships. These variables have not been previously investigated in association with different dimensions of narcissism and late adolescent friendships and were empirically tested in the current study. Such an examination should help provide a further understanding of the interplay between narcissism and how individuals approach friendships prior to adulthood.

## **Literature Review**

### **Narcissism**

Narcissism, which is characterized by an inflated self-concept, has gained attention within personality and social psychology research, with research having clinical implications emerging (e.g., Carlson, Vazire, & Oltmanns, 2011; Dufner, Rauthmann, Czarna, & Denissen, 2013; Pincus et al., 2009). Empirical research on narcissism has been primarily conducted with adult samples, but it has recently expanded to children and adolescents (Barry & Wallace, 2010). However, narcissism in regards to adolescent development garnered much theoretical consideration from researchers in the 1990s (Bleiberg, 1994). To date, many studies using children and adolescents have focused on understanding non-pathological narcissism in terms of their associations with externalizing problems (i.e., delinquency, conduct problems, aggression) and internalizing symptoms (e.g., anxiety; Barry, Frick, Adler, & Grafeman, 2007; Barry et al., 2003; Barry & Malkin, 2010; Washburn, McMahon, King, Reinecke, & Silver, 2004). Additionally, researchers have examined the relation between narcissism and aspects of adolescents' interpersonal interactions that occur within a variety of social domains that

include residential programs (Golmaryami & Barry, 2010; Grafeman, Barry, Marcus, & Leachman, 2015), schools (Washburn et al., 2004), and social networking sites (Ong et al., 2011).

In addition to the variety of contexts in which narcissism has been examined, there are different facets of narcissism that have been discussed (e.g., Barry & Kauten, 2014; Pincus et al., 2009), and they may have dissimilar influences on adolescents' interpersonal relationships, particularly friendships. Particular features of these dimensions of narcissism may also be associated with a sense of closeness, cooperation, or competitiveness, all of which can exist simultaneously in close relationships (Shulman & Knafo, 1997). Nonetheless, the overall goal of the study was to examine the different dimensions of adolescent narcissism and their relation with perceptions of friendships, an examination that is novel within the adolescent narcissism literature.

### **Pathological and Non-Pathological Narcissism**

Pathological narcissism is a construct of narcissism that has been differentiated into grandiose and vulnerable dimensions consisting of distinct features and having somewhat different correlates (Dickinson & Pincus, 2003; Miller, Hoffman, Gentile, Wilson, & Campbell, 2013; Miller et al., 2011; Wink, 1991). In terms of theoretical delineations, grandiose narcissism is characterized by exploitativeness, dominance, exhibitionism, and superiority, whereas vulnerable narcissism is characterized by fragile self-esteem masked by a self-inflated image, entitlement rage, anxiety, and sensitivity to interpersonal threats.

Individuals with high levels of grandiose narcissism tend to be involved in ostentatious and pompous behaviors and have self-perceptions that exaggerate their true

abilities or characteristics (Gabriel, Critelli, & Ee, 1994). Interpersonally, grandiose narcissism is thought to involve an intense need for validation and admiration from others and is related to vindictive, domineering, and over-nurturing behaviors (Pincus, 2013). Individuals with characteristics of grandiose narcissism also openly display a power orientation which fosters a sense of superiority to others (Wink, 1991). However, past research has shown that individuals high in grandiose narcissism are able to rouse initial interest from others who essentially reinforce the attention-seeking attributes of narcissism (Back, Schmukle, & Egloff, 2010; Wink, 1991). Wink (1991) noted this association in his research when delineating two faces of narcissism, suggesting that individuals with grandiose narcissism “impress others, although not always favorably, due to their outgoingness, self-assurance, forcefulness, and need to be admired” (p.596). Characteristics as such may fulfill particular needs during adolescence when self-esteem becomes more influenced by identity and level of social acceptance (Brown & Lohr, 1987; Valkenburg, 2006).

Earlier psychologists, including Erick Erikson postulated self-esteem as a critical aspect of development, especially during adolescence. According to Erikson (1956), adolescents’ maintenance of their self-esteem is a part of their developing ego identity and can be a reason adolescents place much emphasis on idealizing, attracting, or garnering attention and admiration from others. Adolescents with features of grandiose narcissism may exaggerate their developing ego identity through overt behaviors (e.g., bullying, emphasis on outer appearance) and seek recognition from others to be seen as self-assured, impressionable, and unique.

Despite the importance of others' attention and adulation, competitive tasks that involve achievement rewards may be even more important than interpersonal relatedness for individuals with grandiose narcissism (Besser & Priel, 2010). For example, in threatening situations, grandiose narcissism is associated with stronger negative emotional reactions toward threats involving achievement failure than threats of interpersonal rejection (Besser & Priel, 2010). Therefore, it has been suggested that individuals with grandiose narcissism may value the role that competition has on maintaining and enhancing self-esteem while undervaluing domains that require social approval (e.g., closeness, cooperation; Besser & Priel, 2010). However, competition from a close partner was also shown to deteriorate interpersonal relationship closeness for individuals high in grandiose narcissism. Besser and Priel's (2010) findings are consistent with the independent self-construal concept that individuals high in narcissism have a high self-focus (i.e., independence, self-enhancement) combined with low other-focus (Konrath, Bushman, & Grove, 2009). This tendency could, in turn, negatively affect interpersonal relationships insofar as it promotes a sense of competitiveness and lack of cooperation toward one's acquaintances.

On the other hand, individuals high in vulnerable narcissism are known to oscillate between feelings of superiority and inferiority. As noted above, vulnerable narcissism is characterized by fragile self-esteem, attachment anxiety, and negative affectivity and is associated with sensitivity to criticism and anxious concern about one's inadequacies (Morf & Rhodewalt, 2001; Pincus, 2013; Wink, 1991). Contrary to grandiose narcissism which is more observable, vulnerable narcissism is often referred to as a "hidden or covert narcissism,"- the narcissism manifested in passivity and sensitivity

in social interactions despite unwarranted feelings of an exaggerated sense of importance (Wink, 1991). When idealized expectations are not met, individuals high in vulnerable narcissism may tend to shy away from others to circumvent the possibility of disappointment (Dickinson & Pincus, 2003).

Narcissistic vulnerability was also studied by Efrain Bleiberg in effort to understand the tumultuous development and regulation of adolescents' self-esteem that made them susceptible to feelings of shame and passivity. According to Bleiberg (1994), "like no other stage of life, the passage through adolescence bears the hallmark of narcissistic vulnerability: a proneness to embarrassment and shame, acute self-consciousness and shyness, and painful questions about self-esteem and self-worth" (p. 31). Such narcissistic vulnerability is related to cold, socially avoidant, and exploitable interpersonal problems, and it often additionally manifests as experiences of anger and emptiness (Dickinson & Pincus, 2003; Morf & Rhodewalt, 2001).

Additionally, previous research has provided empirical evidence that vulnerable narcissism is often related to less socially competitive behaviors. For instance, individuals with high levels of vulnerable narcissism have been shown to be highly dependent on external feedback from others and are less equipped than individuals with grandiose narcissism to use self-enhancement strategies (Besser & Priel, 2010). In addition, negative reactivity to interpersonal rejection is more commonplace than achievement failure as a function of vulnerable narcissism, (Besser & Priel, 2010) and individuals with such characteristics do not have a strong affinity for competitive situations (Luchner, Houston, Walker, & Houston, 2011; Luchner, Mirsalimi, Moser, & Ones, 2008). However, in a study by Luchner and his colleagues (2011), covert



narcissism, similar to vulnerable narcissism, had a small but significant correlation with competitiveness. These results suggested that individuals with vulnerable narcissism are competitive but that they do not emphasize the importance of competition. Rather, cooperation would be an ideal motive so that negative responses from others are minimized and positive responses are reinforced.

Research has also described non-pathological or “normal” narcissism, a conceptualization that is the focus of much of the adult personality-social literature and is becoming of interest in studies of youth (Barry, Pickard, & Ansel, 2009; Miller & Campbell, 2008). Normal narcissism is measured along a continuum of traits (e.g., authority, superiority, exhibitionism, entitlement, exploitativeness) by the NPI and Narcissistic Personality Inventory for Children (NPIC; see Barry et al., 2003). A relatively high level of normal narcissism, however, does not necessarily indicate the presence of narcissistic personality disorder or ill psychological health (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). Certain components of the NPI, including the Self-Sufficiency and Authority scales are often considered “adaptive” traits of narcissism due to their associations with positive mental health outcomes. Conversely, components such as the Entitlement and Exploitativeness scales are primarily associated with “maladaptive” features that related to negative indicators of psychosocial functioning (Raskin & Terry, 1988; Wink, 1991).

Individuals high in normal narcissism usually have high expectations for themselves (Farwell & Wohlwend-Lloyd, 1998), enjoy ego-relevant tasks that bolster their positive self-views (Morf, Weir, & Davidov, 2000), and seek dominance in interpersonal relationships (Brown & Zeigler-Hill, 2004). Fixation on seeking and

deserving special attention (Gabriel et al., 1994) often conjoins with a dismissal of disconfirming information, resulting in an exaggerated self-image (Gosling, John, Craik, & Robins, 1998). Often, individuals with these tendencies also overestimate the desirability of their behavior, believing that others admire them in positive ways just as they admire themselves (Gosling et al., 1998). As a consequence, the disconnection between reality and perceived self creates a platform for conflict with others.

As described by Sedikides et al. (2004), individuals high in normal narcissism “disregard the possibility that their self-promoting tactics constitute a slight against others” (p.401). Eventually, these individuals may degrade or belittle others while inflating their own self-esteem, resulting in strained relationships (Campbell, Reeder, & Sedikides, 2000). Thus, the discrepancy between the elevated self-perceptions that are connected to narcissism and the perceptions of others is suggestive of potential conflicts in interpersonal communication. Such conflict negatively affects the quality of friendships and emotional adjustment in adolescents (Demir & Urberg, 2004).

To further understand narcissism’s impact on the quality of adolescent friendships, the current study investigated the relation between the different dimensions of narcissism and perceptions of closeness, cooperation, and competitiveness. It is important that narcissism be examined in friendships given that friendships are an interpersonal resource outside of the family circle in which adolescents learn interpersonal skills that can be useful in forming and maintaining meaningful relationships. Friendships also may pose as a protective barrier against internalizing symptoms such as anxiety and foster positive social adjustment and psychological well-being (Demir & Urberg, 2004; Page-Gould, Mendoza-Denton, & Tropp, 2008).

## **Narcissism and Perceived Closeness, Cooperation, and Competitiveness**

Interpersonal skills are essential for self-efficacy and social competence (Gist, Stevens, & Bavetta, 1991). The need to further understand common aspects of interpersonal relationships (e.g., closeness, cooperation, competitiveness) among adolescents is apparent but still relatively absent in empirical research, particularly as it relates to adolescent personality. Closeness, cooperation, and competitiveness often co-occur in relationships, but their differences are noteworthy (Schneider, Dixon, & Udvari, 2007; Tauer & Harackiewicz, 2004). Closeness is a feeling of strong, frequent interconnectedness with others, and cooperation is the action that builds a connection with others as a result of being willing to consider the welfare of others (Cremer & Tyler, 2005). Competitiveness, a more antagonistic construct, involves a desire to gain an upper hand in interpersonal situations (Helmreich & Spence, 1978). Collectively, closeness, cooperation, and competitiveness can have differing effects on the quality and dynamics of adolescents' interpersonal relationships, but the effects of each can either be more salient or suppressed when considering the role of personality factors such as narcissism in promoting these features of friendships.

Perceptions of being close to others become increasingly important in adolescents' relationships (Berndt, 1982; Buhrmester, 1990). From childhood to adolescence, friendships become of significant value as the amount of time peers spend together increases (Buhrmester, 1990). This period of development is also when closeness to friends involves increasing self-disclosure and engagement in mutual activities (Dolgin & Kim, 1994). In adolescent friendships, qualities such as closeness, self-disclosure, coherence, and trust can enrich self-expression, self-esteem, and

psychological health (Berndt, 2002). From a neurological perspective, Masten, Telzer, Fuligni, Lieberman and Eisenberger (2012) concluded that time spent with friends in adolescence was related to less neural sensitivity in later peer rejection. Thus, evidence suggests that time spent with friends, presumably an indicator of closeness to them, can promote a sense of acceptance and resiliency.

The social interdependence theory is a model of interactions and goal achievements between individuals and postulates that goal structure (e.g., cooperation, competition, or to achieve closeness) determines how individuals interact (Johnson & Johnson, 2005). According to this model, interdependence occurs when individuals share common goals and when each individual's goal is dependent on the action of the other(s). When individuals cooperate or compete on a task or within a relationship, each individual's behavior has an impact on the task or relationship at hand. Adolescents who structure their goals to cooperate with others benefit from higher achievement and positive peer relationships relative to if competitive goals are pursued (Roseth, Johnson, & Johnson, 2008). Individuals with narcissistic traits can be cooperative as well, but they are likely to use cooperation with others as a strategy for self-enhancement, thus presumably not reaping the interpersonal benefits noted by the social interdependence theory (Campbell et al., 2005). When there is not an opportunity for self-enhancement, individuals with high levels of narcissism are less likely to cooperate or be helpful (Wallace & Baumeister, 2002).

Competitiveness is another approach that clearly affects adolescents' interpersonal relationships (Hibbard & Buhrmester, 2010). Some research has indicated that adolescents view competition negatively in their relationships, specifically in

friendships (Rizza & Reis, 2001). Fortunately, research has also shown that competition in adolescent friendships is not always damaging and that friendships often remain intact after experiencing interpersonal stress (Remillard & Lamb, 2005). For male friendships, particularly, competition may not be detrimental as compared to female friendships (Schneider, Woodburn, del Pilar Soteras del Toro, Udvari, 2005). Competition can encumber healthy adolescent friendships, but the durability of friendships is evident when friends are able to handle competition (Berndt, Hawkins, & Hoyle, 1986). However, narcissism can increase the negative impact of competition in a friendship by producing exploitation and reduced closeness (Nicholls & Stukas, 2011). In one study, Nicholls and Stukas (2011) informed participants that their friend performed better or equivalently on a “competitive spirit” test. The researchers found that individuals with high levels of narcissism significantly reduced their relationship closeness after the threat of being outperformed but did not exhibit a reduction in the importance of competition to their self-esteem. These studies provide evidence that competitiveness is a central feature of narcissism, as individuals with narcissistic tendencies use competition as a means of demonstrating and maintaining their sense of superiority.

### **Narcissism, Gender, Adolescent Friendships, and Friendship Quality**

Earlier studies of narcissism and friendships have considered gender differences. Across cultures, males generally score higher in narcissism than females (Foster, Campbell & Twenge, 2003). As previously discussed, narcissism is positively related to competitiveness, and males additionally score higher in competitiveness than females (Cheng & Chan, 1999; Schneider et al., 2005). For example, a study conducted by Schneider and his colleagues (2005) found that females were less competitive than males,

and that competition in males' friendships may provide opportunities for companionship. Presumably, males' friendships tend to be less harmfully affected by competition than females' friendships. From this assertion in McGuire's (2014) research, "it is plausible that competitive males can expect other males to be competitive, resulting in less interpersonal conflict" (p.18). Females, on the other hand, are more likely to report higher levels of closeness in their friendships than males (Cheng & Chan, 1999). Females' friendships have been shown to be based more on self-disclosure and intimacy (Rose, 2002), and competition may be injurious to such friendships. Because narcissism is related to some traits that are traditionally considered more masculine than feminine (e.g., authority, independence; Bem, 1975), females with high levels of narcissism, including exuding competitiveness, may endure interpersonal consequences that may negatively affect their friendships.

Although a relatively new area of empirical research, some findings have emerged concerning narcissism and qualities of adolescents' friendships. In a sample of Chinese adolescents whose ages ranged from 12 to 19, narcissism and adolescent friendship qualities were related to some notable gender differences (Zhou, Li, Zhang, & Zeng, 2012). Specifically, males scored higher in narcissism than females, and narcissism was positively correlated with three friendship qualities (i.e., trust & support, validation, and disclosure & communication) for males, whereas no correlations were found between narcissism and these friendship qualities among females. Consistent with previous research, boys were more narcissistic than girls. This study suggests that narcissism in males is a more normative personality trait associated with certain qualities (i.e., competitiveness) that, for them, often provide opportunities for camaraderie. In an effort

to further examine this issue, the current study considered whether narcissism differentially relates to perceived competitiveness for males and females. In addition, the impact of narcissism, competitiveness, and gender on perceived closeness in friendships was investigated.

### **The Current Study**

This current study examined the relation between multiple dimensions of narcissism (i.e., grandiose, vulnerable, normal/non-pathological) and how late adolescents perceive feelings of closeness, cooperation, competitiveness, and friendship quality. Gender was considered in this study, as it has been found to moderate the relation between adolescent narcissism and friendship qualities (Zhou et al., 2012). It is important to understand self-perception variables such as narcissism in conjunction with specific perceptions of relationships, as narcissism has been shown to play a role in behavioral problems such as aggression, including from the perspective of peers (Golmaryami & Barry, 2010). Late adolescence, which was emphasized in the current study, parallels early and mid-adolescence based on the importance of friendships, social adjustment, and psychological well-being (Almquist, Östberg, Rostila, Edling, & Rydgren, 2014; Burk & Laursen, 2005; Waldrip, Malcolm, & Jensen-Campbell, 2008). Whether an adolescent is in the span of early, mid, or late adolescence, interpersonal communication is important, and friends become a critical resource for social support and the development of social skills.

### **Hypotheses**

The primary hypothesis predicted that different dimensions of narcissism would have different correlations with perceived closeness, cooperation, and competitiveness in

late adolescent friendships. Hypothesis 1 was that grandiose narcissism would be positively associated with perceived closeness, cooperation, competitiveness, and friendship quality given the possibility that grandiose narcissism typically relates negatively to a presentation of distress or anxiety and is often related to perceptions of positive interpersonal interactions as well as dismissive attitudes in adults (Dickinson & Pincus, 2003). Hypothesis 2 predicted that vulnerable narcissism would be positively associated with perceived cooperation and competitiveness and negatively correlated with perceived closeness and friendship quality, as vulnerable narcissism and competitiveness have been shown to be negatively related (Luchner et al., 2011).

For Hypothesis 3, it was expected that normal (i.e., non-pathological) narcissism would be more related to perceived closeness, cooperation, competitiveness, and friendship quality based on the associated tendency to seek dominance in relationships while also perceiving that relationships are relatively positive (e.g., Barry & Wallace, 2010). It was expected for Hypothesis 4 that grandiose and normal narcissism would be related to perceived competitiveness for females because females' friendships are commonly characterized as being close and less competitive (Cheng & Chan, 1999; Rose, 2002). However, given that individuals with grandiose and normal narcissistic traits tend to be competitive, females with relatively high levels of such traits may perceive a sense of competitiveness in their friendships. Therefore, for Hypothesis 5, competitiveness was expected to diminish perceptions of closeness for females but not for males given the relative normalcy of competitiveness in adolescent male friendships (Cheng & Chan, 1999; Schneider et al., 2007; Schneider et al., 2005). Hypothesis 6 predicted that pathological narcissism would be negatively related to friendship quality for females



because female friendships are constituted by intimacy, self-disclosure, and reciprocation (Buhrmester, 1990), and pathological narcissism includes features such as shielding one's perceived weaknesses from others, self-esteem that is highly contingent on others' feedback, and emotional reactivity to perceived slights from others (e.g., Pincus et al., 2009).

## **Method**

### **Participants**

Participants were 219 students (181 females, 38 males), all 18 years of age, attending a four-year university located in the Southeastern region of the United States. Racial/ethnic groups of the participants included Caucasian (64.1%), African American (26.8%), Hispanic/Latino (1.8%), Asian/Pacific Islander (3.6%), and Other (3.2%). There was a mandated age restriction of 18 years of age so that the age of participants would most closely approximate late adolescence. Students were enrolled in an undergraduate psychology course and were eligible to receive course credit or extra credit for participation in the study.

### **Materials**

*Demographic information.* The participants completed a demographic questionnaire to document their age, gender, and race. This information was used for descriptive purposes, with gender also serving as a moderator variable.

*Pathological Narcissism Inventory* (PNI; Pincus et al., 2009). The PNI was used to measure grandiose and vulnerable narcissism. There are 52 self-report items on the PNI that assess 7 dimensions of pathological narcissism that deal with grandiose narcissism (Exploitativeness, Grandiose Fantasy, Self-sacrificing Self-enhancement) and

vulnerable narcissism (Contingent Self-esteem, Hiding the self, Devaluing, Entitlement Rage; Pincus et al., 2009). Items on the PNI include statements such as “I often fantasize about being admired and respected” and “I am disappointed when people don’t notice me.” The dimensions of the PNI have been supported via factor analysis (Pincus et al., 2009; Wright, Lukowitsky, Pincus & Conroy, 2010). In the present study, the internal consistency of the Grandiose Narcissism scale was  $\alpha = .90$  and for the Vulnerable Narcissism scale was  $\alpha = .95$ .

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

Normal, or non-pathological, narcissism was assessed by the NPIC. The NPIC is a derivative of the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) that is widely used in adult populations. The NPI measures non-pathological narcissism (Miller & Campbell, 2008), and the NPIC also uses analogous items to assess narcissism in child and adolescent populations (Barry et al., 2003). The NPIC contains 40 self-report forced-choice items in which respondents choose one statement from a pair (e.g. “I prefer to blend in with the crowd” or “I like to be the center of attention”). Respondents are additionally asked to rate their chosen statement as “sort of true” or “really true.” The NPIC has shown good construct validity (Barry et al., 2003) and has been instrumental in research on child and adolescent narcissism (e.g., Barry et al., 2007; Barry & Wallace, 2010; Golmaryami & Barry, 2010). The internal consistency of the NPIC in the present sample was  $\alpha = .86$ .

*Intimate Friendship Scale* (IFS; Sharabany, 1994). The IFS measured the respondents’ perceptions of closeness in their friendships. The IFS targets dyad pairs and respondents were asked to answer questions based on their feelings toward a specific

same-gender friend. There are two versions of the IFS: a version each for boys and girls. The scales consist of 32 items that measure eight qualities of closeness in friendships. Factors represented in the measure include Frankness/Spontaneity, Trust/Loyalty, Imposition, Exclusiveness, Attachment, Giving/Sharing, Common Activities, and Sensitivity/Knowing. Statements on the IFS are rated on a 7-point scale from “Strongly agree” to “Strongly disagree.” Example items include “I feel close to my friend” and “I offer my friend the use of my things (like clothing, possessions, food, etc.)” Previous research using the IFS has deemed it reliable in measuring intimacy and closeness in friendships (Cordeiro, 2005; Sharabany, Eshel, & Hakim, 2008). The internal consistency of the overall closeness score in this sample was  $\alpha = .97$ .

***Competitive-Cooperative Attitude Scale (CCAS; Martin & Larsen, 1974).***

Perceptions of cooperation and competitiveness were assessed by the CCAS. The CCAS gauges respondents’ general attitudes toward competitive and cooperative behaviors within interpersonal situations. For the study, the CCAS was analyzed in reference toward the adolescents’ perceptions of competitiveness and cooperation in regards to their friendships. There are 28 items on the CCAS, and items are scored on a Likert scale. Sample items include “It is alright to do something to someone to get even,” “I don’t trust many people,” and “Teamwork is really more important than who wins.” The internal consistency of the combined scores for the cooperation items was  $\alpha = .78$ , whereas the internal consistency for competitiveness was  $\alpha = .89$ .

***Friendship Quality Scale (FQS; Bukowski, Hoza, & Boivin, 1994).*** The FQS measured the participants’ perceptions of the overall quality of their friendships. There are two versions; one for males and one for females. The items on the FQS target dyad

pairs, and respondents are required to answer in reference to a specific, same-gender friend. The FQS consists of 46 items in which respondents are to rate according to a Likert-scale: 1 (Probably not true), 2 (Might be true), 3 (Usually true), 4 (Very true), and 5 (Really true). Example items include: “Things are pretty even in my friendship” and “My friend would help me if I needed it.” The internal consistency of this measure in the present sample was  $\alpha = .91$ .

### **Procedure**

IRB approval was obtained before data collection began. Subsequently, participants were recruited through a university psychology research participation system. Participation was voluntary, and students were able to withdraw from the study at any time. The participants were able to complete the questionnaires on their own schedule as long as they completed the study before the end of the semester. The PNI, NPIC, IFS, CCAS, and FQS were converted to an online format using Qualtrics Survey Software. Links to the questionnaires were distributed to the participants via the psychology research participation system.

### **Data Analyses**

Hypotheses 1-4, and 6 were examined via correlations. Hypothesis 5 was examined via a multiple regression model.

### **Results**

Descriptive statistics for the study variables are reported in Table 1, and bivariate correlations are reported in Tables 2 for the entire sample, whereas Table 3 reports correlations for males, and Table 4 reports correlations for females. Hypothesis 1 stated that grandiose narcissism would be significantly, positively correlated with perceived

closeness, cooperation, and competitiveness, and friendship quality. The grandiose dimension of pathological narcissism was significantly, positively correlated with perceived closeness,  $r = .26, p < .001$ , cooperation,  $r = .16, p = .019$ , and competitiveness,  $r = .38, p < .001$ , but not with friendship quality,  $r = .01$ . Hypothesis 2 stated that vulnerable narcissism would be significantly, positively correlated with perceived cooperation and competitiveness and negatively correlated with closeness. Vulnerable narcissism was significantly, positively correlated with competitiveness,  $r = .49, p < .001$ , but not with closeness,  $r = .08$ , cooperation,  $r = .02$ , or friendship quality,  $r = -.01$ .

Hypothesis 3 predicted that non-pathological narcissism would be significantly, positively correlated with perceived closeness, cooperation, competitiveness, and friendship quality. Non-pathological narcissism was significantly, positively correlated with perceived cooperation,  $r = -.16, p = .021$ , and competitiveness,  $r = .58, p < .001$ , but not with perceived closeness,  $r = -.05$ , or friendship quality,  $r = -.04$ . Hypothesis 4 stated that grandiose and normal narcissism were expected to be related to perceived competitiveness for females. However, the correlation was significant for both males,  $r = .54, p < .001$ , and females,  $r = .33, p < .001$ .

To test Hypothesis 5, multiple regression analyses were conducted separately for grandiose, vulnerable, and non-pathological narcissism as predictors. In these three models, the narcissism variable and gender were entered in to the first step followed by the addition of the interaction term between the two variables in the subsequent step. These analyses resulted in no significant gender by narcissism interaction effect for predicting competitiveness,  $b = .72, se = 1.9, p = .07$ .

Hypothesis 6 predicted that grandiose and vulnerable narcissism would be negatively related to the perceptions of overall friendship quality for females. However, grandiose,  $r = .01$ , and vulnerable narcissism,  $r = -.02$ , were not significantly associated with friendship quality for females. Likewise, grandiose,  $r = .04$ , and vulnerable narcissism,  $r = .04$ , did not significantly correlate with perceptions of friendship quality for males.

### **Discussion**

The present findings indicate some interesting relations concerning narcissism and perceptions of closeness, cooperation, competitiveness, and friendship quality during late adolescence. Broadly, these results reflect the complexity of narcissism based on its distinct dimensions. In the present study, grandiose narcissism was associated with perceived closeness, cooperation, and competitiveness in friendships. This finding is consistent with research that has suggested that individuals high in grandiose narcissism may perceive events and relationships in different ways that may also reflect different strategies in managing relationships with others. For example, grandiosity may be tied to both cooperating and competing with others as a means to bolster self-esteem (Campbell et al., 2005). A self-regulatory processing model formulated by Morf and Rhodewalt (2001) also postulates that individuals high in narcissism strive to construct and sustain a positive self-worth and self-esteem which coincides with perceiving closeness.

The association between grandiose narcissism and competitiveness align well with Luchner et al. (2011)'s findings on overt narcissism and general competitiveness. These findings support the theoretical and conceptual link between competitiveness and grandiose narcissism, suggesting that individuals high in grandiose narcissism maintain a

competitive attitude and pursue competitive tasks to showcase their abilities. Contrary to the hypothesis, grandiose narcissism was not associated with perceived friendship quality. Individuals high in grandiose narcissism use multiple interpersonal strategies for recognition, whether it may be via competitive superiority, a dismissive attitude, or through continuously seeking attention. Such efforts toward recognition may hinder the quality of a stable and supportive friendship. Thus, an individual high in grandiose narcissism may consider him/herself as superior and seek reassurance about his or her attractiveness, skills, or social status from a friend in a manner that undermines a quality friendship of mutual support.

In the present study, vulnerable narcissism was positively associated with competitiveness and unassociated with perceived closeness, cooperation, and friendship quality. Theoretical support for the relation between competitiveness and vulnerable narcissism was unclear prior to the present study. Much of the relevant literature has focused on covert narcissism (Luchner et al., 2008, Luchner et al., 2011, Malkin, Barry, & Zeigler-Hill, 2011). Vulnerable narcissism and covert narcissism measure a similar construct of vulnerability and fragile self-esteem (Hendin & Cheek, 1997; Pincus et al., 2009; Wink, 1991). The present study focused on a general competitive attitude, but previous survey research has established a negative association between covert narcissism and general competitiveness and positive association with hypercompetitiveness (i.e., a need to win and enhance self-worth regardless of the means; Luchner et al., 2011). Such findings indicate that the association between competitiveness and vulnerable narcissism is unclear.

Non-pathological narcissism, referred to as normal narcissism, was positively associated with perceived competitiveness and negatively associated with cooperation. From previous survey and experimental research, the correlation between competitiveness and normal narcissism is not surprising (Campbell et al., 2005; Luchner et al., 2011). In addition, research using the NPI, has linked narcissism to cooperation but in relation to opportunities for self-aggrandizement rather than a general attitude of cooperation in friendships (Campbell et al., 2005). It is plausible that normal narcissism and cooperation were negatively associated in the present study because this form of narcissism involves a preoccupation with status over others (Barry et al., 2003), and a cooperative attitude toward friends may be viewed as undermining efforts toward status gains.

Counter to an additional prediction, non-pathological narcissism was not significantly associated with perceived closeness. Although non-pathological narcissism has been used in research examining the grandiose component of narcissism, for the present sample, it did not produce a similar association with closeness as the Grandiose Narcissism scale of the PNI. Despite the hypothesis that non-pathological narcissism would be tied to inflated perceptions of friendships, including of closeness, the present study found no such tendency. It may be that the lack of intimacy and commitment associated with non-pathological narcissism (Campbell, Foster, & Finkel, 2002) may override any need self-aggrandizing by reporting closeness in friendships or to pursue closer connections for the benefits of others. This dimension of narcissism was also unassociated with friendship quality. Friendships not only involve a sense of agreeableness but also engagement in mutual activities and providing support, and



individuals high in normal narcissism often lack commitment and have been shown as not perceiving themselves in terms of agreeableness and morality (Campbell et al., 2002; Campbell, Rudich, & Sedikides, 2002). These tendencies may explain the lack of a relation between normal narcissism and friendship quality in the present study.

Gender was also a consideration in the relations under investigation in this study. However, the study demonstrated that females higher in grandiose and normal narcissism indicated a sense of competitiveness similar to the associations found for males. This finding illustrates that general personality factors such as narcissism may have an influence on competitiveness in friendships regardless of an individual's gender.

In contrast to the final hypothesis, pathological narcissism was unassociated with friendship quality for female friendships. Female friendships are often described as more intimate and close than male friendships, but personality traits such as grandiose and vulnerable narcissism could detract from such close relationships. The lack of a negative association between grandiose and vulnerable narcissism and female friendship quality call this theory into question.

### **Limitations**

A number of limitations within the present study should be considered. First, there is limited generalizability of the findings from the current sample, given that participants were all 18 years of age, attended a four-year university, and were enrolled in an introductory psychology course. The present sample also consisted of a higher number of female than male participants. For these reasons, female participants in the current sample may not be representative of the general population of older adolescents and

young adults. Additionally, all data were collected via self-report questionnaires. Thus, some of the associations may be due, in part, to shared-source variance.

Another limitation concerns the measurement of friendship quality using the IFS and FQS. The IFS and FQS, constructed by Sharabany (1994) and Bukowski et al. (1994), respectively, gauge children's and adolescents' friendship closeness and intimacy. Although several items from the IFS and FQS measured certain activities that could also be representative of late adolescents' friendships (e.g., "I feel free to talk to him/her about almost anything" from the IFS and "I can trust and rely upon my friend" from the FQS), some items were more relatable to children and early adolescents, such as this item from the FQS, "My friend and I play together at recess." The IFS and FQS are also tailored to examine the friendship quality of a same-gender dyad friendship and consisted of male and female versions. However, adolescents, especially late adolescents, often form cross-sex friendships (Kuttler, La Greca, & Prinstein, 1999). Therefore, the questionnaires used in the present study may have limited participants' choosing of a friendship (i.e., male or female) for reporting perceptions of friendship quality.

Similar to the concerns regarding the IFS and FQS, there are some potential issues in measuring cooperation and competitiveness via the CCAS. The CCAS measures a general cooperative and competitive attitude, not cooperation and competitiveness within a friendship. Although there may be validity in individuals' general attitudes translating to their functioning and behavior in interpersonal relationships (Triandis, 1979), it cannot be concluded that participants in the present study were actually directly cooperative or

competitive toward the same-gender individual about whom he or she rated perceptions of friendship quality.

### **Future Directions**

To address developmental issues on this topic, further studies should use a longitudinal approach. By assessing these constructs in the same participants over an extended period of time, the developmental processes involved in the relation between self-perception and perceptions of one's friendships can be more directly investigated. Also, given the current study's examination of only 18 year-old adolescents, broader age ranges, including younger and older participants, may give insights on narcissism and perceptions of closeness, cooperation, competitiveness, and friendship quality from a developmental standpoint.

Future studies could also use other methods such as observation. For example, observational methods in laboratory settings with tasks for friends to complete with competitive and cooperative behaviors may provide information that cannot be gleaned through relying on one's self-report. Finally, the examination of adolescent narcissism in relation to perceived closeness, cooperation, competitiveness, and friendship quality in a variety of populations, including individuals of a broader age group is needed. Because the sample consisted of students from a four-year university, more research should be conducted on other populations such as atypical and at-risk adolescents.

Research in the area of adolescent narcissism is important because an adolescent's personality and self-esteem can influence behavior around, and relationships with, others such as family and peers (Jensen-Campbell et al., 2002; Selfhout et al., 2010; South, Krueger, Johnson, & Iacono, 2008). Moreover, research regarding adolescent friendships

is imperative because friends become an influence on behavior and evolve into a vital component of one's social support system during this developmental period (Buhrmester, 1990; Rose, 2002). This information would be useful in informing personality factors that relate to, or influence, adolescents' perceptions of peer relationships and to shape interventions aimed at improving antagonism in the context of interpersonal relationships.

## References

- Almquist, Y. B., Östberg, V., Rostila, M., Edling, C., & Rydgren, J. (2014). Friendship network characteristics and psychological well-being in late adolescence: Exploring differences by gender and gender composition. *Scandinavian Journal of Public Health, 42*, 146-154.
- Back, M. D., Schmukle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight? Decoding the narcissism–popularity link at zero acquaintance. *Journal of Personality and Social Psychology, 98*, 132-145. doi:10.1037/a0016338
- Barry, C. T., Frick, P. J., Adler, K. K., & Grafeman, S. J. (2007). The predictive utility of narcissism among children and adolescents: Evidence for a distinction between adaptive and maladaptive narcissism. *Journal of Child & Family Studies, 16*, 508-521. doi:10.1007/s10826-006-9102-5
- Barry, C. T., Frick, P.J., & Killian, A.L. (2003). The relation of narcissism and self-esteem to conduct problems in children: A preliminary investigation. *Journal of Clinical Child & Adolescent Psychology, 32*, 139-152.
- Barry, C. T., & Kauten, R. L. (2014). Non-pathological and pathological narcissism: Which self-reported characteristics are most problematic in adolescents? *Journal of Personality Assessment, 96*, 212-219.
- Barry, C. T., & Malkin, M. L. (2010). The relationship between adolescent narcissism and internalizing problems depends on the conceptualization of narcissism. *Journal of Research in Personality, 44*, 684-690.  
doi: <http://dx.doi.org/10.1016/j.jrp.2010.09.001>

- Barry, C. T., Pickard, J. D., & Ansel, L. L. (2009). The associations of adolescent invulnerability and narcissism with problem behaviors. *Personality and Individual Differences, 47*, 577-582. Retrieved from <http://dx.doi.org.logon.lynx.lib.usm.edu/10.1016/j.paid.2009.05.022>
- Barry, C. T., & Wallace, M. T. (2010). Current considerations in the assessment of youth narcissism: Indicators of pathological and normative development. *Journal of Psychopathology & Behavioral Assessment, 32*, 479-489. doi:10.1007/s10862-010-9188-3
- Bem, S. L., & Lewis, S. A. (1975). Sex role adaptability: One consequence of psychological androgyny. *Journal of Personality and Social Psychology, 31*, 634-643. doi:10.1037/h0077098
- Berndt, T. J. (1982). The features and effects of friendships in early adolescence. *Child Development, 53*, 1447-1460.
- Berndt, T. J. (2002). Friendship quality and social development. *Current Directions in Psychological Science, 11*, 7-10.
- Berndt, T. G., Hawkins, J.A., Hoyle, S.G. (1986). Changes in friendship during a school year: Effects on children's and adolescents' impressions of friendship and sharing with friends. *Child Development, 57*, 1284-1297.
- Besser, A., & Priel, B. (2010). Grandiose narcissism versus vulnerable narcissism in threatening situations: Emotional reactions to achievement failure and interpersonal rejection. *Journal of Social and Clinical Psychology, 29*, 874-902. doi:10.1521/jscp.2010.29.8.874

- Bleiberg, E. (1994). Normal and pathological narcissism in adolescence. *American Journal of Psychotherapy, 48*, 30-51.
- Brown, B. B., & Lohr, M. J. (1987). Peer-group affiliation and adolescent self-esteem: An integration of ego-identity and symbolic-interaction theories. *Journal of Personality and Social Psychology, 52*, 47-55. doi:10.1037/0022-3514.52.1.47
- Brown, R. P., & Zeigler-Hill, V. (2004). Narcissism and the non-equivalence of self-esteem measures: A matter of dominance? *Journal of Research in Personality, 38*, 585-592. doi: 10.1111/j.1467-6494.1991.tb00773.
- Buhrmester, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. *Child Development, 61*, 1101-1111
- Bukowski, W. M., Hoza, B., & Boivin, M. (1994). Measuring friendship quality during pre- and early adolescence: The development and psychometric properties of the Friendship Qualities Scale. *Journal of Social and Personal Relationships, 11*, 471-484. doi:10.1177/0265407594113011
- Burk, W. J., & Laursen, B. (2005). Adolescent perceptions of friendship and their associations with individual adjustment. *International Journal of Behavioral Development, 29*, 156-164. doi:10.1080/01650250444000342
- Campbell, W., Bush, C., Brunell, A. B., & Shelton, J. (2005). Understanding the social costs of narcissism: The case of the tragedy of the commons. *Personality and Social Psychology Bulletin, 31*, 1358-1368. doi:10.1177/0146167205274855
- Campbell, W. K., Foster, C. A., & Finkel, E. J. (2002). Does self-love lead to love for others?: A story of narcissistic game playing. *Journal of Personality and Social Psychology, 83*, 340-354. doi:10.1037/0022-3514.83.2.340

- Campbell, W. K., Reeder, G. D., Sedikides, C., & Elliot, A. J. (2000). Narcissism and comparative self-enhancement strategies. *Journal of Research in Personality, 34*, 329-347. doi: <http://dx.doi.org/10.1006/jrpe.2000.2282>
- Campbell, W. K., Rudich, E. A., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin, 28*, 358-368. doi:10.1177/0146167202286007
- Carlson, E. N., Vazire, S., & Oltmanns, T. F. (2011). You probably think this paper's about you: Narcissists' perceptions of their personality and reputation. *Journal of Personality and Social Psychology, 101*, 185-201. doi:10.1037/a0023781
- Cheng, S., & Chan, A. C. M. (1999). Sex, competitiveness, and intimacy in same-sex friendships in Hong Kong adolescents. *Psychological Reports, 84*, 45-48.
- Cordeiro, R. (2005). Physical appearance and intimate friendship in adolescence: A study using a Portuguese college student sample. *Social Behavior and Personality, 33*, 89-94. doi:10.2224/sbp.2005.33.1.89
- Cremer, D. D., & Tyler, T. R. (2005). Managing group behavior: The interplay between procedural justice, sense of self, and cooperation. *Advances in Experimental Social Psychology, 37*, 151-218. Retrieved from [http://dx.doi.org/10.1016/S0065-2601\(05\)37003-1](http://dx.doi.org/10.1016/S0065-2601(05)37003-1)
- Demir, M., & Urberg, K. A. (2004). Friendship and adjustment among adolescents. *Journal of Experimental Child Psychology, 88*, 68-82. Retrieved from <http://dx.doi.org/10.1016/j.jecp.2004.02.006>
- Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders, 17*, 188-207.



- Dolgin, K. G., & Kim, S. (1994). Adolescents' disclosure to best and good friends: The effects of gender and topic intimacy. *Social Development, 3*, 146-157.  
doi:10.1111/1467-9507.ep11631116
- Dufner, M., Rauthmann, J. F., Czarna, A. Z., & Denissen, J. A. (2013). Are narcissists sexy? Zeroing in on the effect of narcissism on short-term mate appeal. *Personality and Social Psychology Bulletin, 39*, 870-882.  
doi:10.1177/0146167213483580
- Erikson, E. (1956). The problem of ego identity. *Journal of the American Psychoanalytic Association, 4*, 56-421.
- Farwell, L. & Wohlwend-Lloyd, R. (1998). Narcissistic processes: Optimistic expectations, favorable self-evaluations, and self-enhancing attributions. *Journal of Personality, 66*, 65-83.
- Foster, J. D., Campbell, W. K., & Twenge, J. M. (2003). Individual differences in narcissism: Inflated self-views across the lifespan and around the world. *Journal of Research in Personality, 37*, 469-486. doi: 10.1016/S0092-6566(03)00026-6
- Gabriel, M. T., Critelli, J. W., & Ee, J. S. (1994). Narcissistic illusions in self-evaluations of intelligence, and attractiveness. *Journal of Personality, 62*, 143-155.
- Gist, M. G., Stevens, C.K., Bavetta, A.G. (1991). Effects of self-efficacy and post-training intervention on the acquisition and maintenance of complex interpersonal skills. *Personnel Psychology, 44*, 837-861.
- Golmaryami, F. T. (2010). The associations of self-reported and peer-reported relational aggression with narcissism and self-esteem among adolescents in a residential setting. *Journal of Clinical Child & Adolescent Psychology, 39*, 128-133.

- Gosling, S. D., John, O. P., Craik, K. H., & Robins, R. W. (1998). Do people know how they behave? Self-reported act frequencies compared with on-line codings by observers. *Journal of Personality and Social Psychology, 74*, 1337-1349.  
doi:10.1037/0022-3514.74.5.1337
- Grafeman, S. J., Barry, C. T., Marcus, D. K., & Leachman, L. L. (2015). Interpersonal perceptions of narcissism in an at-risk adolescent sample: A social relations analysis. *Journal of Research on Adolescence, 25*, 92-100.  
doi:10.1111/jora.12088
- Ha, C., Petersen, N.J. & Sharp, C. (2008). Narcissism, self-esteem, and peer problems: Implications for conduct problems in a community sample of 7-11 year old children. *European Journal of Child and Adolescent Psychiatry, 17*, 406-413.
- Helmreich, R. L., & Spence, J. T. (1978). Work and family orientation questionnaire: An objective instrument to assess components of achievement motivation and attitudes toward family and career. *JSAS Catalog of Selected Documents in Psychology, 8*, 35.
- Hendin, H.M., Cheek, J.M. (1997). Assessing hypersensitive narcissism: A reexamination of Murray's narcissism scale. *Journal of Research in Personality, 31*, 588-599. doi: 10.1006/jrpe.1997.2204
- Hibbard, D., & Buhrmester, D. (2010). Competitiveness, gender, and adjustment among adolescents. *Sex Roles, 63*, 412-424. doi:10.1007/s11199-010-9809-z
- Jensen-Campbell, L. A., Adams, R., Perry, D. G., Workman, K. A., Furdella, J. Q., & Egan, S. K. (2002). Agreeableness, extraversion, and peer relations in early

- adolescence: Winning friends and deflecting aggression. *Journal of Research in Personality*, 36, 224-251. doi:10.1006/jrpe.2002.2348
- Johnson, D. W. & Johnson, R.T. (2005). New developments in social interdependence theory. *Genetic, Social & General Psychology Monographs*, 131, 285-358.
- Kerr, A. E., Patton, M. J., Lapan, R. T., & Hills, H. I. (1994). Interpersonal correlates of narcissism in adolescents. *Journal of Counseling & Development*, 73, 204-210. doi:10.1002/j.1556-6676.1994.tb01737.x
- Konrath, S., Bushmann, B.J., Grove, T. (2009). Seeing my world in a million little pieces: narcissism, self-construal, and cognitive-perceptual style. *Journal of Personality*, 77, 1197-1228.
- Kuttler, A. F., La Greca, A. M., & Prinstein, M. J. (1999). Friendship qualities and social-emotional functioning of adolescents with close, cross-sex friendships. *Journal of Research on Adolescence*, 9, 339-366. doi:10.1207/s15327795jra0903\_5
- Lopez, S. (Performer). (2011). Prom queen [Television series episode]. Brennan, I., Loreto, D.D., Falchuk, B., Murphy, R. (Executive Producers), *Glee*. Los Angeles, CA: 20th Century Fox Television.
- Luchner, A. F., Houston, J. M., Walker, C., & Houston, M. A. (2011). Exploring the relationship between two forms of narcissism and competitiveness. *Personality and Individual Differences*, 51, 779-782. doi:10.1016/j.paid.2011.06.033
- Luchner, A. F., Mirsalimi, H., Moser, C. J., & Jones, R. A. (2008). Maintaining boundaries in psychotherapy: Covert narcissistic personality characteristics and psychotherapists. *Psychotherapy: Theory, Research, Practice, Training*, 45, 1-14. doi:10.1037/0033-3204.45.1.1

- Malkin, M. L., Barry, C. T., & Zeigler-Hill, V. (2011). Covert narcissism as a predictor of internalizing symptoms after performance feedback in adolescents. *Personality and Individual Differences, 51*, 623-628. doi:10.1016/j.paid.2011.05.031
- Martin, H. J., & Larsen, K. S. (1976). Measurement of competitive-cooperative attitudes. *Psychological Reports, 39*, 303-306. doi:10.2466/pr0.1976.39.1.303
- Masten, C. L., Telzer, E. H., Fuligni, A. J., Lieberman, M. D., & Eisenberger, N. I. (2012). Time spent with friends in adolescence relates to less neural sensitivity to later peer rejection. *Social Cognitive & Affective Neuroscience, 7*, 106-114. doi:10.1093/scan/nsq098
- McGuire, J. E. (2014). Competition and emotional closeness in early adolescent friendships: The role of domain importance and coping. *Dissertation Abstracts International, 74*.
- Miller, J., & Campbell, W.K. (2008). Comparing clinical and social-personality conceptualizations of narcissism. *Journal of Personality, 76*, 449-476.
- Miller, J. D., Gentile, B., Wilson, L., & Campbell, W. (2013). Grandiose and vulnerable narcissism and the DSM-5 pathological personality trait model. *Journal of Personality Assessment, 95*, 284-290. doi:10.1080/00223891.2012.685907
- Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Campbell, W. (2011). Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality, 79*, 1013-1042. doi:10.1111/j.1467-6494.2010.00711.x
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry, 12*, 177-196. doi:10.1207/S15327965PLI1204\_1

- Morf, C. C., Weir, C., & Davidov, M. (2000). Narcissism and intrinsic motivation: The role of goal congruence. *Journal of Experimental Social Psychology, 36*, 424-438.  
doi: <http://dx.doi.org/10.1006/jesp.1999.1421>
- Nicholls, E., & Stukas, A. A. (2011). Narcissism and the self-evaluation maintenance model: Effects of social comparison threats on relationship closeness. *Journal of Social Psychology, 151*, 201-212.
- Ong, E.Y., Ang, R.P., Ho, J.C., Lim, J.C., Goh, D.H., Lee, C.S., Chua, A.Y. (2011). Narcissism, extraversion, and adolescents' self-presentation on Facebook. *Personality and Individual Differences, 50*, 180-185. Retrieved from <http://dx.doi.org/10.1016/j.paid.2010.09.022>
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group friendship. *Journal of Personality and Social Psychology, 95*, 1080-1094.  
doi:10.1037/0022-3514.95.5.1080
- Pincus, A. L. (2013). The pathological narcissism inventory. In J. Ogronczuk (Ed.), *Understanding and Treating Pathological Narcissism*. Washington, DC: American Psychological Association.
- Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. C., & Levy, K. N. (2009). Initial construction and validation of the pathological narcissism inventory. *Psychological Assessment, 21*, 365-379. doi:10.1037/a0016530
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the narcissistic personality inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology, 54*, 890-902. doi:10.1037/0022-3514.54.5.890

- Remillard, A., & Lamb, S. (2005). Adolescent girls' coping with relational aggression. *Sex Roles, 53*, 221-229. doi:10.1007/s11199-005-5680-8
- Rizza, M. G., & Reis, S. M. (2001). Comparing and contrasting: Stories of competition. *Gifted Child Quarterly, 45*, 54-62. doi:10.1177/001698620104500108
- Rose, A. J. (2002). Co-rumination in the friendships of girls and boys. *Child Development, 73*, 1830-1843.
- Roseth, C. J., Johnson, D. W., & Johnson, R. T. (2008). Promoting early adolescents' achievement and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Psychological Bulletin, 134*, 223-246.  
doi:10.1037/0033-2909.134.2.223
- Schneider, B. H., Dixon, K., & Udvari, S. (2007). Closeness and competition in the inter-ethnic and co-ethnic friendships of early adolescents in Toronto and Montreal. *The Journal of Early Adolescence, 27*, 115-138. doi:10.1177/0272431606294822
- Schneider, B. H., Woodburn, S., del Pilar Soteras del Toro, M., & Udvari, S. J. (2005). Cultural and gender differences in the implications of competition for early adolescent friendship. *Merrill-Palmer Quarterly, 51*, 163-191.  
doi:10.1353/mpq.2005.0013
- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy?: Self-esteem matters. *Journal of Personality and Social Psychology, 87*, 400-416. doi:10.1037/0022-3514.87.3.400
- Selfhout, M., Burk, W., Branje, S., Denissen, J., van Aken, M., & Meeus, W. (2010). Emerging late adolescent friendship networks and Big Five personality traits: A

social network approach. *Journal of Personality*, 78, 509-538.

doi:10.1111/j.1467-6494.2010.00625.x

Sharabany, R. (1994). Intimate friendship scale: Conceptual underpinnings, psychometric properties and construct validity. *Journal of Social and Personal Relationships*, 11, 449-469. doi:10.1177/0265407594113010

Sharabany, R., Eshel, Y., & Hakim, C. (2008). Boyfriend, girlfriend in a traditional society: Parenting styles and development of intimate friendships among Arabs in school. *International Journal of Behavioral Development*, 32, 66-75.

doi:10.1177/0165025407084053

Shulman, S., & Knafo, D. (1997). Balancing closeness and individuality in adolescent close relationships. *International Journal of Behavioral Development*, 21, 687-702. doi:10.1080/016502597384622

South, S. C., Krueger, R. F., Johnson, W., & Iacono, W. G. (2008). Adolescent personality moderates genetic and environmental influences on relationships with parents. *Journal of Personality and Social Psychology*, 94, 899-912.

doi:10.1037/0022-3514.94.5.899

Tauer, J. M., & Harackiewicz, J. M. (2004). 'The effects of cooperation and competition on intrinsic motivation and performance': Correction to Tauer and Harackiewicz (2004). *Journal of Personality and Social Psychology*, 87, doi:10.1037/h0087892

Thomaes, S., Bushmann, B.J., Stegge, H., Olthof, T. (2008). Trumping shame by blasts of noise: Narcissism, self-esteem, shame, and aggression in young adolescents. *Child Development*, 79, 1792-1801.

- Triandis, H. C. (1979). Values, attitudes, and interpersonal behavior. *Nebraska Symposium on Motivation*, 27, 195-259.
- Waldrip, A. M., Malcolm, K. T., Jensen-Campbell, L.A. (2008). With a little help from your friends: The importance of high-quality friendships on early adolescent adjustment. *Social Development*, 17, 832-852.
- Wallace, H. M., & Baumeister, R. F. (2002). The performance of narcissists rises and falls with perceived opportunity for glory. *Journal of Personality and Social Psychology*, 82, 819-834. doi:10.1037/0022-3514.82.5.819
- Washburn, J. J., McMahon, S. D., King, C. A., Reinecke, M. A., & Silver, C. (2004). Narcissistic features in young adolescents: Relations to aggression and internalizing symptoms. *Journal of Youth & Adolescence*, 33, 247-260.
- Wink, P. (1991). Two faces of narcissism. *Journal of Personality and Social Psychology*, 61, 590-597. doi:10.1037/0022-3514.61.4.590
- Wright, A. G. C., Lukowitsky, M. R., Pincus, A. L., & Conroy, D. E. (2010). The higher order factor structure and gender invariance of the pathological narcissism inventory. *Assessment*, 17, 467-483. doi: 10.1177/1073191110373227
- Valkenburg, P. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *Cyberpsychology & Behavior*, 9, 584-590.
- Zhou, H., Li, Y., Zhang, B., & Zeng, M. (2012). The relationship between narcissism and friendship qualities in adolescents: Gender as a moderator. *Sex Roles*, 67, 452-462. doi:10.1007/s11199-012-0169-8



## Appendices

### Appendix A: Tables

Table 1  
*Descriptive Statistics*

	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>SD</i>	<i>Skewness</i>
Normal Narcissism (NPIC)	13	99	51	16	.18
Grandiose Narcissism (PNI)	.28	5.0	3.0	.84	-.09
Vulnerable Narcissism (PNI)	.00	5.0	2.4	.92	.01
Perceived Friendship Closeness (IFS)	32	256	182	42	-1.0
Cooperative Attitude (CCAS)	12	56	42	8.2	-.85
Competitive Attitude (CCAS)	20	140	65	23	.22
Perceived Friendship Quality (FQS)	84	287	202	28	-.59

Table 2  
*Bivariate Correlations*

	NPIC Normal	PNI Grandiose	PNI Vulnerable	IFS Closeness	CCAS Cooperative	CCAS Competitive	FQS Friendship Quality
NPIC Normal	—	.43***	.25***	-.05	-.16*	.58***	-.04
PNI Grandiose	—	—	.63***	.26***	.16*	.38***	.01
PNI Vulnerable	—	—	—	.08	.02	.49***	-.01
IFS Closeness	—	—	—	—	.17**	-.08	.29***
CCAS Cooperative	—	—	—	—	—	.02	.24**
CCAS Competitive	—	—	—	—	—	—	-.06
FQS Friendship Quality	—	—	—	—	—	—	—

Note. \* $p < .05$ . \*\* $p < .01$ ,  $p < .001$ \*\*\*

Table 3

*Bivariate Correlations by Gender: Males*

	NPIC Normal	PNI Grandiose	PNI Vulnerable	IFS Closeness	CCAS Cooperative	CCAS Competitive	FQS Friendship Quality
NPIC Normal	—	.48***	.27	.16	-.23	.66***	.14
PNI Grandiose		—	.68***	.40*	.06	.54***	.04
PNI Vulnerable			—	.24	-.02	.59***	.04

Note. \* $p < .05$ ,  $p < .001$ \*\*\*

Table 4

*Bivariate Correlations by Gender: Females*

	NPIC Normal	PNI Grandiose	PNI Vulnerable	IFS Closeness	CCAS Cooperative	CCAS Competitive	FQS Friendship Quality
NPIC Normal	—	.41***	.24**	-.10	-.16*	.55***	-.10
PNI Grandiose		—	.62***	.28***	.16*	.33***	.01
PNI Vulnerable			—	.05	.03	.46***	-.02

Note. \* $p < .05$ ,  $p < .001$ \*\*\*



**INSTITUTIONAL REVIEW BOARD**

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.5997 | Fax: 601.266.4377 | [www.usm.edu/research/institutional.review.board](http://www.usm.edu/research/institutional.review.board)

**NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Institutional Review Board 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: CH2-14043003

PROJECT TITLE: Adolescent Personality and Closeness, Cooperation, and Competitiveness in Friendships

PROJECT TYPE: Change to a Previously

Approved Project RESEARCHER(S):

Suzanne Amadi

COLLEGE/DIVISION: College of Education  
and Psychology DEPARTMENT: Psychology

FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Expedited

Review Approval PERIOD OF APPROVAL:

08/28/2014 to 08/27/2015

**Lawrence A. Hosman, Ph.D.**  
**Institutional Review Board**

## **THE UNIVERSITY OF SOUTHERN MISSISSIPPI AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT**

**Consent is hereby given to participate in the following study titled: Adolescent Personality and Friendships: Perceived Closeness, Cooperation, and Competitiveness**

**Purpose:** The purpose of this study is to evaluate personality characteristics that influence perceptions of closeness, cooperation, and competitiveness among adolescent friendships

**Description of Study:** Participants in this study will be asked to complete five questionnaires that will assess personality characteristics and perceptions of closeness, cooperation, competitiveness, and friendship quality. All questionnaires will be completed confidentially, and all responses will be kept confidential as well. All resulting data will be combined, all identifying information will be removed, and the data will be entered into a computer database program and appropriately analyzed. This process does not incorporate any invasive procedures, and participants can expect questionnaires to take approximately 45-60 minutes to complete.

**Benefits:** Potential benefits include a better understanding of the dimensions of personality that may affect individuals' perceptions of closeness, cooperation, and competitiveness in their friendships. Participants will also be awarded 1 SONA credit.

**Risks:** This is a minimal risk study and there does not appear to be any major risks related to completing the questionnaires. Should participants experience discomfort and wish to seek counseling services, they can contact the USM Student Counseling Services: Kennard-Washington Hall, Room 200; Phone: 601-266-4829. Participants can discontinue from further participation in the study at any time without consequence.

**Confidentiality:** This is an online survey and only researchers will have access to the information provided. Information from these questionnaires will be entered into a computer database, will be combined, and will no longer be connected to a participant's name after completion of the forms.

**Participant's Assurance:** Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to Suzanne Amadi at (662) 392-2329. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

After reading the consent form, I understand the procedures of the current study. Now please indicate whether or not you want to continue with the study.

- I consent to participate in this research and agree that I am 18 years of age or younger
- I do not consent to participate in this research

### **Demographics Questionnaire**

Please indicate your race.

- White
- Hispanic or Latino
- Black or African American
- Asian/Pacific Islander
- Other

What is your date of birth? (Example: 02/23/1993)

Please indicate your age.

- 18
- Other

Please indicate your gender

- Male
- Female

**PNI**  
**Pathological Narcissism Inventory**

*Instructions: Below you will find 52 descriptive statements. Please consider each one and indicate how well that statement describes you. There are no right or wrong answers. On the line beside the question, fill in only one answer. Simply indicate how well each statement describes you as a person on the following scale:*

0	1	2	3	4	5
Not at all Like me	Moderately Unlike me	A little Unlike me	A little Like me	Moderately Like me	Very much Like me

- \_\_\_ 1. I often fantasize about being admired and respected.
- \_\_\_ 2. My self-esteem fluctuates a lot.
- \_\_\_ 3. I sometimes feel ashamed about my expectations of others when they disappoint me.
- \_\_\_ 4. I can usually talk my way out of anything.
- \_\_\_ 5. It's hard for me to feel good about myself when I'm alone.
- \_\_\_ 6. I can make myself feel good by caring for others.
- \_\_\_ 7. I hate asking for help.
- \_\_\_ 8. When people don't notice me, I start to feel bad about myself.
- \_\_\_ 9. I often hide my needs for fear that others will see me as needy and dependent.
- \_\_\_ 10. I can make anyone believe anything I want them to.
- \_\_\_ 11. I get mad when people don't notice all that I do for them.
- \_\_\_ 12. I get annoyed by people who are not interested in what I say or do.
- \_\_\_ 13. I wouldn't disclose all my intimate thoughts and feelings to someone I didn't admire.
- \_\_\_ 14. I often fantasize about having a huge impact on the world around me.
- \_\_\_ 15. I find it easy to manipulate people.
- \_\_\_ 16. When others don't notice me, I start to feel worthless.
- \_\_\_ 17. Sometimes I avoid people because I'm concerned that they'll disappoint me.
- \_\_\_ 18. I typically get very angry when I'm unable to get what I want from others.
- \_\_\_ 19. I sometimes need important others in my life to reassure me of my self-worth.

- \_\_\_ 20. When I do things for other people, I expect them to do things for me.
- \_\_\_ 21. When others don't meet my expectations, I often feel ashamed about what I wanted.
- \_\_\_ 22. I feel important when others rely on me.
- \_\_\_ 23. I can read people like a book.
- \_\_\_ 24. When others disappoint me, I often get angry at myself.
- \_\_\_ 25. Sacrificing for others makes me the better person.
- \_\_\_ 26. I often fantasize about accomplishing things that are probably beyond my means.
- \_\_\_ 27. Sometimes I avoid people because I'm afraid they won't do what I want them to do.
- \_\_\_ 28. It's hard to show others the weaknesses I feel inside.
- \_\_\_ 29. I get angry when criticized.
- \_\_\_ 30. It's hard to feel good about myself unless I know other people admire me.
- \_\_\_ 31. I often fantasize about being rewarded for my efforts.
- \_\_\_ 32. I am preoccupied with thoughts and concerns that most people are not interested in me.
- \_\_\_ 33. I like to have friends who rely on me because it makes me feel important.
- \_\_\_ 34. Sometimes I avoid people because I'm concerned they won't acknowledge what I do for them.
- \_\_\_ 35. Everybody likes to hear my stories.
- \_\_\_ 36. It's hard for me to feel good about myself unless I know other people like me.
- \_\_\_ 37. It irritates me when people don't notice how good a person I am.
- \_\_\_ 38. I will never be satisfied until I get all that I deserve.
- \_\_\_ 39. I try to show what a good person I am through my sacrifices.
- \_\_\_ 40. I am disappointed when people don't notice me.



- \_\_\_ 41. I often find myself envying others' accomplishments.
- \_\_\_ 42. I often fantasize about performing heroic deeds.
- \_\_\_ 43. I help others in order to prove I'm a good person.
- \_\_\_ 44. It's important to show people I can do it on my own even if I have some doubts inside.
- \_\_\_ 45. I often fantasize about being recognized for my accomplishments.
- \_\_\_ 46. I can't stand relying on other people because it makes me feel weak.
- \_\_\_ 47. When others don't respond to me the way that I would like them to, it is hard for me to still feel ok with myself.
- \_\_\_ 48. I need others to acknowledge me.
- \_\_\_ 49. I want to amount to something in the eyes of the world.
- \_\_\_ 50. When others get a glimpse of my needs, I feel anxious and ashamed.
- \_\_\_ 51. Sometimes it's easier to be alone than to face not getting everything I want from other people.
- \_\_\_ 52. I can get pretty angry when others disagree with me.



		4. Sometimes, I get embarrassed when people say nice things about me.	Or	I know I am good because everybody keeps telling me so.		
		5. It scares me to think about me ruling the world.	Or	If I ruled the world, it would be a better place.		
		6. I can usually talk my way out of anything.	Or	I try to accept what happens to me because of my behavior.		
		7. I like to blend in with other people around me.	Or	I like to be the center of attention.		
		8. I will be a famous person.	Or	I do not think about being famous much.		
		9. I am no better or no worse than most people.	Or	I think I am a special person.		
		10. I am not sure if I would be a good leader.	Or	I think I am a good leader.		
		11. I say what's on my mind.	Or	I wish I would tell people what I think more often.		

Really Sort of  
 Really  
 True True  
 True  
 for Me for Me  
 for Me

Sort of  
 True  
 for Me

		12. I like to be the boss of other people.	Or	I don't mind following orders.		
		13. It is easy to get people to do what I want.	Or	I don't like it when I try to get people to do what I want.		
		14. I make sure that people appreciate what I do.	Or	People usually appreciate what I do.		
		15. I don't like to show off my looks.	Or	I like to show how good I look.		
		16. I can tell what people are like.	Or	Sometimes it's hard to know what people are like.		
		17. If I know what I'm doing, I like to make decisions.	Or	I like to make decisions all the time.		
		18. I just try to be happy.	Or	I want the world to think that I am something special.		
		19. My looks are nothing special.	Or	I like to see how good I look.		
		20. I try not to be a show off.	Or	I usually show off when I get the chance.		
		21. I always know what I'm doing.	Or	Sometimes I'm not sure of what I'm doing.		
		22. Sometimes I need other people to help me get things done.	Or	Most of the time, I don't need anyone else to help get things done.		
		23. Sometimes I tell good stories.	Or	Everybody likes to hear my stories.		
		24. I expect to get a lot from other people.	Or	I like to do things for other people.		

Really Sort of  
 Really  
 True True  
 True  
 for Me for Me  
 for Me

Sort of  
 True  
 for Me

		25. I won't be happy until I get everything that I should get.	Or	I am happy whenever something good happens.		
		26. When people say good things about me, I get embarrassed.	Or	I like it when people say good things about me.		
		27. I want to control other people.	Or	I'm not really interested in controlling others.		
		28. I don't pay attention to the latest craze or fashion.	Or	I like to start new crazes and fashions.		
		29. I like to look at myself in the mirror.	Or	I am not really interested in looking at myself in the mirror.		
		30. I really like to be the center of attention.	Or	I am not comfortable being the center of attention.		
		31. I can do anything with my life that I want to.	Or	People can't always do whatever they want with their lives.		
		32. Being an expert about something doesn't mean that much to me.	Or	Other people seem to know that I am an expert on some things.		
		33. I would rather be a leader.	Or	I don't care if I'm a leader or not.		
		34. I am going to be a great person.	Or	I hope that I am going to be great.		
		35. People sometimes believe what I tell them.	Or	I can make anybody believe anything I want them to.		

Really Sort of  
 Really  
 True True  
 True  
 for Me for me  
 for Me

Sort of  
 True  
 for Me

		36. I have always been a leader.	Or	It takes a while to become a good leader.		
		37. I wish someone would write a story about my life someday.	Or	I don't like for people to be nosy about my life.		
		38. I get upset when other people don't notice how I look.	Or	I don't mind looking like just another person when other people are around.		
		39. I am able to do more things than other people.	Or	I can learn a lot from other people.		
		40. I am just like everybody else.	Or	I am an outstanding person.		

**IFS: Girl Version**  
**Intimate Friendship Scale: Girl Version**

*Instructions: This questionnaire asks about you and your best friend.  
 Circle the number that best describes your relationship  
 Circling "7" means the statement describes your relationship well.  
 Circling "1" means the statement does not describe your relationship at all.*

**There are no right or wrong answers!**

1. I stay with her when she wants to do something other children  
 don't want to do..... 1 2 3 4 5 6 7
2. I feel free to talk to her about almost  
 anything..... 1 2 3 4 5 6 7
3. The most exciting things happen when I am with her and nobody else is  
 around..... 1 2 3 4 5 6 7
4. I feel close to her..... 1  
 2 3 4 5 6 7
5. I know that whatever I tell her is kept secret between us..... 1  
 2 3 4 5 6 7
6. I tell others nice things about her..... 1  
 2 3 4 5 6 7
7. Whenever you see me you can be pretty sure that she is also around..... 1  
 2 3 4 5 6 7
8. If she does something which I don't like, I can always talk to her about  
 it..... 1 2 3 4 5 6 7
9. I know how she feels about the boy she likes..... 1  
 2 3 4 5 6 7
10. I can tell when she is worried about something..... 1  
 2 3 4 5 6 7
11. I tell her when I have done something that other people would not approve of..... 1  
 2 3 4 5 6 7
12. If she wants something I let her have it, even if I want it too..... 1  
 2 3 4 5 6 7

13. I work with her on some of her school-work..... 1  
2 3 4 5 6 7
14. I do things with her which are quite different from what other kids do..... 1  
2 3 4 5 6 7
15. I can plan how we'll spend our time without having to first check with her..... 1  
2 3 4 5 6 7
16. I speak up to defend her when other kids say bad things about her..... 1  
2 3 4 5 6 7
17. I can use her things without asking for permission..... 1  
2 3 4 5 6 7
18. I talk with her about my hopes and plans for the future..... 1  
2 3 4 5 6 7
19. I like to do things with her..... 1  
2 3 4 5 6 7
20. When something nice happens to me I share the experience with her..... 1  
2 3 4 5 6 7
21. When she is not around I keep wondering where she is and what she is  
doing..... 1 2 3 4 5 6 7
22. I work with her on some of her  
hobbies..... 1 2 3 4 5 6 7
23. I know how she feels about things without her telling  
me..... 1 2 3 4 5 6 7
24. I know which kinds of books, games and activities she  
likes..... 1 2 3 4 5 6 7
25. I will not go along with others to do anything against  
her..... 1 2 3 4 5 6 7
26. I offer her the use of my things (like clothes, toys, food or  
books)..... 1 2 3 4 5 6 7
27. It bothers me to have other kids come around and join in when the two  
of us are doing something together..... 1  
2 3 4 5 6 7



28. If I want her to do something for me, all I have to do is ask..... 1 2 3 4 5 6 7
29. Whenever she wants to tell me about a problem, I stop what I am doing and listen for as long as she wants..... 1 2 3 4 5 6 7
30. I like her..... 1  
2 3 4 5 6 7
31. I can be sure she'll help me whenever I ask for it..... 1  
2 3 4 5 6 7
32. When she is not around I miss her..... 1  
2 3 4 5 6 7

**IFS: Boy Version**  
**Intimate Friendship Scale: Boy Version**

*Instructions: This questionnaire asks about you and your best friend.  
Circle the number that best describes your relationship  
Circling "7" means the statement describes your relationship well.  
Circling "1" means the statement does not describe your relationship at all.*

**There are no right or wrong answers!**

1. I stay with him when he wants to do something other children don't want to do. 1 2 3 4 5 6 7
2. I feel free to talk to him about almost anything. 1 2 3 4 5 6 7
3. The most exciting things happen when I am with him and nobody else is around. 1 2 3 4 5 6 7
4. I feel close to him. 1 2 3 4 5 6 7
5. I know that whatever I tell him is kept secret between us. 1 2 3 4 5 6 7
6. I tell people nice things about him. 1 2 3 4 5 6 7
7. Whenever you see me you can be pretty sure that he is also around. 1 2 3 4 5 6 7
8. If he does something which I don't like, I can always talk to him about it. 1 2 3 4 5 6 7
9. I know how he feels about the girl he likes. 1 2 3 4 5 6 7
10. I can tell when he is worried about something. 1 2 3 4 5 6 7
11. I tell him when I have done something that other people would not approve of. 1 2 3 4 5 6 7
12. If he wants something I let him have it, even if I want it too. 1 2 3 4 5 6 7
13. I work with him on some of his school work. 1 2 3 4 5 6 7
14. I do things with him which are quite different from what other kids do. 1 2 3 4 5 6 7
15. I can plan how we'll spend our time without having to first check with him. 1 2 3 4 5 6 7
16. I speak up to defend him when other kids say bad things about him. 1 2 3 4 5 6 7

17. I can use his things without asking for permission. 1 2 3 4 5 6 7
18. I talk with him about my hopes and plans for the future. 1 2 3 4 5 6 7
19. I like to do things with him. 1 2 3 4 5 6 7
20. When something nice happens to me I share the experience with him. 1 2 3 4 5 6 7
21. When he is not around I keep wondering where he is and what he is doing. 1 2 3  
4 5 6 7
22. I work with him on some of his hobbies. 1 2 3 4 5 6 7
23. I know how he feels about things without him telling me. 1 2 3 4 5 6 7
24. I know which kinds of books, games and activities he likes 1 2 3 4 5 6 7
25. I will not go along with others to do anything against him. 1 2 3 4 5 6 7
26. I offer him the use of my things (like clothes, toys, food or books). 1 2 3 4 5 6 7
27. It bothers me to have other kids come around and join in when the two  
of us are doing something together. 1 2 3 4 5 6 7
28. If I want him to do something for me all I have to do is ask. 1 2 3 4 5 6 7
29. Whenever he wants to tell me about a problem, I stop what I am doing and  
listen for as long as he wants. 1 2 3 4 5 6 7
30. I like him. 1 2 3 4 5 6 7
31. I can be sure he'll help me whenever I ask for it 1 2 3 4 5 6 7
32. When he is not around I miss him. 1 2 3 4 5 6 7

## CCAS

### Competitive-Cooperative Attitude Scale

*Instructions: Listed below are 28 statements about cooperative or competitive attitudes. Using the 5-point scale below, decide the extent to which you agree or disagree with each statement.*

Strongly disagree= 1

Disagree= 2

Neutral= 3

Agree= 4

Strongly agree= 5

1. People who get in my way end up paying for it  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
2. The best way to get someone to do something is to use force  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
3. It is alright to do something to someone to get even  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
4. I don't trust many people  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
5. It is important to treat everyone with kindness  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
6. It doesn't matter who you hurt on the road to success  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
7. Teamwork is really more important than who wins  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
8. I want to be successful, even if it's at the expense of others  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
9. Do not give anyone a second chance  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
10. I play a game like my life depended on it  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
11. I play harder than my teammates

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
12. All is fair in love and war	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
13. Nice guys finish last	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
14. Losers are inferior	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15. A group slows me down	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
16. People need to learn to get along with others as equals	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
17. My way of doing things is best	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
18. Every man for himself is the best policy	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
19. I will do anything to win	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
20. Winning is the most important part of the game	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. Our country should try harder to achieve peace among all	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
22. I like to help others	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
23. Your loss is my gain	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
24. People who overcome all competition on the road to success are models for young people to admire	Strongly disagree	Disagree	Neutral	Agree	Strongly agree

25. The more I win the more powerful I feel  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
26. I like to see the whole class do well on a test  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
27. I try not to speak unkindly of people  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree
28. I don't like to use pressure to get my way  
Strongly disagree    Disagree    Neutral    Agree    Strongly agree

## Friendship Qualities Scale: Girl Version

*Directions: Below are some statements about the quality of your friendship. Using the 5-point scale below, decide the extent to which you agree or disagree with each statement.*

**BE SURE TO THINK ABOUT YOUR BEST FRIEND WHEN YOU ANSWER THESE QUESTIONS AND BE SURE TO READ EACH ITEM CAREFULLY**

"1" means the sentence is probably not true for your friendship,

"2" means that it might be true,

"3" means that it is usually true,

"4" means that it is very true,

"5" means that it is really true for your friendship.

1. My friend and I spend a lot of our free time together. Not True      Really True  
1-----2-----3-----4-----5
  
2. My friend gives me advice when I need it. Not True      Really True  
1-----2-----3-----4-----5
  
3. My friend and I do things together. Not True      Really True  
1-----2-----3-----4-----5
  
4. My friend and I help each other. Not True      Really True  
1-----2-----3-----4-----5
  
5. Even if my friend and I have an argument we would still be able to be friends with each other. Not True      Really True  
1-----2-----3-----4-----5
  
6. My friend and I play together at recess. Not True      Really True  
1-----2-----3-----4-----5
  
7. If other kids were bothering me, my friend would help me. Not True      Really True  
1-----2-----3-----4-----5

8. Our friendship is just as important to me as it is to my friend.      Not True      Really True  
1-----2-----3-----4-----5
9. I can trust and rely upon my friend.      Not True      Really True  
1-----2-----3-----4-----5
10. My friend helps me when I am having trouble with something.      Not True      Really True  
1-----2-----3-----4-----5
11. If my friend had to move away I would miss her.      Not True      Really True  
1-----2-----3-----4-----5
12. If I can't figure out how to do something, my friend shows me how.      Not True      Really True  
1-----2-----3-----4-----5
13. Sometimes it seems that I care more about our friendship than my friend does.      Not True      Really True  
1-----2-----3-----4-----5
14. When I do a good job at something my friend is happy for me.      Not True      Really True  
1-----2-----3-----4-----5
15. There is nothing that would stop my friend and I from being friends.      Not True      Really True  
1-----2-----3-----4-----5
16. Sometimes my friend does things for me or makes me feel special.      Not True      Really True  
1-----2-----3-----4-----5
17. When my friend and I have an argument, she can hurt my feelings.      Not True      Really True  
1-----2-----3-----4-----5
18. When I have not been with my friend for a while I really miss being with her.      Not True      Really True  
1-----2-----3-----4-----5
19. If somebody tried to push me around, my      Not True      Really True



- friend would help me. 1-----2-----3-----4-----5
20. I can get into fights with my friend. Not True Really True  
1-----2-----3-----4-----5
21. My friend would stick up for me if another kid was causing me trouble. Not True Really True  
1-----2-----3-----4-----5
22. When we have free time at school, such as at lunchtime or recess, my friend and I usually do something together or spend time with each other. Not True Really True  
1-----2-----3-----4-----5
23. If I have a problem at school or at home I can talk to my friend about it. Not True Really True  
1-----2-----3-----4-----5
24. My friend can bug me or annoy me even though I ask her not to. Not True Really True  
1-----2-----3-----4-----5
25. If I forgot my lunch or needed a little money my friend would loan it to me. Not True Really True  
1-----2-----3-----4-----5
26. I think of things for us to do more often than my friend does. Not True Really True  
1-----2-----3-----4-----5
27. If I said I was sorry after I had a fight with my friend she would still stay mad at me. Not True Really True  
1-----2-----3-----4-----5
28. My friend helps me with tasks that are hard or that need two people. Not True Really True  
1-----2-----3-----4-----5
29. My friend and I go to each other's houses after school and on weekends. Not True Really True  
1-----2-----3-----4-----5

30. Sometimes my friend and I just sit around and talk about things like school, sports, and other things we like.      Not True      Really True  
1-----2-----3-----4-----5
31. If I have questions about something my friend would help me get some answers.      Not True      Really True  
1-----2-----3-----4-----5
32. Even if other persons stopped liking me, my friend would still be my friend.      Not True      Really True  
1-----2-----3-----4-----5
33. I know that I am important to my friend.      Not True      Really True  
1-----2-----3-----4-----5
34. My friend would help me if I needed it.      Not True      Really True  
1-----2-----3-----4-----5
35. Being friends together is more important to me than it is to my friend.      Not True      Really True  
1-----2-----3-----4-----5
36. If there is something bothering me I can tell my friend about it even if it is something I can not tell to other people.      Not True      Really True  
1-----2-----3-----4-----5
37. Things are usually pretty even in my friendship.      Not True      Really True  
1-----2-----3-----4-----5
38. My friend puts our friendship ahead of other things.      Not True      Really True  
1-----2-----3-----4-----5
39. When I have to do something that is hard I can count on my friend for help.      Not True      Really True  
1-----2-----3-----4-----5
40. If my friend or I do something that bothers the other one of us we can make up easily.      Not True      Really True  
1-----2-----3-----4-----5

41. My friend and I can argue a lot.                      Not True              Really True  
1-----2-----3-----4-----5
42. My friend and I disagree about many things.                      Not True              Really True  
1-----2-----3-----4-----5
43. If my friend and I have a fight or argument we can say "I'm sorry" and everything will be alright.                      Not True              Really True  
1-----2-----3-----4-----5
44. I feel happy when I am with my friend.                      Not True              Really True  
1-----2-----3-----4-----5
45. My friend likes me as much as I like her.                      Not True              Really True  
1-----2-----3-----4-----5
46. I think about my friend even when my friend is not around.                      Not True              Really True  
1-----2-----3-----4-----5

## Friendship Qualities Scale: Boy Version

*Directions: Below are some statements about the quality of your friendship. Using the 5-point scale below, decide the extent to which you agree or disagree with each statement.*

**BE SURE TO THINK ABOUT YOUR BEST FRIEND WHEN YOU ANSWER THESE QUESTIONS AND BE SURE TO READ EACH ITEM CAREFULLY**

"1" means the sentence is probably not true for your friendship,

"2" means that it might be true,

"3" means that it is usually true,

"4" means that it is very true,

"5" means that it is really true for your friendship.

1. My friend and I spend a lot of our free time together. Not True      Really True  
1-----2-----3-----4-----5
  
2. My friend gives me advice when I need it. Not True      Really True  
1-----2-----3-----4-----5
  
3. My friend and I do things together. Not True      Really True  
1-----2-----3-----4-----5
  
4. My friend and I help each other. Not True      Really True  
1-----2-----3-----4-----5
  
5. Even if my friend and I have an argument we would still be able to be friends with each other. Not True      Really True  
1-----2-----3-----4-----5
  
6. My friend and I play together at recess. Not True      Really True  
1-----2-----3-----4-----5
  
7. If other kids were bothering me, my friend would help me. Not True      Really True  
1-----2-----3-----4-----5

8. Our friendship is just as important to me as it is to my friend.      Not True      Really True  
1-----2-----3-----4-----5
9. I can trust and rely upon my friend.      Not True      Really True  
1-----2-----3-----4-----5
10. My friend helps me when I am having trouble with something.      Not True      Really True  
1-----2-----3-----4-----5
11. If my friend had to move away I would miss him.      Not True      Really True  
1-----2-----3-----4-----5
12. If I can't figure out how to do something, my friend shows me how.      Not True      Really True  
1-----2-----3-----4-----5
13. Sometimes it seems that I care more about our friendship than my friend does.      Not True      Really True  
1-----2-----3-----4-----5
14. When I do a good job at something my friend is happy for me.      Not True      Really True  
1-----2-----3-----4-----5
15. There is nothing that would stop my friend and I from being friends.      Not True      Really True  
1-----2-----3-----4-----5
16. Sometimes my friend does things for me or makes me feel special.      Not True      Really True  
1-----2-----3-----4-----5
17. When my friend and I have an argument, he can hurt my feelings.      Not True      Really True  
1-----2-----3-----4-----5
18. When I have not been with my friend for a while I really miss being with him.      Not True      Really True  
1-----2-----3-----4-----5

19. If somebody tried to push me around, my friend would help me.                      Not True              Really True  
1-----2-----3-----4-----5
20. I can get into fights with my friend.                      Not True              Really True  
1-----2-----3-----4-----5
21. My friend would stick up for me if another kid was causing me trouble.                      Not True              Really True  
1-----2-----3-----4-----5
22. When we have free time at school, such as at lunchtime or recess, my friend and I usually do something together or spend time with each other.                      Not True              Really True  
1-----2-----3-----4-----5
23. If I have a problem at school or at home I can talk to my friend about it.                      Not True              Really True  
1-----2-----3-----4-----5
24. My friend can bug me or annoy me even though I ask him not to.                      Not True              Really True  
1-----2-----3-----4-----5
25. If I forgot my lunch or needed a little money my friend would loan it to me.                      Not True              Really True  
1-----2-----3-----4-----5
26. I think of things for us to do more often than my friend does.                      Not True              Really True  
1-----2-----3-----4-----5
27. If I said I was sorry after I had a fight with my friend he would still stay mad at me.                      Not True              Really True  
1-----2-----3-----4-----5
28. My friend helps me with tasks that are hard or that need two people.                      Not True              Really True  
1-----2-----3-----4-----5
29. My friend and I go to each other's houses after school and on weekends.                      Not True              Really True  
1-----2-----3-----4-----5

30. Sometimes my friend and I just sit around and talk about things like school, sports, and other things we like.      Not True      Really True  
1-----2-----3-----4-----5
31. If I have questions about something my friend would help me get some answers.      Not True      Really True  
1-----2-----3-----4-----5
32. Even if other persons stopped liking me, my friend would still be my friend.      Not True      Really True  
1-----2-----3-----4-----5
33. I know that I am important to my friend.      Not True      Really True  
1-----2-----3-----4-----5
34. My friend would help me if I needed it.      Not True      Really True  
1-----2-----3-----4-----5
35. Being friends together is more important to me than it is to my friend.      Not True      Really True  
1-----2-----3-----4-----5
36. If there is something bothering me I can tell my friend about it even if it is something I can not tell to other people.      Not True      Really True  
1-----2-----3-----4-----5
37. Things are usually pretty even in my friendship.      Not True      Really True  
1-----2-----3-----4-----5
38. My friend puts our friendship ahead of other things.      Not True      Really True  
1-----2-----3-----4-----5
39. When I have to do something that is hard I can count on my friend for help.      Not True      Really True  
1-----2-----3-----4-----5
40. If my friend or I do something that bothers the other one of us we can make up easily.      Not True      Really True  
1-----2-----3-----4-----5

41. My friend and I can argue a lot.                      Not True              Really True  
1-----2-----3-----4-----5
42. My friend and I disagree about many things.                      Not True              Really True  
1-----2-----3-----4-----5
43. If my friend and I have a fight or argument we can say "I'm sorry" and everything will be alright.                      Not True              Really True  
1-----2-----3-----4-----5
44. I feel happy when I am with my friend.                      Not True              Really True  
1-----2-----3-----4-----5
45. My friend likes me as much as I like him.                      Not True              Really True  
1-----2-----3-----4-----5
46. I think about my friend even when my friend is not around.                      Not True              Really True  
1-----2-----3-----4-----5