

THE MODERATING ROLE OF FRIENDSHIP AND THE EFFECTS OF WITHDRAWAL ON
CHILDREN WHO ARE NEGLECTED WITHIN THE PEER NETWORK:
A POPULATION AT RISK FOR INTERNALIZING DISTRESS?

by

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(Under the Direction of A. Michele Lease)

ABSTRACT

Recent research indicates that sociometrically neglected children as a group are no more at risk for internalizing disorders than their average peers; however, the current study proposed that differences in the internalizing of emotional distress might be found in neglected individuals who exhibit behaviors of withdrawal or who do not have a reciprocal classroom friend. Results revealed that neglected children were found to be less likely than their peers to have a reciprocated classroom friend. Teachers reported greater depression and a trend toward higher anxiety and somatization in these neglected and friendless children. Furthermore, neglected children who exhibited excluded-withdrawn behavior reported higher levels of depression and greater difficulty with interpersonal relations than their peers.

INDEX WORDS: Sociometric popularity, Neglect, Friendship, Withdrawal, Internalizing Distress, Anxiety, Depression

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CHAPTER 1

INTRODUCTION

Middle childhood marks a period of development in the social lives of children, during which they increasingly focus on relationships with their peers. Empirical evidence suggests that the need to belong, especially amongst one's peers, is a fundamental human motivation (Baumeister & Leary, 1995). Social developmental researchers agree peer relationships impact the social-emotional development of children, in negative and in positive ways (Asher & Coie, 1990; Hartup, 1983), and peer difficulties are associated with a variety of mental health issues (Kupersmidt, Coie, & Dodge, 1990; Parker & Asher, 1987). Peer relationships can be described through multiple levels of interpersonal experience (Bukowski and Hoza, 1989); two levels in particular that contribute to a child's socioemotional development are group acceptance and friendship (Hartup, 1996). Whereas group acceptance, operationalized as sociometric status in the peer relationship literature (Coie & Dodge, 1983; Coie, Dodge, & Coppotelli, 1982), reflects a child's placement and overall functioning within the peer network, friendship is a dyadic relationship with another child. Although distinct areas of functioning, they are interrelated in the skills that are necessary for each (Gifford-Smith & Brownell, 2003). For some children, creating friendships and navigating the unpredictable seas of the peer network are rewarding, but for other children they constitute a much less satisfying, and even stressful, experience.

Peer interactions are less-closely supervised by adults during middle childhood, and peer perceptions have an intense impact on a child's developing self-concept (Rubin, Bukowski, &

Parker, 2006). These peer experiences are not simply trivial exchanges between classmates. Researchers agree that a child's functioning within the peer network is related to social and emotional development and psychopathology (e.g., Boivin, Hymel, & Bukowski, 1995; Deater-Deckard, 2001; Hecht, Inderbitzen, & Bukowski, 1998; Oldehinkel, Rosmalen, Veenstra, Kornelis Dijkstra, & Ormel, 2007; Parker & Asher, 1987). For this reason, researchers interested in studying anxious and depressive symptoms in adolescence might include early indication of peer difficulties (Fontaine, Yang, Burks, Dodge, Price, Pettit & Bates, 2009).

Historically, researchers studied peer relations by measuring social status through playmate selection (i.e., how much their peers wanted to play with them) and child reports of who they "like" (Newcomb et al., 1993). However, these approaches only offered a partial explanation of the peer network. Researchers recognized that the reason children were not selected as a preferred playmate might be the result of social dislike but might also result from simply going unnoticed within the peer group. Children who are unnoticed or overlooked in the peer network were later given the term "neglected" in the peer research literature. Based on this concept, a two-dimensional sociometric classification system was developed. Specifically, within the sociometric system, children are asked to nominate peers who they "like the most" and peers who they "like the least." Two other scores are derived from like-most and like-least nominations and also used in sociometric classification: social preference and social impact (see Coie et al., 1982). Social preference is defined by how much children are liked or disliked by their peers (e.g., the standardized difference of liking minus disliking). Social impact reflects the degree to which children impact their social environment, and ultimately, how much they are noticed by their peers (e.g., standardized sum of like plus dislike). Peer report is used, as

opposed to adult reports, because adults interact with children in more structured settings (Newcomb et al., 1993).

Based on like-most, like-least, social preference, and social impact scores, sociometric classification places children into one of five sociometric categories: popular, rejected, neglected, controversial, and average (Coie, Dodge & Coppotelli, 1982; Newcomb et al, 1993). Popular children are those who have a high level of social preference, high likeability, and low dislike scores. Rejected children have low social preference, low likeability, and high scores for dislike. Children who are classified as neglected are rarely liked or disliked, and have low social impact (i.e., low visibility) within the peer group. Controversial children are nominated as both highly liked and highly disliked, and therefore have high social impact (Coie & Dodge, 1983). Children are referred to as “average” when they fall within 0.5 standard deviations of the mean on social preference and social impact (Coie et al., 1982); alternatively, children not classified in one of the other four status groups might also be classified as ‘average.’

Researchers have found sociometric groups to have somewhat high within-group behavioral heterogeneity (Gifford-Smith & Brownwell, 2003); In an effort to tease out differences, some researchers have identified subgroups of children within a status classification based on a combination of social status and behavior (i.e., the rejected-aggressive child, or the pro-social-aggressive child; e.g., see Deater-Deckard, 2001; French, 1988). The three domains of behavior typically used to further discriminate among subtypes within sociometric status category are aggression, withdrawal, and sociability. Aggression includes behaviors that are disruptive, physical, and negative, whereas withdrawal includes feelings of loneliness, depression, and anxiety. Sociability is comprised of seven components including social interaction, problem solving, communication skill, positive social action, positive social traits,

friendship relations, and adult interaction (Newcomb et al, 1993). Resulting research has focused on the behavior and characteristics of individual children that might lead to their placement within the peer system, identifying child experiences that could impact placement, studying group norms and biases, and investigating the connection between placement and future outcomes (Gifford-Smith & Brownell, 2003).

Much of the existing research regarding social status and psychopathology has focused on popular (i.e., well-liked) or rejected (i.e., disliked) children; however, neglected (i.e., overlooked or ignored) children have received less attention, resulting in research on neglected children that is ambiguous. Outside a general lack of sociability (i.e., being shy or withdrawn), a clear and consistent behavioral profile associated with neglected sociometric status has not been identified (Coie et al., 1990; Gifford-Smith & Brownell, 2003; Hatzichristou & Hopf, 1996; Rubin, Bukowski, & Parker, 2006). In contrast, the literature supports a clear connection between peer rejection and the development of psychopathology (Bagwell et al., 1998; Boivin et al., 1995; Deater-Deckard, 2001), most likely from the distinctive profile of rejected children. Asher and Dodge (1986) presented a compelling profile of risk for rejected children, pointing out that rejected children are more likely to experience loneliness, display negative and undesirable behaviors, and have peer system placement that is pervasive, even across new environments. Further, the researchers noted that “the risk status for neglected children is less clear” (p. 444).

A common finding is that neglected children are difficult to differentiate behaviorally from their average peers (Gifford-Smith & Brownell, 2003), particularly when their behavior is described via adult reports (Newcomb, Bukowski, & Pattee, 1993). Coie, Dodge, and Kupersmidt (1990) suggested that the behavior of neglected children is difficult to describe as a result of their low visibility in the peer group. Based on discriminant analysis, Hatzichristou and

Hopf (1996) found that neglected children were likely to be misclassified into alternative sociometric groups, presumably because their low visibility creates challenges in adequately recognizing subtle differences between these children and their average peers. Furthermore, Fredrickson and Furnham (1998) tested thirteen different sociometric classification methods and concluded that the neglected classification, in general, has questionable psychometric validity. In contrast, Newcomb and colleagues (1993) performed a meta-analysis of 41 studies and validated the classification of neglected status based on their behavior as a group, albeit noting some instability in the classification. Findings of Newcomb and colleagues indicate that in comparison to average children, neglected children evidence less aggression and depression, but were also less sociable, more withdrawn, and evidenced less social interaction and positive social traits.

Despite known challenges in the classification of neglected children, researchers recognize the value in continued examination of neglected status. Parker and Asher (1987) considered the connection between poor peer relationships and later problematic adult outcomes in a meta-analytic review and noted, “It seems plausible, for example, that children without social support from peers would, over the long term, be at risk for feelings of extreme loneliness or even depression. Or, insofar as peer relationships, especially friendships, provide valuable support during times of life stress, it also makes sense that individuals with peer-relationship problems would be at risk for stress-related difficulties, such as various psychosomatic disturbances (e.g., hypertension, ulcers, and chronic headaches)” (p. 378). Congruently, Oldehinkel and colleagues (2007) found depression in a population of early adolescent females to be strongly associated with not being liked, as indicated by a low number of nominations received for “Which classmates do you like?” Wright and colleagues found that children who

are depressed are unlikely to seek out social support by requesting advice or assistance from another child (Wright, Banerjee, Hoek, Rieffe, & Novin, 2010).

Given the assertions from Parker and Asher (1987), it is logical to suspect that children who are neglected by their peers might feel detached from the social world surrounding them, and perhaps feel invisible within the peer network. Therefore, it is conceivable that long-term neglect would negatively impact social development, as well as self-esteem, internal dialogue, and affect. Overall, existing research reflects an obscure profile of neglected children; however, to issue a “blanket statement” that neglected children are not lonely, depressed, or anxious may be disregarding significant distinctions between subgroups. For example, in a meta-analytic review of sociometric research, Newcomb and colleagues stated that although it has been proposed that neglected children are not an at-risk subgroup, it is possible that methods of data collection may be hiding small, yet significant, distinctions between neglected and average children (Newcomb, Bukowski, & Pattee, 1993). Perhaps by further dissecting groups within the peer network and considering both categorical and behavioral attributes, more homogenous groups with distinct risk profiles might be revealed.

For example, Lease and colleagues (Lease, Musgrove, & Axelrod, 2002) combined three dimensions of peer-reported social status, including likeability, perceived popularity, and social dominance, and identified seven distinct behavioral subtypes through cluster analysis. That study demonstrated that incorporating those three dimensions of social status emphasized in differing disciplines (developmental psychology, ethology, and sociology) allowed for a more fully defined social status classification (Lease et al., 2002). One particular subtype, low-dominant/unpopular, appears to be most closely aligned with sociometrically neglected children. Inspection of the characteristics of this group revealed these children to be socially withdrawn

and /or socially anxious, and possibly behaviorally inhibited. As another example of research into more refined subgroups, Bukowski, Laursen, and Hoza (2010) found that children who were withdrawn from the peer group (specifically avoidant and excluded children) exhibited worsening of depressed affect over time. However, the longitudinal data demonstrated that the added factor of friendship moderated depressed affect, such that children who are withdrawn but possessed a reciprocal friendship evidenced lower levels of depressed affect than children who are withdrawn and without a friend. The consideration of a protective factor (i.e., the presence of a reciprocal friendship) allowed for higher discrimination among children who are withdrawn in the Bukowski et al. study.

Considered collectively, it is proposed that further breakdown and classification of the neglected group of children may yield more homogeneous subgroups with unique profiles, specifically in regard to the possibility of internalizing distress. Whereas research on neglected children indicates that they are not at risk for depression (Newcomb et al., 1993), it is possible that differences may be detected when including the presence or absence of a mutual friendship. Identifying meaningful subgroups is critical in considering the highest risk for future maladjustment, and thus, in developing appropriate interventions for these children.

One practical approach is to consider subgroups of sociometric status in relation to the presence of friendship. Research suggests that having a close, reciprocal friend in middle childhood is associated with adult feelings of general self-worth; conversely, being friendless during adolescence is associated with symptoms of depression, both concurrently and in later adulthood (Bagwell et al., 1998; Bukowski, et al., 2010). Positive peer experiences might be a protective factor, enhancing resilience in children who are at risk for poor outcomes resulting from negative socialization experiences (Rubin, Bukowski, & Parker, 2006). For example,

research by Hodges, Boivin, Vitaro, and Bukowski (1999) demonstrated that friendship may serve to protect children from the negative experience of peer victimization, such as bullying. Although peer victimization is known to contribute to internalizing distress, this internalizing distress was significantly decreased by the presence of a close, reciprocal friend.

Because friendships provide opportunities to develop social skills competencies (Glick & Rose, 2011), children who lack friendships may possess poor social skills that result from lack of practice. The primary risk factor for children with poor social skills is poor peer acceptance (Parker & Asher, 1987) and poor peer acceptance is typically associated with a lack of friendships. It is a cyclical relationship: children who are not very well-liked have few opportunities to exercise their social skills, decreasing the odds of subsequent friendships and future opportunities to increase their social savvy and gain friends. Gifford-Smith and Brownell (2003) stated that studying either peer acceptance or friendship in isolation will likely lead to limited and incomplete information. It is important to remember that children who are isolated or relatively unknown in the overall peer network can still have a reciprocal friendship (Ladd, Kochenderfer, & Coleman, 1997; Parker & Asher, 1993); therefore, accounting for sociometric status and friendship simultaneously might result in more distinct, detailed profiles of risk status for neglected children (Gifford-Smith & Brownell, 2003).

The current study investigates the link between neglected status and internalizing distress, particularly amongst those neglected children with and without a reciprocated friendship. Specifically, the study will examine whether neglected children in this sample have significantly higher internalizing problems when compared to children with average status. Additionally, the possible moderating effects of the presence of a reciprocated friend on internalizing distress in neglected children will be examined. Finally, the study will explore internalizing distress among

neglected-withdrawn children as compared to neglected children rated by peers as not particularly withdrawn.

Neglected Sociometric Status

As stated earlier, in a meta-analysis of 41 studies Newcomb and colleagues (1993) found neglected children to exhibit a consistent profile independent from, albeit similar to, the profile of children of average status. For example, they found neglected status to be distinguished by higher levels of withdrawal than average children. In spite of this withdrawal, it was noted that neglected children exhibited less depression than average children when viewed across studies. Regarding sociability, neglected children evidenced fewer total social interactions and fewer positive social traits. This low sociability combined with the low nominations required to qualify for neglected status suggests that these children are not likely well known by their classmates. Furthermore, neglected children demonstrated less aggression and lower disruptive behavior levels than children of average status.

Newcomb and colleagues' (1993) finding that neglected children evidence less depression than average status children might be the result of difficulty in detecting internalizing disorders by observation or adult/peer report alone. For this reason, self-report is an important method for determining depression in children (Panichelli-Mindel, Flannery-Schroeder, Kendall & Angelosante, 2005). Teachers typically view neglected students in a positive light, rating them as being motivated in school, able to function independently in the classroom, and exhibiting appropriate classroom behavior (Wentzel & Asher, 1995). It is not surprising that teachers would equate these "low-need, good students" with having few internalizing difficulties.

Neglected children appear to be viewed by their peers with indifference: interacting with them yields neither social risk nor social advantage (Frederickson & Furnham, 1998). As stated

earlier, neglected children's low-sociability has cyclical effects: The less positive social skills a child has, the more likely they will be overlooked by their peers, and when a child is overlooked socially, they have fewer opportunities to develop and to hone social skills. Furthermore, having a well-developed sense of what is appropriate social behavior in various contexts can be just as important as having those social skills (Gifford-Smith & Brownell, 2003) and application of this knowledge comes with practice.

Coie and Dodge (1988) found that neglected children were nonaggressive, peaceable, and reserved. Additionally, the neglected boys in their study were rated by peers as being less cooperative (less social reciprocation) and were not good leaders, a report that is congruent with findings of a lack of prosocial behaviors in neglected children (Hatzichristou & Hopf, 1996). When compared to rejected children, neglected boys in the Coie and Dodge study were more likely to be isolated in their play. Neglected children are occasionally described by their peers as being shy and withdrawn (Ollendick, Weist, Borden, & Greene, 1992). However, Asher and Wheeler (1985) found that they were not more lonely than other children, despite their isolated play. This raises the question: Is the child simply content to play alone or does the child feel social anxiety?

When considering this profile – nonaggressive and reserved, socially appropriate but isolated – it is understandable why these children have low visibility amongst their peers. In fact, Coie and Dodge (1988) found that neglected children were consistently rated by their peers as below the average group on all items, whether indicative of social skill, withdrawal, or externalizing behavior. Perhaps neglected children simply do not come to their peers' minds when they are completing peer nomination items: they may be simply less well-known by their peers and less easily recalled. Regarding subsequent risk, research indicated that most neglected

children will make friends by middle school (Newcomb et al., 1993) but the potential for internalizing distress in elementary school remains.

Withdrawal / Isolation in Children

Childhood withdrawal is a behavior associated with neglected status (Newcomb et al., 1993). Additionally, withdrawal is correlated with internalizing problems, including low self-esteem, loneliness, anxiety, and depression (Boivin et al. 1995; Rubin, et al., 2006a; Rubin, Coplan, & Bowker, 2009). Children who are described as socially withdrawn are the ones who are typically playing alone or watching their peers from the sideline, perhaps resulting from shyness or anxiousness (Oh, Rubin, Bowker, Booth-LaForce, Krasnor, & Laursen, 2008). Observance of the occurrence of solitary play in children has the strongest validity when informed by peer report (Spangler & Gazelle, 2009), but the challenge in studying withdrawn or isolated children is in determining why they are observed to be solitary in their work or play. It is possible that a child was first excluded by peers and subsequently became withdrawn; conversely, a child may have withdrawn from others and subsequently became neglected by peers.

Researchers have cited three main forms of child solitude. Two forms are characterized as residing within the child, anxious-solitary and unsociable, while the third form is a result of the social network: peer exclusion (Boivin et al., 1995; Spangler & Gazelle, 2009). Anxious-solitary is conceptualized as resulting from internal conflict in the desire for normative peer interaction coupled with high internal social anxiety (Asendorpf, 1990; Gazelle & Ladd, 2003). Other researchers refer to this group as shy-withdrawn, and describe these children as being unlikely to initiate conversations with peers, hesitant to speak, and appearing less socially competent than their same-age peers (Rubin, Coplan, Bowker, 2009). In contrast, children who

are unsociable are disinterested and prefer to play alone, despite possessing the necessary skills to interact with their peers (Asendorpf, 1990). Peer exclusion refers to a child being excluded from a social activity and can be active exclusion (e.g. telling a child they cannot play with them) or passive exclusion (e.g., failing to notice a child during recess, and thereby failing to include them) (Gazelle & Ladd, 2003).

Children who are socially withdrawn are at risk for victimization, specifically bullying (Hanish & Guerra, 2004). This is likely because they are an easy target and are unlikely to retaliate (Olweus, 1993). Of the subtypes of withdrawal, anxious-solitary children were found to have a greater likelihood of being victimized by their peers than the other subgroups of children who were withdrawn (Ladd, Kochenderfer-Ladd, Eggum, Kochel, & McConnell, 2011). Rubin and colleagues (2006a) found that peer victimization of children who are withdrawn and do not possess a mutual friendship is associated with later internalizing and externalizing difficulties. However, the relation was non-significant for those children who had a mutual friendship, suggesting friendship is a protective factor for these children against peer victimization (Rubin et al., 2006a; Ladd et al., 2011). Similarly, Oh and colleagues (2008) found that friendlessness and peer victimization were associated with increased withdrawal over a four year period.

Childhood withdrawal represents more than just immediate repercussions; there are also longitudinal implications. Rubin and colleagues discovered through a follow-up study that social withdrawal at age seven predicted feelings of insecurity, negative self-esteem, and loneliness at age 14 (Rubin, Chen, McDougall, Bowker, & McKinnon, 1995). Gazelle and Rudolph (2004) found that when children who are anxious-solitary were included by their peers they displayed more pro-social behaviors and became less avoidant over time; however, when anxious-solitary children were excluded by their peers, they demonstrated a decrease in social approach behavior.

Indeed, researchers agree that it is the negative response of the peer network toward these children who are withdrawn that predicts an increase in internalized negative thoughts and feelings (Rubin et al., 2009).

Children's Friendships

Neglected children are significantly less likely to have a reciprocated friend than other children within the peer network (Gest, Graham-Bermann & Hartup, 2001). The term "friendship" has been defined as a close, mutual, dyadic relationship (Bukowski & Hoza 1989), and many researchers have indicated that the validity of a friendship is based in reciprocity, in which the friendship must be confirmed by each child (e.g., Bukowski & Hoza, 1989; George & Hartmann, 1996; Parker & Asher, 1993). In school, children typically seek out friendships first according to social proximity (e.g., children in the same class), and then based on similarity to oneself, level of enjoyment of interactions and reciprocity of the friendship (Gifford-Smith & Brownell, 2003; Newcomb, Bukowski, & Pattee 1993; Rubin et al., 2006a). Children's friendship experiences can vary greatly, in areas such as the presence of reciprocal friendships, the number of friendships, and the quality of those friendships (Hartup, 1996).

A close, reciprocal friendship is essential to adaptive development, and it fulfills different roles throughout developmental stages, ranging from entertainment through coordinated play in early childhood, to group acceptance, companionship, and support in middle childhood, and individual identity formation in early adolescence (Bagwell, Newcomb, & Bukowski, 1998; Gifford-Smith & Brownell, 2003). As Sullivan (1953) stated in his seminal work, friendship is a significant developmental task that fulfills a child's interpersonal needs for acceptance, approval, and intimacy. Friends provide a sympathetic ear and function as confidants through difficult

times. Self-esteem is promoted through this relationship, which provides opportunities for disclosure, support, and understanding (Newcomb & Bagwell, 1995).

Friends serve as socialization agents for children (Hartup, 1996; Sullivan, 1953). As stated earlier, neglected children often go unnoticed by their peers. Fewer opportunities to interact with peers and engage in social skills development translate into under-developed social skills. This reflects Piaget's theory that a child's knowledge and understanding of social constructs is contingent upon collective social interactions with other children (Piaget, 1950/1995c). It is through these friendships that children learn social skills such as reciprocation, cooperation, conflict resolution, communication skills, and positive social traits; therefore, experience with a best friend is linked to the development of social competency (Rubin et al., 2006a).

A child's self-concept is believed to develop as a result of social experience. Children have a pre-conceived self-image that they hold while interacting with other individuals and subsequently modify that self-image as a result of these experiences and interactions (Epstein, 1973). Research into pre-adolescent cliques by Adler and Adler (1996) demonstrated the effect of friendship groups on self-concept, through the development of understanding of personal social value such as level of charisma and competency in the peer group. Further, children with reciprocal friends are found to be more socially competent and pro-social, possess a higher self-esteem, and are less likely to be lonely (Newcomb & Bagwell, 1995).

Research supports the broad statements that friendships are generally beneficial, while being friendless might be detrimental to a child's social and emotional well-being (Greco & Morris, 2005). Children who do not have a reciprocal friend may be lacking in this type of intimate support. Researchers found that the absence of an interpersonal relationship with

another person may lead to feelings of loneliness, and this loneliness may contribute to feelings of loss of confidence, low self-worth, and social anxiety (Fontaine et al., 2009; Parker and Asher, 1993). Moreover, being friendless is correlated with an increased risk for bullying by peers (Kochenderfer & Ladd, 2008) and loss of a close friendship is associated with risk for depression, loneliness, and peer victimization (Rubin et al., 2006a; Parker & Seal, 1996).

Furthermore, there is empirical support that friendships buffer negative experiences in peer relationships (Bukowski, Laursen, & Hoza, 2010). A child who is having difficulty with peers will benefit from a stable, close relationship with another child, especially if the other child has positive peer relationships (Deater-Deckard, 2001). These protective factors likely stem from enhancing the individual's feelings of self-efficacy as a result of his ability to form positive, long-lasting friendships (Fenzel, 2000), as well as pro-social modeling that is offered from the child who has positive peer relationships. Additionally, Berndt and colleagues (1999) found that having a close friend could buffer peer relationship difficulties experienced by a child during a school transition. Other research indicates that friendship can moderate internalizing distress. Heller and Tanaka-Matsumi (1999) found that depressive symptoms (withdrawal and sadness) that were shared during an interaction with a well-adjusted friend resulted in an increase in the pro-social behavior displayed by the child who was experiencing the depressive symptoms.

Friendships of neglected children

Gest and colleagues found that neglected children were significantly less likely to have a reciprocal friendship in comparison to all other sociometric groups; Twenty-one percent of neglected children had a reciprocal friend and, in comparison, 55% of average children were found to have a reciprocal friend (Gest, Graham-Bermann & Hartup, 2001). Similarly, Parker and Asher (1993) revealed that average and highly accepted children were approximately twice

as likely to have a best friend than were low-accepted children, as determined by peer ratings of how much they liked to play with that child. They further stated that when low-accepted children had reciprocal friends, these friendships were more likely to be problematic and low in quality.

Although neglected children may struggle to form friendships, being popular does not guarantee friendship; however, being well liked (i.e., popular) does increase the chances of forming friendships (Bukowski, Pizzamiglio, Newcomb, & Hoza, 1996). In other words, children typically choose to interact with a child they like, giving likeable children more opportunities for forming friendship. However, simply having the opportunity to make friends will not alone guarantee that a friendship will be formed. Possessing pro-social skills and behaviors that promote likeability (e.g., friendliness) will help to promote friendship with others. Unfortunately, neglected children have been found to have low levels of pro-social behavior (Wentzel, 2003).

Placement in the peer network determines the visibility of a child to potential friends (Bukowski et al, 1996). The more popular a child is, the more visible they are to other children, therefore affording more possibilities for friendships. Conversely, a child who is neglected in the peer group will be less noticeable, and will have fewer opportunities for friendship development. This offers a potential protective factor to the child who is neglected overall within the peer group, but has one reciprocal friend: The opportunity to practice pro-social skills with one child allows improvement of those skills, and likeability in addition to pro-social skills are the key to opportunities for increased friendship.

Current Study

The current study aims to answer three primary questions. The first question is “Do neglected children have significantly higher internalizing problems than average status children?” Existing research indicates that significant differences in mean levels of depression and anxiety between children who are neglected and children who are of average status are unlikely (i.e., see meta-analysis by Newcomb et al., 1993); however, many of these studies have relied on adult-report, which can result in underreporting of internalizing distress (Panichelli-Mindel, Flannery-Schroeder, Kendall & Angelosante, 2005). Self-report was included in this sample, and therefore it was hypothesized that mean levels of internalizing distress for neglected children would be higher than that of average children due to methodological differences from past research. The purpose of addressing this first research question was twofold: first to compare this sample to existing literature, and additionally to get a baseline of how these neglected children are functioning.

Second, “For neglected children, do those without a friend have higher levels of internalizing distress when compared to neglected children with a reciprocated friendship?” I hypothesized that having a reciprocated friend would provide a buffer against concurrent depression and anxiety. Past studies have shown poor peer acceptance, loneliness, and anxious/depressed symptoms to be interrelated (Fontaine et al., 2009); thus, due to the known connection between friendlessness, lack of social support, and social emotional difficulties, I expected to find similar results. Finally, “Are neglected-withdrawn children experiencing more internalizing distress in comparison to their average peers?” As stated earlier, children who were withdrawn demonstrated increased depression over time (Bukowski et al., 2010); therefore, I expected to see a difference in mean levels of internalizing distress between these groups.

CHAPTER 2

METHOD

Participants

The data used herein is from a larger study on children's peer group social structure and peer relations which was collected in the late Spring of 2000. Children were recruited from 26 fourth and fifth grade classrooms from three schools in the southeastern region of the United States. Both parental consent and child assent were required for participation in the study. Active consent/assent was obtained for 85% of the total possible participants, resulting in the inclusion of 422 elementary school children. Because of incomplete data for the teacher- and/or self-report measures, 66 children were excluded from analyses, resulting in 356 children in the data set. The majority of students with missing data were from complete classes that lacked a component of data (i.e., teacher-report forms). Two hundred children were in the fourth grade, and 156 were in fifth grade. Of the total sample, 170 (i.e., 47.8%) children were male. Ethnic breakdown is as follows: 64.9% Caucasian, 32.6% African American, and 2.5% "Other" (i.e., Asian, Hispanic, or Mixed Race). Within-school sample demographics were comparable to individual school demographics. School population information indicated that 57% of children qualified for free or reduced lunch status.

Questionnaires were administered as a group and read aloud by two members of the research team in each classroom. Participants completed the questionnaires in two 1-hour sessions over consecutive days to reduce the risk of fatigue. Those children who did not have parental consent to participate either read quietly at their desks or were given teacher permission

to go to the library. Nominations were restricted to the available participants and not open to all members of the class. At the conclusion of the sessions, children were given a small gift as a token of appreciation, regardless of whether they participated or not.

Predictor Variables

Sociometric Popularity

Following the sociometric interview protocol described by Coie, Dodge, and Coppotelli (1982), children were asked to nominate three participating classmates that they “like most” (i.e., “Which children do you like to play with the most?”) and “like least” (i.e., “Which children do you like to play with the least?”). “Like most” and “like least” scores were standardized within classroom and gender to allow for comparison across classrooms that had different numbers of participants and differing gender ratios. Social impact scores were computed as the sum of standardized “like most” plus “like least”, whereas social preference scores were computed by subtracting “like least” from “like most” scores. “Like most”, “like least”, social preference, and social impact scores were used to assign children to sociometric status categories. Sociometric categories were assigned prior to eliminating students with incomplete data. Individuals were classified as neglected if their social impact score was less than -1 , their “like most” score was less than 0 , and their “like least” score was less than 0 . Sixty-five children in the sample were identified as having neglected sociometric status. Average status has been determined in two ways within the literature. All children who do not meet other sociometric categories are classified as Average (Coie & Dodge, 1983), or alternatively, the more stringent definition is used in which individuals were classified as average if they scored within .5 standard deviations of the average range on social preference (Coie et al., 1982). Because the children of average status were utilized as a comparison group, the more stringent definition was used. As a result,

twenty-one children in the sample were identified as having an average sociometric status using this strict definition of average.

Peer reports of a classroom reciprocal friendship

Participants were also compared on the presence or absence of a mutual friendship within their classroom. To determine whether children were participants in one or more close classroom friendships, children were asked to nominate up to three classmates as friends (i.e., "Which children are your very closest friends?"). A reciprocated friendship was identified when two participants each nominated the other as a friend, indicating mutual liking, and was scored as "1" for mutual friendship and "0" when there was no mutual selection of friendship. Presence of a reciprocated friendship was determined prior to eliminating students with incomplete data. Of neglected children, 38 (58.5%) possessed a reciprocal friend, and 27 (41.5%) did not. In comparison, in the total sample of children, 71.4% had a reciprocal friend, while 28.6% did not. For average status children, 80% had a reciprocal friend, while 20% did not.

Peer reports of social withdrawal

Peer nominations were used to determine social withdrawal among peers. On each survey, participants were instructed to first consider children in their class who typically play by themselves. Three scenarios were then posed to the participant, which parallel behavioral typologies of unsociable withdrawal ("someone who gets along well with others, but would prefer to play alone"), anxious-solitary ("someone who looks like they want to play with others but seems afraid or shy"), and excluded-withdrawn ("someone who doesn't play with other kids because no one will play with them"). Scores were standardized by classroom to a mean of 0 and a standard deviation of 1, due to variations in the possible number of nominations according to the number of peer nominators in each classroom. It has become standard practice in

determining behavioral subtypes to use between 0.50 and 1.00 standard deviations from the mean as a cut point (i.e., see Coie et al., 1982; Rubin et al., 2006); therefore, for the purpose of this study, children who scored .75 standard deviations or higher than the mean were classified as withdrawn.

Of the total sample, 72 children (20.2%) of the sample were rated as unsociable-withdrawn, 77 children (21.6%) were anxious-solitary, and 56 children (15.7%) were excluded-withdrawn. Due to the likely overlap in nominations, correlations were examined (see Appendix B). Of the children in the category of sociometric neglect, 16 children (24.6%) were rated as unsociable-withdrawn, 20 children (30.8%) were anxious-solitary, and 8 children (12.3%) were excluded-withdrawn.

Outcome Variables

Social and Emotional Functioning

Internalizing symptoms were assessed through teacher report and child self-report on the Behavior Assessment System for Children Teacher Rating Scales (BASC-TRS) and Behavior Assessment System for Children Self-Report of Personality (BASC-SRP) (Reynolds & Kamphaus, 1992). The BASC is a clinically-normed measure that features both adaptive and clinical scales. The BASC is a multi-method, multi-dimensional approach to assessing behavior and self-perception and designed to facilitate classification of a variety of emotional and behavioral difficulties. The BASC offers three age levels on the TRS and two age levels on the SRP. The Child level was used in this study (TRS-C and SRP-C). Scores are in the form of T-Scores, with a mean of 50 and a standard deviation of 10, and classified according to the BASC manual as “Average” for scores of 0-59, “At Risk” for scores of 60-69, and “Clinically Significant” for scores of 70 and greater. Adaptive scales are reverse coded, so that lower score

are indicative of more adaptive problems: They are classified as “Average” for scores of 41 and greater, “At Risk” for scores of 31-40, and “Clinically Significant” for scores of 0-30.

The BASC-SRP is a personality inventory consisting of statements in which the student chooses “true” or “false.” The child form consists of 152 items and has 12 scales. The following SRP scales were used in this study: Social Stress, Anxiety, Depression, and Interpersonal Relations. The BASC-TRS is a teacher-reported measure of student behaviors and adaptive functioning in the school setting, in which the teacher responds to 148 statements according to a four-point scale indicating agreement from “Never” to “Almost Always.” The following TRS scales were used in this study: Anxiety, Depression, and Somatization. A description of scales included on the BASC-SRP are found in Table 1 and scales included on the BASC-TRS are found in Table 2 (adapted from Reynolds & Kamphaus, 1992).

Internal consistency for the BASC SRP-C is high, averaging a coefficient alpha of .81 for gender and age level. Test-retest correlation is high at coefficient alpha .76. Similarly, internal consistency for the BASC TRS-C is high, at a .88 coefficient alpha for ages 8 through 11, test-retest correlation is high at a coefficient alpha of .91 for the age group, and interrater reliability is reasonably high, with a mean coefficient alpha of .83 for four pairs of teachers rating the same child. Support for construct validity is provided through factor analytic results of the scales. Concurrent validity was measured against five frequently used teacher report forms and four similar child report measures (see Reynolds & Kamphaus, 1992). Furthermore, reliability, validity, and utility of the BASC have been confirmed by independent review (see Flanagan, 1995; Sandoval & Echandia, 1994).

Table 1: BASC Self-Report of Personality, Descriptions of Scales Used in the Current Study

Clinical Scales Included	Scale Description
Anxiety	Feelings of nervousness, worry, and fear; the tendency to be overwhelmed by problems.
Social Stress	Feelings of stress and tension in personal relationships; a feeling of being excluded from social activities.
Depression	Feelings of unhappiness, sadness, and dejection; a belief that nothing goes right.
Adaptive Scales Used	
Interpersonal Relations	The perception of having good social relationships and friendships with peers.

Note: Adapted from Reynolds and Kamphaus (1992).

Table 2: BASC Teacher Rating Scale, Descriptions of Scales Used in the Current Study

Clinical Scales Included	Scale Description
Anxiety	The tendency to be nervous, fearful, or worried about real or imagined problems.
Depression	Feelings of unhappiness, sadness, and stress that may result in an inability to carry out everyday activities (neurovegetative symptoms) or may bring on thoughts of suicide.
Somatization	The tendency to be overly sensitive to and complain about relatively minor physical problems and discomforts.

Note: Adapted from Reynolds and Kamphaus (1992).

CHAPTER 3

RESULTS

Analysis Plan

The current study examined sociometrically neglected children and potential internalizing problems. Specifically, three questions were raised in this pursuit: (1) Do neglected children in this sample demonstrate significantly higher internalizing problems than sociometrically average children? (2) Does having a reciprocated friend moderate internalizing problems for neglected children? (3) Do neglected children who are withdrawn among their peers demonstrate higher internalizing problems than sociometrically average children? T-tests are utilized to answer these questions. Research suggests little difference in internalizing distress between neglected and average groups; however, as previously stated, those results were based upon adult reports, which frequently underreport internalizing distress. Because this sample utilized self-reports in addition to teacher reports, it was expected that group differences might be found. Furthermore, it was anticipated that differences might be observed in neglected children's internal functioning based on the presence of a reciprocated friend or the presence of withdrawal behavior.

Analyses

Question 1: Do neglected children in this sample demonstrate significantly higher internalizing problems than sociometrically average children?

T-tests were employed to determine whether a significant difference in internalizing distress existed between neglected and average status children on each of these BASC scales:

Social Stress, Anxiety, Depression, and Interpersonal Relations, and teacher report on Anxiety, Depression, and Somatization scales.

On self-report measures, neglected children experienced significantly lower social stress ($M = 46.65$, $SD = 9.918$) than average children ($M = 53.29$, $SD = 10.588$), $t(84) = -2.624$, $p = .010$. Regarding self-reported anxiety, there was no significant difference between neglected children ($M = 49.4$, $SD = 11.194$) and average children ($M = 52.57$, $SD = 10.206$), $t(84) = -1.152$, $p = .253$. Neglected children did not experience a significant difference in self-reported depression ($M = 51.57$, $SD = 11.329$) when compared to average children ($M = 51.86$, $SD = 9.996$), $t(84) = -.104$, $p = .917$. Furthermore, on self-reported interpersonal relations, no significant difference between neglected children ($M = 49.83$, $SD = 12.062$) and average children ($M = 50.48$, $SD = 7.339$), $t(84) = -.231$, $p = .818$ was found.

According to teacher reports, significant differences in anxiety did not exist between neglected children ($M = 50.89$, $SD = 10.682$) and average children ($M = 49.14$, $SD = 8.918$), $t(84) = .677$, $p = .500$. Additionally, teacher ratings did not indicate differences in depression between neglected children ($M = 48.14$, $SD = 7.626$) and their average peers ($M = 51.29$, $SD = 9.073$), $t(84) = -1.568$, $p = .121$. Finally, no significant difference was found on somatization between neglected ($M = 52.72$, $SD = 12.178$) and average children ($M = 54.38$, $SD = 14.671$), $t(84) = -.515$, $p = .608$ when examining teachers' ratings.

Question 2: Does having a reciprocated friend moderate internalizing problems for neglected children?

To determine whether the presence of a reciprocated friend moderated internalizing distress in neglected children, independent sample t-tests were used. Regarding social stress experienced by neglected children, those without a reciprocated friend did not experience

significantly different levels of social stress ($M = 45.85$, $SD = 10.719$) than those with a reciprocated friend ($M = 47.21$, $SD = 9.413$), $t(63) = .541$, $p = .590$. Surprisingly, neglected children without a friend experienced significantly less anxiety ($M = 45.67$, $SD = 9.652$) in comparison to those with a friend ($M = 52.05$, $SD = 11.571$), $t(63) = 2.345$, $p = .022$. In looking at depression in neglected children, those without a reciprocated friend did not experience a significant difference in depression ($M = 51.67$, $SD = 11.787$) compared to those with a friend ($M = 51.50$, $SD = 11.152$), $t(63) = -.058$, $p = .954$. Finally, no significant difference was found in interpersonal relations of neglected children between those without a reciprocated friend ($M = 47.48$, $SD = 13.075$) and those with a reciprocated friend ($M = 51.50$, $SD = 11.164$), $t(63) = 1.332$, $p = .188$.

A notable trend was observed in teacher report of internalizing distress in neglected children without a friend. Teachers reported significantly higher depression in neglected children without a friend ($M = 50.89$, $SD = 9.720$) in comparison to those with a friend ($M = 46.18$, $SD = 4.975$), $t(36) = -2.309$, $p = .027$. Levene's test indicated unequal variances ($F = 35.371$, $p < .001$), so the degrees of freedom were adjusted from 63 to 36. Teachers reported a trend, albeit not significant, of higher anxiety in neglected children without a friend ($M = 53.56$, $SD = 9.881$) than for those with a friend ($M = 49.00$, $SD = 10.950$), $t(63) = -1.720$, $p = .090$. Additionally, teachers reported a trend, albeit not reaching statistical significance, of more somatization in neglected children without a friend ($M = 56.15$, $SD = 14.109$) versus those with a friend ($M = 50.29$, $SD = 10.099$), $t(63) = -1.953$, $p = .055$.

Question 3: Do neglected children who are withdrawn among their peers demonstrate higher internalizing problems than sociometrically average children?

T-tests were again used to determine whether neglected children who were rated highly on behaviors of withdrawal demonstrated increased mean levels of internalizing distress when compared to average children. Because a child can be rated highly on one, two, or all three withdrawal items, it should be noted that results are not entirely independent. Results are presented according to withdrawal behavior, wherein neglected children exhibiting that withdrawal behavior are compared to average children on internalizing composites.

Neglected children rated high on unsociable-withdrawal

According to children's self-report, neglected children rated highly on unsociable-withdrawn behavior ($M = 49.75$, $SD = 12.152$) did not experience significantly more social stress than average children ($M = 53.29$, $SD = 10.588$), $t(35) = -.944$, $p = .352$. Neglected children who demonstrated unsociable-withdrawn behavior ($M = 53.25$, $SD = 11.596$) did not experience significant differences in anxiety compared to their average peers ($M = 52.57$, $SD = 10.206$), $t(35) = .189$, $p = .851$. Similarly, neglected children who were rated highly on unsociable-withdrawn behavior ($M = 54.63$, $SD = 12.868$) did not report significantly higher depression when compared to their average peers ($M = 51.86$, $SD = 9.996$), $t(35) = .737$, $p = .466$. Finally, on a self-report of interpersonal relations, children who were neglected and exhibited behaviors of unsociable-withdrawal ($M = 46.88$, $SD = 14.207$) did not report significantly different difficulty when compared to their average peers ($M = 50.48$, $SD = 7.339$), $t(35) = -1.002$, $p = .323$.

Teachers did not report significantly greater anxiety for neglected children who were rated highly on unsociable-withdrawn behavior ($M = 51.19$, $SD = 11.226$) in comparison to their average peers ($M = 49.14$, $SD = 8.918$), $t(28.031) = .599$, $p = .554$. Regarding student depression, teachers reported that neglected children who demonstrated unsociable-withdrawn

behavior actually presented less depression, albeit not a significant level, ($M = 46.19$, $SD = 5.764$) in comparison to their average peers ($M = 51.29$, $SD = 9.073$), $t(35) = -1.963$, $p = .058$. Finally, teachers did not report significant differences in student somatization for neglected children rated highly on unsociable-withdrawn behavior ($M = 55.63$, $SD = 14.935$) in comparison to their average peers ($M = 54.38$, $SD = 14.671$), $t(35) = .254$, $p = .801$.

Neglected children rated high on anxious-solitary withdrawal

Neglected children who scored high on anxious-solitary behavior ($M = 47.25$, $SD = 11.346$) did not report significantly higher social stress in comparison to average children ($M = 53.29$, $SD = 10.588$), $t(39) = -1.762$, $p = .086$. Neglected children who demonstrated anxious-solitary behavior ($M = 52.20$, $SD = 13.081$) did not report significantly higher anxiety than average children ($M = 52.57$, $SD = 10.206$), $t(39) = -.102$, $p = .920$. Neglected children who are rated highly on anxious-solitary behavior ($M = 51.50$, $SD = 13.141$) did not show significantly different amounts of depression in comparison to their average counterparts ($M = 51.86$, $SD = 9.996$), $t(39) = -.098$, $p = .922$. Finally, neglected children who exhibited anxious-solitary behavior ($M = 50.15$, $SD = 11.926$) did not demonstrate mean differences in comparison to average children ($M = 50.48$, $SD = 7.339$) on interpersonal relations, $t(39) = -.106$, $p = .916$.

For neglected children who were rated highly on anxious-solitary behavior ($M = 51.85$, $SD = 10.854$), teachers did not report significant differences in anxiety from their average peers ($M = 49.14$, $SD = 8.918$), $t(39) = .874$, $p = .387$. Similarly, teachers did not report significant differences in depression between neglected children who demonstrated anxious-solitary behavior ($M = 48.25$, $SD = 8.565$) and their average peers ($M = 51.29$, $SD = 9.073$), $t(39) = -1.10$, $p = .278$. Furthermore, teachers did not cite significant differences in somatization between

neglected children who were rated highly on anxious-solitary behavior ($M = 54.35$, $SD = 13.570$) and their average peers ($M = 54.38$, $SD = 14.671$), $t(39) = -.007$, $p = .994$.

Neglected children rated high on excluded-withdrawn

Neglected children who were rated highly on excluded-withdrawn behavior ($M = 56.00$, $SD = 11.212$) did not experience significantly more social stress when compared to their average peers ($M = 53.29$, $SD = 10.588$), $t(27) = .608$, $p = .549$. Furthermore, neglected children who demonstrated excluded-withdrawn behavior ($M = 55.38$, $SD = 11.563$) also did not have significantly higher mean anxiety than their average peers ($M = 52.57$, $SD = 10.206$), $t(27) = .638$, $p = .529$. However, neglected children who are rated highly on excluded-withdrawn behavior ($M = 61.50$, $SD = 12.615$) demonstrated significantly higher mean levels of depression than average children ($M = 51.86$, $SD = 9.996$), $t(27) = 2.162$, $p = .040$. Neglected children who exhibited excluded-withdrawn behavior ($M = 39.13$, $SD = 12.484$) reported significantly more difficulties with interpersonal relations when compared to their average peers ($M = 50.48$, $SD = 7.339$), $t(8.911) = -2.418$, $p = .039$.

Teachers did not report significant differences in anxiety between neglected children who were rated highly on excluded-withdrawn behavior ($M = 54.88$, $SD = 11.457$) from their average peers ($M = 49.14$, $SD = 8.918$), $t(27) = 1.431$, $p = .164$. Teachers did not report significant differences in student depression between neglected children who demonstrated excluded-withdrawn behavior ($M = 48.63$, $SD = 7.269$) and average children ($M = 51.29$, $SD = 9.073$), $t(27) = -.741$, $p = .465$. Finally, teachers did not report significant differences in somatization between neglected children who were rated highly on excluded-withdrawn behavior ($M = 56.75$, $SD = 14.150$) and average children ($M = 54.38$, $SD = 14.671$), $t(27) = .392$, $p = .698$.

CHAPTER 4

DISCUSSION

Neglected children have been frequently dismissed as a group that is no more at risk for internalizing distress than their average peers (Coie et al., 1982; Newcomb et al., 1993; Parker & Asher, 1987). However, Newcomb and colleagues (1993) suggested that differences in methods of data collection may be hiding small, yet significant, differences between groups. The first intention of the study was to determine, within this sample, if there were differences in self-reported internalizing distress between neglected and average children. Furthermore, this study proposed to uncover significant differences between sociometric groups by differentiating subgroups of neglected children based upon the presence or absence of a reciprocal classroom friend and peer-reports of withdrawal behavior. That is, it was expected that neglected children without a reciprocal friend would evidence more internalizing distress than children who had a reciprocal friend, and neglected children who were withdrawn would evidence more internalizing distress than average children.

Overall, findings were not consistent with these expectations; however, some differences among subgroups were found. First, in this sample, no differences were discovered between neglected children and their average peers in regards to self-report of anxiety, depression, or interpersonal relations, or on teacher report of their anxiety, depression, or somatic complaints. Neglected children actually evidenced less social stress than their average peers according to children's self-report. This was consistent with findings from the meta-analytical work of Newcomb and colleagues (1993) as well as more recent research by Gifford-Smith and Brownell

(2003), who determined that the overall profile of neglected children was difficult to differentiate from average children.

Neglected children in this sample were less likely than their peers to have a reciprocated friend. Seventy-one percent of children in the entire sample had a reciprocal friend. However, only 58.5% of neglected children had a friend, whereas 80% of average status children had a reciprocal friend. The presence or absence of a friend was used to determine within-group differences among neglected children, resulting in intriguing findings: A notable trend emerged through teacher report of student behavior. Teachers reported a significantly higher rate of depression in neglected students without a reciprocal classroom friend. Additionally, teachers reported a trend towards higher anxiety and somatization in these students, although this trend did not reach statistical significance. However, neglected students without a reciprocal classroom friend did not self-report higher depression, social stress, or difficulty with interpersonal relationships, in comparison to their friended counterparts, and actually reported less anxiety. While the differences between teacher and self-report are surprising, the teacher results concur with research that indicates that children without a reciprocal friendship are at risk for depression and social anxiety (Parker & Asher, 1987; Rubin et al., 2006).

Types of withdrawal were investigated to determine if children who are neglected and demonstrate high levels of withdrawal experience more internalizing distress in comparison to their average peers. The first type of withdrawal explored was unsociable-withdrawal. Analyses indicated that neglected children who were rated highly by their peers on unsociable-withdrawal do not experience significantly higher anxiety, depression, social stress, or difficult interpersonal relations when compared to their average peers. Furthermore, teachers did not report these children to have greater anxiety or somatization than their average peers, and actually reported

these children to have lower, albeit not significantly lower, depression than sociometrically average students.

A second type of withdrawal behavior considered was anxious-solitary withdrawal. Neglected children who were rated highly on anxious-solitary behaviors by their peers did not report significantly higher anxiety, depression, or difficulty with interpersonal relations. Moreover, these children reported slightly lower social stress, although not reaching the threshold of statistical significance. Similarly, teachers did not rate these children as being more anxious or depressed, or as displaying more somatization than their average peers.

The third and final type of withdrawal behavior investigated was excluded-withdrawn. Children who were sociometrically neglected and rated highly by their peers as exhibiting behaviors of excluded-withdrawn reported higher levels of depression and more difficulty with interpersonal relations than their average peers; however, they did not report higher levels of anxiety or social stress. The finding that these children reported higher rates of depression supports existing literature (Boivin et al. 1995; Rubin, et al., 2006a; Rubin, Coplan, & Bowker, 2009). However, teachers did not report significant difficulties in anxiety, depression, or somatization for these children. Furthermore, it should be reiterated that peer exclusion includes both active and passive exclusion (Gazelle & Ladd, 2003). Because the children in this sample endorsed difficulty with interpersonal relations but not social stress, it is presumable that these children may be experiencing passive exclusion, especially in light of the knowledge that neglected children have low visibility in their peer group, are not as well known by their peers, and frequently fail to come to their peer's minds (Newcomb et al., 1993).

Limitations

This study had several limitations. First, in determining internalizing risk for neglected children, the child's perspective is important. If a child is neglected in the peer group and aware of it, the child may experience more anxiety or distress than the child who is ignored by peers but unaware (Parker & Asher 1987). Information regarding the child's perspective on his or her own social status was not collected for this sample, and therefore, was not analyzed.

Another limitation of the current study is the lack of consideration of a close, reciprocal friendship outside the classroom. Due to the method in this study of measuring friendship within the classroom, it is possible that the neglected children in this study who did not have a reciprocal friend in the classroom may have benefited from a reciprocal friend outside the classroom that was not taken into account: a friend in another classroom whom they only see at recess, or a friend from their neighborhood or church, or a sibling. As stated by Parker and Asher (1987), these children might be essentially "six-hour unpopular children." Thus, it is not expected that these children would show the same level of internalizing distress as children who are friendless in all settings (Parker & Asher, 1987). Further, evidence has been found that many neglected children without friends will develop a reciprocal best friend by late elementary school, indicating a short-term nature to their lack of friendship (Newcomb et al., 1993), and therefore not a lasting distress.

The importance of a child's friendships can also be moderated by the quality of their family relationships, which was not measured in this study. For children who do not have a supportive family environment at home, friendship outside the home becomes of paramount importance; likewise, for children without reciprocal friendships, families contribute more heavily to their adjustment (Gauze, Bukowski, Aquan Assee, & Sippola, 1996). This indicates

that children without a close friendship in the classroom can still benefit from protective factors of a close relationship with a family member. For example, a strong maternal bond was found to be more effective in offsetting symptoms of depression in early adolescence than friendship (Vaughan, Foshee, & Ennett, 2010). Additionally, there is evidence that many children derive emotional support from family pets (Melson, 2003).

Another limitation to the current study was the lack of consideration of quality of friendship. Although the presence of a friend typically serves as a protective factor for emotional well-being, not all friendships are alike, and some can be detrimental (Hartup 1997; Ladd, Kochenderfer, & Coleman, 1996). Friendships of children who are low-accepted by their peer group (as determined by peer ratings of how much they liked to play with that child) often score lower on dimensions of quality than the friendships of more popular children (Parker & Asher, 1993). Research has shown that having a low quality friend (i.e., a negative influence) can be just as deleterious as not having a friend at all (Hartup, 1996).

The measurement of withdrawal behaviors was based upon peer nominations for three questions, in which each question constituted a type of withdrawn behavior. To further develop the credibility of these groups, teacher nominations of children who exhibit different forms of withdrawn behavior could be added to the peer nominations (i.e., see Gazelle & Rudolph, 2004; Ladd et al., 2011). Teacher report of withdrawn behavior in children is well validated in the literature (i.e., see Gazelle & Rudolph, 2004; Ladd & Profilet, 1996).

Summary and Future Directions

Despite these limitations, the current study extends existing research by suggesting that the sociometric group neglected deserves further investigation, due to the evidence that subsets of neglected children may, in fact, be experiencing internalizing distress. As indicated in this

study, neglected children without a reciprocal friend and neglected children who are exhibiting excluded-withdrawn behavior may be experiencing greater internalizing difficulty than other friended and non-withdrawn neglected children; therefore, more research is needed into these groups of children. Past research has concluded that “serious developmental concern for children in this group is most likely unjustified” (Newcomb et al., 1993, p. 121); however, this study indicates that it is crucial that researchers continue to investigate subsets of the neglected population in order to fully ascertain risk, and, if needed, develop appropriate and effective interventions.

REFERENCES

- Adler, P. A., and Adler, P. (1996). Preadolescent clique stratification and the hierarchy of identity. *Sociological Inquiry*, 66, 2, 111 - 142.
- Asendorpf, J. B. (1990). Beyond social withdrawal: Shyness, unsociability, and peer avoidance. *Human Development*, 33, 250 – 259.
- Asher, S. R., & Coie, J. D. (1990). *Peer rejection in childhood*. New York: Cambridge University Press.
- Asher, S. R., & Dodge, K. A. (1986). Identifying children who are rejected by their peers. *Developmental Psychology*, 22, 4, 444 – 449.
- Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology*, 53, 4, 500 – 505.
- Bagwell, C. L., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendship and peer rejection as predictors of adult adjustment. *Child Development*, 69, 1, 140 – 153.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 3, 497 – 529.
- Berndt, T. J., Hawkins, J. A., and Jiao, Z. (1999). Influences of friends and friendships on adjustment to junior high school. *Merrill-Palmer Quarterly*, 45, 13 – 41.

- Boivin, M., Hymel, S., & Bukowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development and Psychopathology, 7*, 765 – 785.
- Bukowski, W. M., & Hoza, B. (1989). Popularity and friendship: Issues in theory, measurement, and outcome. In T. Berndt & G. Ladd (Eds.). *Peer relationship in child development* (pp. 15 – 45). New York: Wiley.
- Bukowski, W. M., Laursen, B., & Hoza, B. (2010). The snowball effect: Friendship moderates escalations in depressed affect among avoidant and excluded children. *Development and Psychopathology, 22*, 749 – 757.
- Bukowski, W. M., Pizzamiglio, M. T., Newcomb, A. F., & Hoza, B. (1996). Popularity as an affordance for friendship: The link between group and dyadic experience. *Social Development, 5*, 2, 189 – 202.
- Coie, J. D. & Dodge, K. A. (1983). Continuities and changes in children's social status: A five year longitudinal study. *Merrill-Palmer Quarterly, 29*, 261 - 282.
- Coie, J. D. & Dodge, K. A. (1988). Multiple sources of data on social behavior and social status in the school: A cross-age comparison. *Child Development, 59*, 815 – 829.
- Coie, J. D., Dodge, K. A., & Coppotelli, H. (1982). "Dimensions and types of social status: A cross- age perspective. *Developmental Psychology, 18*, 557-570.
- Coie, J. D., Dodge, K. A., and Kupersmidt, J. B. (1990). Peer group behavior and social status. In S. R. Asher & J. D. Coie (Eds.). *Peer rejection in childhood* (pp. 17 – 59). New York: Cambridge University Press.

- Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *Journal of Child Psychology and Psychiatry, 42, 5, 565 – 579.*
- Epstein, S. U. (1973). The self-concept revisited: Or a theory of a theory. *American Psychologist, 28, 5, 404 - 416.*
- Fenzel, L. M. (2000). Prospective study of changes in global self-worth and strain during the transition to middle school. *Journal of Early Adolescence, 20, 93 – 116.*
- Flanagan, R. (1995). A review of the *Behavior Assessment System for Children (BASC)*: Assessment consistent with the requirements of the Individuals With Disabilities Education Act (IDEA). *Journal of School Psychology, 33, 2, 177 – 186.*
- Frederickson, N. L. & Furnham, A. F. (1998). Sociometric classification methods in school peer groups: A comparative investigation. *Journal of Child Psychology and Psychiatry, 39, 6, 921 – 933.*
- French, D. C. (1988). Heterogeneity of peer-rejected boys: Aggressive and nonaggressive subtypes. *Child Development, 59, 4, 976 – 985.*
- Gauze, C., Bukowski, W. M., Aquan Assee, J., & Sippola, L. K. (1996). Interactions between family environment and friendship and associations with self perceived well-being during adolescence. *Child Development, 67, 2201 – 2216.*
- Gazelle, H. & Rudolph, K. D. (2004). Moving toward and away from the world: Social approach and avoidance trajectories in anxious solitary youth. *Child Development, 75, 3, 829 – 849.*
- Gazelle, H. & Ladd, G. W. (2003). Anxious solitude and peer exclusion: A diathesis-stress model of internalizing trajectories in childhood. *Child Development, 74, 257 – 278.*

- George, T. P., & Hartmann, D. P. (1996). Friendship networks of unpopular, average, and popular children. *Child Development, 67*, 2301 – 2316.
- Gest, S. D., Graham-Bermann, S. A., & Hartup, W. W. (2001). Peer Experience: Common and unique features of number of friends, network centrality, and sociometric status. *Social Development, 10*, 1, 23 – 40.
- Gifford-Smith, M. E., & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology, 41*, 235 – 284.
- Glick, G. C., & Rose, A. J. (2011). Prospective associations between friendship adjustment and social strategies: Friendship as a context for building social skills. *Developmental Psychology, 47*, 4, 1117 – 1132.
- Greco, L. A., & Morris, T. L. (2005). Factors influencing the link between social anxiety and peer acceptance: Contributions of social skills and close friendships during middle childhood. *Behavior Therapy, 36*, 197 – 205.
- Hanish, L. D., & Guerra, N. G. (2004). Aggressive victims, passive victims, and bullies: developmental continuity or developmental change. *Merrill – Palmer Q, 50*, 17 – 38.
- Hartup, W. W. (1983). Peer relations. In E. M. Hetherington (Ed.) *Handbook of child psychology: Vol. 4. Socialization, personality, and social development* (pp. 103 – 198). New York: Wiley.
- Hartup, W. W. (1996). The company they keep: Friendships and their developmental significance. *Child Development, 67*, 1 – 13.
- Hartup, W. W., Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin, 121*, 3, 355 – 370.

- Hatzichristou, C., & Hopf, D. (1996). A multiperspective comparison of peer sociometric status groups in childhood and adolescence. *Child Development, 67*, 1085 – 1102.
- Hecht, D. B., Inderbitzen, H. M., & Bukowski, A. L. (1998). The relationship between peer status and depressive symptoms in children and adolescents. *Journal of Abnormal Child Psychology, 26*, 2, 153 – 160.
- Heller, M. C., and Tanaka – Matsumi, J. (1999). A sequential analysis of depressive behaviors within adolescent peer interactions. *Journal of Psychopathology and Behavioral Assessment, 21*, 249 – 273.
- Hodges, E., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*, 94 – 101.
- Kochenderfer, B. J., & Ladd, G. W. (2008). Peer victimization: Cause of consequence of school maladjustment? *Child Development, 67*, 4, 1305 – 1317.
- Kupersmidt, J. B., Coie, J. D., & Dodge, K. A. (1990). The role of poor peer relationships in the development of disorder. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 274 – 305). New York: Cambridge University Press.
- La Greca, A. M., & Stone, W. L. (1993). Social Anxiety Scale for Children-Revised: Factor Structure and Concurrent Validity. *Journal of Clinical Child and Adolescent Psychology, 22*, 1, 17 - 27.
- Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1996). Friendship quality as a predictor of young children's early school adjustment. *Child Development, 67*, 1103 – 1118.

- Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1997). Classroom peer acceptance, friendship, victimization: Distinct relational systems that contribute uniquely to children's school adjustment? *Child Development, 68*, 1181 – 1197.
- Ladd, G. W., Kochenderfer-Ladd, B., Eggum, N. D., Kochel, K. P., & McConnell, E. M. (2011). Characterizing and comparing the friendships of anxious-solitary and unsociable preadolescents. *Child Development, 82*, 5, 1434 – 1453.
- Ladd, G. W., & Profilet, S. M. (1996). The Child Behavior Scale: A teacher-report measure of young children's aggressive, withdrawn, and prosocial behaviors. *Developmental Psychology, 32*, 6, 1008 – 1024.
- Lease, A. M., Musgrove, K. T., and Axelrod, J. L. (2002). Dimensions of social status in preadolescent peer groups: likability, perceived popularity, and social dominance. *Social Development, 11*, 4, 508 – 533.
- Lindstrom Jr., W. A., Lease, A. M., & Kamphaus, R. W. (2007). Peer- and self-rated correlates of a teacher-rated typology of child adjustment. *Psychology in the Schools, 44*, 6, 579 – 599.
- Melson, G. (2003). Child development and the human-companion animal bond. *American Behavioral Scientist, 47*, 1, 31 – 39.
- Newcomb, A. F., & Bagwell, C. L. (1995). Children's friendship relations: A meta-analytic review. *Psychological Bulletin, 117*, 306 – 347.
- Newcomb, A., Bukowski, W., & Pattee, L. (1993). Children's Peer Relations: A Meta-Analytic Review of Popular, Rejected, Neglected, Controversial, and Average Sociometric Status. *Psychological Bulletin, 113*, 1, 99 - 128.

- Oh, W., Rubin, K. H., Bowker, J. C., Booth-LaForce, C., Rose-Krasnor, L., & Laursen, B. (2008). Trajectories of social withdrawal from middle childhood to early adolescence. *Journal of Abnormal Child Psychology, 36*, 553 – 566.
- Oldehinkel, A. J., Rosmalen, J. G. M., Veenstra, R., Kornelis Dijkstra, J., & Ormel, J. (2007). Being admired or being liked: classroom social status and depressive problems in early adolescent girls and boys. *Journal of Abnormal Child Psychology, 35*, 417 – 427.
- Ollendick, T. H., Weist, M. D., Borden, M. C., & Greene, R. W. (1992). Sociometric status and academic behavioral, and psychological adjustment: A five-year longitudinal study. *Journal of Consulting and Clinical Psychology, 60*, 80 – 87.
- Olweus, D. (1993). Victimization by peers: Antecedents and long-term outcomes. In K. H. Rubin & J. B. Asendorpf (Eds.), *Social withdrawal, inhibition and shyness in childhood* (pp. 315–341). Hillsdale, NJ: Erlbaum.
- Panichelli-Mindel, S. M., Flannery-Schroeder, E. F., Kendall, P. C., & Angelosante, A. G. (2005). Disclosure of distress among anxiety-disorder youth: Differences in treatment outcome. *Journal of Anxiety Disorders, 19*, 403 – 422.
- Parker, J. G. & Asher, S. R. (1987). Peer Relations and Later Personal Adjustment: Are Low-Accepted Children At Risk? *Psychological Bulletin, 102*, 3, 357 - 389.
- Parker, J. G. & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29*, 611 – 621.
- Parker, J. G., & Seal, J. (1996). Forming, losing, renewing, and replacing friendships: Applying temporal parameters to the assessment of children's friendship experiences. *Child Development, 67*, 2248 – 2268.

- Piaget, J. (1995c). Explanation in sociology. In J. Piaget, *Sociological studies* (L. Smith, Ed.) (pp. 30- 96). New York: Routledge. (Original article published in French in 1950)
- Reynolds, C. R., & Kamphaus, R. W. (1992). *Behavior Assessment System for Children*. Circle Pines, MN: American Guidance Service.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006a). Peer interactions, relationships, and Groups. In Eisenberg, N. (Ed.), *Handbook of child psychology, Sixth edition, Volume 3: Social, emotional, and personality development* (pp. 571–645). New York: John Wiley & Sons, Inc.
- Rubin, K. H., Chen, X., McDougall, P., Bowker, A., McKinnon, J. (1995). The Waterloo longitudinal project: Predicting internalizing and externalizing problems in adolescence. *Development and Psychopathology, 7*, 751 – 764.
- Rubin, K. H., Coplan, R. J., and Bowker, J. C. (2009). Social Withdrawal in Childhood. *Annual Review of Psychology, 60*, 141 – 171.
- Rubin, K. H., Wojslawowicz, J. C., Rose-Krasnor, L., Booth-LaForce, C., & Burgess, K. B. (2006b). The best friendships of shy/withdrawn children: Prevalence, stability, and relationship quality. *Journal of Abnormal Child Psychology, 34*, 2, 143 – 157.
- Sandoval, J. & Echandia, A. (1994). Behavior Assessment System for Children. *Journal of School Psychology, 32*, 4, 419 – 425.
- Spangler, T. & Gazelle, H. (2009). Anxious solitude, unsociability, and peer exclusion in middle childhood: a multitrait-multimethod matrix. *Social Development, 18*, 4, 833 – 856.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.

- Vaughan, C. A., Foshee, V. A., & Ennett, S. T. (2010). Protective effects of maternal and peer support on depressive symptoms during adolescence. *Journal of Abnormal Child Psychology*, *38*, 261 – 272.
- Wentzel, K. R. (2003). Sociometric status and adjustment in middle school: A longitudinal study. *Journal of Early Adolescence*, *23*, 1, 5 – 28.
- Wentzel, K. R., & Asher, S. R. (1995). Academic lives of neglected, rejected, popular, and controversial children. *Child Development*, *62*, 1066 – 1078.
- Wright, M., Banerjee, R., Hoek, W., Rieffe, C., & Novin, S. (2010). Depression and social anxiety in children: Differential links with coping strategies. *Journal of Abnormal Child Psychology*, *38*, 405 – 419.

APPENDIX A

Means and Standard Deviations of Dependent Variables

Table 3

Descriptive statistics for BASC Scales

		Sociometric Average		Sociometric Neglected	
Scale		M	SD	M	SD
SRP	Depression	51.86	9.99	51.57	11.32
	Anxiety	52.57	10.20	49.40	11.19
	Social Stress	53.29	10.58	46.65	9.91
	Interpersonal Relations	50.48	7.33	49.83	12.06
TRS	Depression	51.29	9.07	48.14	7.62
	Anxiety	49.14	8.91	50.89	10.68
	Somatization	54.38	14.67	57.72	12.17

APPENDIX B

Correlations Amongst Types of Social Withdrawal

Table 4
Correlations Amongst Types of Social Withdrawal

Type of Social Withdrawal	Unsociable Withdrawal	Anxious-solitary Withdrawal	Excluded Withdrawal
Unsociable Withdrawal	1		
Anxious-solitary Withdrawal	0.57*	1	
Excluded Withdrawal	0.20	0.18	1

* = Significant at $p < 0.01$

Table 5
*Total Neglected Children Classified in Each Type of
Withdrawal, and Overlap between Types*

	Unsociable	Anxious	Excluded
Unsociable	16		
Anxious	6	20	
Excluded	5	4	8