THE ROLE OF PEER RELATIONSHIPS IN CONFERRING

RISK OR RESILIENCE TO CHILDREN

by

JULIE KNOTT BOYD

(Under the Direction of A. Michele Lease)

ABSTRACT

The purpose of this two-study dissertation was to explore the relationship between children's peer relationships and risk for internalizing distress, particularly amongst neglected children, and subsequently, to propose a preventative framework for meeting children's social and emotional needs within the school. The first study was conducted using data from 541 fourth and fifth grade students attending five suburban elementary schools in the southeastern United States. Results for the entire sample indicated that friendship and clique membership seem to be important for decreased risk of network loneliness, while friendship appears to be the most important type of peer relationship for decreased risk of dyadic loneliness and teacher reported internalizing distress. However, results for sociometrically neglected children in the sample indicate that while withdrawal was a significant predictor of neglected children's network loneliness, it was not a significant predictor of dyadic loneliness or teacher report of children's internalizing distress. Further, dyadic friendship and clique membership were not significant predictors of neglected children's loneliness or internalizing distress.

Study two of this dissertation proposes a behavioral response-to-intervention (RtI) framework for social-emotional health promotion for children with poor peer relations and risk for internalizing distress, wherein behaviors leading to and supporting friendships are enhanced

through psychosocial education. The recommended framework includes universal screening to detect sub-clinical levels of emotional distress and problematic peer relations, and identifies intensifying levels of support including contextual strategies for teachers and parents, psychoeducation, social skills training, and cognitive behavioral therapy. Together, the two studies supports the existing literature by investigating poor peer relations as a risk factor and identifying a school-wide model for social-emotional support and intervention.

INDEX WORDS: Sociometric Status, Neglect, Friendship, Cliques, Loneliness, Internalizing Distress, Intervention, Social Skills Training, Cognitive Behavioral Therapy

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TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS vi

LIST OF TABLES ix

CHAPTER

1 DISSERTATION INTRODUCTION AND LITERATURE REVIEW 1

2 THE ROLE OF PEER RELATIONSHIPS IN CONFERRING RISK AND RESILIENCE TO NEGLECTED CHILDREN: 5

Abstract 6

Introduction 7

Methods 24

Results 31

Discussion 41

3 FROM RESEARCH TO PRACTICE: THE IMPORTANCE OF HEALTHY PEER RELATIONSHIPS AND METHODS TO SUPPORT ITS DEVELOPMENT 47

Abstract 48

Introduction 49

A Behavioral Response to Intervention Model for Social Emotional Health 52

Limitations and Future Directions 79

4 DISSERTATION CONCLUSION 84

REFERENCES 87

LIST OF TABLES

Page

Table 2.1: Correlations Among Study Variables 33

Table 2.2: Descriptive Statistics of Dyadic and Network Loneliness and Teacher Report of Children's Internalizing Distress 35

Table 2.3: Hierarchical Multiple Regression Analysis Predicting Children's Network Loneliness 36

Table 2.4: Hierarchical Multiple Regression Analysis Predicting Children's Dyadic Loneliness 37

Table 2.5: Hierarchical Multiple Regression Analysis Predicting Teacher Report of Children's Internalizing Distress 38

Table 2.6: Hierarchical Multiple Regression Analysis Predicting Neglected Children's Network Loneliness 39

Table 2.7: Hierarchical Multiple Regression Analysis Predicting Neglected Children's Dyadic Loneliness 40

Table 2.8: Hierarchical Multiple Regression Analysis Predicting Teacher Report of Neglected Children's Internalizing Distress 41

CHAPTER 1

DISSERTATION INTRODUCTION AND LITERATURE REVIEW

Education today can no longer focus on strictly academic pursuits, such as reading, writing and arithmetic, as the path to children's life success. Researchers and educators are beginning to recognize that children's social interactions with peers contribute to their overall success and effectiveness in school, including their academic performance (Benner, 2011; Wentzel, Donlan, & Morrison, 2012). Indeed, who a child socializes with can affect his or her academic experience: For example, Ryan (2001) found that children who were members of a peer group comprised of low-achieving or unmotivated students showed a significant decline from the beginning to the end of the school year in their own achievement and motivation, whereas those children who socialized with high-achieving students who enjoyed school experienced a significant increase in academic motivation over the course of the school year. This set of results was obtained even when individual and peer group motivation levels at the beginning of the school year were statistically accounted for in pre-post analyses.

Beyond academic influence, research indicates that healthy peer interactions and relationships in childhood have a strong impact on physical and mental health outcomes across the life span: it is positively correlated with current psychological functioning, negatively correlated with future health risk, and the lower a child's peer status, the greater the risk for adult hospitalization for psychological disorders and physical disease, such as heart disease (Almquist, 2009; Holt-Lunstad, Smith, & Layton, 2010). Furthermore, friendship groups may directly

influence children's mental health through "contagion" of internalizing distress, in which their own internalizing distress increases due to exposure to friends' internalizing distress (Mercer & DeRosier, 2010; Schwartz-Mette & Rose, 2012). With suicide ranking as the third leading cause of death for adolescents and with rates continuing to rise (American Academy of Pediatrics Committee on Adolescence, 2007; Pfeffer, 2001; Shain & American Academy of Pediatrics, 2007), the connection between childhood health, emotions, and peer relationships is becoming a priority (Butler & Sbarra, 2013).

Whereas research on sociometrically rejected children indicates a clear connection to psychopathology (Bagwell, Newcomb, & Bukowski, 1998; Deater-Deckard, 2001), results of existing risk analysis for neglected status (i.e., overlooked or ignored) are unclear (Asher & Dodge, 1986; Coie, Dodge, & Kupersmidt, 1990; Gifford-Smith & Brownell, 2003; Hatzichristou & Hopf, 1996; Rubin, Bukowski, & Parker, 2006). Perhaps this is due to their low visibility in the peer group preventing a complete behavioral description (Coie et al., 1990). Further, membership in this status category is unstable (Newcomb, Bukowski, & Pattee, 1993), which may indicate that neglected children constitute a more heterogeneous group than is currently appreciated. More specifically, this heterogeneity may represent differing behavior amongst neglected status children.

One practical approach is to consider subgroups of neglected sociometric status in relation to the presence of dyadic friendship and/or membership in a clique (i.e., an interaction-based group of peers). 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, Laursen, & Hoza, 2010). Positive peer experiences

might offer a protective factor, enhancing resilience in children who are at risk for poor outcomes (e.g., increased internalizing distress) resulting from negative socialization experiences (Rubin, Bukowski, & Parker, 2006).

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 dyadic and group friendship simultaneously might result in a more distinct, detailed profile of risk status for neglected children (Gifford-Smith & Brownell, 2003). Accordingly, the second chapter of this dissertation investigates the link between neglected status and internalizing distress, in which internalizing distress may be moderated by social behavior, existence of a friendship, or inclusion in a clique.

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. Further, poor social skills are related to poor peer acceptance (Parker & Asher, 1987), and poor peer acceptance, in turn, is typically associated with a lack of friendships. Stated differently, it is a bidirectional relationship: children who have poor social skills tend to be not very well-liked and children who are not well-liked have few opportunities to exercise their social skills.

The third chapter of this dissertation will spotlight the impact of peer relationships on current and future emotional health (Almquist, 2009; Hoza, Bukowski, & Beery, 2000; Parker & Asher, 1993) and the opportunities for proactive identification of sub-clinical emotional distress and prevention through early intervention focused on peer relationships. It is proposed that by

targeting peer relationships, some forms of psychopathology might be attenuated or even averted (Burns, Andrews, & Szabo, 2002; Greco & Morris, 2001). At this time, most schools take a reactive approach, offering services to individual children with existing psychopathology, while system-focused preventative services are infrequent (e.g., see Sheridan & Gutkin, 2000).

For this reason, applicable interventions will be proposed for encouraging positive social relationship development, enhancing and teaching social skills, and using cognitive restructuring techniques to prevent future psychopathology among school-aged children. It is proposed that one reason for the failure of socioemotional interventions for children is due to the tendency to focus solely on child-specific variables (i.e., the child's symptoms or behavior) without considering contextual information such as children's peer relationships and overall social status (Ringeisen, Henderson, & Hoagwood, 2003). For this reason the chapter will include child-specific and contextual interventions that take into consideration social status and peer relationships and ways to foster a supportive environment, both at home and at school.

CHAPTER 2

THE ROLE OF PEER RELATIONSHIPS IN CONFERRING RISK OR RESILIENCE TO NEGLECTED CHILDREN[1]

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Abstract

The purpose of this study was to explore children's peer relationships and social behaviors and to determine whether these differences have an effect on their risk for internalizing distress, particularly amongst neglected children. Results for the entire sample indicated that dyadic friendship and clique membership seem to be important for decreased risk of network loneliness, while dyadic friendship appears to be the most important type of peer relationship for decreased risk of dyadic loneliness and teacher reported internalizing distress. When the same analyses were applied to sociometrically neglected children in the sample, withdrawal was a significant predictor of neglected children's network loneliness but was not a significant predictor of dyadic loneliness or teacher report of children's internalizing distress. Further, dyadic friendship and clique membership were not significant predictors of neglected children's loneliness or internalizing distress. Although differences were noted in friendship rates and clique inclusion for neglected children, these differences did not translate into internalizing distress in this study. Results for the entire sample supports consideration of the use of a preventative model in schools for social-emotional health promotion, in which withdrawal behaviors are minimized and behaviors leading to and supporting friendships are enhanced through social skills education.

Introduction

Since the 1930s social scientists have been attempting to decipher the relationship between children's individual characteristics and their peer relationships (Ladd, 1999). Empirical evidence suggests that the need to belong, especially amongst one's peers, is a fundamental human motivation (Baumeister & Leary, 1995), with friendship representing a significant developmental task (Sullivan, 1953). It has long been posited that a child's standing within the social network impacts individual development. Social developmental researchers agree: peer relationships impact the socioemotional development of children in negative and in positive ways, and peer difficulties are associated with a variety of mental health issues (Bukowski, Laursen, & Hoza, 2010; Rubin, Bukowski, & Parker, 2006).

Current research, in what has been referred to as the "third generation" of children's peer relationships research, has focused on the multiple *types* of peer relationships (Ladd, 1999). Three particular types of interpersonal experiences that contribute to a child's socioemotional development are clique inclusion, social status, and friendship (Bukowski & Hoza, 1989; Coie & Dodge, 1983; Hartup, 1996). Whereas clique inclusion and sociometric status reflect a child's placement and functioning within the overall peer network, friendship refers to 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.

Middle childhood marks a unique period in the social world of children, during which children increasingly focus on relationships with their peers and begin to turn to them for advice instead of turning to parents and other authority figures (Fontaine, Yang, Burks, Dodge, Price,

Pettit et al., 2009; Rubin & Thompson, 2002). In fact, as children progress from middle childhood into adolescence reports of peer influence increase each year as reports of parental influence decrease (Rubin & Thompson, 2002). Peer interactions are less-closely supervised by adults during middle childhood, compared to the early childhood years, and peer perceptions can have an intense impact on a child's developing self-concept (Rubin, Bukowski, & Parker, 2006a).

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., Deater-Deckard, 2001; Hecht, Inderbitzen, & Bukowski, 1998; Oldehinkel, Rosmalen, Veenstra, Kornelis Dijkstra, & Ormel, 2007). Longitudinal research completed four decades ago demonstrated that unpopular children were more likely to be disproportionately represented in psychiatric registries as adults (Cowan, Pedersen, Babigan, Izzo, & Trost, 1973). This still holds true: In a thirty-year follow up study, girls who had low sociometric status in childhood (based on the peer nomination question "whom in this class do you like best to work with") held a significantly higher risk for adult hospitalizations from anxiety and/or depression (Modin, Ostberg, & Almquist, 2011). This indicates that researchers interested in internalizing symptomatology might consider including an indication of early peer difficulties (Fontaine et al., 2009).

In addition to psychological difficulties, new research suggests that unsuccessful childhood peer experiences can have a lasting, negative impact on physical health. One type of research shows longitudinal implications in the form of biomarkers: When faced with social stressors in which negative peer evaluation is possible, children's hypothalamic-pituitary-adrenocortical (HPA) system becomes activated (Hankin, Badanes, Abela, & Watamura, 2010).

Although increased cortisol release paired with a rapid recovery is adaptive in the immediate situation (i.e., "flight or fight" response), chronically high levels of cortisol in the system can cause HPA dysregulation and have deteriorating effects on an individual's overall health. In a meta-analytic review of 208 studies, Dickerson and Kemeny (2004) found that when compared to other types of psychological stressors, the largest changes in cortisol resulted from "social-evaluative" stressors stemming from situations in which the individual was exposed to peer judgment that they could not control, and further, these stressors had the longest recovery time. More recently, other types of longitudinal, health-related research have found that negative peer experiences in adolescence are correlated with an increase in metabolic syndrome in adulthood, including problems with blood-pressure, glucose, and obesity (Gustafsson, Janlert, Theorell, Westerlund, & Hammarstrom, 2012).

Historically, researchers studied a child's ability to successfully establish healthy peer relations by measuring social status, primarily 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 view of the peer network. Researchers recognized that not being selected as a preferred playmate might be the result of social dislike but also might result from simply going unnoticed within the peer group. Based on this concept, a two-dimensional sociometric classification system was developed, in which children are asked to nominate peers who they "like the most" and peers who they "like the least." From this, two other scores are derived for use 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 and are not always privy to peer social exchanges in middle childhood (Newcomb et al., 1993).

Five sociometric categories are formed from like-most, like-least, social preference, and social impact scores: 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; i.e., are overlooked or ignored) 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 sociometric status 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 (Coie & Dodge, 1983).

Neglected Sociometric Status

Research connecting sociometric status and the development of psychopathology has largely focused on popular or rejected children; however, neglected status has received less attention, and the research that exists regarding risk for neglected children is ambiguous. Outside of low sociability (i.e., being shy or withdrawn), a clear and consistent behavioral profile linking neglected status children with future risk has not been identified (Gifford-Smith & Brownell, 2003; Rubin, Bukowski, & Parker, 2006). In contrast, the literature supports a clear

connection between rejected status children and the development of psychopathology (e.g., see Deater-Deckard, 2001), most likely due to the distinctive profile of rejected children.

Collectively, seminal research has found neglected children to be peaceable and reserved, and demonstrate less aggression and lower disruptive behavior levels than children of average status (Newcomb et al., 1993); however, there is a pattern of problematic social behavior. In a meta-analysis of 41 studies on sociometric status Newcomb and colleagues (1993) found neglected status children are characterized by having fewer total social interactions and demonstrating fewer positive social traits. This is congruent with later findings by Hatzichristou and Hopf (1996) of a lack of prosocial behaviors in neglected children. Neglected status children are frequently described by their peers as being shy and withdrawn (Newcomb et al., 1993; Ollendick, Weist, Borden, & Greene, 1992), and, in comparison to rejected children, neglected boys are more likely to be isolated in their play (Coie & Dodge, 1988).

When considering this profile (i.e., low sociability, withdrawn, nonaggressive, reserved) in combination with the selection criteria for neglected status (infrequently nominated as liked or disliked), it is apparent that these children have low visibility amongst their peers. It is possible that their low visibility in the peer group creates challenges for their peers in adequately recognizing subtle differences in their behavior (Coie, Dodge, & Kupersmidt, 1990); they may not be well-known, or perhaps neglected children simply do not come to their peers' minds when they are completing peer nomination items. Presumably due to this low visibility, Hatzichristou and Hopf (1996) found that neglected children were occasionally misclassified into alternative sociometric groups, based on discriminant analysis.

In spite of this withdrawal and isolation, teachers reported less depressive symptomatology in neglected status children than average children when viewed across studies

(Newcomb et al., 1993). Since teachers typically view neglected students in a positive light (e.g., 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 they would equate being "low-need, good students" with having few internalizing difficulties. Additionally, Newcomb and colleagues' finding (1993) might be the result of difficulty in detecting internalizing disorders by observation (i.e., adult/peer report) alone. Whereas teachers are more successful at identifying externalizing problems, they frequently fail to recognize internalizing symptoms of some children, even after several months of observation (Pearl, Leung, Van Acker, Farmer, & Rodkin, 2007). Due to this difficulty, self-report is often a better method for assessing emotional distress in children (Panichelli-Mindel, Flannery-Schroeder, Kendall & Angelosante, 2005).

Other studies note the link or potential connection between neglected status and psychological distress. In their seminal article, Parker and Asher (1987) noted, "It seems plausible, for example, that (neglected) children without social support from peers would, over the long term, be at risk for feelings of extreme loneliness or even depression." (p. 378). Congruently, Oldehinkel and colleagues (2007) found that depression in early adolescent females was strongly associated with not being liked, as indicated by a low number of nominations received for "Which classmates do you like?", a methodology which could have resulted in the group containing both rejected and neglected children. Conversely, Wright and colleagues found that children who are depressed are unlikely to seek out social support from their peers by requesting advice or assistance (Wright, Banerjee, Hoek, Rieffe, & Novin, 2010), which is similar to the withdrawal behaviors and lack of sociability associated with neglected status (Newcomb et al., 1993).

It is logical to suspect that children who are neglected by their peers might feel disconnected from the social world surrounding them, and perhaps feel invisible within the peer network. Further, it is conceivable that long-term neglect would negatively impact social development, as well as self-esteem, internal dialogue, and affect. Is the neglected child simply content to play alone or is the child lonely? Although neglected sociometric group research has revealed somewhat high within-group behavioral heterogeneity (Gifford-Smith & Brownwell, 2003), perhaps by further dissecting groups within the peer network and considering both peer relationships and behavioral attributes, more homogenous groups with distinct risk profiles might be revealed. It is possible that subgroups of neglected children, perhaps those without a friend or friendship group with which to identify, may be experiencing emotional distress.

In an effort to tease out these behavioral differences, some researchers have identified subgroups of children based on a combination of social status and behavior (i.e., the rejected-aggressive child or the popular-antisocial adolescent; e.g., see Deater-Deckard, 2001; Van de Schoot, Van der Velden, Boom, & Brugman, 2010). Two domains of behavior typically used to further discriminate among subtypes within sociometric status categories are withdrawal and sociability (Newcomb et al., 1993). Alternatively, 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 subtypes through cluster analysis with distinct behavioral profiles, allowing for a more fully defined social status classification. One cluster in particular, *low dominant/unpopular*, was characterized as having low status and elevated internalizing distress (Lease et al., 2002). Resulting research has focused on how the behavior, characteristics, and experiences of individual children might lead to their

placement within the peer system, and subsequently investigating the connection between that placement and future outcomes (Gifford-Smith & Brownell, 2003).

As another example of research into more refined behavioral subgroups of neglect, Bukowski and colleagues found that children who were withdrawn from the peer group (specifically avoidant and excluded children) exhibited worsening of depressed affect over time (Bukowski, Laursen, & Hoza, 2010). However, the longitudinal data demonstrated that the added factor of friendship moderated depressed affect, such that children who were withdrawn but possessed a reciprocal friendship evidenced lower levels of depressed affect than children who were 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 was proposed that further partitioning of the neglected status group might yield more homogeneous subgroups with unique profiles. Although some research indicates that neglected status children are not at risk collectively for negative outcomes (Newcomb et al., 1993), it is possible that differences might be detected among subgroups when considering the presence of a mutual friendship or inclusion in a friendship group, given the buffering role of friendship. The current study investigated the link between neglected status and emotional distress (demonstrated via teacher- and self-report), particularly amongst those neglected children who did not possess a dyadic friendship and/or those who were not included in a clique. Identifying meaningful subgroups is critical in considering the highest risk for future maladjustment, and thus, in developing appropriate interventions for these children.

Withdrawal / Isolation in Children

Social withdrawal is a behavior that is often associated with neglected, as well as rejected, sociometric status (Ladd, 1999; Newcomb et al., 1993), and may serve as a type of behavioral index for a child's inhibition, isolation, or exclusion by peers (e.g., see Gazelle & Ladd, 2003). Children's interactions are generally described in terms of moving *toward* other children, moving *against* other children, and moving *away from* other children (Rubin & Thompson, 2002). Children who are withdrawn typify those described as moving away from other children. These are children who are typically playing alone or watching their peers from the sideline, perhaps resulting from shyness or anxiousness (Oh et al., 2008). Emotionally, withdrawal is correlated with internalizing problems, including low self-esteem, loneliness, anxiety, and depression, and in turn, is associated with diminished relationships (Biggs, Vernberg, & Wu, 2012; Boivin, Hymel, &Bukowski, 1995; Rubin et al., 2006a; Rubin, Coplan, & Bowker, 2009).

Withdrawal in children is, by itself, associated with risk. Children who are socially withdrawn are at increased risk for peer victimization, such as bullying (Hanish & Guerra, 2004). Perhaps this is due to the speculation that withdrawn children are easy targets who are unlikely to retaliate (Olweus, 1993). From the perspective of longitudinal risk, 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).

In reverse, negative peer experiences can increase the risk for withdrawal: Oh and colleagues (2008) found that friendlessness and victimization were associated with *increased* withdrawal over a four-year period. Rubin and colleagues (2006a) found that peer victimization

of children who are withdrawn and are not involved in a school friendship (determined by peer nominations of mutual liking) is associated with later internalizing and externalizing difficulties; however, the relation was non-significant for those children who had a mutual school friendship, suggesting friendship could serve as a protective factor for these children against peer victimization and its long-term effects (Ladd et al., 2011; Rubin et al., 2006a).

Relatedly, how peers react to withdrawn children can promote or decrease withdrawal behavior: Gazelle and Rudolph (2004) found that when withdrawn children, particularly those described as anxious-solitary, were included by their peers, they displayed more pro-social behaviors and became less avoidant over time; however, when these children were excluded by their peers they demonstrated a decrease in social approach behavior. Further, 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

A close, reciprocal friendship offers neglected children benefits that are different from those offered by general sociometric acceptance (Ladd, 1999). Friends provide a sympathetic ear and function as confidants providing social support that reduces stress during difficult times (Gunnar & Donzella, 2002). When faced with a challenge, a good friend might help a child to think things through more clearly and competently (Rubin & Thompson, 2002). 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). A child's self-esteem is developed and promoted through this relationship, which provides opportunities for disclosure, support, and understanding (Ladd, 1999).

As Sullivan (1953) stated in his seminal work, friendship is a significant developmental task that fulfills a child's interpersonal needs for acceptance, approval, trust, and intimacy, often representing the first time that the child has experienced these elements outside their family circle. These friends serve as socialization agents for children (Hartup, 1996; Sullivan, 1953), which is particularly important for the neglected child who is less likely to be pro-social. 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). This reflects Piaget's theory that a child's knowledge and understanding of social constructs is contingent upon collective social interactions with other children; i.e., questioning, arguing, negotiating, and accepting and rejecting ideas (Piaget, 1950/1995c). Stated simply, having fewer opportunities to interact with peers and engage in social skills development typically translates into under-developed social skills, whereas having friends may help a neglected child to determine which social behaviors are acceptable and which are not.

From an adaptive perspective, friendship is essential to development and fulfills different roles throughout developmental stages, ranging from entertainment through coordinated play in early childhood, to companionship and support in middle childhood, and individual identity formation in early adolescence (Gifford-Smith & Brownell, 2003). Children demonstrate recognition of this progression through their changing definition of friendship over time: whereas young children identify friends as those who they enjoy as playmates, by around age ten children begin to identify friends as those who think similarly, stick up for one another, and share similar values, and by adolescence a friend is defined according to empathy and mutual understanding (Rubin & Thompson, 2002).

In research measurement, the term "friendship" has been defined as a close, mutual, dyadic relationship, and many researchers have indicated that friendship must be confirmed through reciprocity to be valid (e.g., see Bukowski & Hoza, 1989; Furman, 1996; Parker & Asher, 1993; Rubin et al., 2006a). This allows distinction between actual friendships and desired friendships. 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; Rubin et al., 2006a). Children's friendship experiences can vary greatly in presence, number, and quality (Hartup, 1996).

Research supports the broad statements that friendships are generally beneficial, whereas 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 have found that the absence of an interpersonal relationship with another person is linked to feelings of dyadic loneliness, and this loneliness contributes to feelings of loss of confidence, low self-worth, and social anxiety (Fontaine et al., 2009; Hoza, Bukowski, & Beery, 2000; Parker & Asher, 1993). Moreover, friendship has been found to be an important predictor of adjustment trajectories during early and middle grade school; friendlessness 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 et al., 2010; Laursen, Bukowski, Aunola, & Nurmi, 2007). 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). This offers hope to the neglected child who is ignored by most of his peers, but has one reciprocal friend. 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.

As stated earlier, research indicates that peer difficulties in childhood can have deleterious effects on physical health, including dysregulation of the HPA axis, which regulates the body's stress response, resulting in increased and sustained cortisol release (Dickerson & Kemeny, 2004). However, research by Peters and colleagues indicates that HPA dysregluation was moderated by friendship: children who were excluded from the peer group, as determined by student report of children who are excluded from peer activities, demonstrated greater dysregulation when they did not have a reciprocal friendship and less HPA dysregulation when they had the support of a friend (Peters, Riksen-Walraven, Cillessen, & de Weerth, 2011).

Placement in the peer network plays a role in determining the visibility of a child to potential friends (Bukowski, Pizzamiglio, Newcomb, & Hoza, 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 have fewer opportunities for friendship development. Although being well-liked or "popular" does not guarantee friendship, it does increase the chances of friendship formation due to increased opportunities for likeable children to have social exchanges with peers (Bukowski et al., 1996). Although possessing pro-social skills and behaviors that promote likeability (e.g., friendliness) promote friendship formation, neglected children have been found to have low levels of pro-social behavior (Wentzel, 2003). This is not to insinuate that all neglected children are friendless: some

poorly accepted youths have friends and some well accepted children do not (Parker & Asher, 1993).

Clique Membership

Research into neglected children's peer relationships cannot stop with dyadic relationships, which are just one aspect of children's social lives. During middle childhood, the majority of children's social interactions take place within small informal interaction-based groups of approximately three to nine children, referred to as 'cliques' in the literature (Chen, Hang, & He, 2003; Rubin et al., 2006). Cliques are typically same-sexed and have shared characteristics or patterns of behavior, and participation within the clique can be influential: by middle childhood, children interact with fellow clique members an average of four times more often than with other peers (Gest, Farmer, Cairns, & Xie, 2003; Rubin et al., 2006). This is noteworthy because, in comparison to a dyadic friendship, clique-based interactions and friendships might provide more opportunities for sharing beliefs and behaviors and might wield more influence on molding children's behavior patterns (Jones & Estell, 2010). When these cliques include pro-social children and positive interactions, membership in a clique can improve the child's social skills, increase their psychological well-being, help them cope with stress, and prevent or diminish feelings of loneliness (Rubin & Thompson, 2002).

Cliques are dynamic groups that are ever-evolving (Cairns, Leung, Buchanan, & Cairns, 1995a), however, reliable methods exist to document children's group membership. While behavioral observation has long been used in identifying children's friendship groups, current researchers directly ask children to list groups of students who frequently spend time together (Cairns et al., 1995a; Kwon & Lease, 2009). This is due to the methodological insight that children are expert observers of the social network (Cairns, Perrin, & Cairns, 1985). Social

cognitive mapping, or SCM is used as one method of aggregating responses across participants and generating a map of the class (or grade, school, etc.) social structure (Cairns, Cairns, Neckerman, Gest, & Gariepy, 1988; Cairns et al., 1985).

Whereas approximately 95% of children report being in a clique (e.g. Kiesner, Cadinu, Poulin, & Bucci, 2002; Tarrant, MacKenzie, & Hewitt, 2006), children report identifying with their cliques, or having a sense of belonging to the group, to varying degrees. Children who report low levels of identification with their clique have been found to report lower self-esteem (Tarrant et al., 2006). On the other hand, when children identify highly with their cliques, they are more likely to conform to group norms and expectations of behavior (Kwon & Lease, 2009). This conformity to group influence may lead to increases in negative behavior, such as aggression and delinquent acts, or, conversely, increases in positive behavior such as sociability, leadership, scholarship, and adaptability, depending on the characteristics of the clique (Berndt, Hawkins, & Jiao, 1999; Molloy, Gest, & Rulison, 2010; Rodkin & Hodges, 2003; Tremblay, Mâsse, Vitaro, & Dobkin, 1995). In other words, clique membership is not always a positive experience. Accordingly, clique influence has the ability to affect a child's identity formation, self-evaluation, and overall self-concept in both positive and negative ways (Molloy et al., 2010), and the impact of these early peer experiences can last well into adolescence and adulthood (Bagwell et al., 1998; Pedersen, Vitaro, Barker, & Borge, 2007).

The Relationship Between Status, Behavior, and Peer Relationships: The Current Study

This goal of this study was to investigate whether elevated levels of internalizing symptomatology are present within subsets of neglected status children. One way that children express internalizing distress is through self-reported feelings of loneliness. Research indicates that children with low social preference are more likely to experience loneliness than are their

average peers (Asher & Coie, 1990). Further, regardless of how well-accepted children were, Parker and Asher (1993) found that children without a best friend were lonelier than those with a best friend. When these risks are combined (low sociometric status and friendlessness) they represent a significant threat for childhood loneliness, which impacts a child's well-being and can have devastating and lasting effects to their self-esteem (Rubin & Thompson, 2002). Moreover, loneliness and social difficulty have long-term effects: Fontaine and colleagues (2009) found that loneliness provided a mediating effect on the developmental progression between low social preference in childhood and adolescent anxiety and depression.

Research by Renshaw and Brown (1993) demonstrated that friendship moderated loneliness according to peer status: low-status children (as determined by ratings of how much other children liked to play with them) who did not have a friend reported more loneliness than those same status children who had at least one friend, and low-status friendless children reported more loneliness than average and high-status children who were also friendless. Similarly, Bukowski and colleagues (1993) found that friendship appears to buffer unpopular children from loneliness.

Although past research has typically investigated loneliness as a unidimensional construct (Asher & Wheeler, 1985), more recent research of subtypes of loneliness has reported that peer group and dyadic loneliness should be studied simultaneously (Hoza et al., 2000). Recent research has posited that subtypes of loneliness may be more adequately subdivided into emotional isolation due to deficits within friendship and into feelings of social isolation due to poor peer acceptance (Bukowski & Hoza, 1989; Hoza et al., 2000). Stated differently, a lack of friendship prevents an experience of intimacy and alliance, whereas a lack of social acceptance prevents a sense of inclusion; however, both types of loneliness result from unmet social needs.

Thus, the impact of group and dyadic functioning are distinct albeit related (Hoza et al., 2000). Current research on loneliness has advanced to analysis of group versus dyadic loneliness; that is to say, segmenting loneliness into the emotion experienced due to low involvement in the peer network versus that experienced due to the lack of a reciprocal friendship (Hoza et al., 2000).

Children's behavior, specifically withdrawal, can also affect friendship experiences. Withdrawn children demonstrate the greatest vulnerability toward emotional difficulties, such as internalizing distress, which Ladd and colleagues (2011) speculated would hinder their ability to form and maintain friendships. Further, friendships are characterized by homophily (McPherson, Smith-Lovin, & Cook, 2001); this is the case for the friendships of withdrawn children too. In past research, the friends of withdrawn children have been found to be more withdrawn and victimized than the friends of those in the control group, and, additionally, withdrawn children reported low friendship quality in comparison to the control group (i.e., lacking in intimate disclosure and helpfulness, and rated by the friends as being "less fun" than friendships between non-withdrawn children) (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Collectively, this indicates that withdrawal, in and of itself, is typically correlated with emotional difficulties, that withdrawn children may have more difficulty making friends, and when they do make friends, they tend to be with other withdrawn children who may be experiencing internalizing distress themselves. Because the goal of this study is to investigate whether friendships buffer internalizing distress, withdrawal will be controlled.

The goal of this study is to determine whether internalizing distress may exist within subsets of neglected children. Analyses will be run according to the overarching research question: Do peer relationships (e.g., dyadic friendship or clique membership) moderate

internalizing distress or loneliness, beyond the effects of withdrawal behavior, in neglected children?

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 2012. Children were recruited from 37 fourth and fifth grade classrooms from five schools in a suburban county in the southeastern region of the United States with a population of 130,929 (2013). Both parental consent and child assent were required for participation in the study. Active consent/assent was obtained for 67% of the 851 total possible participants, resulting in the inclusion of 575 elementary school children for data collection, of which 270 were male and 305 were female.

A small number of cases (6%) needed to be excluded due to incomplete data. Specifically, data was excluded when children omitted items or answered questions in a way that affected the validity of the variable, such as nominating only non-participants as friends, which prevents measurement of reciprocity. More information on the reasoning behind excluding these cases is discussed below within individual variable information. After excluding incomplete cases, data for 541 children were included in analyses. Two hundred and fifty children were male and 291 were female. Two hundred and seventy-six children were in the fourth grade, and 265 were in fifth grade. Ethnic breakdown is as follows: 77.4% Caucasian, 11.1% African American, 7.6% Hispanic, 1.3% Asian, and 2.6% "Two or More Races". Within-school sample demographics were comparable to individual school demographics. School population information indicated that 41% 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. Participants completed the questionnaires in a single one-hour session in the school cafeteria. Those children who did not have parental consent to participate remained with their teacher in the classroom. Nominations were not restricted by class; participants were allowed to nominate anyone in their grade. Researchers have found that many children interact with other children outside their homeroom class, which was the case in the current sample, and restricting peer nominations to their classroom would likely lead to erroneous conclusions and missed information (Marks, Babcock, Cillessen, & Crick, 2013; Poulin & Dishion, 2008). Nominations were unlimited (i.e., they were able to nominate as many children as they wished), which is shown to increase ecological validity in sociometric research (Cillessen & Marks, 2011; Marks et al., 2013).

Further, a free-recall procedure was utilized, in which children were able to nominate any children within their grade, and was not limited to a roster of those individuals who were participating in data collection (Farmer, Hall, Petrin, Hamm, & Dadisman, 2010). Accordingly, peer nomination results for the sociometric status measure were standardized for all 851 children in the total possible sample in order to obtain the most accurate sociometric measurement, although only children with active consent were used in further analyses. Likewise, cliques were identified using social cognitive mapping for all 851 children, but children without active consent were dropped in subsequent analyses. 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 status. Following the sociometric interview protocol described by Coie, Dodge, and Coppotelli (1983), children were asked to nominate same-grade peers who 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 to a mean of 0 and standard deviation of 1 within grade and gender to allow for comparison across grades that had different numbers of participants and for 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.

Children 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-one children were classified as neglected in the sample of 541 children. Eighty-three individuals were classified as popular, meaning that they received a social preference score greater than 1.0, a "like most" score of greater than 0, and a "like least" standardized score of less than 0. Children classified as rejected consisted of those who received a social preference score of less than -1.0, a "like least" standardized score of greater than 0, and a "like most" standardized score of less than 0. This resulted in sixty children being classified as rejected. The controversial group was comprised of those who received a social impact score of greater than 1.0 and "like most" and "like least" standardized scores that were greater than 0. Forty-five children were classified as controversial. All children who did not meet the four extreme sociometric categories were classified as being of average status (Coie & Dodge, 1983). As a result, 292 children in the sample were identified as average.

Peer reports of a classroom reciprocal friendship. Participants were also compared on the presence or absence of a mutual friendship within their grade. To determine whether

children were participants in one or more close friendships, children were asked to nominate grade members as friends (i.e., Which children are your very closest friends?"). Again, nominations were unlimited and names of nonparticipants as well as participants could have been written down. A reciprocated friendship was identified when two *participants* each nominated the other as a friend, indicating mutual liking. Friendship was coded two ways for analysis: it was scored as a continuous variable indicating the number of reciprocal friends and a second variable was scored as "0" for the existence of a mutual friendship and "1" when there was no reciprocated friendship. This provided the option for correlational analyses with number of reciprocal friends, as well as analyses focused on the presence of at least one reciprocal friendship, since research indicates having at least one friend provides a protective factor against poor outcomes, whereas having no friends is a risk factor (Gifford-Smith & Brownell, 2003). The range of reciprocated friendships in the sample ranged from 0 to 7. In the event that a child nominated all non-participants as friends (e.g., none of a child's identified "friends" participated in the study and the friendships could not be validated by reciprocation, resulting in the child's classification as "friendless"), these children were assigned a value for missing data (Gest et al., 2001). As previously noted, this reduced the data sample by 6%, from 575 to 541 children.

Cliques and social-cognitive mapping (SCM). To identify cliques or friendship groups within the social network, participants were asked to identify as many social groups in their grade as they could: "We want you to think about the kids in your grade. Some hang out together all the time. They may be working together, playing together, or they just do a lot together. Please list the groups of kids who do things or hang out together in your grade**.** Even two people can be in a group together." Space was provided for eight groups: they were told they could nominate less than eight groups, or, if they knew more than eight groups, they could turn onto

the back of the page to list more groups. The participants were informed that they did not need to be a member of the group themselves to include it. Clique sizes within the sample ranged from 3 to 16 children.

SCM was used to identify cliques of children from the data, which reflects the methodological insight that children are expert observers, and thus expert reporters, of the entire peer network (Cairns et al., 1985; Cairns et al., 1988). Whereas researchers have long relied on observation to study peer networks, access to important social settings such as hallways and restrooms are limited, and, in turn, limit data (Gest et al., 2003). Peer groups nominated by the participants were used to create a co-occurrence matrix, which includes a tally of how many times each child was listed as belonging to the same group as each of his/her peers. The matrix created for each grade level (within each school) was then submitted to the SCM analysis program that applies an algorithm to identify discrete cliques. Children were coded as "0" when they were part of a clique and "1" when they were not part of a clique. SCM demonstrates high validity; overlaps between self-reported groups and the SCM computation are high ($p = .79$; Cairns et al., 1995a) and observational data maps onto SCM data relatively well (Cairns et al., 1985; Gest et al., 2003). Additionally, SCM demonstrates appropriate test-retest reliability of .74 to .84 when measured over a 3-week period (Cairns et al., 1995a).

Peer reports of social withdrawal. Research indicates that measurement of social withdrawal in children has the strongest validity when informed by peer report (Spangler & Gazelle, 2009). For this reason, peer nominations were used to determine social withdrawal amongst children. On each survey, participants were instructed to first consider children in their grade 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") (Rubin et al., 2006). A *total* withdrawal score for each participant was created by summing the number of nominations received across the three withdrawal items; scores were standardized by grade 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 grade.

Outcome Variables

Self-report of loneliness. Children's feelings of loneliness were measured through use of the Peer Network and Dyadic Loneliness Scale (PNDLS) (Hoza et al., 2000). The PNDLS measures loneliness both at the network level and the dyadic level through sixteen items. According to scale construction, the eight items related to peer network loneliness tap into feelings of social isolation and a lack of group inclusion, whereas the remaining eight dyadic items represent feelings of closeness, care, and support from a peer. The scale is formatted in such a way to reduce social desirability responses: each items is formatted as *"Some kids feel (wish/have/etc.)… but other kids feel (wish/have/etc.)…"* and respondents choose the statement that best describes how they feel. Further, respondents determine if the statement is *sort of true* for them or *really true* for them, allowing for a four-point scale rating for each item. Scores are computed for each subscale by tallying scores for the eight items and dividing by eight, resulting in a score between 1 (very low loneliness) and 4 (very high loneliness). Coefficient alphas in the existing research on scale validation indicated that the scales are internally consistent (i.e., .88 for the Peer Network Loneliness subscale and .84 for the Peer Dyadic Loneliness subscale; Hoza

et al., 2000). Within this sample, coefficient alphas were also internally consistent (i.e., .83 and .83, respectively).

Teacher-report of internalizing symptomatology. Internalizing symptoms were measured through the Interpersonal Competence Scale (ICS-T; Cairns, Leung, Gest, & Cairns, 1995b). The ICS-T is a rating scale for teachers and parents, which consists of 18 items and offers three primary factors: *Aggressiveness* (AGG: argues, trouble at school, fights), *Popularity* (POP: popular with boys, popular with girls, lots of friends), and *Academic Achievement* (ACA: spelling and math). Three subsidiary factors include *Social Affiliation* (AFF: smile, friendly), *Olympian Quantities* (OLY: appearance, sports, wins), and *Internalizing Problems* (INT: shyness, sad, worry). The subsidiary factor INT was used as a teacher report of student internalizing distress. Each item on the ICS-T is presented along with a seven point scale of small boxes at equidistant intervals along a horizontal line ranging from "Never" to "Always," with "Sometimes" at the midpoint. Each item reflects possible scores of 1 to 7, with the higher scores indicating that item as highly descriptive of that child.

According to Cairns and colleagues (Cairns et al., 1995b), the INT scale was not included until the 1988 revision of the ICS-T. In seven out of ten factor analyses INT was found to be a distinct factor. Prior research indicates that scale internal consistency for the ICS-T is acceptable (i.e., median alphas ranged from 0.67 to 0.82 for individual factors), and test-retest reliability of the primary subscales in fourth graders has proved to be robust (i.e., 0.80 to 0.92) when assessed over a three-week period (Cairns et al., 1995b). Within this sample, coefficient alpha for the INT scale was acceptable (i.e., .62). The ICS-T has demonstrated convergent validity with direct observation, student records review, and peer nominations (Irvin, Farmer, Leung, Thompson, &

Hutchins, 2010) and has been found to have developmental validity in the form of reliable predictions of future social adjustment (Cairns et al., 1995b).

Results

The analyses are presented in three parts. First, correlations among study variables were run. A preliminary analysis was conducted to determine friendship rates and clique inclusion among all sociometric status categories. This enabled an examination of potential differences in these types of peer relationships for children in the neglected status category in comparison to other categories. Next, normality of the dependent variables (i.e., the PNDLS and the ICS-T) in the current data was examined.

The final section presents the analyses related to the research questions. Analyses via hierarchical regressions were performed for the primary research questions: When controlling for the effects of behavioral withdrawal, do peer relationships (e.g., presence of at least one dyadic friendship or clique inclusion) modulate internalizing distress or loneliness, and does this apply for sociometrically neglected children? Specifically, hierarchical regressions were performed within the total sample and, comparatively, just for the sociometrically neglected subgroup within the sample. The first hierarchical regressions examined friendship and clique inclusion as predictors of child-reported *dyadic loneliness*, with withdrawal behaviors controlled, for all children. The second hierarchical regression examined friendship and clique inclusion as predictors of child-reported *network loneliness*, with withdrawal behaviors controlled. The third hierarchical regression examined friendship and clique inclusion as predictors of teacher-reported *internalizing distress*, while again controlling for withdrawal behavior. These same hierarchical regressions were conducted for children within the sociometrically neglected group to determine significant predictors of internalizing distress for this specific subgroup.

Correlations Among Predictor (Independent) Variables

Correlations among study variables for the full sample (N=541) were in expected directions and significant, albeit small in magnitude (see Table 2.1). There was a significant negative correlation between number of reciprocal friends and overall peer reported withdrawal behavior, teacher reported internalizing distress, and self reported loneliness. As number of reciprocal friends increased, withdrawal behaviors decreased, teacher reports of observed internalizing distress decreased, and self-reports of both network and dyadic loneliness decreased. There was also a significant negative correlation between clique membership and all outcome variables, indicating that when children were part of a clique, withdrawal, internalizing distress, and dyadic and network loneliness was lower. There was a significant positive correlation between withdrawal and internalizing distress, network loneliness, and dyadic loneliness, indicating that, as withdrawal levels increased, internalizing distress and both types of loneliness increased. A significant positive correlation was observed between teacher reports of internalizing distress and self-reports of network and dyadic loneliness. Network loneliness and dyadic loneliness were significantly positively correlated.

The friendship rate for all children in the sample was 73.9%, meaning that 73.9% of children had at least one reciprocal friendship. The presence of a reciprocal friendship significantly differed by status group, X^2 (4, N = 541) = 87.09, p = <.01. In looking at individual sociometric groups, fewer rejected and neglected children had a reciprocal friendship than did popular, controversial, and average status children. Specifically, popular and controversial groups had the highest rate of friendship (i.e., 96.4% and 93%, respectively), followed by average status children (i.e., 76%). Neglected status children had a friendship rate of 54.1%, whereas only 36% of children in the rejected status group had a reciprocal friendship.

While the majority of children in the sample were included in a clique (i.e., 92.1% of children were included in a clique), there were significant differences in clique inclusion by sociometric subgroup, X^2 (4, N = 541) = 12.33, p = .01. Whereas popular, controversial, and average status groups had higher rates of clique inclusion (i.e., 94%, 95.6%, 93.8%, respectively), 88.5% of neglected status children and 81.7% of rejected children were included in cliques.

Table 2.1

*Correlations Among Study Variables (*N *= 541)*

	Withdrawal	Clique Member-ship	TR Internalizing	SR Network Loneliness	SR Dyadic Loneliness
Number of Reciprocal Friends	-0.18**	0.12**	-0.22**	-0.24**	-0.22**
Withdrawal		-0.16**	0.24**	0.19**	0.15**
Clique Membership			-0.11*	-0.15**	-0.10*
TR Internalizing				0.19**	0.13**
SR Network Loneliness					0.68**

** p < .01; * p < .05

Note. SR = Self-reported; TR = Teacher reported

Normality of the Outcome (Dependent) Variables

To examine the characteristics of the outcome variables, descriptive statistics were run and visual inspection of histograms was conducted for score distribution of each variable as a whole. Descriptive statistics were also run for each variable by gender or grade to see if within-

group differences existed. Means and standard deviations for each variable are reported in Table 1.2.

Self-report of loneliness. The PNDLS offers two scores for loneliness: dyadic loneliness and network loneliness. Since these scores represent differing constructs, statistics are reported separately (see Table 2.2). As expected, histogram analysis demonstrates a positive skew for dyadic and network loneliness (i.e., 1.28 and 0.90, respectively), representing a low average of self-reported loneliness amongst all children in the sample. Similarly, mean scores for dyadic and network loneliness in all children was as expected (i.e., 1.61 and 1.80, respectively). Despite the lack of normality, when the sample size is greater than twenty-five to thirty the t-statistic will follow a normal distribution (Boneau, 1960; Sawilowsky & Blair, 1992) and need not be standardized.

Teacher-report of internalizing symptomatology. The mean score of the ICS-T internalizing construct for all children was as expected (i.e., 3.07), indicating that teachers rated the students as demonstrating internalizing distress only occasionally. Histogram analyses of the ICS-T indicates that scores demonstrate approximate normal distribution across possible ratings, and values for skewness and kurtosis were within recommended limits (0.12 and -0.28, respectively).

Table 2.2

Descriptive Statistics of Dyadic and Network Loneliness and Teacher Report of Children's Internalizing Distress

		Mean (SD)		
Group	N	SR Dyadic Loneliness	SR Network Loneliness	TR Internalizing
4th grade	276	1.62 (0.64)	1.81 (0.69)	3.04 (1.22)
5th grade	265	1.59 (0.65)	1.79 (0.70)	3.10 (1.10)
Males	250	1.60 (0.59)	1.73 (0.65)	3.14 (1.18)
Females	291	1.61 (0.69)	1.87 (0.72)	3.01 (1.14)
All cases	541	1.61 (0.65)	1.80 (0.69)	3.07 (1.16)

Note. SR = Self-reported; Minimum SR value = 1; Maximum SR Value = 4

TR = Teacher reported; Minimum TR value = 1; Maximum TR Value = 7

Hierarchical Regressions

Effect of friendship and clique membership on children's internalizing distress. To begin, analyses were conducted to determine the relation between children's peer relationships and internalizing distress in all children, regardless of sociometric status category. Three hierarchical regression analyses were conducted to predict children's internalizing distress based on friendship and clique membership, while controlling for withdrawal at step 1. One analysis predicted children's self-reported network loneliness, the second predicted children's self-reported dyadic loneliness, and the third predicted teacher's report of children's internalizing symptoms. Prior to hierarchical regression analyses, the independent variables were examined for collinearity and independence. Results of the variance inflation factor (all less than 2.0) suggest that the estimated betas are well established in the following regression models (O'Brien,

2007). The Durbin-Watson statistic ranged from 1.6 to 2.1 across regression equations, which is acceptable, and suggests that the assumption of independent errors has been met (Hunsinger & Smith, 2008).

In the first regression equation, withdrawal was a significant predictor of children's *network* loneliness (see Table 2.3). At step 2, the addition of variables indicating absence/presence of a mutual friendship and clique membership added significantly to the prediction of network loneliness. Thus, for the total sample, having a mutual friendship and belonging to a clique predicted children's self-reported network loneliness, above and beyond levels of peer-reported social withdrawal.

Table 2.3

Hierarchical Multiple Regression Analysis Predicting Children's Network Loneliness

Measures	*R*	R^2	ΔR^2	*F*	*df*	ß
Step 1:	0.19	0.04	0.04	19.39**	1, 539	
Withdrawal						0.19**
Step 2:	0.26	0.07	0.03	13.20**	2, 537	
Friendship						0.14**
Clique Membership						0.12**

Note. Betas reported are those from the step at which the variable was entered into the equation. Betas reported are standardized betas.

* $p < .05$. ** $p < .01$

With regard to dyadic loneliness, withdrawal was also a significant predictor at step 1 (see Table 2.4). Likewise, at step 2 the inclusion of peer relationship variables was again significant. However, upon inspection of the betas, and in contrast to the prediction of network

loneliness, clique membership was not a unique, significant predictor of dyadic loneliness: Only the betaweight for absence/presence of a mutual friendship provided unique information to the prediction of dyadic loneliness.

Table 2.4

Hierarchical Multiple Regression Analysis Predicting Children's Dyadic Loneliness

Measures	R	R^2	ΔR^2	F	df	ß
Step 1:	0.15	0.02	0.02	11.65**	1, 539	
Withdrawal						0.15**
Step 2:	0.22	0.05	0.03	8.95**	2, 537	
Friendship						0.14**
Clique Membership						0.07

Note. Betas reported are those from the step at which the variable was entered into the equation. Betas reported are standardized betas.

* $p < .05$. ** $p < .01$

Finally, in the regression equation predicting teacher's report of children' internalizing distress, withdrawal was again a significant predictor at step 1 (see Table 2.5). At step 2, the addition of friendship and clique membership to the regression equation was also significant. However, results indicate that similar to dyadic loneliness, clique membership was not a unique, significant predictor of teacher-reported internalizing distress. In sum, regression results for the full sample indicate that considering friendship and clique information adds useful information above and beyond the variance accounted for by withdrawal behaviors in the prediction of internalizing distress. However, friendship and clique membership were useful in predicting *network* loneliness, whereas the presence of a mutual friendship appears to be more salient than

clique membership in predicting *dyadic* loneliness and teacher-reported internalizing distress. Despite significance, R^2 values were low in each model, indicating that other variables besides withdrawal and peer relations are impacting loneliness and internalizing distress, or perhaps, that the outcome variables are not adequate measures of student's internalizing distress.

Table 2.5

Hierarchical Multiple Regression Analysis Predicting Teacher Report of Children's Internalizing Distress

Measures	R	R^2	ΔR^2	F	df	ß
Step 1:	0.24	0.06	0.06	32.41**	1, 539	
Withdrawal						0.24**
Step 2:	0.28	0.08	0.02	14.96**	2, 537	
Friendship						0.13**
Clique Membership						0.06

Note. Betas reported are those from the step at which the variable was entered into the equation. Betas reported are standardized betas.

* $p < .05$. ** $p < .01$

Effect of friendship and clique membership on neglected children's internalizing distress. The second section of regression analyses conducted was aimed at determining the impact of children's relationships on internalizing distress in neglected children. Similarly to the above analyses, three hierarchical regression analyses were conducted to predict neglected children's internalizing distress based on friendship and clique membership, while controlling for withdrawal. Again, one analysis predicted neglected children's self-reported network loneliness, the second predicted neglected children's self-reported dyadic loneliness, and the third predicted teacher's report of neglected children's internalizing symptoms.

In the first regression equation on neglected children, withdrawal remained a significant predictor of children's network loneliness (see Table 2.6). However, at step 2, the addition of variables indicating the absence/presence of a mutual friendship and clique membership did not significantly add to the prediction of network loneliness. Thus, for neglected children in the sample, having a mutual friendship and belonging to a clique did not predict children's self-reported loneliness, above and beyond levels of peer-reported social withdrawal.

Table 2.6

Hierarchical Multiple Regression Analysis Predicting Neglected Children's Network Loneliness

Measures	R	R^2	Adj. R^2	ΔR^2	F	df	ß
Step 1:	0.28	0.08	0.06	0.08	5.06*	1, 59	
Withdrawal							0.28*
Step 2:	0.31	0.09	0.05	0.01	1.96	2, 57	
Friendship							0.07
Clique Membership							0.09

Note. Betas reported are those from the step at which the variable was entered into the equation. Betas reported are standardized betas.

* $p < .05$. ** $p < .01$

With regard to neglected children's dyadic loneliness, withdrawal was not a significant predictor at step 1 (See Table 2.7). Similarly, step 2 of the hierarchical regression equation using friendship and clique membership to predict neglected children's dyadic loneliness, while controlling for the effects of withdrawal, was also not significant.

Table 2.7

Hierarchical Multiple Regression Analysis Predicting Neglected Children's Dyadic Loneliness

Measures	R	R^2	Adj. R^2	ΔR^2	F	df	ß
Step 1:	0.15	0.02	0.01	0.02	1.28	1, 59	
Withdrawal							0.15
Step 2:	0.18	0.03	-0.02	0.01	0.65	2, 57	
Friendship							-0.09
Clique Membership							-0.06

Note. Betas reported are those from the step at which the variable was entered into the equation. Betas reported are standardized betas.

* $p < .05$. ** $p < .01$

Finally, in the regression equation predicting teacher's report of neglected children's internalizing distress, withdrawal was again not a significant predictor at step 1 (See Table 2.8). Step 2 of the hierarchical regression equation using friendship and clique membership to predict teacher report of neglected children's internalizing distress, while controlling for the effects of withdrawal, was also not significant.

Table 2.8

Hierarchical Multiple Regression Analysis Predicting Teacher Report of Neglected Children's Internalizing Distress

Measures	*R*	R^2	Adj. R^2	ΔR^2	*F*	*df*	ß
Step 1:	0.12	0.02	-0.01	0.02	0.88	1, 59	
Withdrawal							0.12
Step 2:	0.18	0.03	-0.02	0.02	0.63	2, 57	
Friendship							-0.04
Clique Membership							0.13

Note. Betas reported are those from the step at which the variable was entered into the equation. Betas reported are standardized betas.

* $p < .05$. ** $p < .01$

Discussion

Although the predominate literature on neglected children indicates that the group is not at increased risk for internalizing distress based on their sociometric status (Coie et al., 1982; Newcomb et al., 1993; Parker & Asher, 1987), it has been suggested that alternative methods of data collection and behavioral subgrouping may reveal differences in risk between groups of neglected children (Newcomb et al., 1993). If risk can be identified in specific groups of children, appropriate interventions can be tailored to their behavioral differences. The purpose of this study was to explore behavioral differences in children's peer relationships and social behaviors and to determine whether these differences have an effect on their risk for internalizing distress. Specifically, it was expected that children who did not have a reciprocal friend and were not part of a clique would be at higher risk for loneliness and internalizing distress, above

and beyond the risk associated with withdrawal behaviors, and that the increased risk would exist within sociometrically neglected children as well.

The correlations between study variables for all children showed that withdrawal had a positive correlation with each of the outcome variables. As withdrawal increased, children's self-report of network loneliness increased, their self-report of dyadic loneliness increased, and teacher's report of child internalizing distress increased. Additionally, correlations indicated that as withdrawal increased, children's number of reciprocal friendships decreased and children were less likely to be in a clique. Conversely, as withdrawal behaviors decreased, reciprocal friendships and clique inclusion increased. These results support and reflect existing research that withdrawal is associated with internalizing problems, including low self-esteem, loneliness, anxiety, and depression, as well as diminished relationships (e.g., see Biggs, Vernberg, & Wu, 2012; Boivin et al. 1995; Rubin et al., 2006a; Rubin et al., 2009).

Similar to findings of other researchers (e.g., Gest, Graham-Bermann & Hartup, 2001; Parker & Asher, 1993), neglected children in the study were found to be less likely to have a mutual friendship in comparison to the likelihood of all other children in the data set. Additionally, they had significantly lower reciprocal friendship rates than popular, average, or controversial sociometric groups. The only group with lower reciprocal friendship, although not significantly lower, was the sociometrically rejected children. Neglected children also had lower rates of clique inclusion in comparison to popular, average and controversial groups, albeit not significantly lower.

As expected, children's withdrawal behaviors were a significant predictor of internalizing distress; however, after controlling for the effects of withdrawal, children's peer relationships were also significant predictors. Specifically, reciprocal friendship and clique membership were

significant predictors of self-reported network loneliness, even after controlling for withdrawal. Reciprocal friendship was also a significant predictor of self-reported dyadic loneliness and teacher report of internalizing distress, after controlling for withdrawal. Given that the majority of children in the study were part of a clique (i.e., 92%), these results indicate that reciprocal friendship is a particularly salient predictor of internalizing distress in these children. It is important to note, despite significance, that R^2 values were low in each model indicating that other variables besides withdrawal and peer relations were impacting loneliness and internalizing distress, or perhaps, that the outcome variables are not adequate measures of student's internalizing distress. These possibilities are further discussed in the limitations section.

When the same analyses were applied to sociometrically neglected children in the sample, withdrawal was a significant predictor of neglected children's network loneliness; however, it did not significantly predict neglected children's dyadic loneliness or teacher report of children's internalizing distress. Further, dyadic friendship and clique membership were not significant predictors of neglected children's loneliness or internalizing distress above and beyond social withdrawal.

Future Directions and Limitations

This study supports existing literature that reports a correlation between withdrawal behaviors, poor peer relationships, and internalizing distress. Although withdrawal is a commonly recognized risk factor for internalizing distress, such as depression, its correlation with poor peer relationships, and the protective factor offered by developing healthy peer relationships, is less understood (e.g., see Benner, 2011; Ladd et al., 2011: Oh, et al., 2008). Practitioners would be well advised to pay particular attention to withdrawal behaviors and its

relationship to poor peer relationships, and develop interventions to increase healthy peer relationships for children who are at risk for internalizing distress.

Beyond withdrawal, peer relationships were found to be a significant predictor of children's internalizing distress. Specifically, promotion of both dyadic friendship and clique membership seems to be important for decreased network loneliness, while dyadic friendship appears to be the most important type of peer relationship for decreased risk of dyadic loneliness and teacher reported internalizing distress. This supports existing research that demonstrates that children with reciprocal friends are less likely to be lonely and those without friends are more likely to have low self-worth and increased anxiety (Fontaine et al., 2009; Greco & Morris, 2005; Newcomb & Bagwell, 1995). Further, this supports consideration of the use of a preventative model in schools for social-emotional health promotion, in which withdrawal behaviors are minimized and behaviors leading to and supporting friendships are enhanced through social skills education.

Identification of a subgroup of neglected children who are at risk remains elusive, despite exploration by this study into the effects of peer relationship. Although differences were noted in friendship rates and clique inclusion, these differences did not translate into internalizing distress, as measured in this study. While it remains plausible that there is no significant, inherent risk in neglected sociometric status, there are limitations to this study.

First, it is possible that the factors that lead to neglected status might be related to the factors that lead to friendlessness. As previously stated, placement in the peer network plays a role in determining the visibility of a child to potential friends, with neglected children likely having fewer opportunities for friendship development (Bukowski et al., 1996). A substantial proportion of children who have difficulties within the greater peer network also experience

difficulties in establishing and maintaining dyadic relationships in school (Hoza et al., 2000), and, as stated earlier, neglected children in this sample, as well as in past research, were less likely to have a reciprocal friendship than other children (Gest et al., 2001). It is difficult to determine the potential protective factor of friendships for the neglected children who do not possess them.

Additionally, methodological issues exist with the way that friendship was determined in this study. Considering friendship as a dichotomous variable (e.g., did the child have a reciprocal friend or did they not have a reciprocal friend) flattens the concept of friendship. In other words, it is insensitive to qualitative data indicating the nature and depth of the friendship (Furman, 1996). It is plausible that differences observed in this study between the neglected group and the total sample on the protective nature of "friendship" are actually indicative of qualitative differences in how friendship is defined by the nominator. Although the children nominated one another according to their conceptual understanding of friendship, this may be more indicative of companionship than the theoretical definition of friendship as fulfilling a child's interpersonal needs for acceptance, approval, trust, and intimacy (Sullivan, 1953). Seminal research by Parker and Asher (1993) supports this possibility: their research indicated that friendship quality is an important contribution to the measurement of loneliness, and furthermore, when sociometrically low-accepted children (including both neglected and rejected children) possessed friendships, they tend to be low in quality.

Most remarkably, future research might benefit from more explicit measures of child internalizing distress, such as through a more thorough and comprehensive self-report measure of depression, anxiety, and overall internalizing distress, instead of mere loneliness. The PNDLS more accurately reflects feelings about your social relationships than internalizing distress.

While teacher-report offers a valuable counter-point to children's self-report, and did target children's internalizing distress, teachers do not have access to the internal thoughts of children; therefore, self-reports of a child's thoughts and feelings often reflect the most accurate representation of internalizing distress (Newcomb et al., 1993). Unfortunately, attempts to use a more comprehensive self-report measure were cost-prohibitive for this study.

CHAPTER 3

FROM RESEARCH TO PRACTICE: THE IMPORTANCE OF HEALTHY PEER RELATIONSHIPS AND METHODS TO SUPPORT ITS DEVELOPMENT[2]

[2] Boyd, J. K. To be submitted to *School Psychology Review*.

Abstract

Research indicates that healthy peer relationships, both in the greater peer network and in individual friendships, are an important component of psychological and physical well-being, whereas the absence of healthy peer relationships represents risk. Students' mental health is also known to affect their academic achievement and subsequent graduation rates. School is not just a place for academic learning; it is also a place where students are developing socially and emotionally. Accordingly, school-based services are an ideal method of meeting student's social and emotional needs, and specifically, through the preventative framework of the response-to-intervention (RtI) model. This chapter proposes a behavioral RtI framework, beginning with universal screening to detect sub-clinical levels of emotional distress and problematic peer relations, and identifies contextual and individual interventions that address the social and emotional needs of students. A variety of contextual strategies for teachers and parents are highlighted, as well as individual interventions including psychoeducation, social skills training, and cognitive behavioral therapy.

Introduction

Current research indicates that we have a mental health crisis in our schools. The Centers for Disease Control and Prevention reported in 2009 that 17.4% of female high school students and 10.5% of males have considered suicide. In a seven-year longitudinal study by Costello and colleagues (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003) it was found that 35.7% of individuals age 9 through 16 experienced at least one psychiatric disorder at some point during their childhood or adolescence. Unfortunately, 80% of children between the ages of 6 and 17 who need mental health services do not receive it; and when controlling for demographics, the rate of unmet need was largest for minority children and the uninsured (Strein, Hoagwood, & Cohn, 2003; Kataoka, Zhang, & Wells, 2002). In turn, student's mental health affects their academic achievement: over three-quarters of children with an emotional disturbance never achieve a standard high school diploma (Office of Special Education and Rehabilitation Services, 2001)

School is not simply a place where academic learning takes place; children are developing their social identity as a result of experiences at school, which is an important predictor of their current and future psychological functioning (Farmer, 2000). Research indicates that a child's social status, as an indicator of social success, is an important correlate of their current and future psychological health as well as their future risk for physical disease (e.g., diabetes, heart disease): High social status is highly correlated with psychological well-being and low risk for future disease, whereas low social status is correlated with psychopathology and high risk for future disease (Almquist, 2009). Additionally, research indicates that a significant proportion of children who have difficulties within the greater peer network also experience difficulties in establishing and maintaining dyadic friendships (Hoza et al., 2000), and being

friendless is associated with loneliness, low self-esteem, and a resulting poor trajectory for future emotional well-being and increased risk of victimization, such as bullying (Parker & Asher, 1993; Parker & Seal, 1996; Rubin et al., 2006a). Peer victimization increases the risk of depression, anxiety, poor self-esteem, social isolation, psychosomatic problems, and suicidal ideation (Olweus & Limber, 2010). Considered collectively, healthy peer relationships, both in the greater peer network and in individual friendships, are an important component of psychological and physical well-being, whereas the absence of healthy peer relationships represents risk (Butler & Sbarra, 2013). This relationship between status and psychological well-being will be herein referred to as social-emotional health/functioning.

A large proportion of students that needs mental health services during childhood and adolescence is unlikely to receive it unless it is offered through their school; research indicates that for those children who do receive services, 70% to 80% of those services were received through the school (Strein et al., 2003). School-based services reach a large population, because children are required by law to attend school and families are more likely to follow-through with referrals for service if it is offered within the school (Levitt, Saka, Romanelli, & Hoagwood, 2007; Rones & Hoagwood, 2000). The traditional approach to mental health and peer relationship difficulties in schools has been to offer services (i.e., typically individual or group therapy) at the special education level to those children qualifying for an emotional or behavioral disorder, but not at the general education level (Levitt et al., 2007).

Taking a preventative focus is a noble goal, and as Greco and Morris (2001) stated, "Most would agree that building skills is preferable to remediating deficits" (p. 312). Changing our strategy to prevention, rather than management, of mental health disorders is both more efficient and more cost-effective (Levitt et al., 2007). Thus, a natural response would be to

promote the use of a school-based service delivery model, in which children are identified based on social-emotional risk factors and preventative services are offered within the school. Although schools address clinical levels of emotional distress through special education services, preventative services are infrequent despite their effectiveness (e.g., preventive services for mental and emotional health, exercise, nutrition, tobacco and substance abuse, etc.; e.g., see Inman, van Bakergem, LaRosa, & Garr, 2011; Sheridan & Gutkin, 2000; Strein et al., 2003).

In order to take a more proactive approach, we should consider screening children to detect sub-clinical levels of symptomatology (i.e., internalizing behaviors, externalizing behaviors, and peer difficulties), since we know that these symptoms represent risk factors for the future development of major depressive disorder, anxiety disorders, or substance abuse (Gotlib, Lewinsohn, & Seeley, 1995; Greco & Morris, 2001; Kessler, Avenevoli, & Merikangas, 2001), and developing appropriate interventions. Mental health and behavioral screening for early identification is most effective when embedded within a larger continuum of school-based services and treatment (Levitt et al., 2007): Adelman and Taylor (2000) recommended a model that begins with a focus on public health and wellness for all children, early identification for targeted interventions for children in need, and progressing to intensive, ongoing treatments for those with the highest risk.

The goal of this chapter is to present information regarding detection of sub-clinical levels of emotional distress and problematic peer relations in school children and to identify contextual and individual interventions that address this interplay between social difficulties and emotional distress through a behavioral Response to Intervention model. By screening individuals with sub-clinical levels of distress and peer difficulties, and intervening to promote positive environmental elements and to address the underlying skill deficits or cognitive

attributions, schools may be able to circumvent future pathology as well as prevent current academic and social impact (Burns, Andrews & Szabo, 2002; Greco & Morris, 2001).

A Behavioral Response to Intervention Model for Social Emotional Health

Since the primary mission of schools is to educate and insure academic success, it is not surprising that schools have not made social emotional health a focus of the educational agenda; however, there is growing consensus that psychosocial difficulties must be addressed and services fully integrated into the school system if children are to be effective and successful learners (Adelman & Taylor, 2000; Ringeisen et al., 2003). As stated by Elias and colleagues, schools must recognize “that academic success rests on a foundation of social-emotional competencies that must be nurtured as part of mainstream education,” (Elias, Zins, Graczyk, & Weissberg, 2003, p. 304) and further, “sound education requires an equivalent focus on EQ *and* IQ” (i.e., “emotional quotient”; Elias et al., 2003, p. 308). Indeed, school-based social-emotional interventions have been found to improve *both* emotional and educational functioning (Jones & Bouffard, 2012).

The promotion of preventative services in education is not a new concept. The 2004 reauthorization of the Individuals with Disabilities Education Improvement Act (P.L. 108-446), placed increased importance on preventative services through school-wide screening and progress monitoring for academic difficulties. As a result of this passage, many schools have changed the face of academic service delivery and decision-making through Response to Intervention (RtI), with the goal of serving all children through earlier identification and prevention (Fuchs & Fuchs, 2007). Instead of waiting until a child is failing in an academic or skill area to offer intervention, all children receive universal screening to identify those children who would benefit from proactive academic services, with the hope of avoiding the need for

special education services. Much in the way that children participate in this school-wide academic screening (or similarly, hearing and vision screenings through the school), many children would benefit from an annual evaluation for social-emotional well-being.

Although RtI research predominantly focuses on academic applications and school systems typically utilize RtI in the context of academic support, it is a logical and effective framework for approaching social, emotional and behavioral concerns as well (Fairbanks, Sugai, Guardino, & Lathrop, 2007; Fuchs & Fuchs, 2006; Hawken, Vincent, & Schumann, 2008). Research supports the efficacy of a behavioral RtI model, with a focus on increasing positive behavior and eliminating problematic behavior, although behavioral RtI research has predominately focused on children with externalizing symptoms and recurrent office discipline referrals (Fairbanks et al., 2007; Hawken et al., 2008). Although a typical behavioral RtI model focuses on changing negative behavior, it is equally applicable to developing or increasing prosocial behaviors, improving social problem-solving, and addressing faulty cognitions, with the ultimate goal of preventing internalizing psychopathology that is correlated with these skill deficits (Adelman & Taylor, 2000; Fairbanks et al., 2007). The RtI model proposed herein, which is focused on increasing positive social-emotional behaviors and skills, is intended as an extension of behavioral RtI.

The sequencing of tiers and intensifying interventions is similar across RtI models (Adelman & Taylor, 2000; Hawkin et al., 2008). Behavioral strategies for enhancing peer relationships and protecting emotional well-being in children should be provided across the entire school regardless of children's risk status (considered Tier 1/universal strategies, in the RtI literature). Once at-risk children have been identified through universal screening, those children may receive small group evidence-based intervention (EBI; Tier 2/targeted intervention) aimed

at remediating their problematic behaviors or skill deficits. Data is systematically collected to determine the student's responsiveness to the intervention (i.e., data-based decision making according to progress or lack thereof), and interventions may be intensified or changed accordingly. Those children who are not responsive to Tier 2 intervention may receive smaller group or individual EBI (Tier 3/intensive intervention). Children who remain unresponsive to intervention and continue to demonstrate clinically significant behaviors might be evaluated for special education services. (For further review of RtI, see Fuchs & Fuchs, 2007; Fuchs, Mock, Morgan, & Young, 2003; Gresham & Project REACH, 2005; Gresham, 2007.)

Interventions should be contextually-focused and differential: Ringeisen and colleagues (2003) assert that child interventions often fail due to the lack of attention given to contextual differences at the individual and organizational levels. For example, many interventions focus on child-specific variables (e.g., symptoms of anxiety) and overlook contextual information, such as social functioning with peers. Further, a child who reports distress in dyadic relationships will benefit from a different intervention than a child whose distress occurs exclusively in the group setting, and a child who experiences clinical levels of anxiety in both contexts is likely to require more intensive intervention (Hoza et al., 2000). Accordingly, the most successful interventions take into account contextual information, such as individual and environmental risk and protective factors, and are comprehensive, multidisciplinary (e.g., targeting physical and mental health along with academic performance), and collaborative (Burns & Hickie, 2002; Durlak, 1998). Having this information in mind when determining the intervention type, focus, placement and integration will increase efficacy (Ringiesen et al., 2003).

Many behavioral interventions exist for use in a school setting, and an exhaustive list of available interventions is outside the scope of this chapter. For the purpose of specificity and detail, this paper will focus on examples of behavioral interventions applicable to children who are having poor peer problems and, consequently, are at increased risk for internalizing distress, including psychoeducation, social skills training, and cognitive behavioral therapy. Interventions aimed at remediating skill deficits, highlighting or developing individual strengths, minimizing student vulnerability, and increasing adult cognizance and support can all serve to enhance or protect a child's social functioning (Farmer, 2000) and subsequent emotional well-being. Whereas these interventions are detailed within a proposed gradated framework, they are typically adaptable for use at any level, by teaching specific strategies and skills to all children, or concentrating it as an intensive individual intervention.

Universal Screening: Detecting Risk for Mental Health Disorders

At the universal screening phase of a behavioral RtI system focused on social-emotional health, all children in the general population are screened with the goal of identifying those children who have risk factors or are experiencing symptoms of mental health or peer relationship problems (Levitt et al., 2007). Self-report measures typically are used in universal screening for school-aged children due to the fact that once a child is able to reliably report their emotions and behavior, the child becomes the key informant, particularly in regard to internalizing problems such as depression and anxiety (Levitt et al., 2007; Logan & King, 2002). Furthermore, children are best situated to answer items pertaining to peer relationships, since teachers have been found to be unreliable at identifying children's social status and friendship groups (Pearl, Leung, Van Acker, Farmer, & Rodkin, 2007).

Due to the preventative nature of a screening, selecting broad instruments with positive predictive validity is paramount. The instrument should demonstrate sensitivity to identify individuals with a potential mental health disorder, and specificity to rule out those without a disorder. In the balance between sensitivity and specificity, when the focus is on detection of possible mental health disorders, it is better to allow more false positives and to ensure against false negatives; for example, if a school is trying to detect symptoms of depression for suicide prevention, it is preferable to over-identify those who might be experiencing symptoms of depression (and later rule out with a more thorough assessment) than to fail to identify a child (Levitt et al., 2007). In simplistic terms, it is best to "cast a wide net" and identify any child who might be at risk. Further, whether an instrument is effective for screening is largely dependent on ease of administration, the amount of time that it takes to complete it, ease of scoring, clarity of interpretation, and how suitable it is for the population with which it will be used (Levitt et al., 2007).

There are a variety of screening instruments available for use. One example would be the Behavioral and Emotional Screening System of the Behavior Assessment System for Children, Second Edition (BASC-2 BESS), which is available for ages 3 through twelfth grade and offers teacher forms, student self-report (grade 3 – 12), and parent forms. The BESS screens for behavioral and emotional risk, such as maladaptive behaviors, emotions, thought patterns, and poor prosocial and coping skills, which are associated with later development of mental health disorders and can contribute to academic problems (Kamphaus, 2012). The BESS takes approximately 10 minutes to complete.

Risks and challenges in preventative universal screening can arise if clinicians fail to obtain active parental consent, if student privacy is not protected, and if it results in the

unnecessary labeling of students (Levitt et al., 2007). Although some schools believe that testing that is completed by all students does not require additional consent, it is best to ensure informed parental consent (Kamphaus, 2012). This may also increase the potential for school-home partnership in the event that need for further testing or immediate intervention results from preliminary screening. The school must develop a proactive plan before screening to provide for students' privacy protection (Levitt et al., 2007). There is concern that screening can result in labels, which may carry a negative stigma or cause the child's behavior to be "explained" by the label; however, when used properly, the nature of a screener is to indicate the need for further testing, and is not diagnostic in and of itself. Further, subsequent testing for positive screens should aid in developing services for a child, and are not intended to reify labels (Sattler, 2008).

Universal Strategies for All Children ("Tier 1")

Teacher psychoeducation: laying an important foundation. There is a persistent "jockeying" for social position amongst children in their school ecology, with certain children more adept than others. Accordingly, they develop distinct social roles and relationships that ultimately create an interplay between their social and academic behaviors (Molloy et al., 2010). Stated differently, child characteristics and social standing interact with the classroom context. Cliques (i.e., interaction-based groups) hold influence over their members, shaping behaviors and emotional expression, and recognition of how groups wield this influence and the degree to which students identify with and conform to their group is important (Jones & Estell, 2010; Kwon & Lease, 2009). Adult social support is a key component to children's successful social lives, and effective teacher response to social difficulties between children requires an understanding of the often subtle and complex lines of communication between peer group members (Xie, Swift, Cairns, & Cairns, 2002).

Unfortunately, research indicates that teachers tend not to be knowledgeable about peer networks and social dynamics within their classroom (Pearl et al., 2007; Rubin & Thompson, 2002) and education about these dynamics, and their effect on child behavior and emotions, is rare and often limited in teacher education/preparation programs (Jones & Bouffard, 2012; Rodkin & Hodges, 2003). Teachers are unreliable at recognizing classroom cliques (i.e., social groups) during the first half of the year; they are more likely to recognize cliques of boys who appear problematic (i.e., high externalizing behaviors) and cliques of popular girls (i.e., high in socially desirable behaviors) (Pearl et al., 2007) than other types of cliques. Further, teacher practices, beliefs, and classroom management skills vary drastically from classroom to classroom and school to school (Roland & Galloway, 2002). Too often, uninformed teachers *unknowingly* exacerbate the problem by failing to stop covert aggressive behavior and by mistakenly blaming victims and siding with perpetrators (Smith & Brain, 2000). Additionally, they may carelessly group children (e.g., seating charts, peer tutoring, or cooperative learning) in a way that promotes negative social behavior, such as when a dominant, aggressive child is paired with a shy, submissive child (Farmer, 2000).

Farmer and colleagues recommended that teacher professional development programs include a three-prong approach: give teachers strategies for promoting the academic engagement of all students in the classroom, teach strategies for effective behavior management, and educate them regarding social dynamics, including identification of peer groups, social structures, and student's roles, and its impact on academic and social behavior (Farmer, Hall, Petrin, Hamm, & Dadisman, 2010). This professional development is important, since attempting to facilitate change without knowledge of the complexities of the peer ecology may result in worsened conditions and unintended consequences (Rodkin & Hodges, 2003). In an example given by

Atlas and Pepler (1998), if a classroom is not highly-structured, children who are performing low academically may be more likely to engage in off-task behavior, aggressive children may bully others, victims of the bullies and other peers may become anxious or fearful, and ultimately it is difficult for any student to be academically engaged. Problem behavior is frequently attributed to a single child, however, it is important to recognize that there are events that lead up to the behavior and it is often influenced by other children: instigators and perpetuators, friends and enemies, or simply classmates who are serving as intrigued spectators (Farmer, 2000).

Alternatively, teachers who are knowledgeable about the peer cultures within their schools are more likely to be aware of potential aggressors and victims and can use this knowledge to work toward restructuring the environment toward a proactive climate that discourages negative behavior and fosters supportive, protective friendships for potential victims (Rodkin & Hodges, 2003). This would include establishing firm, understood limits regarding inappropriate social aggression, reducing opportunities for social rewards for inappropriate behavior, and increasing a sense of community amongst students (Olweus & Limber, 2010). For example, Faris and Felmlee (2011) pointed out that whereas most bullying prevention programs focus on the bully or victim, the more successful program will target the environment (or context in which the bullying occurs) and how aggressive behavior is rooted within peer relationships and status. Bullying prevention programs "may have a better chance of success if bystanders [are encouraged to] scorn aggression instead of being impressed or entertained by it" (Faris & Felmlee, 2011, p. 68). Further, since having at least one friend serves as a protective factor against bullying (Kochenderfer & Ladd, 2008), teachers can identify and promote peer buddies for children without a friend. In an Australian study of prevention of youth depression, Burns and colleagues stated that prevention programs must encompass all levels to be effective and

sustainable: classroom, curriculum, school, and community support (Burns et al., 2002).

Although children can be taught pro-social strategies, they may remain unsuccessful without contextual level support *outside* the classroom as well. Teachers should be cognizant of social exchanges outside the classroom (e.g. in hallways, lunchrooms, and playgrounds) and the continued opportunity that they have to provide social guidance and to encourage in-vivo practice of new social skills between their students outside of the classroom (Jones & Bouffard, 2012). Contextual level interventions consider the peer group and the specific environment, and work with surrounding circumstances, social hierarchy, and stimuli to evoke change (Farmer, 2000). In other words, if a child has become neglected or rejected, their peers may not be receptive to their new social advances, no matter how appropriate (Hymel, Wagner, & Butler, 1990). Occasionally, teacher attention and social manipulation is necessary to give these children a second chance. Additionally, they may need to be encouraged to continue applying new skills and strategies, even if they are initially unsuccessful (Hymel et al., 1990).

By utilizing knowledge of peer dynamics within their school and classroom, teachers could demonstrate intuitive, proactive warmth and support, while simultaneously orchestrating effective teaching strategies for enhancing social skill development, decreasing undesirable behavior, and increasing desirable behavior (Farmer, 2000; Rodkin & Hodges, 2003). Schools that employ strategies and programs that focus on pro-social development are more likely to foster environments in which cooperative and productive relationships are formed and students are emotionally supported by both peers and teachers, which, in turn, has been found to enhance academic and social performance (Gallagher, Dadisman, Farmer, Huss, & Hutchins, 2007; Wentzel, Donlan, & Morrison, 2012). Ultimately, this allows the successful teacher to go further

than the realm of Reading, Writing, and Arithmetic, and nurture “the whole child”, including their social and emotional development.

Strategies for encouraging healthy peer relationships. Once contextual support is established, students should be explicitly taught pro-social strategies. There is a push to increase schools’ recognition and teaching of social and emotional learning (SEL; Bridgeland, Bruce, & Hariharan, 2013). According to the Collaborative for Academic, Social, and Emotional Learning (CASEL), this involves teaching children self-awareness and management of one’s emotions, establishing and maintaining positive social relationships, feeling and showing empathy for others, and making responsible decisions toward the achievement of positive goals (“CASEL Forum Summary,” 2013). A variety of effective SEL programs exists for all age groups (e.g., see Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). A recent national teacher survey of 605 educators from preschool through twelfth grade indicated that they would support SEL: Almost all teachers (93%) endorsed social and emotional learning as “very” or “fairly” important and indicated it should be included in children’s in-school educational experience (Bridgeland et al., 2013). Sixty-two percent of these teachers believe that social and emotional skill development should be explicitly stated in their state education standards. Further, a meta-analysis of 213 SEL programs involving over 270,000 students showed an increase in not only social and emotional skills, attitudes, and behavior, but an 11 percentile-point gain in academic achievement as well (Durlak et al., 2011). For this reason, the report by Bridgeland and colleagues (2013) recommends connecting social and emotional learning with Common Core State Standards, as well as investing in professional development for educators on understanding social dynamic and emotional skills and how to teach and support them in the classroom.

Positive behavior support (PBS) is a school-wide model known to be effective at reducing problematic student behavior, increasing appropriate social behavior, and promoting an environment that supports healthy peer relationships (e.g., see Metzler, Biglan, Rusby, & Sprague, 2001; Safran & Oswald, 2003; Sugai & Horner, 2006). Simply described, PBS is rooted in behaviorism and involves explicitly communicating rules, teaching appropriate behavior, delivering consistent consequences, and implementing positive reinforcement for positive behavior (Sugai et al., 2000). This involves teaching and promoting contextually appropriate social skills as well as organizing learning environments in a manner that discourages inappropriate behavior (Lewis & Sugai, 1999). For example, a PBS plan may involve the following rules: be respectful, use "put-ups" instead of "put-downs", cooperate with others, and solve problems peacefully (Metzler et al., 2001), which encourages positive peer relationships. Research indicates that PBS is successful at not just improving the behavior of students, but in improving academic performance as well (e.g., Luiselli, Putnam, Handler, & Feinberg, 2005; McIntosh, Chard, Boland, & Horner, 2006).

Within individual classrooms, seating arrangements are an example of a way to further support peer relationships through manipulation of classroom social groups. Although they are commonly utilized with the goal of decreasing off-task behavior by separating cliques that have a tendency toward socializing during academic instructional time, teachers also could apply knowledge of individual and group social dynamics to orchestrate a classroom seating chart that not only decreases off-task behavior, but encourages academic engagement and prosocial behavior (Pearl et al., 2007). This thoughtful attention to classroom situational dynamics and partnering of unskilled, low-status children with prosocial, high-status children may help to bolster the visibility of children who are often overlooked by their peers (Rodkin & Wilson,

2007). Further, it may promote positive, supportive friendships for children who are in need, and encourage positive “social contagion”, such as increased motivation toward academic excellence, and tolerance for diversity (Ryan, 2001). The challenge, however, lies in promoting these friendships: interacting with lower status children yields neither social risk nor social advantage for the average status or popular child (Frederickson & Furnham, 1998). Researchers have found that socially adept children strategically socialize with children who are of similar or higher status, and would be less likely to initiate a social exchange with children of low status (Dijkstra, Cillessen, & Borch, 2012). It may require adult advocacy to initiate these potentially beneficial friendships.

Relatedly, teachers and parents should be aware of groupings and friendships that could become detrimental to a child’s mental health. For example, although research indicates that self-disclosure is a tenet of close friendship, dwelling on and repeatedly discussing problems with a persistently negative emotional style can cause an increase in depressive symptoms for both partners (Rose, 2002). For this reason, it is important for adults to be aware of peer influence and, when possible, monitor their topics of conversations; preventing co-rumination may not only decrease risk for the depressed child, but additionally, for the friend (Schwartz-Mette & Rose, 2012). According to Schwartz-Mette and Rose (2012) children could be taught to recognize patterns of co-rumination, and strategies to disengage and steer conversation in a more positive direction. While it is important for children to be able to engage in the positive aspects of disclosure in friendship (Gunnar & Donzella, 2002), they would benefit from learning to balance emotional connection and disclosure with pleasant activities and positive experiences (Schwartz-Mette & Rose, 2012).

Additionally, teachers could decrease negative social behavior by taking notice of specific groups that target certain children (e.g., teasing) and enacting group-level consequences for such behavior, as well as identifying and promoting appropriate replacement behaviors for the group (Farmer, 2000; Maag, 2005). This works, in part, by removing social reinforcement of negative behavior and increasing peer disapproval of the behavior (i.e., bystanders are more likely to discourage the behavior that risks group-level consequences) and results in a spontaneous increase in peer modeling of appropriate behaviors (Litow & Pumroy, 1975). Additionally, if other peers in the classroom positively reinforce behavior through laughter or acquiescence, strategies should be introduced to inhibit these behaviors, for example, by prompting a different response from the peer group (Farmer, 2000). An example of a replacement behavior may be when children are taught to respond with "I don't think that is funny" to a bully who is meanly teasing or ridiculing another child instead of simply watching. In other words, teach the students to be "upstanders" instead of bystanders.

One well-known method of using group level consequences to encourage appropriate social behavior and healthy relationships is the Good Behavior Game (GBG; Barrish, Saunders, & Wolf, 1969), which has demonstrated its effectiveness for over four decades. In the GBG, children are divided into two groups and team points are lost for undesirable individual behavior (e.g., name calling, talking during instruction or being out of their seat). The team that "loses" incurs group level consequences, while the team that "wins" may receive group privileges. The GBG encourages children to regulate their own behavior, as well as use peer influence strategies to manage the behavior of their classmates, through an interdependent process of behavior-contingent reinforcement (Tingstrom, Sterling-Turner, & Wilczynski, 2006). Not only has the inclusion of GBG been found to reduce immediate undesirable behavior (e.g., disruptions,

aggressiveness), but longitudinal studies have found an increase in later educational outcomes (e.g. higher standardized test scores, increased high school completion and college attendance) and a reduction in future occurrences of antisocial personality disorder and tobacco, drug, and alcohol addictions in individuals who participated in the GBG in elementary school (Bradshaw, Zmuda, Kellam, & Ialongo, 2009; Kellam et al., 2008).

When using group-level consequences to promote healthy peer relationships there are precautions that should be taken, specifically the possibility that a child is incapable of performing the contingent behavior, and the "game" unintentionally exerts too much pressure on a single child (O'Leary & Drabman, 1971). It is imperative that teachers utilizing GBG are aware of classroom social dynamics and monitor peer conversations about the game whenever possible outside the classroom. This would allow the teacher to modify or discontinue the game immediately if it is causing negative individual consequences. This is less likely to be a factor if the GBG is focused on increasing appropriate social behavior and earning rewards, as opposed to decreasing inappropriate behavior and losing points. Numerous modifications to the GBG exist and have been found to be effective, including a modification for encouraging individual prosocial behavior in which points accumulate for individual prosocial actions and the team with the highest points wins (Tingstrom et al., 2006).

Educating parents about social dynamics. Parents have been found to be a factor in children's social success, in which children who are more socially savvy have parents that actively encourage and promote their child's exposure to social situations by arranging social activities, modeling social skills, and serving as a positive support to their child (Rubin & Thompson, 2002). Since most children rely heavily on their parents to arrange and offer transportation for social contacts, such as sports or clubs outside of school, parents have the

opportunity to delicately manage these experiences (Greco & Morris, 2001). For example, some children, particularly neglected children, simply go unnoticed by their peers. Parents may be able to help these children get noticed by their peers in a positive light by encouraging them to participate in activities that highlight their individual strengths while discouraging behavior and activities that draw attention to weaknesses. This promotes the recognition of shared commonalities between potential friends, and these commonalities offer a foundation for friendship to be built upon. Further, children have been found to be more socially successful when parents make themselves available to supervise interactions (as developmentally appropriate/sensitive) and act as "social mentors" to offer competent social advice (Ladd, 1999).

Research indicates that bullied children often do not share their experience with adults, and similarly, adults (parents and/or teachers) rarely have extensive conversations with bullies about their behavior (Fekkes, Pijpers, & Verloove-Vanhorick, 2006). Parent-child communication encouraging empathy for others and recognition of how one child's behavior affects other children can have a positive affect on the development of pro-social behaviors (Carlo, McGinley, Hayes, Batenhorst, & Wilkinson, 2007). As principles to support bullying prevention, Olweus and Limber (2010) recommend that parents show warmth and positive interest in children, set clear limits to their behavior, maintain consistent consequences when rules are broken, and function as positive role models for their children. This parallels extensive literature that indicates that children with authoritative parents, characterized by warmth, responsiveness, consistency, clear boundaries, and discipline, have the best social and emotional adjustment outcomes (Baumrind, 1971; Ladd, 1999). Parents are well advised to offer a relaxed atmosphere in which children know parents are available to listen to their thoughts and feelings; likewise, they should refrain from asking too many questions, which may cause a child to "clam

up" and the parent to appear judgmental or pushy (Rubin & Thompson, 2002). Considered collectively, regulating children's behaviors through reasoning, providing justifications for rules, and discussing feelings of others in a warm environment promotes the development of children's prosocial behavior (Krevans & Gibbs, 1996; Padilla-Walker, Carlo, Christensen, & Yorgason, 2012).

Even when parents encourage children to express themselves, it is often necessary to consider underlying and unstated reasons for children's behavior in order to help them navigate social experiences. As one example, Rubin and Thompson (2002) encourage parents to exercise caution in requiring a child to continue in an activity against the child's wishes. Although clear family expectations of following-through on a commitment is an appropriate general rule, it may be that something within the experience is actually eroding the child's self-confidence. For example, although a child may be an average athlete in the greater population, it is not uncommon for a sensitive child to view himself as inept in comparison to other teammates (Rubin & Thompson, 2002). Parents might wish to engage their child in a conversation about why they wish to discontinue the activity, as an opportunity to correct inaccurate or negative thoughts. Additionally, parents can help an inhibited child to navigate their world by offering sensitive and consistent reassurance. This may include coaching them by questioning negative automatic thoughts (e.g., "Those kids don't want to play with me") and replace it with positive self-directed speech (e.g., "It's alright, those kids look like they are having fun on the playground" and "I should try to join them") (Beck, 2011).

In conclusion, these recommendations for parents presume parental social and emotional well-being. Parental psychopathology (e.g., social anxiety, depression) or social awkwardness can exacerbate children's social difficulties through the modeling or reinforcing of negative,

anxious, or avoidant behaviors (Albano, Chorpita, & Barlow, 2003; Greco & Morris, 2001). Before a parent attempts to intervene, they might best serve their child by considering and addressing their own social difficulties, allowing them to lead by example.

Targeted Interventions ("Tier 2")

Utilizing social skills training for remediation of peer difficulties. Children who continue to demonstrate social-emotional problems and difficulty with peer relationships despite class-wide strategies may receive a targeted, small group intervention such as social skills training. Social skills training (SST) has long been included as a valuable component of the special education treatment plans for children with emotional or behavioral disorders (Cook et al., 2008), attention-deficit hyperactivity disorder (Antshel & Remer, 2003), and autism spectrum disorders (Cotugno, 2009). However, the benefits of SST are not exclusive to children who are already classified under special education; research indicates that chronic friendlessness, peer difficulties, withdrawal, and sub-clinical levels of internalizing distress (e.g., anxiety) during childhood are frequently associated with social skills deficits (Bohlin, Hagekull, & Anderson, 2005; Dodge, 1983; Parker & Seal, 1996; Wentzel, 2003).

A child's social status may be indicative of their social skill level: children who have a low social status in the peer network because they are disliked (i.e., the sociometric category of "rejected") or overlooked (i.e., the sociometric category of "neglected") have been found to have poor social skills and fewer social interactions overall (Newcomb et al., 1993; Wentzel, 2003). Social skill deficiencies that are associated with sub-clinical peer problems include severe shyness, being overly sensitive to "teasing", and possessing poor conversational skills (Parker & Seal, 1996). In general, possessing poor social skills puts children at risk for continued poor peer acceptance, the development of future psychological disorders, school drop-out, criminality, and

poor academic performance (Coie & Dodge, 1983; Gresham, Van, & Cook, 2006; Parker & Asher, 1987). A natural conclusion would be to develop an intervention aimed at changing the behaviors of the child through direct instruction of social skills in order to change the way the child perceives and approaches social situations.

Rsearch indicates small group SST may improve the overall adjustment and well-being of children with peer difficulties due to social skill deficits who are not yet meeting criteria for a special education placement (Cook et al., 2008; Gresham et al., 2006). Effective SST programs aim to improve children's social interactions and reduce problematic behaviors by emphasizing interpersonal skill acquisition, performance, generalization, and maintenance (Cook et al., 2008). The long-term goal of SST is to help children develop the skills necessary to build and maintain positive and meaningful relationships, and to avoid or terminate destructive relationships (Gresham et al., 2006). SST programs utilize three main cognitive-behavioral strategies: an emphasis on explicit coaching and modeling of skills, the use of positive reinforcement, and cognitive approaches that teach problem-solving and coping skills (Cook et al., 2008).

Rubin and Thompson (2002) laid out the components of social skills that typically lead to peer acceptance, including pro-social behaviors and the skill of social approach. Pro-social behaviors include warmth, generosity, and helpfulness, facilitating give-and-take in conversation, and being assertive without being egocentric. Further, pro-social skills include the ability to recognize and understand the thoughts, intentions, and emotions of other individuals. Appropriate social approach is demonstrated through both initiating interactions with others and being responsive to others' pleasant approaches. Although activities such as greeting someone, carrying a conversation, or introducing oneself might seem simple and natural for many people, it can present a major challenge to a child who has social skills deficits (Parker & Seal, 1996).

Assisting children in recognizing and demonstrating social skills can help them to attract and keep friends (Rubin & Thompson, 2002), and further, predicts desirable social outcomes, such as peer acceptance, self-esteem, and positive attitudes toward school, while reducing feelings of loneliness (Gresham, 1983).

Most SST programs use a combination of strategies (e.g., modeling, coaching, rehearsal, addressing cognitive distortions, problem-solving, reinforcement) rather than relying on one particular technique (Begun, 1996; Dowd & Tierney, 1992; Richardson, 1996). Gresham (1985) noted that modeling is perhaps the most cost-effective tier 2 approach. For some children, social skills may be learned simply though carefully planned peer modeling, interaction, and observation, according to social learning theory (i.e., the modeling of successful skills as well as consequences of behavior can serve to guide the observer's own behavior; Bandura & Walters, 1963). Research supports the strength of peer modeling, even among socially reticent children: when anxious-solitary children were included by their peers they displayed more pro-social behaviors and became less avoidant over time (Gazelle & Rudolph, 2004). Friendships with well-adjusted children not only provide continual opportunities for further social skill modeling (Rodkin & Hodges, 2003), they also offer a protective factor for current emotional functioning and opportunity for increased status (Tarrant, MacKenzie, & Hewitt, 2006). Modeling and increased peer exchanges offer the opportunity to develop social skills and competencies (Glick & Rose, 2011). However, for some children social skills are not developed by passive observation but instead must be explicitly taught (Rubin & Thompson, 2002).

Studies detailing the amount of SST needed to be effective are variable. While typical SST interventions for children with, or at risk for, emotional or behavioral disorders average 30 hours (i.e., 2-3 hours a week for 10-12 weeks), Gresham and Colleagues (2006) found that

children who received more intensive SST (i.e., 60 hours total) demonstrated the greatest gains. However, Christoff and colleagues (1985) found improved social interactions of shy adolescents with only eight sessions of a once-weekly group SST program, while Jupp and Griffiths (1990) found improved social skills in “socially isolated” adolescents after thirteen weekly sessions. In another example of SST used with sub-clinical populations, Dadds and colleagues found that a 10-week SST program (including a parent component) significantly decreased the percentage of children with sub-clinical anxiety who subsequently developed an anxiety disorder (i.e., 16% in the treatment group versus 54% in the control group at 6 month follow-up). Further, child and parent reports of children’s internalizing symptoms significantly decreased after the preventative treatment (Dadds, Spence, Holland, Barrett, & Laurens, 1997).

Perhaps more imperative than the amount of time spent on SST, recent research proposes a focus on the individual needs and skill deficiencies of the child as being the most important component of SST (Gresham et al., 2006). For instance, for a child who has difficulty speaking to peers, specific tasks may involve making eye contact, using a verbal greeting, and listening to the response (Begun, 1996). Other children’s difficulty may lie in “reading” another person’s behavioral cues (Dowd & Tierney, 1992), for which those explicit skills are taught and practiced. Further, involving teachers and parents in SST has been found to enhance skill generalization. Specifically, Sheridan and Kratochwill (1990) found that when home and school were incorporated in SST, social initiation behavior in socially withdrawn children increased both at home and at school, whereas teacher-only involvement during SST enhanced social initiation behavior at school only.

Finally, it is important to identify competing problem behaviors that may be preventing the acquisition of social skills. For example, if a child demonstrates externalizing behaviors

(e.g., aggression, noncompliance) or a clinically significant internalizing disorder (e.g., depression, anxiety), these issues need to be recognized when conceptualizing the SST program that will be used for that child (Gresham et al., 2006). It is possible that these behaviors have prevented the acquisition or performance of social skills in the past.

Intensive Interventions ("Tier 3")

Cognitive behavioral therapy for poor peer relations. Research indicates that children with poor peer relations and those with internalizing distress share similar negative attributional styles, or pessimistic ways of interpreting outside events. Negative cognitive attributional biases, negative inferences to self, and negative emotionality increase vulnerability for future depression (Hankin & Abramson, 2002) and anxiety (Flannery-Schroeder & Kendall, 2000) and increase behaviors that lead to low social status (Crick & Dodge, 1994). Relatedly, lonely children demonstrate a negative bias that impacts their interpretation of social events; they often are cynical and self-derogatory and expect to be rejected by others (Boivin & Hymel, 1997). Nelson and colleagues found that high social reticence and withdrawal in children was negatively correlated to children's perceived cognitive competence (Nelson, Rubin, & Fox, 2005). It is possible that altering these negative attributional styles could serve to both improve peer problems and ameliorate internalizing distress.

For this reason, intensive intervention such as cognitive behavior therapy may be recommended for children who are not responsive to the targeted interventions of Tier 2. Simply defined, CBT proposes that thoughts influence behavior and emotion, which can be improved by modifying dysfunctional thinking and beliefs (Beck, 2011). This is the key difference between CBT and other forms of therapy: cognition is the target for intervention (Butler, Chapman, Forman, & Beck, 2006). According to Beck (2011), a cardinal question used by therapists in

CBT is “What was just going through your mind?” This question is used to confront automatic thoughts and beliefs, consider alternative viewpoints, and evaluate the best, worst, and most realistic scenarios. CBT recognizes the complex interplay of behavior, cognition, affect, social factors, and environmental consequences, and thereby alters the underlying negative attributional style (Flannery-Schroeder & Kendall, 2000).

Cognitive behavioral therapy (CBT) is one of the most extensively researched forms of psychotherapy, with over 500 studies demonstrating its efficacy (Beck, 2011; Butler et al., 2006). Meta-analytic studies demonstrate CBT’s long-term effectiveness for childhood disorders such as depression, anxiety, and social phobia (Butler et al., 2006), in addition to antisocial behavior and anger (Bennett & Gibbons, 2000; Sukhodolsky, Kassinove, & Gorman, 2004). Approximately 63% of the individuals receiving CBT show clinically significant improvement of symptoms at the end of treatment (Lewinsohn & Clarke, 1999). Further, CBT offers significantly lower relapse rates in comparison to pharmacotherapy alone, as far out as six years post-treatment, perhaps due to the focus on teaching cognitive strategies that the individual can use independently (Beck, 2011; Paykel, 2007). Accordingly, it has been a long-standing component of effective intervention in schools for children with emotional and behavioral disorders.

Not only is CBT effective at treating disorders once diagnosed, some evidence indicates subclinical levels of these disorders might also benefit from application of CBT methods. Clarke and colleagues (1995) implemented a randomized, controlled trial for 150 adolescents who were at risk for future development of unipolar depressive disorder (i.e., those with elevated, but not clinically significant, depressive symptomatology according to a self-report measure), with half receiving a group CBT treatment (fifteen sessions) and half receiving a control condition. Six-

and twelve-month follow-up analyses indicated a significant advantage for those who received the preventative CBT treatment, with a disorder incidence rate of 14.5% for those receiving CBT versus 25.7% for those in the control condition. Similarly, Gillham and colleagues initiated a randomized controlled trial with fifth and sixth graders at risk for future development of unipolar depressive disorder (i.e., again, those with elevated, but not clinically significant, depressive symptomatology according to a self-report measure), in which half of the children received CBT dually focused on a cognitive component and a social-problem-solving component, while the remaining children received no treatment (Gillham, Reivich, Jaycox, & Seligman, 1995). At the two-year follow-up, it was discovered that symptomatology was reduced by half for the children with moderate to severe risk in the CBT group, and that treatment effects continued to grow after the program was over.

CBT can be offered in either an individual format or a group format, with the individual format typically indicative of a Tier 3, intensive intervention. The benefit of the individual format is that the therapist is able to focus on the individual needs and adapt the session accordingly, whereas a benefit of group format is the ability to engage individuals in role-play and peer feedback (Lewinsohn & Clarke, 1999). Flannery-Schroeder and Kendall (2000) found that both formats were beneficial at improving symptoms of anxiety disorders, and further, 73% of children receiving individual CBT and 50% of those receiving group CBT no longer met criteria for anxiety disorder post-treatment; however, research on the format of CBT (i.e., individual or group) most appropriate for preventative services for school children at risk for psychopathology and suffering from negative peer relations was not found. Duration varies amongst CBT programs when used for treatment of childhood disorder (Lewinsohn & Clarke, 1999): Stark and colleagues promote a 20-week school-based CBT that uses a group format

through the ACTION treatment program for children with clinical-level depression symptoms (Stark, Arora, & Funk 2011), although Brent and colleagues (2008) have proposed that the minimal dose of CBT necessary for therapeutic change is nine sessions.

A variety of manualized CBT programs that target prevention in children at risk for internalizing psychopathology are modifiable for use with children who are additionally suffering from poor peer relationships. One example of an evidence-based, school-delivered CBT intervention that may be modifiable is the ACTION treatment program for depressed youth (Stark et al., 2005). A manualized group intervention designed for girls between the ages of 9 and 13, it is modifiable for boys, older youth, and individual delivery format (Stark, 2011). The 20-session intervention includes the following components: psycho-education, goal setting, coping skills training, problem solving, cognitive restructuring, and building a positive self-schema. The cognitive restructuring component, a central element in CBT, teaches children to evaluate the validity of negative thoughts, and how to reframe them in a more positive light or cope when the negative thought is indeed true. So, for example, rejection sensitive children could be taught to re-evaluate negative thoughts in situations where teasing is involved instead of automatically assuming that intent is meant to be hurtful. Coping skills are taught to help children manage, regulate, and improve their mood and affect, which can also improve the child's social skills. Further, problem-solving skills teach strategies for changing situations when they are within the child's control.

With the documented effectiveness of CBT, a current push is to make CBT more readily available through the use of the computer (Andersson, 2009). Internet-delivered CBT has sparked studies, which demonstrate moderate to strong effects at post-treatment, indicating that this could be a valid method of service delivery in the future (Spek et al., 2007). This would

serve to make CBT more readily available to at-risk groups of children who demonstrate elevated, but not clinical, symptoms of internalizing distress and peer difficulties, particularly in situations where the school psychologist is already over-scheduled. It is important to note, however, that although the delivery of some services included Internet-based interactive features, it does include regularly scheduled support sessions from a therapist through email or telephone throughout the duration, and those studies with increased therapist support had stronger treatment effect sizes (Spek et al., 2007). These studies, however, did not break down effectiveness based on age; therefore, further studies are needed.

Challenges in Implementation

Despite the recognized need for preventative programs and early intervention, there are logistical hurdles for schools since these programs require already scarce resources (Gottfredson & Gottfredson, 2002). First, funding is often a challenge for school systems due to tight county budgets. Universal screening for children to identify at-risk populations typically requires the purchase of some form of protocol, as well as personnel to administer, score, and interpret the data. Further, there are costs associated with program implementation, through training costs, personnel, or materials (Elias et al., 2003). Many researchers and administrators are calling for adequate and flexible funding for schools, in order that they may make social and emotional education a financial priority (Jones & Bouffard, 2012).

A second hurdle is one of time. Many schools have already eliminated or reduced outside play, physical education, art, and music classes to allow more time on the core curriculum, and preventative programing is unlikely to be viewed as part of the primary educational mission (Jones & Bouffard, 2012). Finding available time to dedicate to preventative programs for social and emotional learning will be difficult for schools without first

educating school administration and parents on the importance of its inclusion and the current and longitudinal benefits to children's emotional functioning as well as academic motivation and achievement (Jones & Bouffard, 2012). It is possible that future research and initiative will lead to the development and promotion of social and emotional standards for schools, which will ensure that adequate time and attention is given to this area of teacher training and student development (Dusendbury, Zadrazil, Mart, & Weissberg, 2011).

A final, but important consideration for program implementation is the availability of trained personnel to offer services. While traditional school psychologists training programs focus heavily on assessment, interventions, and consultation, many programs are adding courses and practicum for evidence-based therapeutic practices, treatment planning, and therapy in order to meet the demands of services needed within the school (Raines, 2013; Splett, Fowler, Weist, & McDaniel, 2013). This increasing focus on evidence-based therapies reflects growing consensus in the field that school psychologists have a professional responsibility to support mental health services in the school. As stated in the National Association of School Psychologists (NASP) Blueprint for Training and Practice III (Ysseldyke, Burns, Dawson, Kelley, Morrison, Ortiz, et al., 2006) school psychologists must be able to "recognize the behaviors that are precursors to the development of a disorder" and "as leading mental health experts in schools, school psychologists must be prepared to help design and implement prevention and intervention programs to promote wellness and resiliency" (p. 20). It further stated, "This domain encompasses not only health and wellness, but social skills and life skills as well. School psychologists should help schools develop challenging but achievable behavioral, affective, and adaptive goals for all students" (p. 20).

However, availability of school psychologists to offer preventative services and promotion of healthy peer relationships is largely dependent on the individual school's ratio of students to psychologist and the district expectation of the school psychologist's role (e.g., amount of time expected to be spent in psychoeducational assessments; e.g., see Reschly, 2000, Hosp & Reschly, 2002). Fortunately, many schools utilize a team model that unites counseling, psychological, and social services for supporting psychological health (Adelman & Taylor, 2000, Perfect & Morris, 2011). This team would typically be well-suited to support the interventions proposed under a behavioral RtI model focused on social-emotional health, allowing them to draw upon the collective expertise and training of the team. Further, a team approach would allow them to collectively balance this responsibility amongst their individual workloads, which may be variable throughout the school year.

It is important to note, regardless of intervention selection, that proper training and attention to implementation is imperative. As previously noted, prior professional development opportunities for teachers in social dynamics including peer group identification, social structures, and student roles, and its impact on academic and social behavior, is a necessary and important foundation for the proposed framework for promoting healthy peer relationships (Farmer et al., 2010). Further, administrators, faculty, and staff are more likely to utilize an intervention when they are knowledgeable about the intervention, properly trained, and receive technical support during initial implementation (Forman, Fagley, Dreitlein Steiner, & Schneider, 2009). Conversely, without adequate training, the intervention is more likely to be rigidly directed, less engaging for participants, and implemented inconsistently or without fidelity, which will likely negatively impact the outcome (Inman, et al., 2011; Stark et al., 2011). Additionally, and highly significant, is the possibility of identification of the need for services

that is not within the realm of possible interventions that can be effectively carried out by the school (Levitt et al., 2007). It is important that schools have created an outline of services available through the school, as well as a list of agencies for outside referral, before they commence universal assessment of students.

Ultimately, as Elias and colleagues pointed out, “what has a chance to work is what fits” (Elias et al., 2003, p. 314). In other words, challenges in implementation will be specific to the individual school ecology. When developing an RtI model for social-emotional health and promotion of healthy peer relationships, particular emphasis must be placed on a plan specific to the individual school characteristics and resources available.

Limitations and Future Directions

Although there has been a recent increase in national dialogue, policy, and funding for services relevant to mental health, behavior, and healthy peer relationships in schools (e.g., anti-bullying, dropout and pregnancy prevention, increased school safety, drug-free schools, and home-school partnerships) these programs are frequently viewed as “desirable but unessential,” resulting in marginalized services and a lack of cohesion in policy and practice (Adelman & Taylor, 2000, p. 171). Additionally, schools occasionally select programs (e.g., bullying prevention) in a hasty manner due to current public outcry, without prior research of validity or longitudinal efficacy, or implement the program without consideration for program fidelity (Dusenbury, Brannigan, Falco, & Hansen, 2003; Merrell, Gueldner, Ross, & Isava, 2008; Ringeisen, Henderson, & Hoagwood, 2003). Ultimately, this could mean that schools are wasting precious funding and instructional time. It is essential that preventative services be chosen according to evidence-based standards. As mentioned previously, school psychologist training programs are increasingly focused on evidence-based practice (Raines, 2013; Splett et

al., 2013), making school psychologists a valuable resource for schools in choosing and implementing appropriate services.

There is a scarcity of evidence documenting the generalization, maintenance, and validity of preventative services in children with peer difficulties (Greco & Morris, 2001), although some do exist and highlight the potential of these programs. Skill generalization is an important component of any effective intervention. In existing literature, Christoff and colleagues (1985) found improved social skills in shy children who received eight weeks of SST; however, this improvement failed to generalize to naturalistic, non-treatment settings. Although Blonk and colleagues reported evidence of generalization of new social skills learned through SST in "socially incompetent" 8-12 year olds via teacher and parent ratings, behavioral observations were not completed to corroborate these findings (Blonk, Prins, Sergeant, Ringrose, & Brinkman, 1996). Further studies are needed to determine necessary components of effective preventative treatments that increase generalizability of new skills to the formation of healthy peer relationships.

Research should also consider the need for maintenance sessions of SST and CBT found to be effective in prevention. It is possible that maintenance sessions will be required for optimal effectiveness and generalization to peer relationships and social emotional health. Greco and Morris (2001) offered several suggestions for enhancing both the generalization and maintenance of preventative interventions such as SST and CBT. For example, successful interventions typically include practicing new skills in a range of situations and environments, the assignment of "homework" in interventions, and the use of "booster" or maintenance sessions.

The longitudinal effectiveness of preventative services for peer difficulties and psychopathology is relatively unknown. It is possible that future research might discover that

one type of intervention (e.g., CBT) offers greater long-term effectiveness for prevention in older age groups, whereas another type (e.g., SST) offers greater long-term effectiveness in younger ages. Future studies could investigate the potential long-term effectiveness of individual interventions (SST or CBT) versus contextual interventions (classroom strategies and teacher/parent psychoeducation) according to gender or age at time of treatment.

Another area of consideration for future research would be the identification of potential mediating or moderating variables in preventative services, such as demographic or developmental factors (i.e., age or gender; Greco & Morris, 2001). Existing research on clinical disorders and CBT has identified the moderating roles of gender and age in CBT for children with clinical anxiety (i.e. younger clients and female clients benefitted the most from a combined CBT and family management training; Barrett, Dadds, & Rapee, 1996); however research on mediating and moderating factors in preventative services for social and emotional competencies is sparse.

Future research should consider the multiple ways of identifying those with risk. For example, risk might be identified through various risk factors or by various report methods. The identification of those at risk for internalizing distress and poor peer relations might be made through the utilization of self-report methods of loneliness (Fontaine et al., 2009; Hoza, Bukowski, & Beery, 2000; Parker & Asher, 1993), or children could be determined to be at risk according to peer reports indicating their sociometric category (i.e., a child's placement and functioning within the overall peer network determined by peer report of likability; e.g., see Coie et al., 1982). They might be identified as at-risk via a combination of peer and self-report that demonstrates that they are not included in a dyadic friendship or friendship group (Greco & Morris, 2005), or according to familial risk due to parent psychopathology (Goodman, Rouse,

Connell, Broth, Hall, & Heyward, 2011). Alternatively, risk could be assessed based on measurement of social skills, since poor social skills are correlated with friendlessness, withdrawal, and internalizing distress (Bohlin et al., 2005; Wentzel, 2003).

Finally, whichever type of indicator is chosen (e.g., friendship, loneliness, social skills, etc.), it is important to consider the relevant research that indicates the ideal method of report. For example, Kwon and colleagues found that although both peer and teacher report of a child's social skills successfully predicted positive school functioning (e.g., academic competence and school liking), only peer report of social skills successfully predicted social status outcomes (Kwon, Kim, & Sheridan, 2012). Additionally, Clemans and colleagues found that peer report of aggressive behavior in elementary school was superior to teacher and parent reports for classification accuracy and correlation with future outcomes (Clemans, Musci, Leoutsakos, & Ialongo, 2014). Determining the appropriate method for measuring intervention effectiveness is also important. Hoza and colleagues (2005) proposed that peer-ratings are a more stringent measure of treatment effectiveness than adult-perceived functioning when measuring effectiveness of interventions that are aimed at remediating peer difficulties. For this reason, future research would be well advised to utilize peer-report for indicating the effectiveness of an intervention aimed at remediating peer difficulties.

With increasing research connecting social functioning with current and future psychopathology (Almquist, 2009; Hoza et al., 2000; Parker & Asher, 1993), and the proposal for increased social-emotional support through a behavioral RtI framework at school (Adelman & Taylor, 2000; Levitt et al., 2007), this is expected to be a growing field of research (Butler & Sbarra, 2013). The field of educational psychology would benefit from further research exploring best practices in preventative services aimed at enhancing social and emotional well-

being at school, as well as evidence-based intervention for at-risk students (Jones & Bouffard, 2012).

CHAPTER 4

DISSERTATION CONCLUSION

The overarching goal of the two studies of this dissertation was to investigate the relationship between peer relationships and risk for internalizing distress and to propose a framework for best meeting children's social and emotional needs. The first study used data for 541 children in fourth and fifth grades and investigated whether lack of friendship or not being in a clique was linked to internalizing distress. Analyses were run for the entire population and for the neglected subgroup to determine whether differences existed based on sociometric groupings, with an emphasis on exploration of risk associated with neglected status. The second study highlighted the existing research indicating that peer relationships, both in the greater peer network and in individual friendships, are an important component of healthy psychological, physical, and academic functioning, and proposed a framework for meeting the needs of students according to the response-to-intervention (RtI) model.

Findings from a series of hierarchical regressions in study one indicated that healthy peer relationships were associated with lower levels of internalizing distress. Specifically, in the full sample, possession of a dyadic friendship and membership in a clique are important for decreased risk of network loneliness, even after controlling for the effects of withdrawal, while dyadic friendship appears to be the most important type of peer relationship for decreased risk of dyadic loneliness and teacher reported internalizing distress. However, the findings from the whole sample did not persist for the neglected subtype. When the same analyses were run for neglected, withdrawal remained a significant predictor of neglected children's network

loneliness, but was not a significant predictor of neglected children's dyadic loneliness or teacher report of children's internalizing distress. Further, dyadic friendship and clique membership were not significant predictors of neglected children's loneliness or internalizing distress.

Despite the lack of findings for the neglected group, the first study supports existing literature encouraging practitioners to pay particular attention to withdrawal behaviors and poor peer relationships, and further, to develop interventions to increase healthy peer relationships for children who are at risk for internalizing distress. Ultimately, this supports consideration for the use of a preventative model in schools for social-emotional health promotion, in which withdrawal behaviors are minimized and behaviors leading to and supporting friendships are enhanced through social and emotional education.

Study two proposed a preventative, hierarchical model of intensifying interventions for meeting the social and emotional needs of students with poor peer relations that are at risk for internalizing distress, presented under a behavioral response-to-intervention (RtI) framework. The recommended framework included Tier 1 strategies of teacher and parent education on children's peer relationships, incorporating a social-emotional curriculum into the classroom, and using a positive behavior support model. Universal screening is recommended to identify students at risk for mental health or peer difficulties. Those students identified, or those who are having difficulties within Tier 1, would move to a Tier 2 model in which social skills training is recommended. Tier 3 of the proposed framework recommends cognitive behavioral therapy for negative attributional bias or pessimistic thought patterns related to poor peer relationships.

Research indicates that peer relationships are connected to current and future psychological health (Butler & Sbarra, 2013), and for children to be successful learners, social-emotional competencies must be addressed and services fully integrated into the school system

(Elias et al., 2003). These studies have implications for educational practice in schools that recognize the need for preventative programs and are considering expansion of their existing RtI models to meet the social and emotional needs of children. However, as mentioned previously, "what has a chance to work is what fits" (Elias et al., 2003), and schools must balance available resources with specific school population needs.

REFERENCES

Adelman, H. S., & Taylor, L. (2000). Promoting mental health in schools in the midst of school reform. *Journal of School Health, 70,* 5, 171 – 178. doi:10.1111/j.1746-1561.2000.tb06467.x

Albano, A.M., Chorpita, B. F., & Barlow, D. H. (2003). Childhood anxiety disorders. In E. J. Mash & R. A. Barkley (Eds.), Child pyschopathology, second edition (279 – 329). New York: Guilford Press.

Almquist, Y. (2009). Peer status in school and adult disease risk: A 30-year follow-up study of disease-specific morbidity in a Stockholm cohort. *Journal of Epidemiology and Community Health, 63,* 12, 1028 – 1034. doi: 10.1136/jech.2009.068377

American Academy of Pediatrics Committee on Adolescence (2007). Suicide and suicide attempts in adolescents. *Pediatrics, 105,* 871 – 874.

Andersson, G. (2009). Using the Internet to provide cognitive behavior therapy. *Behavior Research and Therapy, 47*, 175 – 180. doi:10.1016/j.brat.2009.01.010

Antshel, K. M., & Remer, R. (2003). Social skills training in children with Attention Deficit Hyperactivity Disorder: A randomized-controlled clinical trial. *Journal of Clinical Child and Adolescent Psychology, 32,* 1, 153 – 165. doi:10.1207/15374420360533149

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 Clinicial Psychology, 53, 4*, 500 – 505.

Atlas, R. S., & Pepler, D. J. (1998). Observations of bullying in the classroom. *The Journal of Educational Research, 92,* 2, 86 – 99. doi:10.1080/00220679809597580

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. doi:10.1037/0033-2909.117.2.306

Bandura, A., & Walters, R. H. (1963). *Social learning and personality development.* New York: Holt, Rinehart & Winston.

Barrett, P. M., Dadds, M. R., & Rapee, R. M. (1996). Family treatment of childhood anxiety disorders: A controlled trial. *Journal of Consulting and Clinical Psychology, 64,* 333–342.

Barrish, H. H., Saunders, M., & Wolf, M. M. (1969). Good behavior game: Effects of individual contingencies for group consequences on disruptive behavior in a classroom. *Journal of Applied Behavior Analysis, 2,* 119 – 124. doi: 10.1901/jaba.1969.2-119

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.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph, 4*, 1, part 2. doi:10.1037/h0030372

Beck, J. S. (2011). *Cognitive Behavioral Therapy: Basics and Beyond.* New York, NY: Guilford Press.

Begun, R. W. (Ed.). (1996). *Social skills lessons & activities for grades 7 – 12.* West Nyack, NY: The Center For Applied Research In Education.

Benner, A. D. (2011). Latino adolescents' loneliness, academic performance, and the buffering nature of friendships. *Journal of Youth and Adolescence, 40,* 5, 556 – 567. doi:10.1007/s10964-010-9561-2

Bennett, D. S., and Gibbons, T. A. (2000). Efficacy of child cognitive-behavioral interventions f or antisocial behavior: A meta-analysis. *Child and Family Behavior Therapy, 22,* 1, 1 – 15.

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. doi:10.1207/s15326985ep3401_2

Biggs, B. K., Vernberg, E. M., Wu, Y. P. (2012). Social anxiety and adolescents friendships: The role of social withdrawal. *The Journal of Early Adolescence, 32,* 6, 802 – 823. doi: 10.1177/0272431611426145

Blonk, R. W., Prins, P. J., Sergeant, J. A., Ringrose, J., & Brinkman, A. (1996). Cognitive–behavioral group therapy for socially incompetent children: Short-term maintenance effects with a clinical sample. *Journal of Clinical Child Psychology, 25,* 215– 224.

Bohlin, G., Hagekull, B., & Anderson, K. (2005). Behavioral inhibition as a precursor of peer social competence in early school age: the interplay with attachment and nonparental care. *Merrill-Palmer Quarterly, 51*, 1-19.

Boivin, M., & Hymel, S. (1997). Peer experiences and social self-perceptions: A sequential model. *Developmental Psychology, 33,* 1, 135 – 145. doi:10.1037/0012-1649.33.1.135

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.

Boneau, C. A. (1960). The effects of violations of assumptions underlying the t test. *Psychological Bulletin, 57*, 1, 49 – 64.

Bradshaw, C. P., Zmuda, J. H., Kellam, S. G., & Ialongo, N. S. (2009). Longitudinal impact of two universal preventative interventions in first grade on educational outcomes in high school. *Journal of Educational Psychology, 101,* 926 – 937. doi: 10.1037/a0016586

Brent, D., Emslie, G., Clarke, G., Wagner, K., Asarnow, J., & Keller, M., … Zelazny, J. (2008). Switching to another SSRI or to venlafaxine with or without cognitive behavioral therapy for adolescents with SSRI-resistant depression: The TORDIA randomized controlled trial. Journal of the American Medical Association, 299, 8, 901 – 913. doi:10.1001/jama.299.8.901

Bridgeland, J. Bruce, M., & Hariharan, A. (2013). The missing piece: A national teacher survey on how social and emotional learning can empower children and transform schools. Retrieved from http://casel.org/wp-content/uploads/casel-themissingpiece-report.pdf

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.

Burns, J. M., Andrews, G., & Szabo, M. (2002). Depression in young people: what causes it and can we prevent it? *Medical journal of Australia*, *177*, 7, 93- 96.

Burns, J., & Hickie, I. (2002). Depression in young people: a national school-based initiative for prevention, early intervention and pathways for care. *Australasian Psychiatry*, *10*(2), 134-138.

Butler, A. C., Chapman, J. E., Forman, E. M., Beck, A. T. (2006). The empirical status of cognitive-behavioral therapy: A review of meta-analyses. *Clinical Psychology Review, 26,* 17 – 31. doi:10.1016/j.cpr.2005.07.003

Butler, E. A., & Sbarra, D. A. (2013). Health, emotion, and relationships. *Journal of Social and Personal Relationships, 30,* 2, 151 – 154. doi:10.1177/0265407512453425

Cairns, R. B., Cairns, B. D., Neckerman, H. J., Gest, S. D., & Gariepy, J. L. (1988). Social networks and aggressive behavior: Peer support or peer rejection? *Developmental Psychology, 24,* 6, 815 – 823. doi:10.1037//0012-1649.24.6.815

Cairns, R. B., Leung, M. C., Buchanan, L., & Cairns, B. D. (1995a). Friendships and social networks in childhood and adolescence – fluidity, reliability, and interrelations. *Child Development, 66*, 5, 1330-1345. doi:10.1111/j.1467-8624.1995.tb00938.x

Cairns, R. B., Leung, M. C., Gest, S. D., & Cairns, B. D. (1995b). A brief method for assessing social development: Structure, reliability, stability, and developmental validity of the interpersonal competence scale. *Behaviour Research Therapy, 33*, 6, 725 – 736. doi:10.1016/0005-7967(95)00004-H

Cairns, R., Perrin, J., & Cairns, B. (1985). Social structure and social cognition in early adolescence: Affiliative patterns. *Journal of Early Adolescence, 5,* 339 – 355. doi:10.1177/0272431685053007

Carlo, G., McGinley, M., Hayes, R., Batenhorst, C., & Wilkinson, J. (2007). Parenting styles or practices? Parenting, sympathy, and prosocial behaviors among adolescents. *The Journal of Genetic Psychology, 168*, 2, 147 – 176. doi:10.3200/GNTP.168.2.147-176

"CASEL forum summary. Social and emotional learning: Momentum!" (2013). Retrieved September 22, 2013, from http://casel.org/wp-content/uploads/CASEL-2013ForumSummary-20130626.pdf

Centers for Disease Control and Prevention (2009). *National suicide statistics at a glance: Percentage of U.S. high school students reporting considering, planning, or attempting suicide in the past 12 months, by sex, United States, 2009.* Retrieved October 19, 2012, from http://www.cdc.gov/ViolencePrevention/suicide/statistics/youth_risk.html

Chen, X., Chang, L., & He, Y. (2003). The peer group as a context: Mediating and moderating effects on the relations between academic achievement and social functioning in Chinese children. *Child Development, 74*, 710 – 727.

Christoff, K. A., Scott, W. O. N., Kelley, M. L., Schlundt, D., Baer, G., & Kelly, J. A. (1985). Social skills and social problem-solving training for shy young adolescents. *Behavior Therapy, 16,* 468– 477.

Cillessen, A. H. N., & Marks, P. E. (2011). Conceptualizing and measuring popularity. In A. Cillessen, D. Schwartz, & L. Mayeux (Eds.), *Popularity in the peer system* (pp. 25-56). New York, NY: The Guilford Press.

Clarke, G. N., Hawkins, W., Murphy, M., Sheeber, L. B., Lewinsohn, P. M., & Seeley, J. R. (1995). Targeted prevention of unipolar depressive disorder in an at-risk sample of high school adolescents: a randomized trial of a group cognitive intervention. Journal of the American Academy of Child and Adolescent Psychiatry, 34, 312 – 332.

Clemans, K. H., Musci, R., Leoutsakos, J., & Ialongo, N. (2014). Teacher, parents, and peer reports of early aggression as screening measures for long-term maladaptive outcomes: Who provides the most useful information? *Journal of Consulting and Clinical Psychology, 82,* 2, 236 – 247. doi: 10.1037/a0035918

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.

Cook, C. R., Gresham, F. M., Kern, L., Barreras, R. B., Thornton, S., Crews, S. D. (2008). Social skills training for secondary students with emotional and/or behavioral disorders: A review and analysis of the meta-analytic literature. *Journal of Emotional and Behavioral Disorders, 16,* 3, 131 – 144. doi:10.1177/1063426608314541

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry, 60*, 837 – 844. doi:10.1001/archpsyc.60.8.837

Cotugno, A. J. (2009). Social competence and social skills training and intervention for children with Autism Spectrum Disorders. *Journal of Autism Developmental Disorders, 39*, 1268 – 1277. doi: 10.1007/s10803-009-0741-4.

Cowen, E. L., Pedersen, A., Babigan, H., Izzo, L. D., & Trost, M. A. (1973). Long-term follow-up of early detected vulnerable children. *Journal of Consulting and Clinical Psychology, 41*, 438 – 446.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115,* 1, 74 – 101. doi: 10.1037/0033-2909.115.1.74

Dadds, M. R., Spence, S. H., Holland, D. E., Barrett, P. M., & Laurens, K. R. (1997). Prevention and early intervention for anxiety disorders: A controlled trial. *Journal of Consulting and Clinical Psychology, 65,* 627–635.

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.

Dickerson, S. S., & Kemeny, M. E. (2004). Acute stressors and cortisol responses: A theoretical integration synthesis of laboratory research. *Psychological Bulletin, 130,* 3, 355 – 391.

Dijkstra, J. K., Cillessen, A. H. N., & Borch, C. (2012). Popularity and adolescent friendship networks: Selection and influence dynamics. *Developmental Psychology.* Advance online publication. DOI: 10.1037/a0030098

Dodge, K. A. (1983). Behavioral antecedents of peer social status. *Child Development, 54,* 1386 – 1399.

Dowd, T., Tierney, J. (1992). *Teaching social skills to youth.* Boys Town, NE: The Boys Town Press.

Durlak, J. A. (1998). Common risk and protective factors in successful prevention programs. *American Journal of Orthopsychiatry, 68,* 4, 512 – 520. doi:10.1037/h0080360

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 1, 405 – 432. doi: 10.1111/j.1467-8624.2010.01564.x

Dusenbury, L., Brannigan, R., Falco, M., & Hansen, W. B. (2003). A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. *Health Education Research, 18,* 2, 237 – 256. doi:10.1093/her/18.2.237

Dusenbury, L., Zadrazil, J., Mart, A., & Weissberg, R. (2011). State learning standards to advance social and emotional learning: The state scan of social and emotional learning standards, preschool through high school. Retrieved from http://casel.org/wp-content/uploads/2011/04/Brief-on-the-State-Scan-4-18-2011.pdf

Elias, M. J., Zins, J. E., Graczyk, P. A., Weissberg, R. P. (2003). Implementation, sustainability, and scaling up of social-emotional and academic innovations in public schools. *School Psychology Review, 32,* 3, 303 – 319.

Fairbanks, S., Sugai, G., Guardino, D., Lathrop, M. (2007). Response to intervention: Examining classroom behavior support in second grade. *Exceptional Children, 73*, 3, 288 – 310.

Faris, R., & Felmlee, D. (2011). Status struggles: Network centrality and gender segregation in same- and cross-gender aggression. *American Sociological Review, 76,* 1, 48 – 73. doi: 10.1177/0003122410396196

Farmer, T. W. (2000). The social dynamics of aggressive and disruptive behavior in schools: Implications for behavior consultation. *Journal of Educational and Psychological Consultation, 11 (3&4),* 299 – 321. doi:10.1080/10474412.2000.9669417

Farmer, T. W., Hall, C. M., Petrin, R., Hamm, J. V., & Dadisman, K. (2010). Evaluating the impact of a multicomponent intervention model on teachers' awareness of social networks at the beginning of middle school in rural communities. *School Psychology Quarterly, 25,* 2, 94 – 106. doi: 10.1037/a0020147

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.

Fekkes, M., Pijpers, F.I. M., & Verloove-Vanhorick, S. P. (2006). Effects of anti-bullying school program on bullying and health complaints. *Archives of Pediatrics and Adolescent Medicine,* 160, 638 – 644. doi:10.1001/archpedi.160.6.638

Flannery-Schroeder, E. C., & Kendall, P. C. (2000). Group and individual cognitive-behavioral treatments for youth with anxiety disorders: A randomized clinical trial. Cognitive Therapy and Research, 24, 3, 251 – 278. doi:10.1023/A:1005500219286

Fontaine, R. G., Yang, C., Burks, V. S., Dodge, K. A., Price, J. M., Pettit, G. S., & Bates, J. E. (2009). Loneliness as a partial mediator of the relation between low social preference in childhood and anxious/depressed symptoms in adolescence. *Development and Psychopathology*, *21*, 479-491.

Forman, S. G., Fagley, N. S., Dreitlein Steiner, D., & Schneider, K. (2009). Teaching evidence-based interventions: Perceptions of influences on use in professional practice in school psychology. *Training and Education in Professional Psychology, 3*, 226 – 232. doi: 10.1037/a0016874

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.

Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly, 41*, 1, 93 – 99. doi:10.1598/RRQ.41.1.4

Fuchs, L. S., & Fuchs, D. (2007). A model for implementing responsiveness to intervention. *Teaching Exceptional Children, 39*, 5, 14 – 20.

Fuchs, D., Mock, D., Morgan, P. L., Young, C. L. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities Research & Practice, 18,* 3, 157 – 171. doi 10.1111/1540-5826.00072

Furman, W. (1996). The measurement of friendship perceptions: Conceptual and methodological issues. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.) *The company they keep: Friendship in childhood and adolescence* (pp. 41-65). Cambridge: Cambridge University Press.

Gallagher, K. C., Dadisman, K., Farmer, T. W., Huss, L., & Hutchins, B. C. (2007). Social dynamics of early childhood classrooms: Considerations and implications for teachers. In O. Saracho & Spodek (Eds.), *Social learning in early childhood education*. Greenwich, CT: Information Age.

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.

Gest, S. D., Farmer, T. W., Cairns, B. D., & Xie, H. L. (2003). Identifying children's peer social networks in school classrooms: Links between peer reports and observed interactions. *Social Development, 12*(4), 513-529. doi:10.1111/1467-9507.00246

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.

Gillham, J. E., Reivich, K. J., Jaycox, L. H., Seligman, M. E. P. (1995). Prevention of depressive symptoms in schoolchildren: Two-year follow-up. Psychological Science, 6, 6, 343 – 351. Retrieved from http://www.jstor.org/stable/40062887

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.

Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., Heyward, D. (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical child and family psychology review*, *14*, 1, 1 – 27. doi: 10.1007/s10567-010-0080-1

Gotlib, I. H., Lewinsohn, P. M., & Seeley, J. R. (1995). Symptoms versus a diagnosis of depression: Differences in psychosocial functioning. *Journal of Consulting and Clinical Psychology, 63,* 1, 90 – 100. doi:10.1037/0022-006X.63.1.90

Gottfredson, D. C., & Gottfredson, G. D. (2002). Quality of school-based prevention programs: Results from a national survey. *Journal of Research on Crime and Delinquency, 39*, 3 – 35. doi: 10.1177/002242780203900101

Greco, L. A., & Morris, T. L. (2001). Treating childhood shyness and related behavior: Empirically evaluated approaches to promote positive social interactions. *Clinical Child and Family Psychology Review, 4,* 4, 299 – 318.

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.

Gresham, F. M. (1983). Social validity in the assessment of children's social skills: Establishing standards for social competency. *Journal of Psychoeducational Assessment, 1*, 299 – 307. doi:10.1177/073428298300100309

Gresham, F. M. (1985). Utility of cognitive–behavioral procedures for social skills training with children: A critical review. *Journal of Abnormal Child Psychology, 13,* 411–423.

Gresham, F. M. (2007). Response to intervention and emotional and behavioral disorders: Best practices in assessment for intervention. *Assessment for Effective Intervention, 32,* 4, 214 – 222. doi: 10.1177/15345084070320040301

Gresham, F. M., & Project REACH (2005). Response to intervention: An alternative means of identifying students as emotionally disturbed. *Education and Treatment of Children, 28,* 4, 328 – 344.

Gresham, F. M., Van, M. B., Cook, C. R. (2006). Social skills training for teaching replacement behaviors: Remediating acquisition deficits in at-risk students. *Behavioral Disorders, 31,* 4, 363 – 377.

Gunnar, M. R., & Donzella, B. (2002). Social regulation of the cortisol levels in early human development. *Psychoneuroendocrinology, 27*, 199 – 220.

Gustafsson, P. E., Janlert, U., Theorell, T., Westerlund, H., & Hammarstrom, A. (2012). Do peer relations in adolescence influence health in adulthood? Peer problems in the school setting and the metabolic syndrome in middle-age. *PLOS ONE*, 7 (6): e39385. doi: 10.1371/journal.pone.0039385.

Hanish, L. D., & Guerra, N. G. (2004). Aggressive victims, passive victims, and bullies: developmental continuity or developmental change. *Merrill – Palmer Q, 50,* 17 – 38.

Hankin, B. L., Abramson, L. Y. (2002). Measuring cognitive vulnerability to depression in adolescence: Reliability, validity, and gender differences. *Journal of Clinical and Child and Adolescent Psychology, 31*, 4, 491 – 504. doi:10.1207/S15374424JCCP3104_8

Hankin, B. L., Badanes, L. S., Abela, J. R. Z., & Watamura, S. E. (2010). Hypothalmic-pituitary-adrenal axis dysregulation in dysphoric children and adolescents: Cortisol reactivity to psychosocial stress from preschool through middle adolescence. *Biological Psychiatry, 68,* 484 – 490. doi:10.1016/j.biopsych.2010.04.004

Hartup, W. W. (1996). The company they keep: Friendships and their developmental significance. *Child Development, 67,* 1 – 13.

Hatzichristou, C., & Hopf, D. (1996). A multiperspective comparison of peer sociometric status groups in childhood and adolescence. *Child Development, 67,* 1085 – 1102.

Hawken, L. S., Vincent, C. G., Schumann, J. (2008). Response to intervention for social behavior. *Journal of Emotional and Behavioral Disorders, 16*, 4, 213 – 225. doi: 10.1177/1063426608316018

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.

Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine, 7,* 7, 1 – 20. doi: 0.1371/journal.pmed.1000316

Hosp, J. L., & Reschly, D. J. (2002). Regional differences in school psychology practice. *School Psychology Review*, 31, 11 – 29. Retrieved from http://www.fcrr.org/science/pdf/Hosp/regional_differences_sch_psy_practice.pdf

Hoza, B., Bukowski, W., & Beery, S. (2000). Assessing peer network and dyadic loneliness. *Journal of Clinical Child Psychology, 29,* 1, 119 – 128. doi: 10.1207/S15374424jccp2901_12

Hoza, B., Gerdes, A. C., Mrug, S., Hinshaw, S. P., Bukowski, W. M., & Gold, J. A. (2005). Peer-assessed outcomes in the multimodal treatment study of children with attention deficit hyperactivity disorder. *Journal of Clinical Child & Adolescent Psychology, 34*, 74–86.

Hunsinger, D. S., and Smith, M. A. (2008). Factors that influence information systems undergraduates to pursue IT certification. *Journal of Information Technology Education*, 7, 247 – 265.

Hymel, S., Wagner, E., Butler, L. (1990). Reputational bias: View from the peer group. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (156 – 186). Cambridge: Cambridge University Press.

Individuals with Disabilities Education Improvement Act of 2004 (IDEA), P.L. 108-446, 34 CFR Parts 300 and 301. Federal Register. (2006, August 14), Vol. 71 No. 156.

Inman, D. D., van Bakergem, K. M., LaRosa, A. C., and Garr, D. R. (2011). Evidence-based health promotion programs for schools and communities. *American Journal of Preventive Medicine, 40*, 2, 207-219. doi: 10.1016/j.amepre.2010.10.031

Irvin, M. J., Farmer, T. W., Leung, M., Thompson, J. H., & Hutchins, B. C. (2010). School, community, and church activities: Relationship to academic achievement of low-income African American early adolescents in the rural deep south. *Journal of Research in Rural Education, 25*, 4, 1 – 21.

Jones, S. M., & Bouffard, S. M. (2012). Social and emotional learning in schools: From programs to strategies. *Society for Research in Child Development, 26,* 4, 2 – 22.

Jones, M. H., & Estell, D. B. (2010). When elementary students change peer groups: Intragroup centrality, intergroup centrality, and self-perceptions of popularity. *Merrill-Palmer Quarterly, 56*, 2, 164 – 188.

Jupp, J. J., & Griffiths, M. D. (1990). Self-concept changes in shy, socially isolated adolescents following social skills training emphasizing role-plays. *Australian Psychologist, 25,* 165– 177.

Kamphaus, R. W. (2012, August). Project ACT early: A public health model of psychological services in schools. Session presented at the fall conference of the Georgia Association of School Psychologists, Savannah, Georgia.

Kataoka, S. H., Zhang, L., Wells, K. B. (2002). Unmet need for mental health care among U.S. children: Variation by ethnicity and insurance status. *The American Journal of Psychiatry, 159,* 9, 1548 – 1555. doi:10.1176/appi.ajp.159.9.1548

Kellam, S. G., Brown, C. H., Poduska, J. M., Ialongo, N. S., Wang, W., Toyinbo, P., Petras, H., Ford, C., Windham, A., Wilcox, H. C. (2008). Effects of a universal classroom behavior management program in first and second grades on young adult behavioral, psychiatric, and social outcomes. *Drug and Alcohol Dependence, 95S*, S5 – S28. doi:10.1016/j.drugalcdep.2008.01.004

Kessler, R. C., Avenevoli, S., & Merikangas, K. R. (2001). Mood disorders in children and adolescents: An epidemiologic perspective. *Biological Psychiatry, 49,* 1002 – 1014. doi:10.1016/S0006-3223(01)01129-5

Kiesner, J., Cadinu, M., Poulin, F., & Bucci, M. (2002). Group identification in early adolescence: Its relation with peer adjustment and its moderator effect on peer influence. *Child Development, 73*, 196–208. doi:10.1111/1467-8624.00400

Kochenderfer, B. J., & Ladd, G. W. (2008). Peer victimization: Cause of consequence of school maladjustment? *Child Development, 67,* 4, 1305 – 1317.

Krevins, J., & Gibbs, J. C. (1996). Parents' use of inductive discipline: Relations to children's empathy and prosocial behavior. *Child Development, 67,* 3263 – 3277.

Kwon, K., Kim, E., & Sheridan, S. (2012). Behavioral Competence and Academic Functioning Among Early Elementary Children With Externalizing Problems. *School Psychology Review*, *41*, 2, 123-140.

Kwon, K., & Lease, A. M. (2009). Children's social identification with a friendship group: A moderating effect on intent to conform to norms. *Small Group Research, 406,* 6, 694 – 719. DOI: 10.1177/1046496409346578

Ladd, G.W. (1999). Peer relationships and social competence during early and middle childhood. *Annual Review of Psychology, 50*, 333 – 359.

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.

Laursen, B., Bukowski, W. M., Aunola, K., & Nurmi, J. (2007). Friendship moderates prospective associations between social isolation and adjustment problems in young children. *Child Development*, *78,* 4, 1395 – 1404.

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.

Levitt, J. M., Saka, N., Romanelli, L. H., & Hoagwood, K. (2007). Early identification of mental health problems in schools: The status of instrumentation. *Journal of School Psychology, 45,* 163 – 191. doi:10.1016/j.jsp.2006.11.005

Lewinsohn, P. M., & Clarke, G. N. (1999). Psychosocial treatments for adolescent depression. *Clinical Psychology Review, 19*, 3, 329 – 342. http://dx.doi.org/10.1016/S0272-7358(98)00055-5

Lewis, T. J., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive school-wide management. *Focus on Exceptional Children, 31*, 6, 1 – 24.

Litow, L., & Pumroy, D. K. (1975). A brief review of classroom group-oriented contingencies. *Journal of Applied Behavior Analysis, 8*, 3, 341 – 347. doi: 10.1901/jaba.1975.8-341

Logan, D. E., & King, C. A. (2002). Parental identification of depression and mental health service use among depressed adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*, 3, 296–304. doi:10.1097/00004583-200203000-00009

Luiselli, J. K., Putnam, R. F., Handler, M. W., & Feinberg, A. B. (2005). Whole-school positive behaviour support: Effects on student discipline problems and academic performance. *Educational Psychology, 25,* 2-3, 183-198. doi: 10.1080/0144341042000301265

Maag, J. W. (2005). Social skills training for youth with emotional and behavioral disorders and learning disabilities: Problems, conclusions, and suggestions. *Exceptionality, 13*, 155 – 172. doi:10.1207/s15327035ex1303_2

Marks, P. E. L., Babcock, B., Cillessen, A. H. N., & Crick, N. R. (2013). The effects of participation rate on the internal reliability of peer nomination measures. *Social Development, 22*, 3, 609 – 622. doi: 10.1111/j.1467-9507.2012.00661.x

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology, 27*, 415 – 444. Retrieved from http://www.jstor.org.proxy-remote.galib.uga.edu/stable/2678628

McIntosh, K., Chard, D. J., Boland, J. B., & Horner, R. H. (2006). Demonstration of combined efforts in school-wide academic and behavioral systems and incidence of reading and behavior challenges in early elementary grades. *Journal of Positive Behavior Interventions, 8*, 146 – 154.

Merrell, K. W., Gueldner, B. A., Ross, S. W., & Isava, D. M. (2008). How affective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly, 23,* 1, 26 – 42. doi:10.1037/1045-3830.23.1.26

Mercer, S. H., & DeRosier, M. E. (2010). Selection and socialization of internalizing problems in middle childhood. *Journal of Social and Clinical Psychology, 29,* 9, 1031 – 1056. doi:10.1521/jscp.2010.29.9.1031

Metzler, C. W., Biglan, A., Rusby, J. C., & Sprague, J. R. (2001). Evaluation of a comprehensive behavior management program to improve school-wide positive behavior support. *Education and Treatment of Children, 24*, 4, 448 – 479.

Modin, B., Ostberg, V., & Almquist, Y. (2011). Childhood peer status and adult susceptibility to anxiety and depression. A 30-year hospital follow-up. *Journal of Abnormal Child Psychology*, 39, 187 – 199.

Molloy, L. E., Gest, S., & Rulison, K. L. (2010). Peer Influences on Academic Motivation: Exploring Multiple Methods of Assessing Youths' Most "Influential" Peer Relationships. *The Journal of Early Adolescence*, *31*(1), 13-40. doi:10.1177/0272431610384487

Nelson, L., Rubin, K., & Fox, N. (2005). Social withdrawal, observed peer acceptance, and the development of self-perceptions in children ages 4 to 7 years. *Early Childhood Research Quarterly,* 20, 185 – 200.

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.

O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity*, 41, 673 – 690. doi: 10.1007/s11135-006-9018-6

Office of Special Education and Rehabilitation Services (2001). *Twenty-second annual report to Congress on the implementation of the Individuals with Disabilities Education Act.* Available from http://www2.ed.gov/about/reports/annual/osep/2000/chapter-4.doc or by search on find.ed.gov.

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.

O'Leary, K. D., & Drabman, R. (1971). Token reinforcement programs in the classroom: A review. *Psychological Bulletin, 1971, 75,* 379 – 398. doi: 10.1037/h0031311

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.

Olweus, D. & Limber, S. P. (2010). Bullying in school: Evaluation and dissemination of the Olweus Bullying Prevention Program. *American Journal of Orthopsychiatry, 80,* 1, 124 – 134. doi: 10.1111/j.1939-0025.2010.01015.x

Padilla-Walker, L. M., Carlo, G., Christensen, K. J., & Yorgason, J. B. (2012). Bidirectional relations between authoritative parenting and adolescents' prosocial behaviors. *Journal of Research on Adolescence, 22,* 3, 400 – 408. doi: 10.1111/j.1532-7795.2012.00807.x

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.

Paykel, E. S. (2007). Cogntive therapy in relapse prevention in depression. *International Journal of Neuropsychopharmacology, 10,* 131 – 136. doi:10.1017/S1461145706006912

Pearl, R., Leung, M., Van Acker, R., Farmer, T. W., Rodkin, P. C. (2007). Fourth- and fifth-grade teachers' awareness of their classrooms' social networks. *The Elementary School Journal, 108,* 1, 25 – 39. doi:10.1086/522384

Pedersen, S., Vitaro, F., Barker, E., & Borge, A. (2007). The timing of middle-childhood peer rejection and friendship: Linking early behavior to early-adolescent adjustment. *Child Development*, *78*(4), 1037-1051. doi:10.1111/j.1467-8624.2007.01051.x

Perfect, M. M., & Morris, R. J. (2011). Delivering school-based mental health services by school psychologists: Education, training, and ethical issues. *Psychology in the Schools, 48*, 10, 1049 – 1063. doi: 10.1002/pits.20612

Peters, E., Riksen-Walraven, J. M., Cillessen, A. H. N., & de Weerth, C. (2011). Peer rejection and HPA activity in middle childhood Friendship makes a difference. *Child Development, 82,* 6, 1906 – 1920.

Pfeffer, C. R. (2001). Diagnosis of childhood and adolescent suicidal behavior: Unmet needs for adolescent suicide prevention. *Biological Psychiatry, 49*, 1055 – 1061. doi:10.1016/S0006-3223(01)01141-6

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)

Poulin, F., & Dishion, T. J. (2008). Methodological issues in the use of peer sociometric nominations with middle school youth. *Social Development, 17*, 4, 908- 921. doi: 10.1111/j.1467-9507.2008.00473.x

Raines, T. C. (2013). Infusing school-based mental health instruction into school psychology graduate programs. *Dialogue, Georgia Association of School Psychologists*, p. 3. Retrieved from http://www.gaspnet.org/Resources/Documents/Dialogues/Fall_2013.pdf

Renshaw, P. D., & Brown, P. J. (1993). Loneliness in middle childhood: Concurrent and longitudinal predictors. *Child Development, 64,* 1271 – 1284.

Reschly, D. J. (2000). The present and future status of school psychology in the United States. *School Psychology Review, 29,* 4, 507 – 522.

Reynolds, C. R., & Kamphaus, R. W. (1992). *Behavior Assessment System for Children.* Circle Pines, MN: American Guidance Service.

Richardson, R. C. (1996). *Connecting with others: Lessons for teaching social and emotional competence.* Champaign, IL: Research Press.

Ringeisen, H., Henderson, K., & Hoagwood, K. (2003). Context matters: Schools and the "research to practice gap" in children's mental health. *School Psychology Review, 32,* 2, 153 – 168.

Rodkin, P. C., & Hodges, E. V. E. (2003). Bullies and victims in the peer ecology: Four questions for psychologists and school professionals. *School Psychology Review, 32,* 3, 384 – 400.

Rodkin, P. C., & Wilson, T. (2007). Aggression and adaptation: Psychological record, educational promise. In P. H. Hawley, T. D. Little, and & P.C. Rodkin (Eds.), *Aggression and adaptation: The bright side to bad behavior* (pp. 235 – 267). Mahwah, NJ: Erlbaum.

Roland, E. & Galloway, D. (2002). Classroom influences on bullying. *Educational Research, 44,* 299 – 312. doi:10.1080/0013188022000031597

Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical Child and Family Psychology Review, 3*, 4, 223−241. doi:10.1023/A:1026425104386

Rose, A. J. (2002). Co-rumination in the friendships of girls and boys. *Child Development, 73,* 1830-1843. doi:10.1111/1467-8624.00509

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., & Bowker, J. C. (2009). Social Withdrawal in Childhood. *Annual Review of Psychology, 60,* 141 – 171.

Rubin, K., & Thompson, A. (2002). *The friendship factor: Helping our children navigate their social world – and why it matters for their success and happiness.* New York: Penguin Group.

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.

Ryan, A. M. (2001). The peer group as a context for the development of young adolescent motivation and achievement. *Child Development, 72,* 4, 1135 – 1150. doi:10.1111/1467-8624.00338

Safran, S. P., & Oswald, K. (2003). Positive behavior supports: Can schools reshape disciplinary practices? *Exceptional Children*, *69*, 361 – 373.

Sattler, J. M. (2008). Assessment of children: Cognitive foundations. La Mesa: Jerome M. Sattler, Publisher, Inc.

Sawilowsky, S. S., Blair, R. C. (1992). A more realistic look at the robustness and type II error properties of the t test to departures from population normalities. *Psychological Bulletin, 111*, 2, 352 – 360.

Schwartz-Mette, R. A., & Rose, A. J. (2012). Co-rumination mediates contagion of internalizing symptoms within youth's friendships. *Developmental Psychology, 48,* 5, 1355 – 1365. doi:10.1037/a0027484

Shain, B. N., & American Academy of Pediatrics Committee on Adolescence (2007). Suicide and suicide attempts in adolescents. *Pediatrics, 120*, 3, 669 – 676. doi:10.1542/peds.2007-1908

Sheridan, S. M., & Gutkin, T. B. (2000). The ecology of school psychology: Examining and changing our paradigm for the 21st century. *School Psychology Review, 29,* 4, 485 – 502.

Sheridan, S. M., & Kratochwill, T. R. (1990). Behavioral consultation with parents and teachers: Delivering treatment for socially withdrawn children at home and school. *School Psychology Review, 19,* 33–52.

Smith, P. K., & Brain, P. (2000). Bullying in schools: Lessons from two decades of research. *Aggressive Behaviour, 26,* 1 – 9. doi:10.1002/(SICI)1098-2337(2000)26:1<1::AID-AB1>3.0.CO;2-7

Spangler, T. & Gazelle, H. (2009). Anxious solitude, unsociability, and peer exclusion in middle childhood: a multitrait-multimethod matrix. *Social Development, 18,* 4, 833 – 856.

Spek, V., Cuijpers, P., Nyklicek, I., Heleen, R., Keyzer, J., et al. (2007). Internet-based cognitive behaviour therapy for symptoms of depression and anxiety: A meta-analysis. *Psychological Medicine, 37*, 3, 319-328. Doi: http://dx.doi.org.proxy-remote.galib.uga.edu/10.1017/S0033291707000050

Splett, J., Fowler, J., Weist, M. D., & McDaniel, H. (2013). The critical role of school psychology in the school mental health movement. *Psychology In The Schools, 50*, 3, 245-258. doi: 10.1002/pits.21677

Stark, K. D., Arora, P., & Funk, C. L. (2011). Training school psychologists to conduct evidence-based treatments for depression. *Psychology in the Schools, 48*, 3, 272 – 282. doi: 10.1002/pits.20551

Stark, K. D., Schnoebelen, S., Simpson, J., Hargrave, J., Molnar, J., & Glenn, R. (2005). Treating depressed children: Therapist manual for ACTION. Ardmore, PA: Workbook Publishing.

Strein, W., Hoagwood, K., & Cohn, A. (2003). School psychology: A public health perspective: 1. Prevention, populations, and systems change. *Journal of School Psychology, 41,* 1, 23 – 38.

Sugai, G. & Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., Nelson, C. M., Scott, T., Liaupsin, C., Sailor, W., Turnbull, A. P., Turnbull, H. R., Wickham, D., Wilcox, B., Ruef, M. (2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of Positive Behavior Interventions, 2*, 131 – 143. doi: 10.1177/109830070000200302

Sugai, G. & Horner, R. R. (2006). A promising approach for expanding and sustaining positive behavior support. *School Psychology Review, 35*, 2, 245 – 259.

Sukhodolsky, D. G., Kassinove, G., & Gorman, B. S. (2004). Cognitive-behavioral therapy for anger in children and adolescents: A meta-analysis. *Aggression and Violent Behavior, 9,* 247 – 269. doi:10.1016/j.avb.2003.08.005

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry.* New York: Norton.

Tarrant, M., MacKenzie, L., & Hewitt, L. A. (2006). Friendship group identification, multidimensional self-concept, and experience of developmental tasks in adolescence. *Journal of Adolescence, 29*, 627 – 640. doi:10.1016/j.adolescence.2005.08.012

Tingstrom, D.H., Sterling-Turner, H.E., & Wilczynski, S.M. (2006). The Good Behavior Game: 1969–2002. *Behavior Modification 30*, 225–253. doi: 10.1177/0145445503261165

Tremblay, R. E., Mâsse, L. C., Vitaro, F., & Dobkin, P. L. (1995). The impact of friends' deviant behavior on early onset of delinquency: Longitudinal data from 6 to 13 years of age. *Development and Psychopathology, 7,* 649-667. doi:10.1017/S0954579400006763

Van de Schoot, R., Van der Velden, F., Boom, J., & Brugman, D. (2010). Can at-risk young adolescents be popular and anti-social? Sociometric status groups, anti-social behavior, gender and ethnic background. *Journal of Adolescence, 33*, 583 – 592. doi:10.1016/j.adolescence.2009.12.004

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.

Wentzel, K. R., Donlan, A., & Morrison, D. (2012). Peer relationships and social motivational processes. In Ryan, A. M. & Ladd, G. W. (Eds.), *Peer relationships and adjustment at school* (pp. 79 – 107). Charlotte: Information Age Publishing.

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.

Xie, H., Swift, D. J., Cairns, B. D., & Cairns, R. B. (2002). Aggressive behaviors in social interactions and developmental adaptation: A narrative analysis of interpersonal conflicts during early adolescence. *Social Development, 11*, 205 -224.

Ysseldyke, J., Burns, M., Dawson, P., Kelley, B., Morrison, D., Ortiz, S., Rosenfield, S., & Telzrow, C. (2006). School Psychology: A Blueprint for training and practice III. Bethesda, MD: National Association of School Psychologists.