Early Adolescent Friendship and Self-Esteem

A dissertation submitted to Kent State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy

by

Michelle M. Abraham

August 2008
Abstract

The study goal was testing several competing hypotheses regarding how positive and negative friendship qualities and stability relate to early adolescent self-esteem. Hypothesis 1, Consensual Validation Model, proposed participating in higher positive quality friendships enhances self-esteem. Hypothesis 2, Differential Association Model, proposed higher positive quality friendships increases impact of negative quality, resulting in lower self-esteem. Hypothesis 3, Engagement Model, proposed friendships lower in positive and negative quality would lower self-esteem. Hypothesis 4, Embeddedness Model, proposed stable friendships bolster self-esteem through social standing. Hypothesis 5, Moderation Model, proposed stability moderates the relationship between friendship quality and self-esteem, such that the first hypotheses would be supported only if friendship was stable.

143 seventh and eighth graders completed questionnaires, in fall and in spring. At Time 1, students reported friendships, friendship quality, and self-esteem. At Time 2, students reported friendship stability, self-esteem, and socially desirable responding. Hypotheses were tested using positive and negative quality and stability of the best friendship predicting global self-esteem.

When best friendship quality and stability were used to predict global self-esteem, none of the hypotheses were supported. Post hoc analyses tested the hypotheses using best friendship to predict perceived social acceptance rather than global self-esteem. These subsidiary analyses found best friendship positive
quality predicted reporting higher perceived social acceptance. In addition, best friendship negative quality demonstrated a marginal association with lower perceived social acceptance. Best friendship positive quality interacted with best friendship stability to predict higher perceived social acceptance, with stable friendships higher in positive quality reporting highest self-esteem. Additional post hoc analyses were performed with the best friend network predicting perceived social acceptance. Friendship network positive quality predicted higher perceived social acceptance, and network negative quality predicted lower perceived social acceptance. Both findings suggest quality and stability are important to consider with adolescent friendship and self-esteem.

Reports support the Consensual Validation Model which suggests participating in higher positive quality friendships would enhance self-esteem. There was no support of interaction of positive and negative quality, which suggests independent on self-esteem. A final conclusion was it is important to consider the friendship network when examining early adolescent friendship and self-esteem.
TABLE OF CONTENTS

INTRODUCTION .................................................................................................................7

Positive qualities of adolescent friendship .................................................................11
Positive friendship quality and its association with adjustment ...............................16
Negative qualities of adolescent friendship ...............................................................21
Negative friendship quality and adjustment ..............................................................24
Friendship Stability ......................................................................................................27
Hypotheses to be tested ...............................................................................................31

METHODS .........................................................................................................................35

Table 1: Demographic Breakdown .............................................................................36
Measures .........................................................................................................................37

RESULTS ................................................................................................................................42

Table 2: Summary of Hierarchical Regression Analysis for Best Friendship Quality Predicting Self-Esteem .................................................................47
Table 3: Summary of Hierarchical Regression Analysis for Best Friendship Quality and Stability with Interactions Predicting Self-Esteem ..........................49
Post hoc analyses ............................................................................................................50
Table 4: Summary of Hierarchical Regression Analysis for Best Friendship Network Quality Predicting Perceived Social Acceptance ...............................................53
Table 5: Summary of Hierarchical Regression Analysis for Best Friendship Quality Predicting Perceived Social Acceptance .........................................................54
Table 6: Summary of Hierarchical Regression Analysis for Best Friendship Quality, Stability, and Interactions Predicting Perceived Social Acceptance ........55
Table 7: Interaction of Positive Quality and Stability of the Best Friendship Predicting Perceived Social Acceptance .................................................................56

DISCUSSION ......................................................................................................................56
Implications ......................................................................................................................64

FUTURE DIRECTIONS AND LIMITATIONS ..................................................................66
Early adolescent friendship and self-esteem

Friendship is defined as a close interpersonal relationship and is often first identified in early childhood for individuals functioning as playmates who enjoy each other’s company (Sullivan, 1953; Shulman, Elicker, & Sroufe, 1994; Ginsberg, Gottman, & Parker, 1986). Beyond liking and companionship, there are various identifying qualities of friendship. One such quality is that the relationship is not interchangeable with others and friendships are viewed as mutual, with both individuals considering the other to be a friend (Bukowski & Newcomb, 1984; Degirmencioglu, Urberg, Tolson, et al., 1998; Sullivan, 1953; Aboud & Mendelson, 1996). Additionally, there is a degree of social regulation and salient emotional expression that is not evident in other social relationships (Newcomb & Bagwell, 1995).

Further, friendship involves high levels of unity and both parties in the relationship tend to share some commonalities (Sullivan, 1953). For example, friendships tend to center around shared connections (i.e. youth groups) and are most often developed in peer groups that are focused on some shared interest or activity (i.e. athletics) (Sullivan, 1953; Gottman, 1983; Grotevant, 1998; Berndt & Perry, 1986; Brendgen, Vitaro, & Bukowski, 1998; Kirchler, Palmonari, Pombeni, 1993; Newcomb & Bagwell, 1995; Aboud & Mendelson, 1996). These qualities of companionship, affect, and shared activity are what make the earliest friendship unique and identifiable from other interpersonal relationships.
While some components of friendship (e.g. social interaction, assistance) remain evident in later friendships, stage theories of development predict that friendship will undergo some identifiable changes (Uhlingershantz, 1983). Stage theories suggest that the development of a process such as friendship goes from surface to abstract, from self-centered to mutual, and from transient to enduring (Uhlingershantz, 1983). In stage theories, we do not expect to see elimination of previous developmental characteristics, but rather a building on and expansion of those characteristics. Thus, from childhood to adolescence, there may be a shift in friendship toward more depth, mutuality, and stability.

**Adolescent Friendship**

Research supports stage theories of friendship. Earlier friends have similar behaviors (e.g. politeness, sense of humor) (Rubin, Dwyer, Booth-LaForce, et al., 1998; Ginsberg, Gottman, & Parker, 1986) and earlier friendships involved sharing and liking (Aboud & Mendelson, 1996). While these characteristics are still evident in adolescent friendships, we see distinguishable differences. For example, early adolescence (ages 9-12) is considered to be the first developmental period in which children develop close friendships (Sullivan, 1953). Sullivan (1953) proposes that close friendship in early adolescence is particularly unique in that close friends hold as much importance to the adolescent as the adolescent themselves.

Furthermore, while preadolescent friendships involve companionship, positive affect interaction, and support (Newcomb & Bagwell, 1995; Ginsberg,
Gottman, & Parker, 1986), in adolescence we see an increase in some of these identifying characteristics. For example, there is an increase in the amount of time spent with friends (Jackson, 1993; Berndt, 1996a). One study estimates that adolescents spend 29% of their waking hours outside of the classroom with their peers, while spending only 13% with parents (Rubin, Bukowski, & Parker, 1997). Increased time spent with friends allows for an increase in another new characteristic, that of adolescent friends exerting more direct influence (Rubin, Bukowski, Parker, 1997; Berndt, 1996a). Adolescence is often the earliest time most individuals have the opportunity to interact with peers without direct guidance from parents and adolescence is the first developmental period in which individuals rely more on close friends than on parents for particular aspects of identity establishment (Rubin, Bukowski, Parker, 1997).

Close friendships also provide the adolescent with information regarding social skills, serve to enhance emotional development, and foster self-worth (Gottman, 1983; Mannarino, 1978; Ginsberg, Gottman, & Parker, 1986; Sullivan, 1953; Aboud & Mendelson, 1996; Grotevant, 1998), which makes maintaining the relationship a key predictor in positive development. In adolescent close friendships, children have the opportunity to see how the adolescent’s behavior and that of others is viewed by those who do not have power over the adolescent, giving the adolescent the opportunity to incorporate this new information into his/her own behavior (Sullivan, 1953; Tarrant, MacKenzie, & Hewitt, 2006). In addition, development occurs through opportunities for the
adolescent to practice social interaction skills, as close friends provide both feedback to social behaviors and emotional support during this time of exploration and identity development (Tencer, 2005; Frankel, 1990; Grotevant, 1998). A significant correlation between both observed and self-reported peer social support and self-esteem has been demonstrated (Bagwell, Bender, Andreassi, et al., 2005), suggesting close friendships play a fundamental role in adolescent development.

Whereas parents have previously most often been the primary provider of teaching, guidance, and support (Tencer, 2005), during the adolescent’s autonomy-striving peers provide these services on a more equal plane and the adolescent is seen as an individual rather than part of a family unit (Grotevant, 1998; Newcomb & Bagwell, 1995). Autonomy-striving makes adolescence a period of greater independence and this independence may have a significant impact on the adolescent’s social relationships and social development (Berndt, 1982) due to this new equality. While premature autonomy from parents is not considered healthy as early bids for autonomy often produce conflict with parents and have a negative impact on adjustment (Grotevant, 1998), the new equality experienced with adolescent friends is a healthy step in adolescent development. This increased equality brings about another change in friendship from previous developmental stages and necessitates the adolescent having more influence on the outcome of the interaction (Newcomb & Bagwell, 1995).
Positive qualities of adolescent friendship

Reciprocity and Mutuality

As previously suggested, there are some particular identifying characteristics that are unique to adolescent close friendships. Sullivan (1953) cited reciprocity, mutuality, and intimacy as three significant indicators that are new to friendship in adolescence. The first, reciprocity, involves the desire to ensure the happiness of the other person while at the same time pleasing the self (Sullivan, 1953; Berndt, 2004). Adolescent friendships are defined by this new sense of reciprocity (Rubin, Bukowski, Parker, 1997) which includes an increased generosity towards individuals considered friends (Berndt, 1985).

Sensitivity to the needs of others, a part of reciprocity, becomes important because in adolescence the individual has greater self-responsibility for maintaining the relationship (Jackson, 1993). Previously, parents had played the major role in guiding and influencing friendships, but during adolescence there is a shift to autonomy and the maintenance of the friendship lies more with the adolescent. The adolescent has a greater need to be sensitive to the needs of close friends in order to ensure the relationships continue (Newcomb & Bagwell, 1995; Tencer, 2005).

This reciprocity towards close friends may cause the adolescent to alter their behavior in an attempt to achieve mutual satisfaction and decreases the adolescent’s likelihood to seek gains at the friend’s expense (Berndt, 1985). The desire to maintain close friendships promotes both altruism and emotion.
regulation skills (Rubin, Dwyer, Booth-LaForce, et al., 1998). The adolescent is willing to bear the burden of higher cost in a close friendship for a period of time in the belief that this imbalance will eventually shift, allowing for the maintenance of friendship through difficult times (Aboud & Mendelson, 1996). This willingness to be involved in a friendship in which the give and take is not always equal indicates that close friendships hold particular importance for the adolescent (Wright, 1984).

A concept related to reciprocity is mutuality. Mutuality, or mutual satisfaction, involves shared successes. Friendships are built around common activity and common goals; therefore, friends praise successes and encourage after failure, which serves to bolster the adolescent’s self-view (Berndt, 2002) and presents the unique opportunity for both partners to be affected by the interaction (Hinde, 1979). Cognitive developments allow the adolescent a deeper insight into the needs of others in regards to reciprocity and mutuality (Berndt, 1982; Gottman & Mettetal, 1986; Berndt, 2004; Bagwell, Bender, Andreassi, et al., 2005; Gottman, 1983; Honess & Robinson, 1993; Wright, 1984). In particular, the cognitive ability to differentiate between one’s own and others’ beliefs develops (Honess & Robinson, 1993). It may be this increased understanding of both self and others in regards to mutuality (Berndt, 1982) which allows for these emerging characteristics.
**Intimacy**

Mutuality is an intimate form of sharing and opens the adolescent to close friendships which presents the first real opportunity to scrutinize ourselves closely. Sharing gives the adolescent the opportunity to see his/her self through someone else’s eyes. Sullivan (1953) tells us this is often the first time the adolescent has exposed what has previously been protected: their self-concept. Mutuality is therefore related to another quality identified by Sullivan (1953) of adolescent friendships, that of intimacy.

Sullivan (1953) proposed that adolescent close friendships display a significant increase in intimacy, which involves self-disclosure (Berndt, 2004; Gottman & Mettetal, 1986). The close friendship fills the need for interpersonal intimacy for the adolescent in a time when they are becoming less intimate with primary attachment figures (e.g. parents) in an attempt to achieve autonomy (Sullivan, 1953; Ginsberg, Gottman, & Parker, 1986). Autonomy, a primary goal of adolescence, involves integrating the adolescent’s own self-generated beliefs with those which they have received through direct tuition from their parents and from their own experience (Honess & Robinson, 1993; Sebald, 1992).

The importance of friendship intimacy increases in adolescence (Frankel, 1990) because, as the adolescent moves from the dependence of the parent-child relationship towards autonomy, he/she still desires the intimacy of a close interpersonal relationship for disclosure of private views and worries (Berndt, 1982; Sullivan, 1953). This need may be filled by the intimacy of the close
friendship. Research has demonstrated that adolescent friendships have more intimacy than preadolescent friendships (Berndt, 1982; Berndt, 2004; Berndt & Perry, 1986; Diaz & Berndt, 1982; Bowker, 2004). Increased intimacy is indicated by adolescent friends knowing more intimate information about their close friends than preadolescents (Berndt, 1982; Diaz & Berndt, 1982). Adolescence is the first developmental period in which friendship involves the disclosure of private thoughts and fears (Berndt, 1982; Berndt, 1996a). It has been suggested this unique intimacy is able to occur in adolescent friendships because the adolescent has also developed reciprocity, which promotes a balance in disclosure and equity in the friendship (Berndt, 1982; Honess & Robinson, 1993).

Although a more surface intimacy of sharing time may be present in friendships in earlier stages, in adolescence intimacy levels involving disclosure increase while other previously present features stay generally stable (Berndt, 2004). Intimacy, or self-disclosure, becomes more predominant in the adolescent friendship (Gottman, 1983) as the adolescent strives to understand themselves more and relies more strongly on close friends for identity establishment (Rubin, Bukowski, Parker, 1997; Gottman & Mettetal, 1986) and support in autonomy-striving. A goal of intimacy and self-disclosure is self-understanding (Rubin, Bukowski, Parker, 1997; Gottman & Mettetal, 1986). The intimacy of the adolescent friendship allows the adolescent to receive feedback regarding self-concept issues the adolescent may previously have discussed with the parent, but for which he/she now relies more heavily on peers (Tencer, 2005).
Consequently, the intimacy of close friendships in adolescence serves the unique function of validating the adolescent’s self-esteem (Sullivan, 1953). Harter and Whitesell (2003) define self-esteem as *how much one values oneself as a person* (p.1028). The terms self-concept and self-esteem tend to be used somewhat interchangeably in the literature. One review of associated measures suggests that self-concept is a descriptive term involving a generalized and changing view of the self over time (Cremeens, Eiser & Blades, 2006). Alternatively, they suggest that self-esteem is a more evaluative notion in which the individual has either positive or negative satisfaction and feelings of worth regarding the self as compared with others.

Adolescence is a period of greater self responsibility and less parental influence and one in which there is an increase in involvement with peers (Jackson, 1993; Rubin, Dwyer, Booth-LaForce, et al., 1998; Berndt, 1996a). In early adolescence, friendships serve the adolescent’s need for intimacy at a time when autonomy-striving is necessarily distancing the adolescent from parents (Sullivan, 1953; Tencer, 2005; Shulman, Elicker, & Sroufe, 1994). The adolescent is developing the ability to self-assert, or an awareness and ability to communicate his/her own beliefs and an awareness of the difference between the parent’s information regarding the adolescent and his/her own beliefs about the self (Honess & Robinson, 1993). The increased intimacy of adolescent friendships may also serve to promote successful adjustment in the adolescent during their autonomy-striving. Questioning the values taught by parents, a key
part of autonomy-striving, may create conflict within the adolescent (Sebald, 1992; Grotevant, 1998).

**Positive friendship quality and its association with adjustment**

**Positive features as a single positive quality**

Friendship is often described as higher in quality when it involves more of the positive features of friendship. Research studies have found that positive features of friendship throughout development include such general features as positive affect, companionship, support, and cooperative conflict resolution (Berndt, 2002; Newcomb & Bagwell, 1995; Rubin, Dwyer, Booth-LaForce, et al., 1998; Gottman, 1983). In adolescence, friendship is also identified by intimacy, reciprocity, and mutuality. We would expect these three features to also be theoretically interrelated (Newcomb & Bagwell, 1995). Adolescent friendships high in one positive feature tend to be high in all positive features (Berndt, 2002), suggesting that adolescent friendship can be differentiated by a single dimension of positive quality.

**Positive friendship quality and adjustment**

The quality of an adolescent’s interactions with peers is a better predictor of adjustment in adolescent development (i.e. social success) than other factors such as the frequency of interactions with peers (Kirchler, Palmonari, & Pombeni, 1993). Previous research has focused primarily on positive quality friendships and has shown that friendship quality predicts adjustment (Rubin, Dwyer, Booth-
LaForce, et al., 2004; Bagwell, Bender, & Andreassi, 2005; Berndt, 2004; Kirchler, Palmonari & Pombeni, 1993; Way & Greene, 2006; Mannarino, 1978). More specifically, positive friendship quality is associated with an increase in social competence and decreases in internalizing behavior and rejection for girls (Rubin, Dwyer, Booth-LaForce, et al., 2004) and victimization for boys and girls (Boulton, Trueman, Chau, et al., 1999; Rubin, Dwyer, Booth-LaForce, et al., 2004). These findings suggest a buffering effect of positive friendship quality for adolescent adjustment.

Some may argue that the relationship between friendship and adjustment is bi-directional. It could be argued that individuals with greater adjustment also perceive their friendships to be of higher quality. Alternatively, I would suggest that individuals will have their self-worth effected by the influence of those individuals with whom they are intimate and from whom they are receiving a significant amount of feedback regarding the self. This may be especially true of adolescents in the midst of autonomy-striving, a part of which is challenging what you have been told by others, including information regarding the self. Sullivan (1953) suggested the theory of *consensual validation of self-worth* to explain why high positive quality close friendships effect positive adjustment. In this theory, friendship gives the adolescent a chance to explore his/her own beliefs and receive feedback from someone more equal than parents, as parents exert authority over the adolescent. Sullivan (1953) suggests that positive feedback
from close friends may lead the adolescent to an understanding that they are not as different as they previously thought, thereby increasing self-worth.

Another theory proposed to explain the association between high positive friendship quality and enhanced adjustment is the social support theory (Berndt, 2002). Social support involves emotional, instrumental, and informational support. This theory would suggest adolescents use high quality friendship as a protection against negative influences (Cohen, 1988, Cohen & Wills, 1985), which would promote more positive adjustment (Lambie et al., 2002). By using selective inattention (Sullivan, 1953), the adolescent is more likely to attend to the positive feedback of close friends, thereby bolstering adjustment, and more likely to ignore the negative comments of others which may have a detrimental impact on adjustment (Harter & Whitesell, 2003).

Intimacy may also allow friendship to influence adjustment through feedback regarding self-disclosure. Adolescence is the first opportunity to challenge what our parents have taught us (Sebald, 1992) and explore our own self-views (Kirchler, Palmonari, Pombeni, 1993). Close friendships offer emotional support (Frankel, 1990) and guidance during exploration and challenging of taught self-views. Furthermore, the adolescent may experience increases in self-esteem through encountering acceptance by close friends (Berndt, 2004; Mannarino, 1978; 1979; Weimer, Kerns, & Oldenburg, 2004) and the feedback received may result in increased self-esteem (Sullivan, 1953; Rubin, Bukowski, Parker, 1997; Gottman & Mettetal, 1986). Through self-
disclosure and intimacy, adolescent close friendships help to define our self-esteem.

**Positive quality and self-esteem**

Sullivan (1953) suggested that intimacy validates self-esteem. Self-esteem refers to how much value an individual places on themselves (Harter & Whitesell, 2003). As intimacy is a key positive feature of friendship and a component of high quality friendship in adolescence, it is reasonable to propose an association between friendship quality and self-esteem. Research has supported this supposition. It has been demonstrated that children who perceived their friendships to be higher in positive quality experienced a higher global self-esteem (Rubin, Dwyer, Booth-LaForce, et al., 2004; Way & Greene, 2006; Mannarino, 1978; Bagwell et al., 2005).

It is believed that friendship fosters self-esteem through one of the key functions of friendship: understanding the self better (Rubin, Bukowski, Parker, 1997; Gottman & Mettetal, 1986). Adolescents rely on their friends for normative and comparative references regarding their efforts to define their own self-view (Kirchler, Palmonari, & Pombeni, 1993). By offering the adolescent feedback, the friendship is providing the adolescent information regarding how others value and esteem the adolescent. Positive peer feedback becomes quite influential as the adolescent relies more on friends for feedback regarding the identity they are forging (Rubin, Bukowski, Parker, 1997).
In particular, reciprocity, which allows for access to new information regarding the self, may bring about changes in self-esteem. Positive quality may be associated with higher self-esteem because the close friendship reduces anxiety the adolescent may experience regarding emotional and physical changes that are occurring (Mannarino, 1978, 1979) and anxiety over social challenges. Berndt (2002) proposed that high quality friendships may enhance self-esteem because friends praise success and encourage after failure, supporting self-view and bolstering the self-esteem of the adolescent. Conversely, close friends may help in social development by giving the individual exposure to information that is sometimes contrary to self-view information they have experienced in family interactions (Sullivan, 1953). For example, friendship in adolescence may give the individual more positive feedback about him/herself, thereby countering negative information previously received and resulting in a bolstering of self-esteem (Sullivan, 1953).

Alternatively, the adolescent may receive less optimistic feedback from friends about his/her self, contradicting overly positive information they have received. This contradictory information may be more realistic and have a more negative impact on self-esteem (Harter & Whitesell, 2003). We are not completely shaped by our friendships, however. In middle childhood, selective inattention may be used by the child. This is the conscious decision to ignore information that will raise our personal anxiety (Sullivan, 1953; Harter &
Whitesell, 2003). In this way, the adolescent may protect his/her self-esteem to a point.

Another way in which close adolescent friendship may influence self-esteem is through mutuality. The desire for mutual satisfaction is significant in that a concern for others makes us more susceptible to input from friends. Sullivan (1953) suggests that the previous lack of concern over ensuring the satisfaction of friends insulated the child, but the adolescent’s desire for mutual satisfaction makes their self-esteem susceptible to influence (Sullivan, 1953).

One resulting self-esteem benefit from close friendships may occur when the adolescent has to work to change behavior to interact in and maintain friendships (Sullivan, 1953). This change in behavior may cause the adolescent to be viewed more positively by their peers (Berndt, 2002), which in turns leads to an increase in self-esteem. Further, by offering the adolescent the opportunity to see that they are not as different as they thought they were (Sullivan, 1953), mutuality can have a positive impact on self-esteem.

**Negative qualities of adolescent friendship**

**Conflict**

Friendship may not always, however, have a positive impact on self-esteem given that friendships also may manifest negative qualities. Some argue that high negative quality may have a greater impact than high positive quality (Schuster, Kessler, & Asseltine, 1990). The limited research on negative friendship quality consistently identifies three primary negative features: conflict,
rivalry, and dominance attempts. The first negative feature, conflict, concerns the adolescent’s attempts to get their own needs met (Berndt, 2002; 2004). In friendships high in conflict, the individuals involved often struggle with anxiety over getting their own needs met within the relationship, resulting in concerns over equity (Laursen, 1996). Rather than mutuality and reciprocity, these individuals experience conflict in an effort to maintain a perceived balance in the relationship. This conflict appears to arise out of efforts to achieve self-interests (Berndt, 2004) rather than a positive concern for the interests of their friend.

Conflict as an indicator of negative quality emerges as early as second grade (Berndt & Perry, 1986). By eighth grade, Berndt and Perry reported that absence of conflict was an indicator of a supportive friend, but general acquaintances needed more indicators (e.g. cooperative behavior and association) to be considered supportive. However, Berndt and Perry (1986) also noted that adolescent friendships shifted from simple to complex, so the occurrence of conflict would not be enough to prevent a relationship from being considered a friendship. In other words, absence of conflict was not sufficient for a relationship to be considered a friendship and presence of conflict was not sufficient for a friendship to be dissolved. In adolescence, both support and conflict are seen as components of friendship (Berndt & Perry, 1986).

Conflict may be the most difficult negative characteristic to identify. Adolescents prefer equality over competition and tend to give friends the benefit of the doubt when assessing interactions for conflict (Berndt, 1985). Berndt found
that adolescents made the assumption of equality-striving when considering interactions with friends and labeled the same interactions with classmates as competition-based, demonstrating a reporting bias that should be considered when collecting data. Further, Berndt (1985) found that adolescents were more likely to help friends be successful when they encountered conflict in the friendship, perhaps in an attempt to avoid further conflict or an escalation of conflict.

**Rivalry**

The second negative feature is rivalry (Berndt, 2002). Again, it appears that rivalry is prevalent in these high negative quality relationships due to self-interests (Berndt, 2002) and concerns over equity (Laursen, 1996). The adolescents in the friendship are competing with each other in an effort to get their needs met, rather than having concern for the needs of the other. Rivalry prevents the mutuality and reciprocity that are key to positive quality in friendship.

Note, however, that conflict and rivalry, although indicators of negative quality, are not always “bad” features of a relationship. Hartup (1992) suggests that friends can use conflict and rivalry to set boundaries and to determine if the friendship can continue. Conflict and competition may serve to promote social learning and personal development (Schneider, Fonzi, Tani, et al., 1997; Schneider, Woodburn, del Pilar Soteras del Toro, et al., 2005). Conflict may actually be an indicator of the closeness of the friendship in that the more invested the individual is in the relationship, the more likely they are to tolerate
conflict in an effort to find resolution (Newcomb & Bagwell, 1995; Richard & Schneider, 2005).

**Dominance Attempts**

The final negative feature generally addressed is dominance attempts (Berndt, 2002; 2004). Again, dominance attempts are considered a negative feature because they produce an inequality in the relationship (Schneider, Fonzi, Tani, et al., 1997; Schneider, Woodburn, del Pilar Soteras del Toro, et al., 2005). As previously discussed, mutuality and reciprocity are important positive features of friendship and dominance attempts are not conducive to these features. Further, research has demonstrated a positive correlation between dominance attempts and dissatisfaction with the friendship (Shibahashi, 2004) and insecurity in friendship may lead to increased dominance attempts to maintain the friendship (Parker, Low, Walker, et al., 2005).

**Negative friendship quality and adjustment**

**Negative features as a single negative quality**

There is some conceptual overlap in the negative features and research has found that individuals who are high in one negative feature tend to be high in all negative features (Berndt, 2002). Further, the friends’ view of the overall quality of the friendship were similar (high negative or high positive) even when they differed in their view on particular positive (i.e. intimacy) or negative features (i.e. conflict) (Bagwell, Bender, Andreassi, et al., 2005), facilitating the confident categorization of a friendship as high or low in both positive and negative quality.
These qualities (i.e. positive and negative) are not mutually exclusive; in fact, most relationships should have some of each (Bagwell, Bender, Andreassi, et al., 2005). In addition, the limited research has demonstrated that high scores in negative quality of friendship do not predict low scores in positive quality. Berndt has found that the correlation between negative and positive qualities is either weak (2002) or nonexistent (2004). This point is significant in that we cannot automatically assume that the influence of high positive quality will offset the affects of negative quality. Some research has even suggested that negative quality may have a more significant impact on self-esteem than positive quality (Frankel, 1990). These findings suggest that it is prudent to consider the influences of negative quality friendship independent of positive quality when seeking to determine the influence of these factors on self-esteem and then explore the interaction effects.

**Negative quality and self-esteem**

Little is known regarding the influence of the negative quality of friendship on self-esteem, despite the fact that high negative quality appears to have a greater impact on perceived behavioral adjustment than high positive quality (Keefe & Berndt, 1996; Frankel, 1990; Schuster, Kessler, & Aseltine, 1990). We do know that negative friendship quality predicts increased emotional (hostility) and adjustment (anxiety) problems (Berndt, 1996b; Bagwell, Bender, Andreassi, et al., 2005; Claes, 1994). This finding is more significant when we consider that developmental research has consistently demonstrated that influence in one area
tends to carry over to other areas, suggesting that negative friendship quality may have a significant impact and warrants more extensive study to bring our knowledge to par with that of positive friendship quality.

Research has demonstrated some conflicting findings regarding the association of the negative quality of friendship with self-esteem. While Bagwell et al. (2005) found no significant correlation between negative friendship quality and self-esteem, Keefe & Berndt (1996) found that high negative quality was associated with lower global self-esteem. This raises the questions of when negative quality impacts self-esteem and why the negative quality relationship is maintained despite its potential negative impact on self-esteem.

Interaction of positive and negative quality

High quality friendships have been associated with more successful adjustment by increasing prosocial behavior and with fostering the adolescent’s self-esteem (Berndt, 2002). High positive quality in close friendships does not always predict positive outcomes (Rubin, Dwyer, Booth-LaForce, et al., 2004); one study demonstrated that high positive quality friendships are also associated with increases in behavior problems. In particular, Berndt (2002) found that the friendships which were highest in positive quality were also those associated with the greatest increase in disruptive behavior across the school year. Berndt (2002) proposed that it may be explained by the differential association theory, which would predict that the higher a friendship is in positive quality, the more influence the negative quality aspect would have. That is, the influence of
positive friendship quality may depend on whether it occurs in the presence of negative friendship quality. One goal of the present study is to explore whether positive and negative friendship qualities interact in influencing self-esteem.

**Friendship Stability**

One additional feature of adolescent friendship that should be considered when exploring the effects of friendship quality on self-esteem development is stability. During adolescence, the individual becomes more particular regarding who they nominate as friends (Aboud & Mendelson, 1996) and adolescents are more likely to be stable in their nomination of friends than in nomination of disliked peers (Bukowski & Newcomb, 1984). These findings suggest a stability component that is particular to close adolescent friendships. Stability of friendship also appears to be an important predictor in self-esteem (Berndt, 2002). Although friendship stability did not predict quality, friendship has been demonstrated to show an increase in perceived quality over time, further suggesting that stability is an important aspect of friendship to consider when exploring the effects of friendship quality (Way & Greene, 2006).

Some researchers have investigated how friendship quality and friendships stability are related. Exchange theory predicts that individuals want to maximize the outcome of a relationship and that individuals maintain a relationship due to a desire for the rewards of that relationship (Laursen, 1996; Wright, 1984). Relationships high in negative quality tend to be more stable than those high in positive quality (Bowker, 2004). This stability may occur because
the individual lacks other friendship options (Brendgen, Vitaro, & Bukowski, 1998). If the high negative quality relationship appears to be the only option, the individual may maintain it because they reap benefits of self-esteem enhancement despite the negative quality. Perhaps simply having the friendship is more important to self-esteem than the quality of the friendship. As suggested by Rosenberg’s (1986) baseline self-esteem theory, it may be that having the relationship taps into an area of importance that has greater impact on self-esteem than the quality of the relationship (Harter & Whitesell, 2003).

Alternatively, we may find that more stable friendships are higher in negative quality because they are long-lasting. Laursen (1996) suggested that the high conflict in more stable relationships may be due to a greater need to resolve interpersonal conflict in order to maintain the relationship. If this is the case, then we can expect that there is some benefit for the individual in the relationship that over-rides the high negative quality; presumably the relationship is also high in positive quality. Hinde (1979) notes that an interaction is time-limited, but relationships are much longer. Each interaction is influenced by other interactions in the relationship, so perhaps the individual puts more weight on the positive quality of the relationship and diminishes the importance of the negative quality or negative interactions, thereby allowing high negative quality close friendships to be maintained.

Although some studies find stability related to higher negative qualities, other research has shown that stable friendship are high on positive friendship
quality. Bukowski (1984) determined that mutuality was the most significant positive quality predictor of friendship stability and found that stable friendships had both positive and negative qualities. By contrast, Bowker (2004) states that high positive quality is not significantly associated with stability and suggests that conflict may be a better indicator of stability as a result of the need to tap into conflict management skills. Friendships whose partners are high in conflict management skills may be those who are able to maintain their friendship over longer periods of time. Bowker (2004) found that more direct responses to conflict were indicative of more stable relationships and suggests that compromise and a desire to meet self-interests must work together to allow for stable friendships.

In summary, it is unclear how stability is related to positive and negative qualities in friendship. Stability may be interacting with either positive or negative quality, or both, to produce a previously undetected effect of friendship quality on self-esteem. That is, stability may play a moderating role in self-esteem development in that the relationship between friendship quality and self-esteem may depend on whether the friendship is stable.

One final point to consider is the effect of particular demographic variables which have, in previous research, shown an effect on self-esteem. It is around middle school that we first begin to see gender differences in friendships, with girls reporting greater intimacy than boys (Berndt & Perry, 1986; Furman & Buhrmester, 1985; Asher, Parker, & Walker, 1996; Sharabany, Gershoni, &
Hofman, 1981). In addition, there are reported gender (Twenge & Campbell, 2002), ethnicity (Twenge & Crocker, 2002), and age (Harter, 1998) differences for self-esteem, with differences being found between early and mid- to late-adolescence.

A meta-analysis of ethnicity and self-esteem (Twenge & Campbell, 2002) found that African-American samples scored higher on self-esteem measures than Caucasian, with Caucasians scoring higher than other minorities (e.g. Hispanic, Asian). Furthermore, Twenge and Campbell's meta-analysis also found gender and ethnicity interaction differences, with African-American females scoring highest on self-esteem measures. Additionally, it was found that Caucasian boys reported a modestly higher self-esteem than girls, with a mean effect size of 0.21. There was no reported significant difference in self-esteem for African-American boys and girls.

A meta-analysis of age and self-esteem (Twenge & Campbell, 2001) suggests that self-esteem experiences a drop in early adolescence. One possible explanation is that adolescents in the transition between elementary and high school, who are also attempting to achieve autonomy, go through periods of ‘storm and stress’, contributing to shifts in self-esteem (Arnett, 1999; Blos, 1962). Keeping in mind that a majority of the studies included in the meta-analyses were from samples in mid- to late-adolescence, a period in which self-esteem becomes more stable (Twenge & Campbell, 2002), the relationship between
ethnicity, gender, age, and self-esteem reporting will be evaluated before primary
data analyses are performed to determine if I need to control for these variables.

**Hypotheses to be tested**

Positive quality and negative quality of friendship show a modest or non-
significant correlation with each other. Further, both positive and negative
qualities of friendship have been shown to have only a modest correlation with
self-esteem. These findings tend to be counter-intuitive for most people. I
propose that the reason the individual effects of positive and negative quality of
friendship have thus far only been shown to be modest may be explained
through interaction of the two factors which has not been explored thoroughly. It
may be the interaction of the level of positive quality and negative quality that
determines the effect of friendship quality on self-esteem.

This dissertation will test several competing hypotheses regarding how
positive and negative friendship qualities are related to self-esteem. The goal is
to understand how these qualities interact to effect self-esteem. It may be
predicted that adolescents who are involved in friendships that are low in both
positive and negative quality would have lower self-esteem. Although they are
avoiding the negative effects of negative quality, they are also missing out on the
validation of the positive quality of friendship. Therefore, each of the hypotheses
tested would include predictions of lower self-esteem for individuals whose close
friendships are low in both positive and negative quality. The predictions for
individuals with other combinations of positive and negative friendship qualities would have differing hypotheses.

**Hypothesis 1:** Sullivan’s (1953) *consensual validation theory* proposes that participating in high positive quality friendship would be the most important influence on self-esteem assessment. Not only would individuals experience the benefits of high positive quality, but the positive quality of friendship may protect the adolescent from the influence of negative quality. Therefore, adolescents who are in friendships characterized by higher positive quality should experience higher self-esteem irregardless of their level of negative friendship quality. Conversely, those with lower positive quality would not benefit from validation and buffering and would report lower self-esteem. Support for Hypothesis 1 would be obtained if positive quality predicts self-esteem whereas negative quality does not.

```
<table>
<thead>
<tr>
<th>HI NEGATIVE</th>
<th>LO POSITIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI POSITIVE</td>
<td>Self-esteem</td>
</tr>
<tr>
<td>LO NEGATIVE</td>
<td>Self-esteem</td>
</tr>
</tbody>
</table>
```

**Hypothesis 2:** Alternatively, the *differential-association theory* predicts that negative quality will have more of an impact in relationships that are also high in positive quality, resulting in increased influence of negative quality and lowering self-esteem (Berndt, 2002). Hypothesis 2 incorporated Hypothesis 1 in that lower positive quality is linked to lower self-esteem. Hypothesis 2 differs from Hypothesis 1 in predicting that higher positive quality accentuates rather than
compensates for the impact of negative friendship qualities. Differential-association theory would suggest that positive friendship quality would enhance self-esteem only in the absence of negative quality. Therefore, only adolescent friendships higher in positive quality and lower in negative quality would experience a bolstering of self-esteem, while all other groups would experience lower self-esteem.

<table>
<thead>
<tr>
<th></th>
<th>HI POSITIVE</th>
<th>LO POSITIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI NEGATIVE</td>
<td>↓ Self-esteem</td>
<td>↓ Self-esteem</td>
</tr>
<tr>
<td>LO NEGATIVE</td>
<td>↑ Self-esteem</td>
<td>↓ Self-esteem</td>
</tr>
</tbody>
</table>

**Hypothesis 3:** Finally, an engagement model would predict that having a close friendship, regardless of quality, would be sufficient to promote higher self-esteem, so the influencing factor would be being engaged in a friendship or being disengaged (Berndt, 2002). Therefore, any close friendship with higher scores for either positive or negative friendship quality would report higher levels of self-esteem, and only those with a more disengaged close friendship (i.e. lower on both qualities) would experience lower self-esteem.

<table>
<thead>
<tr>
<th></th>
<th>HI POSITIVE</th>
<th>LO POSITIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI NEGATIVE</td>
<td>↑ Self-esteem</td>
<td>↑ Self-esteem</td>
</tr>
<tr>
<td>LO NEGATIVE</td>
<td>↑ Self-esteem</td>
<td>↓ Self-esteem</td>
</tr>
</tbody>
</table>

**Hypothesis 4:** In regards to friendship stability and its effects on self-esteem, we would expect to see an interaction with friendship quality. One possible
model, an *embeddedness model*, suggests having close friendships bolsters self-esteem since being embedded in a social relationship provides social standing (Bukowski & Newcomb, 1984). This model would predict that stable close friendships may result in increased self-esteem irregardless of the quality, with self-esteem enhancement resulting from the adolescent being embedded in a relationship. This raises the question of how stable high negative quality friendships bolster self-esteem, but this question may be partially explained by Bowker’s (2004) prediction that stable friendships may be higher in negative quality because of a desire to resolve conflict to maintain the relationship. In this embeddedness model, more stable relationships may result in an overall bolstering of self-esteem, regardless of friendship quality, based on the benefits received from being embedded in a friendship. Conversely, adolescents with friendships low in stability would experience lower self-esteem as a result of the lack of embeddedness.

<table>
<thead>
<tr>
<th></th>
<th>POS. QUAL.</th>
<th>NEG. QUAL.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI STAB.</td>
<td>Self-esteem</td>
<td>Self-esteem</td>
</tr>
<tr>
<td>LO STAB.</td>
<td>Self-esteem</td>
<td>Self-esteem</td>
</tr>
</tbody>
</table>

**Hypothesis 5:** Alternatively, friendship stability may function as a moderator between friendship quality and self-esteem. In this model, stability(M) would change the relationship between friendship quality(IV) and self-esteem(DV), such that in more stable friendships there would be a stronger relationship between friendship quality and self-esteem. Hypothesis 5 is consistent with any of the first
three hypotheses, but predicts that the hypothesized pattern will be more clearly seen when friendship are stable rather than unstable.

Method

Participants

The participants were recruited through Alliance Middle School, Alliance, Ohio. Students were invited to participate in the study through a letter distributed through the school. Interested families returned a consent form indicating they were willing to allow their adolescent to participate in the study. A reminder was sent to those families who did not return the first consent form. Families not interested were asked to indicate they were not interested and to return the form. Regardless of whether or not they were willing to participate, students who returned their forms were entered in a drawing for various prizes from local businesses and establishments (e.g. McDonalds, Burger King, tickets to high school football game).

To be eligible for participation, the adolescents had to be in grades 7 or 8. Grade 6 was not included as this is the traditional transition period for adolescents from elementary to middle school in this school district and research has demonstrated one common aspect of this transition is instability of friendships (Akos & Galassi, 2004). A power analysis was performed to determine the number of participants necessary to demonstrate a significant correlation. The power analysis indicated that for a significance test of a sample $r$ at $\alpha = .05$ with a medium effect, the necessary minimum sample size is 123.
participants. Of a total of 443 students (243 seventh grade & 200 eighth grade), 184 students returned the consent form (104 seventh grade & 80 eighth grade), with 143 parents (31% of target sample) giving consent for participation.

For Time 1 (T1) data collection, there were 76 seventh grade and 67 eighth grade participants, with all students who returned the consent form participating. Breakdowns of gender, ethnicity, and age by grade level are in Table 1.

Table 1 *Demographic Breakdown*

<table>
<thead>
<tr>
<th></th>
<th>Seventh Grade N = 76</th>
<th>Eighth Grade N = 67</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34 (45%)</td>
<td>25 (37%)</td>
</tr>
<tr>
<td>Female</td>
<td>42 (55%)</td>
<td>42 (63%)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>47 (62%)</td>
<td>42 (63%)</td>
</tr>
<tr>
<td>African-American</td>
<td>13 (17%)</td>
<td>12 (18%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3 (4%)</td>
<td>3 (4%)</td>
</tr>
<tr>
<td>Other/Mixed</td>
<td>10 (13%)</td>
<td>8 (12%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-years</td>
<td>42</td>
<td>--</td>
</tr>
<tr>
<td>13-years</td>
<td>26</td>
<td>40</td>
</tr>
<tr>
<td>14-years</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>15-years</td>
<td>--</td>
<td>3</td>
</tr>
</tbody>
</table>

**Procedure**

All students who returned forms indicating consent completed two sessions at school, one session in the fall (T1) and one in the winter (T2). During the T1 visit, students were first asked to sign an assent form on the day of testing
indicating they were aware of the purpose of the study, agreed to participate, and understood that they could refuse to answer any questions or terminate participation at the participant’s discretion. Students then completed questionnaires providing demographic information and a report of close friendship nominations (Attachment A). At T1, the Friendship Relationship Questionnaire (FRQ) measure of quality of friendship (Attachment B) and the Harter Self-Perception Profile for Children (SPPC) (Attachment C) were also completed. During the T2 evaluation, students again provided friendship nominations for stability measurement and completed the Harter SPPC and the Children’s Social Desirability Scale (CSDS) (Attachment D), a measure of the propensity to answer in a socially desirable way.

**Measures**

**Close Friendships**

*Adolescent’s reports of close friendships.* To assess the adolescent’s close friendships, participants were asked to list the first and last names of their 3 closest same-sex friends at both the T1 and T2 evaluations, but were told they could list fewer names (1 or 2 or none). Further, participants were asked to list the names in the order of closeness, with the first name listed to be their closest or best friend. Participants were allowed to nominate friends outside of school to obtain a clearer picture of the quality of the relationships the adolescent considers to be close friendships. Same-sex friends only were used because these represent most of an adolescent’s close friendships (Hartup, 1992) and
there is some question whether opposite-sex friendships at this developmental stage are friendships or romantic relationships (Sharabany, Gershoni, & Hofman, 1981). While participants were allowed to nominate more than one close friend, for the purpose of this study, only the scores from the best friend will be considered. I focused on the best friend relationship rather than the friendship network due to the fact that theory to this point has largely explored friendship in the context of the impact of the individual. Research has consistently demonstrated an association between the single best friendship and self-esteem (Tarrant, MacKenzie, & Hewitt, 2006; Rubin, Dwyer, Booth-LaForce, et al., 2004; Bagwell, Bender, & Andreassi, 2005; Berndt, 2004; Way & Greene, 2006; Mannarino, 1978).

**Friendship Stability.** To assess close friendship stability, the names listed at T1 were compared with those listed at T2. Stability was determined by examining whether the relationship listed as the closest best friend at T1 was nominated as a ‘close best friend’ at T2. In this way, I could explore if retention of this close friendship was sufficient stability to effect self-esteem. Stability was assessed over a 5-month period. Berndt and Hoyle (1985) found that most close friendships lasted several months but less than a year, so a 5-month span should allow for a reasonable distribution of stable and unstable friendships. Approximately half of adolescent close friendships remain stable at this age (Keefe & Berndt, 1996; Degirmencioglu, Urberg, Tolson, et al., 1998). Results of the current study showed that 63% of the participants demonstrated stability in
nominating their best friendship from T1 as at least a close friendship at T2 (40% nominated the same individual as best friend at T1 and T2). At T1 data collection, four participants (3%) listed no best friend, but all reported a best friend at T2. Participants with no best friend nomination at T1 were included in the non-stable best friend group.

*Friendship Relationship Questionnaire (Furman, 2005).* The Friendship Relationship Questionnaire (FRQ) assesses the quality of adolescent close friendships based on 16 scales. For the purposes of this study, the scales assessing *Prosocial Behavior, Intimacy, Admiration* and *Companionship* were used to assess positive qualities of close friendships, while the scales assessing *Quarreling, Antagonism*, and *Competition* were used to assess the negative qualities of close friendships. To measure intimacy (self-disclosure), the subscales of *Intimacy and Companionship*, which focus on sharing both feelings and time were used. To measure mutuality and reciprocity (ensuring happiness of both individuals), the subscale of *Prosocial Behavior*, which focuses on consideration and sharing, and the subscale of *Admiration*, which focuses on shared liking, were used. To measure rivalry (competition) and dominance attempts (control), both the *Competition* subscale, which focuses on the desire to be better than the friend, and the *Antagonism* subscale, which explores the individual’s willingness to put down the friend, were used. To measure conflict, the *Quarreling* subscale was used.
To assess positive and negative qualities of friendship, participants indicated on a 5-point Likert scale (1 = hardly at all to 5 = extremely much) how characteristic an item was of the particular friendship. Each of the subscales was composed of three items, making the positive friendship quality scale a 12-item scale, while the negative friendship quality scale was 9-item scale. Participants were asked to answer this questionnaire for each of the friendships they nominated as close. To test the influence of the best friendship, the scores from the friendship the adolescent nominated as their best friendship at T1 were used. Both the positive friendship quality ($\alpha = .88$, $M = 44.74$, $SD = 8.60$, $N = 139$) and negative friendship quality scales ($\alpha = .85$, $M = 17.45$, $SD = 6.47$, $N = 139$) demonstrated adequate inter-item reliability.

**Self-Esteem**

*Self-Perception Profile for Children (Harter, 1982).* The Self-Perception Profile for Children (SPPC) is a 36-item scale that assesses self-perception in five domain-specific sub-scales (scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct) that correspond with hypothesized domains of self-esteem, and one measure of global self-esteem. As the purpose of this study was to examine the effects of friendship quality on self-esteem, while the entire scale was administered at T2, only the global self-esteem items were used for analyses.

The SPPC is a ‘some kids, other kids’ format. The child was presented with a statement describing two different types of children and asked to
determine which one of the described kids was most like them. For example,

*Some kids like the kind of person they are* BUT *Other kids often wish they were someone else* is one of the items on the global self-esteem subscale. After choosing which group of kids was most like them, they were then asked to indicate whether the response they chose was *really true* or *sort of true* for them.

The Global Self-Esteem Subscale is composed of 6 items. Each answer was scored from 1 to 4, with higher scores indicating higher self-esteem. The scale has norms available for children 8 years and older. The global self-esteem subscale has demonstrated adequate internal reliabilities, $\alpha = 0.80$ (Muris, Meesters, & Fijen, 2003). The current study found that with 139 subjects reporting, the global self-esteem subscale had a satisfactory Cronbach alpha ($\alpha = 0.75$) with a mean response of 19.270 ($SD = 3.37$, $N = 132$) and a range of 11 to 24.

**Social Desirability**

*Children’s Social Desirability Scale (Crandall, 1966).* The Children’s Social Desirability Scale (CSDS) is a measure of a child’s propensity to answer questions in a socially desirable way. Higher scores indicate a greater likelihood that an individual has a tendency to answer questions in a socially desirable manner. Higher levels of social desirability in children are associated with both avoidance behavior and lower self-esteem. Measuring social desirability allowed for analysis of whether controlling for social desirability changed the association between friendship quality and self-esteem.
The scale consists of 25 Yes or No items which are socially desirable but improbable, such as *Do you always do as you are told* and *Do you always listen to your parents*. Items were scored with socially desirable responses of *No* receiving a value of 0 and *Yes* responses scored as a 1, with the following items were reverse scored: 4, 8, 9, 12, 14, 17 and 22. Scores on the measure would range from 0-25, with higher scores indicating an increased likelihood to answer in a socially desirable manner. This measure has good Cronbach alphas between .85 and .90 (Phipps & Srivastava, 1997). Current study results showed good reliability ($\alpha = 0.83$, $M = 10.78$, $SD = 5.05$, $N = 130$).

**Results**

*Preliminary analyses*

All data analyses were performed on cases with complete data. Preliminary data analyses involved examining the main variables in relation to the demographic variables. First, it was determined whether or not there were significant differences in reporting associated with grade to assure that the two grades (7th & 8th) could be collapsed and examined as one sample. To determine this, multiple t-tests were performed with the variables of positive friendship quality, negative friendship quality, friendship stability, and self-esteem as dependent variables. Analysis demonstrated no significant differences in the reporting between children in grades 7 and 8. In all subsequent analyses, these variables were collapsed across grade.
The main variables of friendship quality and stability were then examined to determine if they were related to the demographic variables of gender, ethnicity, and age. Appropriate tests were run to explore equality of variances, and a t-test determined that gender was associated with both positive friendship quality \((t(127) = 5.13, p < .001)\) and negative friendship quality \((t(127) = 1.23, p < .001)\). Specifically, in their best friendships, girls reported significantly higher positive friendship quality \((M = 3.19, SD = 6.71)\) than did boys \((M = 3.10, SD = .68)\), and girls reported lower negative friendship quality \((M = 2.30, SD = 4.51)\) than did boys \((M = 2.23, SD = .75)\). Gender was controlled for in subsequent analyses. Tests were performed for both ethnicity (comparing Caucasian to non-Caucasian) and age and demonstrated that neither of these demographic variables was significantly associated with any of the predictor variables. In addition, the tendency to reply in a socially desirable manner was examined with the demographic and main variables and no associations were found.

Finally, the correlations between the three predictor variables (positive friendship quality, negative friendship quality, and friendship stability) were examined. I theoretically expected the variables to be somewhat related, but wanted to assure that they were not too strongly correlated, which would suggest multicollinearity. Analysis of best friendship quality variables demonstrated that positive friendship quality and negative friendship quality were not significantly correlated \((r = -.13, p = .13)\). For stability analyses of the best friendship, there was no significant correlation of best friendship stability with positive friendship quality.
quality \((r = -.07, p = .5)\) and only a marginal correlation between best friendship stability and negative best friendship quality reports \((r = .16, p = .07)\). The latter finding suggests that best friendships still considered important at T2 were those with higher levels of negative quality. In other words, friendships with higher negative friendship quality may be slightly more likely to remain as significant relationships than those with higher positive friendship quality.

**Main data analyses**

The main data analyses started with examining correlations of the predictor variables of positive best friendship quality and negative best friendship quality and best friendship stability with the outcome variable of global self-esteem reported at T2. There were no significant correlations found between global self-esteem and friendship quality; both positive quality \((r = .02, p = .78)\) and negative quality \((r = .02, p = .80)\) were unrelated to global self-esteem. In addition, global self-esteem was unrelated to best friendship stability \((r = .09, p = .35)\). These findings suggest that global self-esteem is not associated with either the quality or the stability of the best friendship. However, it is not necessary for friendship quality and stability to be significantly correlated with self-esteem to test for moderation when looking at interaction effects. If moderation is occurring, then we would see a change in the relationship between friendship quality and self-esteem when we test interactions of positive and negative friendship quality or friendship quality with stability.
All hypotheses were tested using sequential (hierarchical) regression analysis to test the relationship between the best friendship variables (positive and negative quality and stability) and global self-esteem. To perform the regression analyses, the variables were first centered by removing the scale-mean from each score. The predictor variables were centered before creating the interaction terms to avoid problems with multicollinearity when testing the interactions. Interaction terms were created by multiplying the best friendship positive and negative quality values with each other, with best friendship stability independently, and all three variables together. Step 1 of all regressions will be the demographic variable of gender as it was found that gender was significantly correlated with friendship quality.

As this study was exploring the main effects of positive and negative quality and stability, as well as the interaction effects, the main data analyses involved testing the hypotheses with regression analyses. An effect would be indicated by a significant change in the $R^2$ Change statistic in regression analyses. Hypothesis 1 tested Sullivan’s (1953) consensual validation theory, which proposes that participating in higher positive quality friendship would be the most important influence on self-esteem assessment. Support of this hypothesis would be found with a significant Beta for positive friendship quality in Step 2 of the regression. Hypothesis 2, the differential-association theory, predicted that negative friendship quality will have more of an impact in relationships that are also higher in positive friendship quality, resulting in
increased influence of negative quality and lowering self-esteem. Support of these results would be supported with a significant $\beta$ for interaction of positive and negative quality of friendship at Step 3 of the regression. Hypothesis 3, an engagement model predicted that higher scores for either positive or negative quality would enhance self-esteem, so only friendships lower on both would experience lower self-esteem. A significant $\beta$ for the interaction of positive and negative quality of friendship at Step 3 of the regression would support this hypothesis. As both Hypothesis 2 and 3 would be supported by a significant $\beta$ for the interaction of positive and negative quality at Step 3 of the regression, which hypothesis was supported would be determined by decomposing the interaction as these two hypotheses are mutually exclusive.

To test Hypotheses 1-3, gender was entered at Step 1 and positive best friendship quality (IV$_1$ testing H1) and negative best friendship quality (IV$_2$) were entered at Step 2, and the interaction (testing H2 & H3) were entered at Step 3. Regression analyses determined that none of the hypotheses involving quality of the best friendship were supported as explaining the association between friendship quality and global self-esteem (see Table 2). When entered at Step 1, gender produced no significant change in predicting self-esteem ($R^2$ Change = .02) and accounted for only 2% of the variance. The friendship quality ($R^2$ Change = .01) predictors entered at Step 2 also produced no significant change, while the interaction ($R^2$ Change = .00) at Step 3 was also not significant, with positive and negative friendship quality and the interaction accounting for less
than an additional 1% of the variance. Further exploration of the coefficients to
determine if any of the predictors were independently having an effect found no
significance.

Regression 1

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Hypothesis Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Hypothesis Tested</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>Hypothesis Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>Hypothesis Tested</td>
</tr>
</tbody>
</table>

| Positive Quality | Hypothesis 1 |
| Negative Quality | Hypotheses 2 & 3 |

| Interaction Effects | Pos Q X Neg Q | Hypotheses 2 & 3 |

Table 2

*Summary of Hierarchical Regression Analysis for Best Friendship Quality Predicting Self-Esteem (N = 127)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
</tr>
<tr>
<td>Gender</td>
<td>-.91</td>
<td>.61</td>
<td>-.13</td>
</tr>
<tr>
<td>Positive Quality</td>
<td>.03</td>
<td>.04</td>
<td>.08</td>
</tr>
<tr>
<td>Negative Quality</td>
<td>-.03</td>
<td>.05</td>
<td>-.05</td>
</tr>
<tr>
<td>P X N Interaction</td>
<td>.003</td>
<td>.01</td>
<td>.05</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.02</td>
<td>.02</td>
<td>.03</td>
</tr>
<tr>
<td>$F$ for change in $R^2$</td>
<td>2.24</td>
<td>.40</td>
<td>.28</td>
</tr>
</tbody>
</table>

*Note:* Positive Quality and Negative Quality were centered at their means.
Additionally, the effects of stability of the best friendship on self-esteem were tested. Support of Hypothesis 4, the embeddedness model, would be indicated by a significant Beta for stability in Step 2 of the regression. If best friendship stability moderates the relationship between best friendship quality and global self-esteem in support of Hypothesis 5, there would be a significant Beta for the interaction of positive best friendship quality and best friendship stability in Step 4, or if there was a significant Beta found for the interaction of positive best friendship quality, negative best friendship quality, and best friendship stability in Step 4.

A second regression analysis was run and, again, gender was entered at Step 1 as a control. To test for the effects of friendship stability, Best Friendship Stability (IV3) was entered at Step 2 to test for a main effect. Positive Best Friendship Quality, Negative Best Friendship Quality, and the Interaction of Positive and Negative Best Friendship Quality were entered at Step 3 to act as a control. The interactions of Positive Best Friendship Quality and Best Friendship Stability, Negative Best Friendship Quality and Best Friendship Stability, and Positive Quality, Negative Quality, and Stability were entered at Step 4.

Regression analyses determined that none of the hypotheses involving stability of friendship were supported as explaining the association between best friendship stability and global self-esteem (see Table 3). None of the interactions demonstrated significance ($R^2 Change = .02$), accounting for only an additional
5% of the variance. Further exploration of the coefficients to determine if any of the predictors were independently having an effect found no significance.

**Regression 2**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Main Effects</td>
</tr>
</tbody>
</table>
| Step 3 | Positive Friendship Quality
Negative Friendship Quality
Positive X Negative Quality Interaction |
| Step 4 | Interaction Effects |
| Step 4 | Positive Quality & Stability | Hyp. 5 |
| Step 4 | Negative Quality & Stability |
| Step 4 | Positive & Negative Quality & Stability | Hyp. 5 |

**Table 3**

*Summary of Hierarchical Regression Analysis for Best Friendship Quality and Stability with Interactions Predicting Self-Esteem (N = 127)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
<td>B</td>
</tr>
<tr>
<td>Gender</td>
<td>-.91</td>
<td>.61</td>
<td>-.13</td>
<td>-.85</td>
</tr>
<tr>
<td>Stability</td>
<td>.58</td>
<td>.67</td>
<td>.08</td>
<td>.63</td>
</tr>
<tr>
<td>Pos. Quality</td>
<td>.03</td>
<td>.04</td>
<td>.08</td>
<td>.04</td>
</tr>
<tr>
<td>Neg. Quality</td>
<td>-.03</td>
<td>.05</td>
<td>-.05</td>
<td>-.14</td>
</tr>
<tr>
<td>P X N Inter.</td>
<td>.003</td>
<td>.01</td>
<td>.05</td>
<td>.01</td>
</tr>
<tr>
<td>P X S Inter.</td>
<td></td>
<td>-.003</td>
<td>.08</td>
<td>-.01</td>
</tr>
<tr>
<td>N X S Inter.</td>
<td></td>
<td>.14</td>
<td>.11</td>
<td>.23</td>
</tr>
<tr>
<td>P X N X S</td>
<td></td>
<td>-.01</td>
<td>.01</td>
<td>-.15</td>
</tr>
<tr>
<td>Inter.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.02</td>
<td>.02</td>
<td>.03</td>
<td>.05</td>
</tr>
<tr>
<td>$F$ chg $R^2$</td>
<td>2.24</td>
<td>.75</td>
<td>.40</td>
<td>.90</td>
</tr>
</tbody>
</table>

*Note: Positive Quality, Negative Quality, and Stability were centered at their means.*
Post Hoc Analyses

Correlation analyses and regression analyses both demonstrated that there were no significant associations between best friendship quality, best friendship stability, and self-esteem. Staying with my original theoretical hypotheses, data collection and theory offered three additional avenues of post hoc exploration. First, while friendship was explored using the best friendship, other research has suggested that it may be the close friendship network that impacts self-esteem. Second, it has also been suggested that during the period of early adolescence, during which self-esteem may experience declines, it may be perceived peer acceptance, rather than global self-esteem, which is affected by network friendship quality and stability. Finally, in line with my original supposition that the best friendship is a better indicator, it may the best friendship which is associated with perceived social acceptance. Thus, given the negative findings, additional analyses were conducted to test these possibilities.

Some recent research has explored the friendship network rather than individual friendships (Claes, 1994; Tarrant, MacKenzie, & Hewitt, 2006). Kirchler, Palmonari, and Pombeni (1993) suggest that the peer group helps to define self-view, so it could be contended that the network of close friends reported as a whole would have an impact on self-esteem that differed from individual reporting of a single best friend. Therefore, the friendship network would be a reasonable avenue of exploration.
For the first line of post hoc analysis, I examined the friendship network in relation to global self-esteem. I performed two regression analyses, parallel to the main data analyses, using aggregated data from the friendships nominated (up to three friends) rather than the data for the Best Friendship. For Network Friendship Quality scores, I aggregated the positive quality scores and negative quality scores for all friends nominated. For Network Friendship Stability scores, if 50% or more of the friendships nominated at T1 were re-nominated, the Network was labeled as stable. I then used these variables to perform regression analyses testing for effects on self-esteem. The regression analyses, after controlling for gender, demonstrated no significant changes in the adjusted $R^2$ for self-esteem when the network friendship variables were used as predictors. The only marginally significant finding was for the interaction of positive quality and stability ($B = 1.66, p = .07$) predicting self-esteem. These findings suggest that high positive quality friendship networks that remain stable may have a small effect on the adolescent’s global self-esteem.

For the second line of post hoc analyses, the effect of positive and negative quality and stability of the network and the interaction of the predictors was examined in regards to the more specific sub-scale of social acceptance. Berndt (2002; 2004) suggested that failure to find consistent outcomes of friendship on self-esteem may be due to the fact that friendship’s effects are seen more in the social acceptance domain of self-esteem rather than in global self-esteem. The self-esteem measure used in this study, the SPPC, consists of
5 subscales (prosocial behavior, athletic, academic, behavioral, social acceptance) for domains determined to impact global self-esteem. The social acceptance subscale measures the adolescent’s perceived acceptance by peers. As the entire Harter SPPC was administered during the measure of self-esteem, I could explore this avenue of analysis using the perceived social acceptance subscale.

Again, two parallel regression analyses were performed using the aggregated scores from the friendship network, but now testing for effects in the domain of perceived social acceptance. In the first regression analysis (see Table 4), Friendship Network Quality was examined in predicting Perceived Social Acceptance. When the network friendship quality predictors were used to predict perceived social acceptance, regression analysis demonstrated a significant change for friendship network quality predicting social acceptance ($R^2_{change} = .06, p < .05$) at Step 2, accounting for 6% of the variance. Examination of the coefficients showed that network positive quality ($B = .19, p < .05$) and network negative quality ($B = -.19, p < .05$) both significantly predicted perceived social acceptance. The interaction of positive and negative quality was not significant at Step 3. These findings demonstrate some support for the impact of friendship quality on perceived social (peer) acceptance, and provide support for Hypothesis 1, the Consensual Validation Model. This Model suggests that high positive quality friendships increased self-esteem and served to buffer the
individual against the effects of negative quality. Stability of the network was not significant.

Table 4

Summary of Hierarchical Regression Analysis for Best Friendship Network Quality Predicting Perceived Social Acceptance (N = 126)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
</tr>
<tr>
<td>Gender</td>
<td>-.01</td>
<td>.11</td>
<td>-.01</td>
<td>-.20</td>
</tr>
<tr>
<td>Positive Network Quality</td>
<td></td>
<td></td>
<td>.20</td>
<td>.09</td>
</tr>
<tr>
<td>Negative Network Quality</td>
<td>-.15</td>
<td>.09</td>
<td>-.16</td>
<td>-.18</td>
</tr>
<tr>
<td>P X N Interaction</td>
<td>-.17</td>
<td>.12</td>
<td>-.13</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.00</td>
<td>.06</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>$F$ for change in $R^2$</td>
<td>.01</td>
<td>3.76*</td>
<td>2.08</td>
<td></td>
</tr>
</tbody>
</table>

Note: Positive Quality and Negative Quality were centered at their means.

* $p < .05$

The third and final set of post hoc analyses used best friendship positive quality, best friendship negative quality, and best friendship stability predicting perceived social acceptance to perform regression analyses parallel to my original hypotheses. The first regression analysis examined best friendship positive quality, best friendship negative quality, and the interaction of positive and negative quality as predictors of perceived social acceptance (see Table 5). When entered as a block at Step 2, the $R^2$ change test for positive and negative
quality was not significant. However, examination of the Beta coefficients for the individual predictors showed a significant effect for best friendship positive quality ($B = .02, p < .05$), suggesting best friendship positive quality has an effect on perceived social acceptance. The interaction of positive and negative quality entered at Step 3 was not significant.

Table 5

*Summary of Hierarchical Regression Analysis for Best Friendship Quality Predicting Perceived Social Acceptance (N = 126)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>SE $B$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Gender</td>
<td>-.01</td>
<td>.11</td>
<td>-.18</td>
</tr>
<tr>
<td>Positive Network Quality</td>
<td>.02</td>
<td>.01</td>
<td>.20</td>
</tr>
<tr>
<td>Negative Network Quality</td>
<td>-.01</td>
<td>.01</td>
<td>-.12</td>
</tr>
<tr>
<td>P X N Interaction</td>
<td>-.001</td>
<td>.001</td>
<td>-.07</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.00</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td>$F$ for change in $R^2$</td>
<td>.01</td>
<td>2.66</td>
<td>.65</td>
</tr>
</tbody>
</table>

*Note:* Positive Quality and Negative Quality were centered at their means.
* $p < .05$

The second regression analysis used best friendship stability and its interaction with best friendship quality to predict perceived social acceptance (see Table 6). When all predictor interactions were entered as a block at Step 4, there was a significant effect, $F(8, 118) = 2.03$, ($R^2$ Change = .07) accounting for 12% of the variance. Examination of the individual coefficients revealed a marginal effect for negative best friendship quality ($B = -.03, p = .07$), suggesting
best friendship negative quality had a small negative effect on perceived social acceptance, after controlling for best friendship positive quality and stability. In addition, tests of individual predictors revealed an effect of the interaction of best friendship positive quality and stability of the best friendship on perceived social acceptance ($B = .04$, $p < .01$).

Table 6

Summary of Hierarchical Regression Analysis for Best Friendship Quality, Stability, and Interactions Predicting Perceived Social Acceptance ($N = 126$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$\beta$</td>
<td>$B$</td>
</tr>
<tr>
<td>Gender</td>
<td>-.01</td>
<td>.11</td>
<td>-.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Stability</td>
<td>.08</td>
<td>.12</td>
<td>.08</td>
<td>.06</td>
</tr>
<tr>
<td>Pos. Qual.</td>
<td>.02</td>
<td>.01</td>
<td>.21</td>
<td>.12</td>
</tr>
<tr>
<td>Neg. Qual.</td>
<td>-.01</td>
<td>.01</td>
<td>-.01</td>
<td>-.13</td>
</tr>
<tr>
<td>PXN Int.</td>
<td>-.001</td>
<td>.002</td>
<td>-.08</td>
<td>-.001</td>
</tr>
<tr>
<td>PXS Int.</td>
<td>.04</td>
<td>.01</td>
<td>.43**</td>
<td></td>
</tr>
<tr>
<td>NXS Int.</td>
<td>.03</td>
<td>.02</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td>PXNXS</td>
<td>-.001</td>
<td>.002</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.00</td>
<td>.00</td>
<td>.05</td>
<td>.12</td>
</tr>
<tr>
<td>$F$ chg $R^2$</td>
<td>.01</td>
<td>.42</td>
<td>2.06</td>
<td>3.10*</td>
</tr>
</tbody>
</table>

Note: Positive Quality, Negative Quality, and Stability were centered at their means. + = marginal, * $p < .05$, ** $p < .01$

To determine the pattern of the interaction of best friendship positive quality and best friendship stability, the interaction was decomposed (see Table 7). I found that best friendship positive quality was related to perceived social acceptance only when the best friendship was stable. This suggests that when the adolescent does not maintain the high quality best friendship, there is a
decline in the perceived social acceptance, which provides support of Hypothesis 5. Hypothesis 5 suggests that stability moderates the relationship between friendship quality and self-esteem. Results suggest that stability moderates the relationship between positive quality and perceived social acceptance, with stability enhancing the effects of best friendship positive quality.

Table 7  Interaction of Positive Quality and Stability of the Best Friendship Predicting Perceived Social Acceptance

<table>
<thead>
<tr>
<th>Level of Best Friendship Positive Quality</th>
<th>Perceived Social Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0.05</td>
</tr>
<tr>
<td>Moderate</td>
<td>0.1</td>
</tr>
<tr>
<td>High</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Discussion

The goal of the study was to test five hypotheses using the adolescent’s best friendship to predict their global self-esteem. The first three hypotheses predicted that either positive quality of the best friendship, or an interaction of the positive and negative qualities of the best friendship, would predict global self-esteem. The last two hypotheses predicted that stability of the best friendship
would either increase self-esteem irregardless of quality, or that stability would moderate the relationship predicted in one of the first three hypotheses. Regression analyses were performed to test these hypotheses using the best friendship to predict global self-esteem, and there were no significant findings. Thus, although both positive and negative quality and the stability of the best friendship have been linked to global self-esteem in theory and previous research, quality and stability of the best friendship were not related to global self-esteem in the current study.

While the purpose of this study was to assess the effect of positive and negative quality and stability of friendship on adolescent self-esteem, there were no significant findings for the original conceptualization of the variables. Data collection allowed for post hoc analyses that would test the same five hypotheses using alternate predictor and outcome variables. The post hoc analyses used both global self-esteem and a narrower conceptualization of the domain of perceived social acceptance. In addition, the post hoc analyses used both the single best friendship and the friendship network. In these analyses, there were some significant findings. Both the best friendship quality and stability and the friendship network quality were related to the domain of perceived social acceptance. In addition, positive quality of the friendship network had some marginal associations with global self-esteem. Using Cohen’s (1992) parameters, all of the findings demonstrated a medium effect size.
The contrasting findings may be explained, in part, by Harter’s (1998) theory that global self-esteem results from performance in a number of domains. Harter proposes that global self-esteem is a summation of perceived success in five domains -- social acceptance, behavior, athletics, academics, and physical appearance -- and the level of importance the individual places on each of these domains independently. The domain of perceived social acceptance refers to how the individual perceives themselves in regards to acceptance by their peers. This domain is measured by asking the adolescent to respond to six statements in the some kids/other kids format that are designed to assess their perception of their social acceptance by peers, such as if they feel that most people their age do like them and if they have as many friends as they want. Current study results suggest more informative findings were achieved by narrowing global self-esteem to perceived social acceptance. Lack of findings may be due to the fact that peer acceptance is only one domain influencing global self-esteem. When looking at early adolescence, future researchers may need to more carefully consider how self-esteem is categorized.

My first goal in the post hoc analyses was to explore the effects of positive and negative friendship quality on perceived social acceptance (i.e. Hypotheses 1-3). When predicting perceived social acceptance, both the individual best friendship and the network provided support of Hypothesis 1, the Consensual Validation Model. This hypothesis proposed that adolescents who are involved in friendships characterized by high positive quality would experience higher self-
esteem. Both high positive quality best friendships and high positive quality
friendship networks were associated with higher perceived social acceptance, a
domain of self-esteem. In large part, adolescent friendship’s influence comes
from the positive quality (e.g. intimacy, reciprocity, and mutuality) of those
friendships (Kirchler, Palmonari, & Pombeni, 1993; Rubin, Dwyer, Booth La-
Force, et al., 2004; Bagwell, Bender, Andreassi, 2005; Berndt, 2004; Way &
Greene, 2006; Mannarino, 1978). Theory suggests that higher intimacy validates
self-esteem by providing information that friends value the adolescent (Sullivan,
1953). Also, theory suggests that the reciprocity and mutuality of close
friendships allows us to see we are not as different as perhaps we thought we
were (Mannarino, 1978, 1979; Berndt, 2002; Sullivan, 1953) resulting in a
perception of greater social acceptance. Research into the benefits of the
emotional support and acceptance the adolescent receives in positive qualities of
close friendships indicates an outcome of higher perceived social acceptance by
their peers (Frankel, 1990; Berndt, 2004; Mannarino, 1978; 1979).

The current study results support the hypothesis that participating in high
positive quality friendships would influence adolescents’ self-evaluations, but the
effect occurs in this study through the domain of perceived social acceptance
rather than global self-esteem. Individuals who were involved in high positive
quality friendships reported themselves as being more socially accepted by their
peers and this was true for both the best friendship and for the close friendship
network. These findings are significant when we consider that in early
adolescence approximately half of friendships remain stable (Keefe & Berndt, 1996; Degirmencioglu, Urberg, Tolson, et al., 1998). Friendship becomes more stable in middle and later adolescent (Degirmencioglu, Urberg, Tolson, et al., 1998). This suggests that the impact of high quality friendships will increase with age as the adolescent becomes more stable in their relationships and maintains the same friendships over greater periods of time, thus conceivably increasing the influence of friendship quality on self-esteem. This leads to the hypothesis that in mid- to late-adolescence, friendship may be even more highly related to self-evaluation.

None of the hypotheses predicted a direct effect for negative friendship quality on self-esteem, only an interaction of positive and negative quality. Theory based on Sullivan (1953) would suggest that negative quality friendships would have a negative impact on self-esteem because the effect of friendship on self-esteem comes from being able to assess self-views and receive feedback through the positive qualities of friendship (i.e. intimacy, mutuality, and reciprocity). Adolescents in negative quality friendships would conceivably receive negative feedback. Previous research into the effect of negative quality has been contradictory. Some studies suggest no relationship exists between negative friendship quality and self-esteem (Bagwell et al., 2005), while other research found that high negative friendship quality was associated with lower self-esteem (Keefe & Berndt, 1996). This study’s findings support an association
between high levels of negative quality in the friendship network and lower perceived social acceptance.

It may be that adolescents who are involved in close friendships high in conflict, rivalry, and dominance attempts may not perceive these relationships as being accepting and, therefore, perceive themselves as being less socially accepted. The current study found an effect for negative quality on perceived social acceptance, but only after controlling for positive quality. As positive and negative quality of the friendship network are not significantly correlated and we see an effect for both independently, the results indicate that positive and negative quality of the friendship network are making independent contributions to perceived social acceptance. These findings suggest that high levels of negative qualities are potentially affecting self-esteem (and perceived social acceptance) in ways as yet unexplored. Sullivan (1953) suggested that in close friendships the individual could use ‘selective inattention’ and ignore information that increased anxiety over the self-view, so that negative friendship quality would generally not lower self-esteem. My findings suggest that for perceived social acceptance, negative quality friendships are having a negative effect. Previously, researchers may have underestimated, or too readily dismissed, the consequences of participating in friendships high in conflict, rivalry, and dominance attempts (Berndt, 1996b).

Contrary to Hypothesis 2, the Differential Association Model, I did not find any support for positive quality increasing the impact of the negative quality of
the friendship. This theory would suggest that the positive quality aspects (intimacy, mutuality, and reciprocity) of the friendship would cause the adolescent to be more susceptible to the impact of the negative quality aspects (conflict, rivalry, and dominance attempts) of the friendship, with all except high positive/low negative friendships experiencing lower self-esteem. Little research has tested the Differential Association Model, but what research has been performed has demonstrated that negative friendship quality predicts emotional and adjustment problems (Berndt, 1996b; Bagwell, Bender, Andreassi, et al., 2005; Claes, 1994). Support for the Differential Association Model may be found for outcomes other than perceived social acceptance (i.e. behavioral conduct).

In addition, I did not find any support for Hypothesis 3, the Engagement Model, which suggested that any friendship with either high positive or high negative would increase self-esteem on the basis of the adolescent being involved in friendship. In this model, only adolescents involved in friendships low in both positive and negative quality (i.e. disengaged) would experience lower self-esteem. In previous research, the Engagement Model was tested by examining whether groups with friends differed from those without friends (Berndt, 1996b). In my study, only four adolescents reported not having a friend at T1 and all reported at least one close friendship at T2, so I could not examine engagement in the same manner. Instead, I assessed the levels of both positive and negative quality of the friendships. The only relationship not enhancing self-esteem in Hypothesis 3 would be the low positive/low negative friendship, which
would be considered a disengaged relationship. Theory suggested that perhaps the individual was reaping benefits from high negative quality friendships that enhanced self-esteem simply from being involved in a friendship (Harter & Whitesell, 2003), but Hypothesis 3 was not supported in this study.

My second goal was to explore how friendship stability is related to self-esteem. Contrary to hypothesis 4, which suggested that being embedded in a stable friendship would result in higher self-esteem due to the social standing provided (Bukowski & Newcomb, 1984), neither stability of the best friendship nor stability of the friendship network were associated with either higher global self-esteem or higher perceived social acceptance. The results did show a marginal correlation between negative quality of the best friendship and stability. This association between negative quality and stability suggests that having stable friendships may not always enhance social adjustment. Previous research has suggested that some adolescents may stay in relationships high in negative quality because they see no other friendship options available to them (Brendgen, Vitaro, & Bukowski, 1998). Stability may increase the impact of the negative quality of the friendship on self-esteem if the adolescent remains in the friendship and, if this is the case, then instability of close friendships and friendship networks would not inevitably be a detriment when discussing the impact of adolescent friendships.

Hypothesis 5, a moderation model, proposed that stability would moderate the association between friendship positive quality and self-esteem. There was
one marginal finding with the interaction of positive friendship quality and the stability of the network related to global self-esteem. In addition, the interaction of positive friendship quality and stability of the best friendship was significant when predicting perceived social acceptance, providing support of Hypothesis 5. Thus, adolescents who were involved in a stable, positive quality best friendship perceived themselves as being more socially accepted than adolescents who were in positive quality best friendships that were not stable. The pattern of the interaction suggests there may be a cumulative effect of the positive quality in stable friendships, so that in longer friendships the child acquires more experiences that enhance self-esteem.

**Implications**

There are four main points for parents, educators, and counselors to take away from the study results. First, early adolescent friendships which are high in positive quality appear to have a positive impact on adolescent perceived social acceptance. Encouraging and teaching adolescents to interact with peers in a more positive, constructive manner not only teaches prosocial behavior, but benefits the child’s development of self-view. Current programs tend to focus more on eliminating negative behaviors (e.g. bullying), while this study suggests that efforts to teach positive social interaction would also benefit the adolescent. Second, negative quality impacts the adolescent independently of positive quality. Overlooking relationships that are high in conflict, rivalry, and dominance attempts because they also have positive qualities may not be the best option. If
the adolescent is not able to balance the impact of the positive and negative qualities of the friendship, it may do more damage than good. Parents and teachers should be watchful of friendships that are high in negative quality and encourage children invested in these types of friendships to explore other friendship options.

Third, positive quality friendships that are stable provide the highest level of enhancement for the adolescent, above and beyond the benefits of positive quality friendships that are unstable. This finding suggests that teaching the adolescent to work in their friendships (i.e. teaching conflict resolution strategies and helping to develop reciprocity) to both decrease negative quality and increase stability is a beneficial pathway to higher levels of perceived social acceptance, and potentially higher self-esteem later on. Also, it is important for parents to encourage involvement in and offer opportunities for interaction with high positive quality friendships. The fourth and final point to be taken away is that the both the best friendship and the friendship network appear to influence the adolescent’s perception of social acceptance by peers. It is important for parents to consider fostering friendship networks in their adolescents. By helping our adolescents to increase their positive quality attributes and to resolve negative quality factors, we are providing them with tools that have potential long-term benefits for development.
Future Directions and Limitations

The decision to use the best friendship rather than the network was based on Sullivan’s (1953) theory, which focuses on the impact of friendship in the dyad, and previous research, which has consistently shown an association between the best friendship and self-esteem. Although this decision was theoretically and empirically sound, the post hoc analyses demonstrated findings that were unique to the network which would not have been identified if only the best friendship had been assessed. This finding suggests that for future research it would be beneficial for research to consider both the best friendship and the friendship network when looking at the impact of adolescent friendship on development. Considering that the significant findings for negative quality were observed when considering the network, we need to consider that the friendship network may provide a more complete picture of the impact of friendship. The friendship network may not be especially supportive or may provide more realistic feedback to the adolescent that has an effect independent of the single best friendship.

In addition, the findings on stability suggest that when studying friendship in early adolescence, stability increases the effect of friendship positive quality on perceived social acceptance. Degirmencioglu and colleagues (1998) found that friendships and networks increase in stability with age through adolescence. It may be that as networks become more stable, they have a greater effect on self-esteem than in early adolescence. Hypothesis 4, which suggested that being
embedded in stable friendships provides self-esteem enhancement due to social standing provided by friendships, may be supported at a later age as stability increases the effects of friendship. At a later age, we may see an effect of more stable friendships on global self-esteem that is not evident in early adolescence.

One limitation of the study was the use of only self-report measures of friendship quality. The FRQ is a self-report measure that assesses the insider’s perspective on the friendship. Reports of friendship from the friend, in the best friend dyad or in the network, would provide different perspectives and may suggest other avenues of influence of friendship on self-esteem. Daily diaries of friendship interactions would have provided a more behaviorally-based perspective on the friendship. Also, reports from parents or teachers and observations of friendship interactions would also help to get a more developed picture of the influences on self-esteem by providing an outsider view.

In addition, there are other limitations to exploring friendship and global self-esteem. Research consistently reports a correlation between the two constructs (Rubin, Dwyer, Booth-LaForce, et al., 2004; Way & Greene, 2006; Mannarino, 1978; Bagwell et al., 2005); however, as Berndt (1996) points out, self-esteem is a relatively stable construct while friendships, particularly in early adolescence, may experience frequent changes. Therefore, we must be careful when discussing the direction of the relationship between friendship quality and self-esteem. While it may be that individuals who experience more positive quality in their friendships feel valued by others and, therefore, experience higher
self-esteem, it may also be interpreted that one result of higher self-esteem is greater experience of positive quality, or perceptions of more positive experience, in close friendships.

One final limitation of the study would be the modest size of the sample. Although there was diversity in ethnicity (37% non-Caucasian) and gender (59% female), and I looked at group differences on these variables and controlled for gender, I was unable to explore patterns based on ethnicity and gender. In future studies, a larger sample would offer the opportunity to examine whether or not associations between friendship quality and stability and self-esteem are similar across groups. Despite consistent findings in research that girls report more intimacy in friendship than boys do (Berndt & Perry, 1986; Furman & Buhrmester, 1985; Asher, Parker, & Walker, 1996; Sharabany, Gershoni, & Hofman, 1981), I would predict that associations between friendship quality and peer acceptance would hold for both boys and girls, and for different ethnic groups.

In conclusion, although none of the original hypotheses were supported, there were informative findings in the post hoc analyses. It does appear that having close friendships with high positive qualities bolsters the adolescent’s perceived social acceptance, which would in turn impact self-esteem. Additionally, stability does serve to moderate the association between friendship quality and self-esteem, with individuals who have high positive quality stable best friendships reporting higher levels of perceived social acceptance. Both
findings suggest that quality and stability are important variables to consider when talking about adolescent friendship and self-esteem.
References


Berndt, T. J. (2004). Children's friendships: Shifts over a half-century in perspectives on their development and their effects. Merrill-Palmer
Quarterly, 50, 206-223.


Rodriguez-Tome (Eds.), *Adolescent and its social worlds* (pp. 47-66). Hillsdale, NJ: Erlbaum


