

STAND BY ME: PREADOLESCENT BEST FRIENDSHIPS

by

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ABSTRACT

The present research explored best friendships during early adolescence. This purpose of this study is three-fold: first, to examine a variety of subjective, qualitative features, including both commonly investigated ones (intimacy, affection) and those lesser studied such as loneliness and parental knowledge; second, to explore the effects of puberty (with groups of early and late pubertal status) on best friend relationships; and finally, to study the association between best friendship qualities and two measures of socio-emotional functioning, including social self-efficacy and empathy. Sixty middle school children between the ages of 12 and 14 were studied. The early adolescents completed friendship questionnaires assessing a variety of qualitative features. All participants responded to questions about a person they considered to be their best friend. Additionally, questionnaires to assess socio-emotional functioning and a measure of pubertal status were administered.

INTRODUCTION

A child has experiences and interactions with a variety of different individuals; individuals who fill a wide range of roles capable of influencing a child's development, including parents, siblings, relatives, teachers, acquaintances, playmates, friends, and best friends. However, as a child grows and looks outside of the family system for social interactions, the importance of peer relationships becomes increasingly apparent. Donna, a 16 year old high school student remarks, "I don't really have a role model or so called 'idol', but one of my favorite people is my best friend, 'Beth'" (Spanogle, 1984). From Donna's description, one can guess with a fair amount of certainty that the relationship with Beth is important and satisfying.

Friendship, and more specifically best friendship, can mean different things depending upon the age and gender of the child. For example, a preschool aged child may consider another child to be his best friend just because they played together in the sand box that day, while an older adolescent or adult may view a best friendship as involving strong mutual interests and support between people. Research in the area of peer relationships identifies a shift in children's concepts of friendships from an initial focus on

material characteristics evolving into one based on abstract characteristics (Sullivan, 1953; Selman, 1980). Beyond this, however, little is known about children's concepts of friendships in general, and more specifically, the significance of early adolescents' perceptions of their best friendships. The question that is presently in need of answers is a descriptive one. What is an early adolescent's concept of a best friend? What is a close relationship in early adolescence?

A child's ability to have interactions with individuals is apparent very early in life. Once a child becomes capable of making eye contact, touching, following movement, and interacting with others, the potential for peer interaction is possible. The work of Vandell and Mueller (1980) supports this hypothesis and offers two basic premises. First, infants and toddlers are both capable of engaging in extended and fairly sophisticated social interactions with peers, and second, show preferences for particular peers. Taken together, these two positions suggest that infants and toddlers are capable of forming friendships. The infants and toddlers who exchange glances, giggles, and touches have very unique preferences for their friendship choices. Certainly, these choices and interactions reflect individual differences in cognitive and social capabilities. As the individual

changes, the more intellectually and socially sophisticated he becomes, the more complex friendships will be expected.

Choosing to investigate a particular age group's peer interactions is really deciding which sets of unique variables and factors a researcher considers important. For example, with younger children the investigator will need to focus primarily on observable behaviors in interactions. With older children and adolescents, investigators can begin to explore subjective evaluations of their relationships. The current exploration focuses on best friendships during the period of early adolescence. The period of adolescence begins at about ten to thirteen years of age and extends through to age eighteen to twenty-two. According to Santrock (1987), "early adolescence encompasses the middle school or junior high school years." Two extremely important reasons for investigating this age group include: (1) early adolescence is a time of stress and friends may prove to be significant sources of support, and (2) early adolescence is also a time when the qualities of peer relationships significantly predict to psychological adjustment in adulthood.

Early adolescence provides a special context in which to study peer interactions. Theorists have differed in their descriptions and ideas about the period of adolescence, but agree upon its importance. G. Stanley Hall (1904) viewed adolescence as a period of "storm and stress." He believed

that the adolescent was fighting to become an adult. Hall's approach is sensible as one observes the adolescent moving back and forth between childhood and the entrance to adulthood and the difficulties of confusion associated with this transition. Anna Freud (1966) also theorized about the significance of early adolescence (utilizing a psychoanalytic perspective). She also viewed adolescence as a time of stress by noting a contrast. She believed that during the genital stage (read puberty), the homeostasis that was previously achieved among the id, ego and superego during the latent stage, is in complete disarray. The task, therefore, is for the individual to achieve balance and control the id, or new sexual impulses associated with sexual changes in the body. This control is achieved by most, but with difficulty during early adolescence. Thus, historically, early adolescence has been characterized as a stressful period.

Important features which make adolescence potentially stressful due to the pubertal and cognitive changes that are occurring within the individual. Contributing to a sense of stress and chaos are the development of acne and growth spurts. These changes and the development of perspective taking skills, cause early adolescents to think about themselves as too large or too small, early or late, or just being "different" relative to peers. These perceptions, in turn, can influence how and why an early adolescent interacts

with peers. Two possible reactions emerge as the early adolescent may avoid his or her peers, embarrassed by the physical changes and perceptions of inadequacies. In contrast to the previous reaction, peers may provide a significant and needed source of support during this period. As Sullivan (1953) notes, peer relationships can provide the adolescent with a sense of security during a time when there is a tremendous amount of changes occurring. This sense of security, he believes, is necessary for achieving successful intimate relationships later in life.

Investigations of early adolescent peer interactions as sources of support are important for a number of other reasons. Peer interactions have been overlooked due to a primary focus on the mother-child relationship (Lewis, 1984). Because of the large amount of research being conducted on this topic, peer interactions have been somewhat neglected. The first years of life are centered around mother-child, father-child, then family interactions. As the child becomes aware of his surroundings, however, increased opportunities for experiences with agemates become available. While the significance of peer relationships may have been viewed as somewhat less important in the past, it is difficult today to overlook their impact. Our social climate is such that major changes are occurring in the early adolescents' strongest support system (the family) and several factors are

seen as having a major impact upon the family structure. Issues such as high divorce rates, single parent families, working moms, teen pregnancies, and drug use and abuse may be stressful experiences forcing teens to look outside the immediate family, thus turning to friends for support and information. While the research literature suggests that children and teens still seek advice and factual information from their parents, parents are not always readily available (Eichorn, 1980). Friends may serve as important substitute sources of support.

Another reason why peer relationships, as contrasted with parent-child relationships, may be important as sources of support, resides in the idea that the family unit may not offer a comfortable environment for certain types of interactions to occur, primarily because so many daily family interactions are centered around household maintenance activities (Larson, 1983). Larson's work offers support and insight for the importance of peer relationships. Larson (1983) found that adolescents reported higher affect and felt more "open" with friends than they did with their families. It seems then that feeling "unconstrained" and in an "open" situation promotes intimate conversations which contribute to self esteem.

In addition to offering a supportive atmosphere during a period of transition, examining early adolescents'

friendships is important in another, yet related, respect. While on the one hand, interactions with peers may prove supportive and helpful while experiencing stress, the lack of this kind of support may have deleterious consequences later in life. It is widely accepted that children with poor peer relationships during childhood and adolescence are "at risk" for the development of social and emotional adjustment problems in adulthood (Cowen, Pederson, Babigian, Izzo, & Trost, 1973). Peer relationships are believed to foster adjustment for a variety of reasons. For example, intimate and affectionate friendships may help decrease an individual's fear and anxiety about emotional and physical changes that occur during early adolescence and may actually improve adjustment (Sullivan, 1953; Douvan & Adelson, 1966). Peer relationships in this regard are unique because adolescents are experiencing the same types of experiences and can offer support to each other; more intimate peer relationships serve to validate self-worth. And, it is reasonable to assume that early adolescents may be able to discuss and understand all of the feelings and questions about the changes that are taking place with their peers. Additionally, peer relationships offer a context for learning important social skills. Sullivan's theory relates to this issue on two points. First, he implies that those children who relate to their friends unselfishly would eventually

transfer those prosocial behaviors to other interpersonal contexts. Second, he proposes that as the need for interpersonal intimacy increases and a "chumship" develops, a genuine sensitivity and sincere interest in the welfare of other persons will emerge through this relationship. Sullivan proposes that peers are critical for the development of prosocial behaviors and social skills. Thus, understanding early adolescent's peer relationships appears to be significant for understanding a youngster's current as well as long term functioning.

The present investigation seeks to explore close adolescent relationships by directing inquiry into a specific kind of friendship--the area of best or close friendships. Specifically, this exploration addresses three issues. (1) First, the purpose of this study is to examine a variety of subjective, qualitative features of early adolescent best friendships, including features not previously examined. For example, by understanding perceptions of qualitative features (e.g., intimacy, companionship, conflict, etc.) we hope to gain insights into exactly how and why these relationships are supportive and how they influence adjustment. This study is designed to provide a clear, descriptive picture of best friendships in middle school or junior high school. Second, this investigation will examine these perceptions of friendship qualities relative to pubertal status. Participants

represent roughly two phases of puberty: early puberty and late puberty. Adolescents, as viewed by early versus late puberty, are expected to experience different kinds of stressors that in turn are expected to influence their perceptions of the qualitative features of their friendships. Finally, the association between best friendship qualities and two measures of social-emotional functioning will be studied. Typically, investigations have only focused on negative consequences of not having close peer relationships (e.g. conduct disorders). In this study, initial attempts to explain associations among peer relationships and more positive or adaptive personal characteristics (social self-efficacy and empathy) will be explored. While the present investigation does not offer an opportunity to directly compare best or close friends with just "regular" friends, the results of this study can be compared with previously cited findings of major contributors in the field to provide a more complete overview.

LITERATURE REVIEW

Friendships are vital at all points during the human lifespan. Because of the complexity and uniqueness of friendships, the task of accurately describing and defining them is difficult. Close relationships, in contrast to more casual ones, tend to be more complex to describe as they should encompass a broader range of activities and emotions. While no one description can be completely encompassing and appropriate, Kelley et al. (1983) proposed that "the close relationship is one of strong, frequent, and diverse interdependence that lasts over a considerable period of time." While Kelley et al.'s definition was used for describing adult relationships generally, it can serve as a basis to begin to describe childhood and adolescent peer relationships.

Many researchers have made attempts to develop descriptions and definitions of children's friendships. The first attempts to emerge from the developmental literature tend to describe children's friendships as developing through a series of stages. More recent descriptive frameworks of friendships originate in the development of systems for coding children's own descriptions of their friendships. These studies will be reviewed as they will serve as guides

for how this investigation will examine early adolescents' descriptions of their own best friendships. In addition to reviewing the more general literature describing children's friendships, a discussion of best friendships will follow. The best friend relationship has not been widely studied, at least not as thoroughly studied as peer relations and friendships in general. Rather than being the specific focus of investigations, studies of best friendships are smaller components of more general friendship studies. Nevertheless, available literature will be reviewed.

This review is further designed to describe friendships during early adolescence which is the target population for this investigation. Because of rapidly changing social, psychological and cognitive factors, early adolescence provides a rich developmental period during which to explore friendships, and more specifically, best friendships. Additionally, a review of the evidence supporting the role of puberty in affecting and possibly changing the nature of friendships during early adolescence will be presented. Puberty and its associated physical changes is viewed as an aspect of this period of the life-span making it unique. More specifically, puberty, and its timing, is believed to be a condition causing stress, presenting the need for supportive and cohesive friendships during this period. For this reason, the present investigation will examine the best

friendships of children who are early and late in relation to pubertal changes.

A final purpose of this review is to examine the role that other individual characteristics play in friendship formation and the maintenance of best friendships. Of particular interest is how empathy and social self-efficacy are associated with friendship characteristics. These are two personal characteristics capable of influencing interactions among best friends, as well as being influenced by these relationships. Identifying the direction of effects, however is not the purpose of the present investigation. Rather, this research represents an effort to determine if such links exist.

In sum, the tasks of why and how best to study early adolescent best friendships are approached by focusing upon four literature areas: (1) an overview of the general friendship literature and how friendships have been studied in the past, (2) best friendships versus regular friendships, (3) the effects of puberty upon early adolescent friendships, and (4) the associations of friendship characteristics with measures of social-emotional functioning (i.e., social self-efficacy, empathy).

Overview of Friendships in Childhood
and Adolescent Literature

Developmental Stage Theories

Childhood friendships have been studied from several perspectives. Each approach has yielded different kinds of information about these friendships. Historically, investigators and theorists attempted to explore friendships by identifying stages of development. Two examples are provided. Harry Stack Sullivan (1953) adopted a developmental perspective that seeks to explain how pathologies emerge as a result of inadequate or dysfunctional social relationships during childhood. Sullivan recognized the importance of nonfamilial relationships for social and psychological development. Sullivan proposed a series of stages/eras through which he believed the organism develops socially. He identified six major stages/eras, which include: infancy, childhood, the juvenile era, preadolescence, early adolescence, and late adolescence (1953). Of most significance for this investigation is Sullivan's description of two stages. Sullivan noted that the preadolescent era, beginning at approximately age 8-1/2, is markedly different from the juvenile era in that a new interest develops in a same sex, nonfamilial person who becomes a friend, pal, or chum. The "chumships" that Sullivan described are full-blown relationships characterized by love. No longer does the child

approach interactions with peers as a means by which to get what he wants or needs, but rather, he becomes an active, interested participant in a complex, reciprocal, intimate relationship. The early adolescent focuses on the relationship and what he can contribute to the partner as well as to the relationship. Sullivan describes this transformation from self to other as resulting from the need for interpersonal intimacy. Notable about this era is closeness, intimacy in these relationships, and movement toward mutual satisfaction. Specifically, Sullivan suggests that "chumships" may serve to defuse the "extreme undesirability of the experience of anxiety," or loneliness. The ability to successfully form these "chumship" relationships generalizes to developing other positive relationships.

Parten (1932, 1933), also using a developmental approach focusing on a specific aspect of friendships, described five ways that infants and children play in the presence of others:

1. Solitary play: The child plays alone and independently with toys. The child makes no effort at communication with other children.
2. Onlooker play: The child spends most of his time watching other children play. He will talk with other children but does not participate.

3. Parallel play: The child plays with similar toys while being next to another child, but their activities are unrelated.
4. Associative play: The child plays with another child and shares toys and conversation, but each child acts alone and the two do not share a common goal.
5. Cooperative play: Children play together and help each other produce a material product or achieve a common goal. Game playing is one example.

Parten's research provides insight into the types of play in which children engage; however, it has deficits. Clearly, this research is most applicable to early childhood, as the focus is only on play as a form of social interaction. If Parten is taking a developmental approach, then the theory falls short because it addresses a single issue relevant for understanding adolescent or adult relationships. For early adolescents, play or playful interaction is but one component of the larger context of friendship as other components such as shared interests and mutual understanding with peers become more significant.

An association can be made between these two developmental descriptions even though one is a more general overview and the other reviews a specific area of social interaction. Just as Sullivan's stages/eras demand certain

levels of cognitive functioning before they can emerge, so do Parten's five kinds of play. While more recent investigators have explored the mechanisms of developmental changes in friendships, Sullivan's and Parten's work still are significant in first identifying friendship development as a progression. Both describe development as progressing toward closer, more mature levels of social interaction--a progressive movement from an emphasis on self to other during later childhood and early adolescence.

Children's and Adolescents' Conceptions of Friendship

More recently, investigators have attempted to describe peer relationships from the child's and adolescent's perspectives. This approach contrasts with the developmental approaches just described in that friendships are described and defined from the child's or adolescents' point of view, as opposed to descriptions of developmental progression based on observational data or a clinician's perspective. For example, Berndt (1978) posed two types of questions to children in kindergarten, third, and sixth grades. The first question focused on features of friendship, with the question "How do you know that someone is your best friend?" Additional prompts of "How else do you know?" were used. The second question asked about non-friendship and reasons for friendship termination. Specifically, "How do you know that

someone is not your friend?" and "What would make you decide not to be someone's friend anymore?" were used as prompts. Upon completion of data collection and analysis, a formal eight category coding system was devised. These eight categories form specific domains from which friendships may be studied.

1. Play or association: playing and spending time together.
2. Prosocial behavior: helpfulness and generosity.
3. Aggressive behavior: teasing and fighting.
4. Intimacy and trust: disclosure and willingness to disclose to each other and trust that information will be kept confidential.
5. Loyalty: support when peers and adults are present.
6. Faithfulness: dependability; the friend won't leave you for someone else.
7. Definitional: comments about the friendships, those aspects that are basic to the definition of the friendship; acknowledgement that you are friends.
8. Personal attributes: aspects of each person's personality that affects the relationship.

Berndt's work seems especially applicable to the early adolescent time period. Each of the eight categories is appropriate for exploring the early adolescent's friendship,

with variation being in that of degree. For example, in early adolescence intimacy and trust are more immediate aspects of the relationship than is aggressive behavior. This is not to say that certain domains disappear at different times during the lifespan, but rather, they may take a "back seat." This type of approach to studying children's friendships appears to have wider applications to studying friendships across the lifespan.

In a similar study of friendships, Bigelow and LaGaipa (1975) explored written responses of children in grades first through eighth regarding expectations of their best friend. A set of twenty-one descriptive relationship dimensions was identified. Eleven of the original categories were reported as being most commonly used by older children, seventh and eighth graders, to describe their relationships: (1) helping--with friend as giver (as opposed to friend helping as receiver), (2) common activities, (3) propinquity, (4) evaluation, (5) acceptance, (6) incremental prior interactions, (7) loyalty and commitment, (8) genuineness, (9) intimacy, (10) common interest, and (11) similarity in attitudes. Bigelow (1977) then used a cluster analysis technique, clustering twenty-one friendship expectation dimensions previously identified in his work with La Gaipa, and found that certain clusters emerged reflecting developmental stages in conceptions of friendships. During grades

two and three, a reward-cost system seemed to be employed by friends, with features such as propinquity, common activity, and similar expectations being salient for this age. In grades fourth and fifth, sharing dimensions emerged, especially in norms, values, rules, and sanctions. A third cluster emerged for children in the sixth and seventh grades, which yielded dimensions of intimacy, self-disclosure, and personal attributes.

Berndt (1978), Bigelow and LaGaipa (1975) and then Bigelow (1977) approached the task of describing childhood and adolescent friendships by identifying specific relationship characteristics emerging from children's descriptions of their friendships. Although using a similar data base, or children's descriptions of their friendships, Selman (1980) addressed the issue of describing these relationships from a different angle. Selman (1980) generated a framework for describing friendships based on changes in social cognition and social perspective taking. Selman identifies developmental levels reflecting associations among perspectives of the self and others. This developmental approach differs from Sullivan's and Parten's because its focus is primarily on a child's perceptions and cognitions about what is important in peer relationships. Five levels are identified, ranging from Level 0 to Level 4 (see Table 1). Parallel to these levels are stages that reflect the under-

standing of close dyadic friendships (see Table 1). The term "stage" is used to refer to the more complete conceptions across the relationship domains (friendship formation, closeness and intimacy, trust, jealousy, conflicts, and their resolutions and termination) or more specifically, the understanding that the particular child has about what constitutes a friend. The term "level" refers to the underlying structure of the perspective-taking ability (developmentally based). Selman's work reflects the notion that while a younger child may commonly mention a specific feature such as loyalty, it is likely that this concept does not mean the same thing to him as it does an older child of 12 years. Selman seeks to discover the true meaning that is being represented for each child. For example, when a 6 year old child and a 12 year old child both talk about "loyalty" in their relationships, the term "loyalty" means different things.

Selman's last stage 4 is similar with the definition provided by Kelley et. al (1983) in that Selman's stage 4 may serve as some support that preadolescent friendships possess many adult-like relationship characteristics. Selman's perspective is vital to understanding friendship development because it takes into account both developmental levels of social perspective-taking and stages of reflective understanding about the friendship, as well as identifying

Table 1. Selman's developmental levels and stages of friendship.

Relationship Between Perspectives of
Self and Others

Understanding of Close Dyadic
Friendships

Level 0: Egocentric or undifferentiated. Ages 3 to 7. Children of this age are aware of the subjective perspectives in themselves and others but have difficulty in distinguishing between their own perspectives and those of others. Confusion exists between intentional and unintentional acts.

Stage 0: Momentary physicalistic play-ments. Conceptions center around propinquity and proximity. "Playmate" is the most appropriate term. Conflicts arise over objects and spaces rather than feelings.

Level 1: Subjective or differentiated perspectives. Ages 4-9. Children in this stage realize that another may have similar or different views from them. A new concern has developed about the psychological life and uniqueness of each person.

Stage 1: One-way assistance: A friend is viewed as someone who is important because he/she performs some function that is important to the self.

Level 2: Self-reflective or reciprocal perspectives. Ages 6-12. Perspective taking is apparent and allows the child to consider their own thoughts and feelings and evaluations of another's actions and behaviors. This ability leads to a reciprocity of thoughts and feelings rather than that of action.

Stage 2: Fair-weather cooperation. New awareness of interpersonal perspectives emerge. There is a matching of specific likes and dislikes rather than matching expectations and standards. Arguments may end a friendship even though both partners may still like each other. No continuity is seen to exist.

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specific issues in the friendship domain (e.g., friendship formation, motives, closeness, intimacy, trust, jealousy, conflicts, resolutions, and termination).

The combined results of the studies reviewed have produced interesting and descriptive information about children's friendships. The most significant factor is that friendships were described in terms of the child's and adolescent's conceptions rather than imposing adult expectations and definitions upon these relationships. Allowing early adolescents to describe in their own words their relationships was the approach adopted in the present investigation. Furthermore, there is considerable overlap among the results of these investigations in terms of the qualities of friendships that youngsters describe. Intimacy, companionship, loyalty, shared activities, etc., are terms that repeatedly characterize the participating children's perceptions regardless of methods used. Because of the apparent salience of these qualitative features, the present investigation seeks to assess these qualities as well as replicate existing research findings. The present research also seeks to examine other qualitative features of relationships emerging from children's descriptions of their best friendships, yet not often studied. More information about these characteristics will be discussed momentarily.

Children's Social Networks

A third approach to describing children's friendships, though infrequently pursued, involves investigating features of children's social networks. This line of research examines how peer relationships differ from parent-child, sibling, or other social network relationships across specific interaction domains or relationship qualities. Furman and Buhrmester (1985) approached this task by having fifth and sixth grade students complete the Network of Relationship Inventory (NRI), which assesses ten relationship qualities. The children rated these qualities for relationships with mothers, fathers, siblings, grandparents, friends, and teachers. The ten relationship qualities assessed on the NRI include: (1) reliable alliance, (2) enhancement of worth, (3) instrumental aid, (4) companionship-social integration, (5) affection, (6) intimacy-disclosure, (7) relative power, (8) conflict, (9) satisfaction, and (10) importance of the relationship. Furman and Buhrmester additionally used ratings of satisfaction and the importance of the relationship as indicators of the overall nature of the relationship.

Findings revealed that while parents were most important for many social provisions, friends were rated highest on companionship. Interestingly, peers and mothers were rated equally on the intimacy component. Additionally, friends scored high on relative power. These results suggest that

relationships between peers are truly complex. One might expect that the intimacy a mother shares with her child is unparalleled, yet early adolescents report that intimacy is equally accessible with their friends. Peer friendships are unique based upon their ability to rival close family relationships and, together with those family relationships, provide the basis for all future social interactions.

Furman and Buhrmester provide specific information about features of relationships and the importance of different members in the child's social network. Furman and Buhrmester's (1985) procedures, however, required the participating children to consider a friend, any friend. In the present investigation, the participating adolescent's are asked to report specifically about the qualitative features of a best friendship. Time did not permit an assessment of these features across multiple relationships. As the present investigation employs the Furman & Buhrmester measure of qualitative features of relationships, and this sample is approximately the same age, the expectation is that results from these two investigations can be compared and contrasted.

The present investigation, therefore, represents an extension of Furman and Buhrmester's work by exploring best friendships. This work represents an extension in another respect. That is, the most commonly identified features of friendship are intimacy, knowledge, responsiveness, similar-

ity, complementarity, and stability. Explored to a lesser degree, yet very important, are loneliness, parental knowledge, satisfaction and competition (Berndt, 1982). Preliminary efforts to explore children's perceptions of these features are part of the present investigation.

Best Friendships

Best friend research is an area that has been neglected in previous investigations. While best friendships are a more specific type of peer relationship, this area may be hampered by the problem of defining the close relationship. As research has shown, early adolescents are capable of intimacy (Sullivan, 1953; Berndt, 1982; Furman and Buhrmester, 1985); and while Kelley, et al.'s definition does not include the intimacy component, the definition may be appropriate here through the implication that intimacy will develop through strong, diverse, frequent and mutually interdependent interactions.

As noted earlier, investigators have often examined best friendships as part of a more general investigation of peer relationships. When best friendships are compared with peer acquaintances, clear differences emerge. For example, Berndt (1982), studying kindergarten, third and sixth grade students, asked specifically about best friendships. While most of the reasons mentioned for what are important quali-

ties for a best friend fit into the original eight category schemes devised by Berndt, three additional ones were added, including:

9. Similarity: having similar likes and dislikes.
10. Duration of friendship: being friends for a period of time.
11. Conflict resolution: acknowledgement that friends make-up after fights.

Results suggested that, once again, older children mentioned intimacy and loyalty as well as prosocial behavior as friendship characteristics more often than younger children. Interestingly, older children gave fewer reasons referring to the basic, obvious features of friendship, such as we play together, etc. Older children also reported that absence of aggressive behavior was important between good friends.

Diaz and Berndt (1982) explored the best friendship relationship in terms of youngster's knowledge about their best friends. Children in grades fourth and eighth were questioned about several aspects of their best friendships, including: best friend's personality characteristics, the friend's preferences, and other informational characteristics such as birthdate and telephone number. Additionally, Diaz and Berndt identified characteristics that they felt were

indicators of knowledge about their partner, such as frequency of contact, duration of the friendship, and cognitive level (e.g., maturity). Their findings are important in several respects. First, a distinction can be made between intimate and nonintimate knowledge components of a best friendship. Younger and older children did not differ in the amount of knowledge they had about external and observable characteristics, but older children knew significantly more about their best friend's likes, feelings, and thoughts. The strongest predictor of the child's awareness of both internal and external characteristics was frequency of contact. While significant, this finding also seems logical in that more contact should yield more information-sharing opportunities.

Generally, there are definition and measurement problems with studying best friendships and the studies cited are not immune. For example, how does one convey the same meaning of "best friend" to a kindergarten child, third grader or junior high school student? Will the criteria be the same for all groups? A definition that is specific may be too confining and too narrow for some, if not all, groups. A general definition may be plagued by difficulties in distinguishing best friendships from regular friendships. Measurement problems stem from the difficulty of having children identify a best friend that is not reciprocated, thus resulting in one-sided best friend relationship.

Children also may identify a popular classmate that they wish were their best friend. While there has been some progress made in terms of describing the unique characteristics of best friendships, there is an obvious and critical need for further exploration in the study of best friendships in the areas just mentioned.

Pubertal Effects on Friendships

Early adolescent friendships are particularly interesting to explore as the developmental literature suggests that "adult-like" characteristics (e.g., intimacy, responsiveness, similarity and complementarity, etc.) are not present in social relationships until this age period (Sullivan, 1953; Selman, 1980). Berndt (1982) discusses the uniqueness of early adolescence and notes three major reasons why this period is special. First, he notes that the social environment of early adolescence is different from that in childhood or late adolescence as the adolescent seeks greater independence resulting in a redefinition of the parent-child relationship, and subsequently, peer relations. This "stage" is awkward, as the early adolescent is treated neither as a child nor an adult but must fit somewhere in between. In agreement with Furman and Buhrmester's (1985) findings that relative power in relation to friends is high, Berndt points out that the adolescent is capable of engaging in

egalitarian-like relationships with peers and friends. This is unique, as prior to this time the individual occupied, more or less, subordinate positions in relationships. Secondly, cognitive abilities continue to expand and develop during this time. The increased capacity for abstract thinking allows for greater depth and breadth of relationships. Finally, Berndt notes that puberty typically defines the beginning of early adolescence. This may be a traumatic time for the individual, who may turn to peers and friends, who are experiencing similar events, for understanding. The emergence of intimacy and affection during this period hints at what may now be termed close, or best friendships.

As suggested by Berndt (1982) and Sullivan (1953), friendships undergo a transformation during preadolescence, a transformation frequently linked to pubertal changes. The nature of the link between puberty and changes in friendships has never been clearly established for two reasons. First is the persistent question of whether or not puberty and early adolescence is a transitional or distinct period of life. Historically, early adolescence is viewed as the beginning of adolescence or the end of childhood. This approach somehow lessens the importance of this particular time in an individual's life. Peterson and Crockett (1985) view puberty as a process rather than an event, which lends support to the notion that early adolescence is a distinct

life period. Relevant to friendships, a second problem occurs in simply trying to define puberty. Medical professionals and physical anthropologists define puberty in terms of the endocrinological and physical changes that occur during this time. Social scientists approach this topic in a similar way, as they identify growth spurts and the appearance of primary and secondary sex characteristics as developmental markers. In the present investigation, these physical changes are not in and of themselves significant. Rather, puberty is thought to be significant because it alters one's physical appearance and consequently how other people respond to you and how you think about yourself, which in turn influences one's social relationships. Unfortunately, in this investigation, the process of how puberty affects peer relationships will not be examined. Rather, this research represented an initial effort to identify a possible link between puberty and peer relationships.

Personal Characteristics

The purpose of this investigation as described to this point is: (1) to explore qualitative features of preadolescent's best friendships that have been described as significant but not yet studied empirically (e.g. competition, loneliness, shared interests and parental knowledge); and (2) to explore how friendship qualities may vary relative

to the preadolescent's pubertal status. The final goal of this investigation is to explore further variations in the qualitative features of preadolescent friendships relative to several individual characteristics. Individual characteristics assumed to influence patterns of interactions and perception of qualitative features include a sense of self-efficacy and empathy.

Social Self-Efficacy

The role of perceptions of self-efficacy, or the child's perceived effectiveness in social interactions with peers, has received little attention in the early adolescent friendship research. This is surprising given that there is some support to show that a sense of self-efficacy in social relationships or lack thereof may influence the quality of peer relations by affecting interpersonal behavior (Goetz and Dweck, 1980). Self-efficacy is different from social competence in that social competence is conceptualized as skillful social behavior and self-efficacy is the personal belief that competence can be achieved in social situations. How an early adolescent perceives his ability to act and react appropriately in social situations may either greatly enhance or affect detrimentally self-concept and future interactions. For example, whether or not an early adolescent can successfully ask a group of children if he can play soccer with

them, is not as important as how easily or difficult that person perceives it to be for him. Does he think he can do it and will it be difficult or easy? Self-efficacy is defined as "the belief that one can successfully perform behavior required to produce desired outcomes" (Wheeler and Ladd, 1982). For example, Wheeler and Ladd found that there are measurable differences in children's conceptions of self-efficacy. Specifically, those children who saw themselves as self-efficacious were well liked and fared well in their peer groups and/or children who had positive self images, were more inclined to see themselves as being more verbally skilled in nonconflict interactions. Furthermore, these children who were high on self-efficacy were able to express their own wants and opinions. Although only partially supported, the hypothesis that younger children tend to overestimate their persuasive abilities cannot be overlooked (e.g. getting others to play a game their way, or going against the norm). It may be that children's abilities to make judgments about their social competence change with age and become more accurate. This implies that self-efficacy should increase with age because the individual is better able to judge how effectively they may be able to persuade others to his own way of thinking. Ability to persuade appears to be the one of the factors that an individual uses to decide how he will react in a given situation. The second

important finding is that perceptions of self-efficacy vary from situation to situation, and that children feel greater social competence in nonconflict situations. The researchers believe that the strength of children's perceptions of their social self-efficacy is dependent upon situational factors. The ability to persuade another individual, especially in conflictual situations, may be a factor that influences best friendships.

As was mentioned earlier, social self-efficacy is assumed to influence the quality of peer relationships by affecting interpersonal behaviors. The goal of the present investigation was to examine the specific qualitative characteristics in early adolescence that may be associated with social self-efficacy. This is a first step toward understanding how social self-efficacy may influence specific interpersonal behaviors. Once again, the possible links among social self-efficacy, interpersonal behaviors and qualitative features of relationships will not be established here. Presently, this research represents an attempt to narrow the scope of the potential connections, by identifying possible associations between qualitative features of best friendships and social self-efficacy.

Empathy

Empathy is defined as a vicarious emotional experiences of others (Mehrabian and Epstein, 1972). It has been suggested that children cannot express empathy until certain cognitive capabilities are attained (Sullivan, 1953; Selman, 1980). More recent investigations, however, are providing empirical results contradicting this assumption (Dunn and Kendrick, 1982). In fact, empathetic responding has been observed as early as the first year of life (Dunn and Kendrick, 1982). It is possible, then, to imagine the link between relationships and development of empathy. Increased empathy results in increased intimacy, and vice versa, a bidirectional association. Bryant (1982) developed a measure, An Index of Empathy for Children and Adolescents, in which her primary goal was to develop an assessment of youngster's understandings of the experience of sharing pleasant and unpleasant feelings. The particular emphasis is on emotional responsiveness as it asks children questions about situations that are "real" for them. Children and adolescents in first, fourth, and seventh grades completed the emotional empathy measure and teacher ratings. Bryant found that empathy scores appeared to increase as physical intimacy increases. A curvilinear developmental path was found for boys and girls with regard to empathic cross-sex arousal, suggesting variations in empathic responsiveness

based upon grade and age. Bryant's approach is unique in that it asks the children and adolescents to reflect upon their own subjective responses as opposed to being a direct measure of observed empathic behavior. Empathy is important in the present study as it is believed that understanding how others feel will increase intimacy in relationships. An understanding of how the other person feels may signal to the other person caring and affection.

In sum, previous studies have only partially begun to answer questions about best friendships. The specific questions that need to be answered are: (1) how do frequently explored qualities of best friendships (e.g., intimacy, power, companionship) compare with other qualities that are less commonly identified (e.g. competition, and shared interests); (2) how do the relationship qualities identified look in relation to pubertal status; and (3) how do relationship qualities appear relative to individual socio-emotional functioning, or specifically, social self-efficacy and empathic response. The present investigation addresses these questions with the goal of providing a clear description of best friendships during early adolescence.

Hypotheses

The present investigation is an extension and combination of cited needs for research in the area of children's

friendship development. This investigation will focus on early adolescent's responses to questions about their relationships with a best or close friend. Specifically, this study takes a look at best friendship qualities, personal adjustment characteristics, and pubertal status. This research is primarily descriptive, however some specific hypotheses have been generated based on existing research. It was hypothesized that: (1) friendship quality variables less frequently studied yet assessed in this investigation including, intimate self-disclosure, competition, shared interests, loneliness, and parental knowledge, should correlate with more commonly assessed friendship quality variables; and (2) pubertal effects will be important in that the late puberty group's friendships will be more intimate and cooperative than the early puberty group, furthermore, the late puberty group should report less competition in their friendships.

METHOD

Sixty young adolescents comprised the sample for this investigation. Five instruments were administered to measure two different kinds of friendship qualities, pubertal status, social self-efficacy and empathy. Details of sample characteristics, procedures, and descriptions of the five instruments are provided below.

Participants

Participants in this study consisted of 60 seventh and eighth grade students. The students were recruited through Sierra Vista Middle School, Sierra Vista, Arizona. The town of Sierra Vista was a somewhat unique population for this research project. Approximately 60 to 70% of all students enrolled at the middle school were from military, retired military, or civil service families. These families were middle class. Student ethnic background was diverse with greater than 50% white; however, Sierra Vista Middle School had the highest percentage of black students of any school in the state of Arizona. Other racial mixtures (e.g., Asian-Black, Asian-Hispanic, etc.) reported were due to high military enrollment. The mean age of respondents was 13.4 years. Religious affiliation was also a unique character-

istic as Catholic and Church of Latter Day Saints represent the largest groups (46.6 and 41.4 respectively). See Table 2 for more detailed information about this sample.

Procedure

A letter describing the study (see Appendix A) and requesting participation and parental consent (Appendix B) was distributed one week prior to the planned date of data collection. All students enrolled in periods 1, 2, 4, 5, and 7 physical education classes received participation requests. Of those receiving letters, 51% received permission to participate. The students surveyed were clearly a convenience sample as school permission was obtained for only those class periods. After receiving parental consent, the students were asked to complete a series of five questionnaires. At the time of data collection, all students receiving parental consent were asked to sign a Minor's Assent Form (see Appendix C). All participating students received both parental consent and gave their own written Assent. All participants received a very small incentive, a new pencil, for completing the questionnaires.

Data were collected for this research project using a series of 5 questionnaires. The questionnaires selected for use assessed general friendship qualities, best friendship qualities, measures of personal characteristics, and a

Table 2. Group characteristics (total subjects) (N = 60).

Characteristics	Mean	SD
Age	13.4	1.7
Grade	7.6	1.2
Number of siblings	2.4	1.4
Religious affiliation	Percent	
Protestant	8.6	
Catholic	46.6	
Jewish	1.7	
Atheist or agnostic	0.0	
Other	41.4	
Ethnic background		
Hispanic	24.1	
Native American	7.4	
Asian	11.1	
Black	44.4	
White	3.7	
Other	10.0	

pubertal status questionnaire. Separate versions of the pubertal status questionnaire were administered to the male and female students.

All data were collected in one school day. Students completed the measures in a small classroom during their designated physical education period. The principal investigator administered all questionnaires. The following directions were given prior to administration:

I want to thank each of you for taking the time to complete this study. I am interested in how people your age think about your friendships and specifically, your best or close friend. Before you begin to answer the questions, I would like each of you to think about a person who is the same sex as you, that you consider to be your best friend. If you do not have a best friend, then think of someone who is a close friend. Please take your time and answer all of the questions. If you get tired or do not feel like finishing the packet you may stop at any time. If you have any questions, please feel free to ask me. Are there any questions before we begin?

Together, the questionnaires took approximately 35 to 50 minutes to complete.

Measurement

The five questionnaires employed were designed to measure the major constructs under investigation: friendship qualities, personal characteristics and pubertal status.

Assessments of Friendship Qualities

Best Friend Relationship Questionnaire (BFRQ). The BFRQ (Gamble and McKinney, 1988) (Appendix D) was developed

specifically for this investigation in an attempt to gather information on qualities on friendships previously identified in the literature. Of particular interest were qualities of friendships that have not been widely researched (e.g., competition, shared interests, parental knowledge). This scale departs from others, not only by focusing on lesser studied variables, but also by exploring a specific component of intimacy, or intimate self-disclosure. A distinction should be made here between intimacy as assessed by a similar scale, the NRI, and intimate self-disclosure used in this scale. The subscale intimacy on the network of relationships inventory (NRI) refers to physical intimacy. The questions designed for the intimate subscale on the BFRQ, labeled intimate self-disclosure, were developed to explore the nature of intimate or self-disclosing conversations in early adolescence. These items addressed both the presence or absence and the frequency that certain special topics are discussed by two friends. For example, individuals were asked to answer the question "How often do you and _____ share information about things that happened to you when you were younger," with answer choices of little or none, somewhat, very often, extremely often and most often.

Overall, the BFRQ consisted of 57 items, with a variety of different question formats ranging from forced choice, to fill in the blanks, to Likert-type (like the

intimacy example) answer choices modelled after those in the NRI. The BFRQ included six subscales, including: (1) intimate self-disclosure (7 items); (2) loneliness (7 items); (3) competition (5 items); (4) shared interests (7 items); (5) parental knowledge (3 items); and (6) overall relationship satisfaction (1 item). Each of the questions for the six subscales were developed to investigate a specific relationship quality. As previously explained, the subscale of intimate self-disclosure was designed to assess the intimate part of peer relationships that occurs in conversations about such topics as childhood histories, future plans, dating, etc. The second subscale, loneliness, examined how often an early adolescent wanted to go some place or do something with someone other than their best friend. It also tapped feelings of being uncomfortable and wanting to be with other people. A third subscale measured competition across several areas including: sports, grades, friends, material possessions, etc. The fourth subscale, labelled shared interests, focused on how much the early adolescent perceives shared activities such as school, subjects, friends, joining clubs, and topics related to the family and home affect the best friendship. For example, so the friends like to spend their free time in the same ways or like the same classes in school. This particular subscale contrasts with the competition subscale in that the same topic areas are examined,

but for activities that the two friends enjoy together. This subscale was based on the principle of similarity in that we like others who are like us. People who like the same things we like and have similar interests and attitudes. Specifically, similarity based on proximity (Newcomb, 1961) and attitudinal similarity (Tesser and Brodie, 1971). Parental Knowledge, the fifth subscale, probed for information about how much parents knew about the best friend and the level of importance parents' placed on qualities such as the friend's looks, athletic abilities and manners. The sixth and final subscale assessed the overall satisfaction with the friendship by asking just that question.

An initial investigation into subscale reliability was completed. Alpha coefficients of internal consistency for the six subscales ranged from .26 to .80 (See Table 3 below for complete statistics).

Network of Relationships Inventory (NRI). The NRI (Furman and Buhrmester, 1985) (Appendix E) assessed children's and adolescent's perceptions of the qualitative features of their relationships with social network members (e.g., parents, teachers, grandparents, etc.). The version used for this study focused solely on the best friend relationship. The NRI consists of 38 questions, from which 10 qualitative features of friendships were derived, including: (1) intimacy; (2) affection; (3) prosocial behavior; (4)

Table 3. Estimates of Internal Reliability using Chronbach's Alpha Coefficients for the Best Friendship Relationship Questionnaire (BFRQ) Variables (n = 60).

Variable	Number of Items	Reliability Coefficients Alpha
Intimate Self-Disclosure	7	.80
Loneliness	7	.55
Competition	5	.77
Shared Interests	7	.74
Parental Knowledge	3	.26

companionship; (5) admiration; (6) reliable alliance; (7) satisfaction; (8) dominance; (9) conflict; and (10) punishment. All the questions were specific to a particular best friend and rated on a 5-item Likert-type response scale. For example, two sample questions included "How much does your friend like or love you" and "How much does your friend treat you like you're admired and respected." Scoring for this scale involved summing the scores across each of the 10 qualitative categories. Internal consistency scores reported by the scale authors were good, with a mean of .80. Alphas for this sample ranged from .43 to .89. A majority of the BFRQ variables were positively and highly correlated with the NRI variables. Correlations ranged from $-.22$ to $.78$.

Personal Characteristics

The Children's Self-Efficacy for Peer Interaction

(CSPI). This CSPI (Wheeler and Ladd, 1982) (Appendix F) was developed to assess self-efficacy, which is defined by Wheeler and Ladd as the "belief that one can successfully perform behaviors required to produce desired outcomes" (p. 795). The CSPI consists of 22 items, including conflict (12 items) and non-conflict (10 items) domains, developed from Blumenfeld and Kinghorn's (1978) six observational categories of persuasive behaviors including: explanations,

imperatives, rules, requests, negotiation, and verbal aggressions. Each question was written to describe a social situation with four possible answer choices: HARD!, hard, easy, and EASY! Respondents were asked to complete each sentence with the appropriate word, based upon whether it is hard or easy for them to do the task and the degree of difficulty. HARD! means that it is very difficult, and EASY! implies it is simple. For example, "Some kids are making fun of someone in your classroom. Telling them to stop is _____ for you." Scoring of the CSPI was completed by summing the children's responses across all items. Total scores may range from 22 to 88 and the authors report a direct relationship between total scores and magnitude of social self-efficacy, with a higher score reflecting greater self-efficacy. For example, the easier the early adolescent reports that he/she finds it to complete tasks that require social competence, the higher that individual's score will be on the total scale. For this sample the mean was 68.6, with a standard deviation of 11.8. The internal reliability coefficient was established to be .91 for the entire scale.

An Index of Empathy for Children and Adolescents.

This instrument (Bryant, 1982) (Appendix G) was designed to assess "the experience of perceived sharing of feelings" (Bryant, 1982, p. 413). This index consists of 22 items in which children and adolescents are asked to respond to a

series of questions as to whether it is "like me" or "not like me," on items such as "People who kiss and hug in public are silly," or "Even when I don't know why someone is laughing, I laugh too." Scoring for this scale involved computing an algebraic sum of all 22 items.

Total scores ranged from 0 to 22. Reported alpha coefficients ranged from .54 for first grade children to .79 for seventh grade students. Reported test-retest reliabilities were .83 for adolescents. The mean for this sample was 12.3 with a standard deviation of 3.8. The estimate of internal consistency was .66 for this sample.

Puberty

Pubertal Development Scale (PDS). This instrument (Petersen et al., 1982) (Appendices H and I) assessed the pubertal status of adolescents through the use of questions about physical changes such as "Have you noticed any skin changes." The PDS is a 7-item scale, with separate scale items for boys and girls. The PDS asked about physical changes that may be occurring, such as growth spurts, menstruation for girls, and skin changes, by offering four possible choices ranging from "not yet started" (assigned a score of 1) to "seems completed" (assigned a score of 4). Scoring for this scale involved summing across the items. Reported internal consistency was good and ranged from .68

to .83 for the separate questions. For this sample, the alpha for females was .46 and .64 for males. While the alpha coefficients were somewhat low, this may have been due to a social desirability factor of wanting to have advanced pubertal status.

RESULTS

Three distinct goals guided these analyses: (1) to study associations among young adolescent's reports of the qualitative features of their best friendships in early adolescence; (2) to determine the effects of pubertal status on children's perceptions of friendship qualities; and (3) to explore associations between two measures of socio-emotional functioning (social self-efficacy and empathy) and the qualitative features of best friendships. Addressing these goals necessitated several different kinds of analyses.

The first set of analyses related to the first goal, examined the intercorrelations among the BFRQ subscale factors (Table 4). When considering those variables characterizing close, generally warm relationships, it was observed that several of these subscales were positively and significantly correlated. Intimate self-disclosure is significantly correlated with shared interests and parental knowledge, and shared interests and parental knowledge were significantly intercorrelated. Finally, numbers of shared interests were correlated with intimate self-disclosure. Surprisingly, the more "negative" characteristics of loneliness and competition also were correlated with the more "positive" characteristics of close relationships, except intimate self-disclosure.

Table 4. Intercorrelations of Best Friend Relationship Questionnaire (BFRQ) Subscales for Males and Females (n = 60).

	Intimate Self- Disclosure	Loneliness	Competition	Shared Interests	Parental Knowledge
Intimate Self- Disclosure	--	.48***	NS	.58***	.46***
Loneliness		--	.28*	.48***	.25*
Competition			--	.39**	.34*
Shared Interests				--	.42***
Parental Knowledge					--

* $p < .05$

** $p < .01$

*** $p < .001$

The second set of analyses were used to address the first goal. Next, an intercorrelation matrix was generated for BFRQ and NRI variables in order to examine how those less commonly studied relationship qualities assessed on the BFRQ were associated with the more frequently studied relationship characteristics assessed by the NRI. Results of correlational analyses revealed that several of the Best Friend Relationship Questionnaire variables were significantly correlated with the Network of Relationships Inventory variables (r 's ranged from $-.22$ to $.73$; $p < .001$ to $p < .05$) (Table 5). For the most part, observed associations among these variables were as expected. The more "positive" characteristics of children's friendships, as assessed on the NRI, were positively and very significantly correlated with the more "positive" friendship characteristics assessed by the BFRQ. That is, intimacy, affection, prosocial behavior, companionship, admiration, and satisfaction from the NRI were positively correlated with intimate self-disclosure, shared interests, and parental knowledge from the BFRQ. These analyses also revealed some unexpected results. First, the loneliness subscale (BFRQ) was significantly and positively correlated with most of the "positive" relationship characteristics as assessed by the NRI. The competition subscale was not significantly correlated with any of the other variables except reliable alliance. This negative correlation,

Table 5. Intercorrelations of Best Friend Relationship Questionnaire (BFRQ) Subscale with Network of Relationships Inventory (NRI) Subscales for Total Sample (n = 60).

	Intimate Self- Disclosure	Loneliness	Competition	Shared Interests	Parental Knowledge
NRI Subscales					
Intimacy	.48***	.49***	--	.46***	.45***
Affection	.73***	.59***	--	.51***	.48***
Prosocial	.65***	.44***	--	.49***	.39***
Companionship	.64***	.50***	--	.41***	.33**
Admiration	.38***	.37***	--	.29**	.30*
Reliable Alliance	.32**	--	-.22*	--	--
Satisfaction	.52***	.43***	--	.37***	.46***
Dominance	.30**	--	--	--	--
Conflict	--	--	--	--	--
Punishment	-.29**	-.26**	--	-.28***	--

* p < .05 ** p < .01 *** p < .001 (2-tailed significance)

however, is interpretable. If competition in the relationship is high, the alliance is perceived as unreliable. Finally, the conflict variable was not significantly related to any other relationship characteristics. For the most part, this pattern of results was as hypothesized, yet it lacked a certain clarity. The two instruments appeared to be measuring a variety of specific qualitative features of relationships, but not necessarily the same dimensions. A more distinct pattern of correlations was expected.

In an attempt to gain clearer insight into early adolescents' friendships and particularly best friendships, t-tests were used to examine pubertal status and potential gender differences (Tables 6) and 7 on each of the relationship quality variables. While gender was not initially hypothesized to profoundly affect the results, it was examined at this point in the hope of clarifying some of the ambiguities that existed. The initial exclusion of gender was based upon inconsistent research findings. While Berndt (1981), and Bigelow and LaGaipa (1980) found gender differences in relation to friendship qualities and conceptions, both Sharabany et al. (1981) and Diaz and Berndt (1982) did not report significant differences. Analyses using t-tests for the BFRQ and NRI variables by gender revealed that girls are significantly more likely than boys to characterize their best friendships as high on intimate self-disclosure, loneli-

Table 6. T-Test Analysis of Best Friend Relationship Questionnaire Subscales and Network of Relationships Inventory Subscales by Pubertal Status (n = 60).

Variable	Means		F-Ratio (df=58)
	Early (n=27)	Late (n=33)	
BFRQ Subscales			
Intimate Self-Disclosure	2.55	2.96	1.55
Loneliness	2.27	2.52	1.28
Competition	2.30	2.37	1.99
Shared Interests	2.42	2.82	2.20*
Parental Knowledge	2.78	2.77	1.09
NRI Subscales			
Intimacy	2.95	3.66	1.23*
Affection	2.22	2.44	1.42
Prosocial Behavior	2.84	3.10	1.82
Companionship	3.26	3.68	1.21
Admiration	3.19	1.13	1.07
Reliable Alliance	4.17	4.47	1.17
Satisfaction	3.65	3.88	1.02
Dominance	4.31	4.31	1.19
Conflict	4.32	4.31	1.62
Punishment	4.64	4.53	1.88

* $p < .05$

** $p < .01$

*** $p < .001$

Table 7. T-Test Analysis of Best Friend Relationship Questionnaire Subscales and Network of Relationships Inventory Subscales by Gender (n = 60).

Variable	Means		F-Ratio (df=58)
	Boys (n=31)	Girls (n=29)	
BFRQ Subscales			
Intimate Self-Disclosure	2.48	3.08	1.67**
Loneliness	2.20	2.62	1.39**
Competition	2.30	2.38	1.25
Shared Interests	2.81	2.95	2.81**
Parental Knowledge	2.58	2.98	1.27**
NRI Subscales			
Intimacy	3.02	3.68	1.03**
Affection	2.16	2.54	2.30**
Prosocial Behavior	2.81	3.16	1.67
Companionship	3.33	3.66	1.38
Admiration	3.08	3.25	1.29
Reliable Alliance	4.26	4.43	1.12
Satisfaction	3.57	4.00	1.36**
Dominance	4.35	4.26	1.65
Conflict	4.25	4.39	1.04
Punishment	4.63	4.52	2.02+

+ p < .06
 * p < .05
 ** p < .01
 *** p < .001

ness, shared interests, and parental knowledge. Significant gender differences were observed for three of the NRI variables of satisfaction, affection, and intimacy. Only marginal gender differences were observed for the prosocial behavior variable on the NRI. When gender differences are found, they tend to suggest that girls' friendships in early adolescence can be characterized by more intimacy, warmth and empathy (Douvan and Adelson, 1966). These correlation matrices and t-test results, therefore, provided some evidence of construct validity for the BFRQ constructed specifically for the measurement of best friendships.

The next set of analyses examined the role of pubertal status with regard to the youngster's perceptions of relationship qualities. Initially, all participants were assigned to a pubertal status group (either early puberty or late puberty) after scores on the PDS were standardized and the median split determined. In an attempt to gain clearer insight into early adolescents' friendships and particularly best friendships, t-tests were used to examine the effects of pubertal status on relationship qualities. The t-test technique was the primary a priori analysis used to study these effects. Results from these tests were discouraging with only marginal differences emerging between the groups (early and late); differences that proved for the most part, to be insignificant. The results are presented in Table 6.

The t-test analyses were conducted for both the BFRQ and NRI relationship domains and only two were significant, shared interests ($F = 2.20, p < .05$; BFRQ subscale) and intimacy ($F = 1.23, p < .05$; NRI subscale). The conflict variable was marginally significant ($F = 1.62, p < .10$). Further analyses of the relationship qualities revealed significant findings for seven subscales including intimate self-disclosure, loneliness, shared interests, intimacy, affection and satisfaction (results summarized in Table 7). All qualities were significant at better than the .05 level. Additionally, punishment was marginally significant ($F = 2.02, p < .06$). Results from these analysis by gender were encouraging and it was decided that further analyses including the gender variable should be conducted. Three sets of analysis for pubertal status and gender were completed. Analysis of variance (bivariate and covariate) with the factors pubertal status and gender were employed to assess the effects on the relationship qualities. Because the results were somewhat complex, they are presented and discussed by type of effect. First, a two-way analysis of variance was done to discover what main and interaction effects were present for pubertal status and gender. Main effects for gender were found for four variables, intimate self-disclosure ($F = 4.44, p < .05$), loneliness ($F = 4.84, p < .05$), shared interests ($F = 5.68, p < .05$), and parental knowledge ($F = 4.81, p < .05$) (Table

8). Two marginal main effects were noted for affection and satisfaction. Unfortunately no main effects were found for pubertal status, and only one interaction effect was noted for conflict.

Second, two separate sets of analyses were conducted on each subscale using ANOVA techniques controlling for pubertal status, and then for gender. No significant effects were found when gender was held constant. Three significant and two marginally significant findings were revealed when pubertal status was controlled. These results roughly mirrored the two-way ANOVA findings, as intimate self-disclosure, shared interests, parental knowledge, intimacy and satisfaction were the affected qualities. See table 9, for complete results.

Analyses of associations among the relationship quality variables and social self-efficacy and empathy produced correlations in the anticipated directions (see Table 10). For example, intimate self-disclosure, shared interests, and parental knowledge are positively and significantly correlated with empathy. In contrast, perceptions of competition in these relations are associated with decreases in reporting social self-efficacy. While intimacy is positively and significantly correlated with social self-efficacy and moderately correlated with empathy, the intimacy counterpart on the BFRQ (intimate self-disclosure) shows

Table 8. Two-Way Analysis of Variance for Best Friend Relationship Questionnaire Variables and Network of Relationships Inventory by Pubertal Status and Gender (n = 60).

Variable	Gender		Pubertal Status	
	Sum of Squares	F-Ratio (df=1)	Sum of Squares	F-Ratio (df=1)
BFRQ Subscales				
Intimate Self-Disclosure	3.40	4.44*	.51	.66
Loneliness	1.77	4.84*	.13	.35
Competition	.05	.06	.02	.03
Shared Interests	3.39	5.68*	.44	.73
Parental Knowledge	2.93	4.81*	.51	.83
NRI Subscales				
Intimacy	2.48	1.67	3.42	2.31
Affection	1.57	3.07+	.07	.14
Prosocial Behavior	1.08	1.60	.26	.38
Companionship	.42	.48	1.46	1.65
Admiration	.75	1.01	.34	.46
Reliable Alliance	.04	.09	.97	2.42
Satisfaction	2.07	3.52+	.04	.07
Dominance	.15	.13	.03	.03
Conflict	.39	.79	.08	.16
Punishment	.09	.30	.08	.28

+ p < .10

* p < .05

** p < .01

Table 9. Analysis of Covariance for Best Friend Relationship Questionnaire Subscales and Network of Relationships Inventory Subscales--Controlling for Pubertal Status and/or Gender (n = 60).

Variable	By Pubertal Status with Gender		By Gender with Pubertal Status	
	Sum of Squares	F-Ratio (df=1)	Sum of Squares	F-Ratio (df=1)
BFRQ Subscales				
Intimate Self-Disclosure	.51	.65	3.40	4.33*
Loneliness	.13	.34	.96	2.57
Competition	.02	.03	.05	.06
Shared Interests	.44	.70	3.39	5.47*
Parental Knowledge	.51	.83	2.93	4.78*
NRI Subscales				
Intimacy	3.42	2.29	2.47	1.66
Affection	.07	.14	1.57	3.04+
Prosocial Behavior	.26	.38	1.09	1.60
Companionship	1.46	1.66	.42	.48
Admiration	.34	.47	2.75	1.02
Reliable Alliance	.97	2.46	.04	.09
Satisfaction	.04	.07	2.07	3.49+
Dominance	.03	.03	.15	.13
Conflict	.08	.15	.39	.75
Punishment	.09	.29	.08	.30

+ p < .10

* p < .05

** p < .01

nonsignificant effects. Intimate self-disclosure was positively and significantly correlated with empathy but not significantly correlated with social self-efficacy (see Table 10 for complete results). Overall, more of the BFRQ and the NRI variables were correlated with empathy than with social self-efficacy. Additionally, those variables considered to be "positive" on both scales were correlated more often with both social self-efficacy and empathy than are the "negative" variables (i.e., conflict and punishment). This may suggest that the "positive" variables are closely associated with more adaptive socio-emotional functioning and have more of an enhancing influence than the "negative" ones which interfere.

The analyses conducted were directed by the general goals of the present investigation of providing a descriptive for best friendships in early adolescence. Two measures assessing the qualitative features of friendships were analyzed for possible associations among the measures themselves, between the measures and pubertal status. Once again, a gender variable was analyzed, along with pubertal status, to help clarify the initial results. The findings offered support for some hypotheses in the present investigation, and directions for future research projects.

Table 10. Intercorrelations of Self-Efficacy, Empathy by Best Friend Relationship Questionnaire and Network of Relationships Inventory Subscales for Males and Females (n = 60).

	Self-Efficacy	Empathy
BRFQ Subscales		
Intimate self-disclosure		.43***
Loneliness	--	.25*
Competition	--	-.32*
Shared Interests	.22*	.37***
Parental Knowledge	--	.33***
NRI Subscales		
Intimacy	.36***	.27*
Affection	.26*	.38***
Prosocial	.25*	.37**
Companionship	--	.30**
Admiration	--	.27*
Reliable Alliance	--	--
Satisfaction	--	.38***
Dominance	--	--
Conflict	--	--
Punishment	--	--

* p < .05 ** p < .01 *** p < .001

DISCUSSION

The present investigation sought to provide a rich description of best friendships in early adolescence, to determine the similarities and differences in best friendships as related to less frequently researched qualities such as competition and loneliness, to look at the effects of puberty on close peer relationships, and to determine the association between self-efficacy and empathy and best friendship relationship qualities. This study achieved these goals with moderate success.

This exploration produced several significant findings. First, correlation matrices revealed that four of the five BFRQ qualities, intimate self-disclosure, loneliness, shared interests, and parental knowledge were positively and significantly correlated with the NRI qualities. The intimate self-disclosure subscale was most frequently correlated with the NRI subscales suggesting that a significant association exists between this relationship quality and other frequently examined characteristics of children's peer relationships. The intimate self-disclosure subscale was most frequently correlated with the other relationship qualities possibly suggesting that it is a central or core ingredient of early adolescent best friendships. Further-

more, no gender differences emerged in relation to the intimate self-disclosure subscale. Other investigators (Berndt, 1982) have criticized the use of intimacy as an index of best friendship quality because girls typically score higher than boys reflecting, perhaps, greater verbal fluency. The present results, though they need to be replicated, suggest that the assessment of intimate self-disclosure may be tapping a gender independent feature of best friendships. While further analysis is needed, this preliminary finding offers initial support for including an assessment of self-disclosure, as opposed to intimacy, when investigating intimacy in early adolescents' relationships. This is especially true at a time when males may be unwilling to relay information about physical intimacy with friends, such as patting them on the back or putting an arm around a shoulder. Additionally, the intimate self-disclosure variable correlated with physical intimacy, affection, prosocial behavior, and reliable alliance. The significance of the intimate self-disclosure variables, along with the other correlations among the other relationship qualities (i.e., loneliness, shared interests, and parental knowledge) suggests that these lesser studied variables are important in studying friendships due to their potential influence on best friendships. Including these relationship qualities in future investigations would provide further support for their

role in the development and maintenance of best friendships and insight into other possible variables.

A second BFRQ subscale (loneliness) presented some puzzling results. Loneliness was positively and significantly associated with intimacy and affection. After consideration, two explanations seemed acceptable. First, it may be that those individuals who reported being more intimate and affectionate as well as more lonely, felt comfortable enough with their relationships to admit the loneliness (i.e., occasionally wondering what it would be like to be with someone other than their best friend). A second explanation suggests that those who are lonely will seek intimacy as a way of trying to reduce their lonely feelings. In reviewing the youngster's ratings of these loneliness items, an inconsistency was noted. Loneliness usually implies a feeling; feeling as though one does not have friends, loved ones, etc. However, the phrasing of the question the early adolescents responded to implied something different. The subscale is structured so that the individual is reporting how often he/she thinks about or desires to be involved with friends other than the one that was their "best" friend. Lonely here is taken to mean lonely for other relationships, and not lonely for friends, in general. Therefore, if this variable is to be included in future investigations, the subscale must be renamed and redefined.

The second focus of this project was to look at the influence of pubertal status on relationship qualities. The lack of significant findings in this area may be due to the population studied. The subjects were all very close in age and pubertal status. With this age group, the gender differences proved to be somewhat more significant than pubertal status differences. Gender differences in existing research of friendships have emerged inconsistently, and were not an initial focus of this study. However, results of data reported here indicate that the gender differences were plentiful and more numerous than pubertal status results. Although minimal, where significant differences did emerge based on pubertal status, such was the fact that the late pubertal status group was significantly different from the early group on the shared interests and intimacy subscales, they were interesting and in the hypothesized directions. Furthermore, these results suggest the need to look further at the role of puberty in the formation and maintenance of best friendships in early adolescence.

The final purpose of this research project was to investigate the associations among the relationship quality variables and social self-efficacy and empathy. These results supported the idea that the more "positive" relationship qualities would be positively and highly correlated with both of these variables. The associations shown are

encouraging and now more specific research is needed to determine possible causal links. Based upon the findings of the present study, it is difficult to say with any amount of certainty that early adolescent friendships are becoming more mature. Although differences between means were found and most often the late pubertal status groups were higher, the difference was not statistically significant.

Limitations

The major limitations of this research project include a unique sample and lack of information about the respondents feelings and cognitions about their "regular" friends as opposed to their best or close friends. Specifically, problems existed with the format of the project. This study was conducted on a single occasion, a one-shot case study, and is therefore susceptible to threats to both reliability and validity (Campbell and Stanley, 1963). The population studied is one that is very narrow, specific, and unique; therefore, these results may not be truly representative of the "average" adolescent's relationships with peers. However, the uniqueness of the unusual ethnic backgrounds and life experiences (career military and civil service employees) of this group of students offers information on this specialized population which may be combined with future research to complete the picture of best

friendships. Certainly, the sample population was one of convenience. This sample, which yielded just 51% of those recruited, provided just enough of a return to assure the plausibility of the study. While the 60 participants were almost evenly distributed between males and females (31 and 29, respectively), the breakdown between early and late pubescent participants was less balanced.

On a more conceptual level, both positive and negative factors were apparent. The use of multiple measures was helpful, not only for reliability and validity purposes but for gaining different views and perspectives on the early adolescent best friendships. As a whole package, this group of five questionnaires worked well. However, this particular investigation utilized these measures to focus on best friendships. The fact that we did not measure "regular" friendships or acquaintances prohibited us from comparing these different kinds of relationships. Additionally, the effects of pubertal status on friendship variables proved to be less significant than hypothesized. It was expected that more differences would be observed. Overall, this lack of differences may be due to the lack of differences in pubertal status apparent between seventh and eighth grade students. Perhaps an investigation in which subjects represented more diverse age groups, such as a comparison among sixth, eighth and tenth grade students, may provide a better indication of

the true effects of pubertal status on best friendships. Although the results are perhaps limited in their generalizability to all early adolescent best friendships, a basis for describing these relationships was developed and tested.

Future Research

Results from the present investigation offer new directions for future research. First, continued validation for the Best Friend Relationship Questionnaire is needed with a variety of different populations. Second, all questionnaires need to be completed by subjects for both best and regular friends to determine differences, and distributed on two different occasions, preferably in the early fall and late spring months. Third, an interesting focus would be to look at those friendships in which opposite sex pairings occur and compare them with same-sex best friendships. Finally, a more complete approach to puberty needs to be taken if the true impact of puberty is to be measured. In addition to physical changes that are occurring, assessments of pubertal impact on perceptions of self, mood, and specific interpersonal behavior must be explored. While these links were not explored in the present investigation, the necessity is apparent if an accurate picture of the effects of pubertal status is to be presented.

This particular area of exploration, early adolescent best friendships, offers many unique and exciting opportunities for investigators. The ultimate need is to follow individuals longitudinally through a series of relationships, both same sex and opposite sex friendships, to determine the impact of these close relationships on future interpersonal interactions and relationships.

APPENDIX A

PARENTAL INFORMATION/CONSENT LETTER

Dear Parents and Students:

Stand By Me: Preadolescent Best Friendships

You are asked to read the following material to insure that you are informed of the nature of this research study and of how you will participate in it, if you consent to do so. Signing this form will indicate that you have been so informed and that you give your consent. Federal regulations require written informed consent prior to participation in this research study so that you can know the nature and the risks of your participation and can decide to participate or not participate in a free and informed manner.

Please read the following statements and sign and return this form if you consent to participating in this study.

"I am being invited to voluntarily participate in the above-titled research project. The purpose of this project is to investigate the differences and similarities of preadolescent best friendships." "I have been invited to participate because I am between the ages of 10 years and 15 years and because I have a best or close friend. More than 100 subjects will be enrolled in this study."

"If I agree to participate, I will be asked to agree to the following: Complete five questionnaires during a 50 minute time period." "I will not be paid for participating in this study."

"I understand that my confidentiality will be strictly maintained. I will be assigned a subject ID#. Only the principal investigator (Michelle McKinney) and her major professor (Dr. Wendy Gamble) will have access to the names of the participants."

"Before Giving my consent by signing this form, the methods, inconveniences, risks, and benefits have been explained to me and my questions have been answered. I understand that I may ask questions at any time and that I am free to withdraw from the project at any time without causing bad feelings or affecting my medical care. I understand that this consent form will be filed in an area designated by the Human Subjects Committee with access restricted to the principal investigator, Dr. Gamble, or authorized representative of the Family Studies Department. I understand that I do not give up any of my legal rights by signing this form. A copy of this consent form will be given to me."

Subject's Signature

Date

Parent/Guardian's Signature

Date

APPENDIX B

PARTICIPANT INFORMATION FORM



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF AGRICULTURE
SCHOOL OF FAMILY AND CONSUMER RESOURCES

Dear Participant:

Thank you for completing this survey. I am currently investigating teen's friendships, specifically best or close friends. A "best" or "close" friend is someone that is very important to you, but is not a member of your family.

Before you begin this survey, please think about the person that is your "best" or "close" friend. You should answer all of the questions about this person. Please do not "switch" persons.

I will be asking more teens, like yourself, to complete these surveys when school begins in the Fall. If you would like to participate in this survey or if you would like to be a part of another study that would involve you and your "best" or "close" friend being interviewed, please complete the information below.

Thank you again for completing this survey.

Sincerely,
Michelle McKinley
Michelle McKinley
Masters Degree Candidate

NAME: _____

ADDRESS: _____

_____ Zip Code

SCHOOL: _____

APPENDIX C

MINOR CONSENT FORM

Minor's Consent Form

Project Title: Stand By Me: Preadolescent Best Friendships

By asking you to fill out these questionnaires, we are trying to get information about how preadolescent's think about their friends.

You are a part of a large group of preadolescents who will complete these questionnaires. All of the individuals will be between the ages of 10 and 15 years old and will be both boys and girls.

If you have any questions please let us know. As a participant in this project, your confidentiality is very important to us. To protect your privacy, you will be assigned a subject identification number. We will use this number instead of your name.

You may choose not to complete these questionnaires at anytime. Please just let us know. If you find a question difficult, you may choose not to answer it. Please remember that this is not a test and that there are no right or wrong answers.

Signature

Date

APPENDIX D

GAMBLE AND MCKINNEY BEST FRIEND
RELATIONSHIP QUESTIONNAIRE

Best or Close Friendships

I.D. Number _____ Boy or Girl Age _____ Grade _____
 Birthdate: _____

Everyone has a number of people who are important in his or her life. For example, your parents, stepparents, relatives, teachers, friends and brothers and sisters are people who might be important to you. In this questionnaire, we ask about your relationships with these people. Your siblings are your brothers and sisters.

1. Circle all the parents you have who are living:
 Natural Mother Step-Mother Natural Father Step-Father
2. Circle the parents you live with right now:
 Natural Mother Step-Mother Natural Father Step-Father
3. Think of an adult you have who is MOST IMPORTANT to you. Who is this person?
 Grandmother Grandfather Aunt Uncle Mother Step-Mother
 Father Step-Father Teacher Coach Brother Sister
4. Write down the names of your siblings (your brothers and sisters) or step-siblings from the OLDEST TO YOUNGEST. If you have more than brothers and sisters, write down the four MOST IMPORTANT to you.

	First Name	Boy/Girl	Age	Grade	Live At (circle one) home/away	Natural/Step (circle one) natural/step
Sibling 1	_____	_____	___	___	_____	_____
Sibling 2	_____	_____	___	___	_____	_____
Sibling 3	_____	_____	___	___	_____	_____
Sibling 4	_____	_____	___	___	_____	_____

5. Which sibling (or stepsibling) is most important to you? Pick just one.
 Sibling 1 Sibling 2 Sibling 3 Sibling 4
6. How many siblings (or stepsiblings) do you have?
 1 2 3 4 5 6 7 8 9
7. My religion is: (Circle one)
 Protestant Catholic Jewish Agnostic or Atheist Other
8. My ethnic background is: (Circle one)
 Hispanic Native American Asian Black White Other _____

Fill in the blanks with the name of your best or close friend and answer the questions about your relationship with your friend.

18. How often do you and _____ share information about things that happened to you when you were younger
- Little or none Somewhat Very Often Extremely Often Most Often
19. How often do you tell _____ about the things that you are worried about or that you are afraid of? (Like being afraid of getting sick, or of someone else getting sick, or of not doing well in school, or just worried about things happening in the world.) How often do you share these worries with your friend?
- Little or none Somewhat Very Often Extremely Often Most Often
20. How much do you and _____ talk about what you want to do in the future, like talk about what you want to be when you grow up?
- Little or None Somewhat Very Much Extremely Much The Most
21. When kids are 11, 12 and 13 years old our bodies start to change in a number of different ways. How often do you and _____ talk about the things you feel and see happening to your bodies?
- Little or none Somewhat Very Often Extremely Often Most Often
22. How much do you and _____ talk about how you feel about entering high school (middle school or junior high) or becoming a teenager?
- Little or None Somewhat Very Much Extremely Much The Most
23. How much do you talk with _____ about feelings or thoughts you might have about girls/boys that you know? (opposite sex)
- Little or None Somewhat Very Much Extremely Much The Most
24. How often do you share your feelings about dating or getting to know girls/boys with _____?
- Little or none Somewhat Very Often Extremely Often Most Often
25. When you are with _____, how often do you find yourself wondering what the other kids in your class are doing?
- Little or none Somewhat Very Often Extremely Often Most Often

26. How often would you like to call or go somewhere with someone other than _____?
- Little or none Somewhat Very Often Extremely Often Most Often
27. When you're with _____, how often would you rather be spending time with other friends?
- Little or none Somewhat Very Often Extremely Often Most Often
28. When you are with _____ how often do you feel kind of safe and comfortable?
- Little or none Somewhat Very Often Extremely Often Most Often
29. When you are with _____ how often do you feel uncomfortable or nervous about your friendships lasting in the future?
- Little or none Somewhat Very Often Extremely Often Most Often
30. When you are with _____ how often do you wish your friendship would go on forever?
- Little or none Somewhat Very Often Extremely Often Most Often
31. When you think about your friendship with _____ how often do you feel that you wouldn't want to change your friendship for anything?
- Little or none Somewhat Very Often Extremely Often Most Often
32. If you and _____ are playing cards or a game, how often will you compete with one another and really try to win the game?
- Little or none Somewhat Very Often Extremely Often Most Often
33. If you and _____ are playing sports, how often will one of you try to be better than the other (even if you are on the same team)?
- Little or none Somewhat Very Often Extremely Often Most Often
34. How often do you and _____ compare grades that you got on a test or compare your report cards?
- Little or none Somewhat Very Often Extremely Often Most Often
35. How often do you try and do better than _____ in school?
- Little or none Somewhat Very Often Extremely Often Most Often

55. If you are a girl, have you started to menstruate? Yes _____ No _____
56. If yes, how long ago did this happen. Circle the number that best describes you.
- a. Within the past 6 months
 - b. In the last 6-12 months
 - c. More than 12 months ago
 - d. more than 2 years ago
57. When you started to menstruate, did you tell your best or close friend about what was happening to you?
Yes _____ No _____

APPENDIX E

FURMAN AND BURHMESTER (1985) NETWORK OF
RELATIONSHIPS INVENTORY

YOUR BEST OR CLOSE FRIEND

ID # _____

1. Please list the first name and last initial of your best or close friend. This should be a person that is not in your family, and should be some one that you see regularly.

THE NEXT QUESTIONS ASK ABOUT YOUR RELATIONSHIPS WITH YOUR BEST FRIEND.
CIRCLE THE ANSWER THAT BEST ANSWERS THE QUESTION.

2. HOW MUCH FREE TIME DO YOU SPEND WITH YOUR FRIEND?

Little or None Somewhat Very Much Extremely Much The Most

3. HOW MUCH DO YOU AND YOUR FRIEND GET UPSET WITH OR MAD AT EACH OTHER?

Little or None Somewhat Very Much Extremely Much The Most

4. HOW MUCH DOES YOUR FRIEND TEACH YOU HOW TO DO THINGS THAT YOU DON'T KNOW?

Little or None Somewhat Very Much Extremely Much The Most

5. HOW SATISFIED ARE YOU WITH YOUR RELATIONSHIP WITH YOUR FRIEND?

Little or None Somewhat Very Much Extremely Much The Most

6. HOW MUCH DO YOU TELL YOUR FRIEND EVERYTHING?

Little or None Somewhat Very Much Extremely Much The Most

7. HOW MUCH DO YOU HELP YOUR FRIEND WITH THINGS HE/SHE CAN'T DO BY HIMSELF/HERSELF?

Little or None Somewhat Very Much Extremely Much The Most

8. HOW MUCH DO YOU SEE YOUR FRIEND?

Little or None Somewhat Very Much Extremely Much The Most

9. HOW MUCH DOES YOUR FRIEND LIKE OR LOVE YOU?

Little or None Somewhat Very Much Extremely Much The Most

10. HOW MUCH DOES YOUR FRIEND PUNISH YOU?

Little or None Somewhat Very Much Extremely Much The Most

11. HOW MUCH DOES YOUR FRIEND TREAT YOU LIKE YOU'RE ADMIRER AND RESPECTED?

Little or None Somewhat Very Much Extremely Much The Most

12. WHO TELLS THE OTHER PERSON WHAT TO DO MORE OFTEN, YOU OR YOUR FRIEND?
 Friend almost always does Friend often does About the same I often do I almost always do
13. HOW SURE ARE YOU THAT THIS RELATIONSHIP WILL LAST NO MATTER WHAT?
 Little or not at all Somewhat Very Sure Extremely sure Most sure
14. HOW MUCH DOES YOUR FRIEND HUG YOU?
 Little or None Somewhat Very Much Extremely Much The Most
15. HOW MUCH DO YOU PLAY AROUND AND HAVE FUN WITH YOUR FRIEND?
 Little or None Somewhat Very Much Extremely Much The Most
16. HOW MUCH DO YOU AND YOUR FRIEND DISAGREE OR QUARREL?
 Little or None Somewhat Very Much Extremely Much The Most
17. HOW MUCH DOES YOUR FRIEND HELP YOU FIGURE OUT OR FIX THINGS?
 Little or None Somewhat Very Much Extremely Much The Most
18. HOW HAPPY ARE YOU WITH THE WAY THINGS ARE BETWEEN YOU AND YOUR FRIEND?
 Little or not at all Somewhat Very Happy Extremely happy Most Happy
19. HOW MUCH DO YOU SHARE YOUR SECRETS AND PRIVATE FEELINGS WITH YOUR FRIEND?
 Little or None Somewhat Very Much Extremely Much The Most
20. HOW MUCH DO YOU PROTECT AND LOOK OUT FOR YOUR FRIEND?
 Little or None Somewhat Very Much Extremely Much The Most
21. HOW MUCH ARE YOU AROUND YOUR FRIEND?
 Little or None Somewhat Very Much Extremely Much The Most
22. HOW MUCH DOES YOUR FRIEND REALLY CARE ABOUT YOU?
 Little or None Somewhat Very Much Extremely Much The Most
23. HOW MUCH DOES YOUR FRIEND DISCIPLINE YOU FOR DISOBEYING HIM/HER?
 Little or None Somewhat Very Much Extremely Much The Most
24. HOW MUCH DOES YOUR FRIEND TREAT YOU LIKE YOU'RE GOOD AT MANY THINGS?
 Little or None Somewhat Very Much Extremely Much The Most

25. BETWEEN YOU AND YOUR FRIEND, WHO TENDS TO BE THE BOSS IN THIS RELATIONSHIP?

Friend almost always does Friend often does About the same I often do I almost always do

26. HOW SURE ARE YOU THAT YOUR RELATIONSHIP WILL LAST IN SPITE OF FIGHTS?

Little or None Somewhat Very Much Extremely Much The Most

27. HOW OFTEN DO YOU GO PLACES AND DO ENJOYABLE THINGS WITH YOUR FRIEND?

Little or None Somewhat Very Often Extremely Often Most Often

28. HOW MUCH DOES YOUR FRIEND KISS YOU?

Little or None Somewhat Very Much Extremely Much The Most

29. HOW MUCH DO YOU AND YOUR FRIEND ARGUE WITH EACH OTHER?

Little or None Somewhat Very Much Extremely Much The Most

30. HOW OFTEN DOES YOUR FRIEND HELP YOU WHEN YOU NEED TO GET SOMETHING DONE?

Little or not at all Somewhat Very Often Extremely Often Most Often

31. HOW GOOD IS YOUR RELATIONSHIP WITH YOUR FRIEND?

Little or not at all Somewhat Very Good Extremely Good The Best

32. HOW MUCH DO YOU TALK TO YOUR FRIEND ABOUT THINGS THAT YOU DON'T WANT OTHERS TO KNOW?

Little or None Somewhat Very Much Extremely Much The Most

33. HOW MUCH DO YOU TAKE CARE OF YOUR FRIEND?

Little or None Somewhat Very Much Extremely Much The Most

34. HOW MUCH DO YOU TALK TO YOUR FRIEND?

Little or None Somewhat Very Much Extremely Much The Most

35. HOW MUCH DOES YOUR FRIEND HAVE A STRONG FEELING OF AFFECTION LIKING OR LOVING TOWARD YOU?

Little or None Somewhat Very Much Extremely Much The Most

36. HOW MUCH DOES YOUR FRIEND SCOLD YOU FOR DOING SOMETHING YOU'RE NOT SUPPOSED TO DO?

Little or None Somewhat Very Much Extremely Much The Most

37. HOW MUCH DOES YOUR FRIEND LIKE OR APPROVE OF THE THINGS YOU DO?

Little or None Somewhat Very Much Extremely Much The Most

38. IN YOUR RELATIONSHIP WITH YOUR FRIEND, WHO TENDS TO TAKE CHARGE AND DECIDE WHAT SHOULD BE DONE?

Friend almost Friend About the I often I almost
always does often does same do always do

39. HOW SURE ARE YOU THAT YOUR RELATIONSHIP WILL CONTINUE IN THE YEARS TO COME?

Little or Somewhat Very Much Extremely Much The Most

40. HOW MUCH DOES YOUR FRIEND TOUCH YOU AFFECTIONATELY (E.G. PATS, ARMS AROUND SHOULDERS)?

Little or None Somewhat Very Much Extremely Much The Most

APPENDIX F

WHEELER AND LADD (1982) ASSESSMENT OF
CHILDREN'S SELF-EFFICACY FOR SOCIAL
INTERACTIONS WITH PEERS

ID# _____

Read each statement and fill in each blank with the word that best describes you, HARD!, hard, easy, EASY! Put "H" if it is REALLY HARD FOR YOU, Put "h" if it is sort of hard for you. Put "E" if it is REALLY HARD FOR YOU, Put "e" if it is sort of hard for you.

1. Some kids want to play a game. Asking them if you can play is _____ for you.
2. Some kids are arguing about how to play a game. Telling them the rules is _____ for you.
3. Some kids are teasing your friend. Telling them to stop is _____ for you.
4. You want to start a game. Asking other kids to play the game is _____ for you.
5. A kid tries to take your turn during a game. Telling the kid it's your turn is _____ for you.
6. Some kids are going to lunch. Asking if you can sit with them is _____ for you.
7. A kid cuts in front of you in line. Telling the kid not to cut in is _____ for you.
8. A kid wants to do something that will get you into trouble. Asking the kid to do something else is _____ for you.
9. Some kids are making fun of someone in your classroom. Telling them to stop is _____ for you.
10. Some kids need more people to be on their teams. Asking them to be on a team is _____ for you.
11. You have to carry some things home after school. Asking another kid for help is _____ for you.
12. A kid always wants to be first when you play a game. Telling the kid you are going first is _____ for you.
13. Your class is going on a trip and everyone needs a partner. Asking someone to be your partner is _____ for you.
14. A kid does not like your friend. Telling the kid to be nice to your friend is _____ for you.
15. Some kids are deciding what game to play. Telling them a game you like is _____ for you.
16. You are having fun playing a game but the other kids want to stop. Asking them to finish playing is _____ for you.

17. You are working on a project. Asking another kid to help is _____ for you.
18. Some kids are using your play area. Asking them to move is _____ for you.
19. Some kids are deciding what to do after school. Telling them what you want to do is _____ for you.
20. A group of kids want to play a game you don't like. Asking them to play a game you like is _____ for you.
21. Some kids are planning a party. Asking them to invite your friend is _____ for you.
22. A kid is yelling at you. Telling the kid to stop is _____ for you.

APPENDIX G

BRYANT (1982) INDEX OF EMPATHY FOR
CHILDREN AND ADOLESCENTS

Put an X in the appropriate box that best describes you.

- | | ME | NOT ME |
|---|-------|--------|
| 1. It makes me sad to see a girl who can't find anyone to play with. | _____ | _____ |
| 2. People who kiss and hug in public are silly. | _____ | _____ |
| 3. Boys who cry because they are happy are silly. | _____ | _____ |
| 4. I really like to watch people open presents, even when I don't get a present myself. | _____ | _____ |
| 5. Seeing a boy who is crying makes me feel like crying. | _____ | _____ |
| 6. I get upset when I see a girl being hurt. | _____ | _____ |
| 7. Even when I don't know why someone is laughing, I laugh too. | _____ | _____ |
| 8. Sometimes I cry when I watch TV. | _____ | _____ |
| 9. Girls who cry because they are happy are silly. | _____ | _____ |
| 10. It's hard for me to see why someone else gets upset. | _____ | _____ |
| 11. I get upset when I see an animal being hurt. | _____ | _____ |
| 12. It makes me sad to see a boy who can't find anyone to play with. | _____ | _____ |
| 13. Some songs make me so sad I feel like crying. | _____ | _____ |
| 14. I get upset when I see a boy being hurt. | _____ | _____ |
| 15. Grown ups sometimes cry even when they have nothing to be sad about. | _____ | _____ |
| 16. It's silly to treat dogs and cats as though they have feelings like people. | _____ | _____ |
| 17. I get mad when I see a classmate pretending to need help from the teacher all the time. | _____ | _____ |
| 18. Kids who have no friends probably don't want any. | _____ | _____ |
| 19. Seeing a girl who is crying makes me feel like crying | _____ | _____ |
| 20. I think it is funny that some people cry during a sad movie or while reading a sad book. | _____ | _____ |
| 21. I am able to eat all my cookies even when I see someone looking at me wanting one. | _____ | _____ |
| 22. I don't feel upset when I see a classmate being punished by a teacher for not obeying school rules. | _____ | _____ |

APPENDIX H

PETERSEN ET AL. (1982) SELF-REPORT MEASURE OF
PUBERTAL STATUS: RELIABILITY, VALIDITY
AND INITIAL NORMAL (BOYS)

Section I: To answer each question, please circle the number in front of the answer that best describes what is happening to you. Please choose only one answer for each question.

1. Would you say that your growth in height:
 1. has not yet begun to spurt ("spurt" means more growth than usual)
 2. has barely started
 3. is definitely underway
 4. seems completed
2. And how about the growth of body hair ("body hair" means underarm and pubic hair)? Would you say that your body hair has:
 1. not yet started growing
 2. has barely started growing
 3. is definitely underway
 4. seems completed
3. Have you noticed any skin changes, especially pimples?
 1. not yet started showing changes
 2. have barely started showing changes
 3. skin changes are definitely underway
 4. skin changes seem completed
4. Have you noticed a deepening of your voice?
 1. not yet started changing
 2. has barely started changing
 3. voice change is definitely underway
 4. voice change seems completed
5. Have you begun to grow hair on your face?
 1. not yet started growing hair
 2. has barely started growing hair
 3. facial hair growth is definitely underway
 4. facial hair growth seems completed

Section II: To answer each question, fill in the blanks with the best answer you can give.

6. How tall are you?

Height: I am _____ feet and _____ inches tall.

7. How much do you weigh?

Weight: I weigh _____ pounds.

APPENDIX I

PETERSEN ET AL. (1982) SELF-REPORT MEASURE OF
PUBERTAL STATUS: RELIABILITY, VALIDITY
AND INITIAL NORMAL (GIRLS)

HOW TO ANSWER THE QUESTIONS

G

Section I: To answer each question, please circle the number in front of the answer that best describes what is happening to you. Please choose only one answer for each question.

1. Would you say that your growth in height:
 1. has not yet begun to spurt ("spurt" means more growth than usual)
 2. has barely started
 3. is definitely underway
 4. seems completed

2. And how about the growth of body hair ("body hair" means underarm and pubic hair)? Would you say that your body hair has:
 1. not yet started growing
 2. has barely started growing
 3. is definitely underway
 4. seems completed

3. Have you noticed any skin changes, especially pimples?
 1. not yet started showing changes
 2. have barely started showing changes
 3. skin changes are definitely underway
 4. skin changes seem completed

4. Have your breasts begun to grow?
 1. not yet started growing
 2. have barely started growing
 3. breast growth is definitely underway
 4. breast growth seems completed

Section II: To answer each question, fill in the blanks with the best answer you can give.

5. Have you begun to menstruate?

1. no
2. yes

If you answered "yes," how old were you when you first menstruated?

Age: I was _____ years and _____ months old when I began to menstruate.

6. How tall are you?

Height: I am _____ feet and _____ inches tall.

7. How much do you weigh?

Weight: I weigh _____ pounds.

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