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## United States and Indonesian Children's Reports of Intimacy in their Same-Sex Friendships: Gender, Developmental, and Cultural Differences

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4/27/00

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### Abstract

Intimacy is one of the primary factors that distinguishes close friends from distant friends and acquaintances. Since intimacy is considered an important aspect of peer friendships, researchers have begun to explore and understand intimacy in greater detail. Intimacy in same-sex peer friendships was assessed in the present study by interviewing fifth graders and eighth graders from Indonesia and the United States. Self-disclosure, emotionally centered behaviors, and activity centered behaviors were included in the present study's conceptualization of intimacy. Gender, developmental, and cultural differences were found in the results. Females mentioned more emotionally centered behaviors in their descriptions of their friends than males. Fifth graders reported more activity centered behaviors in their interviews than eighth graders, and eighth graders reported more emotionally centered behaviors. The Indonesian and U.S. participants showed some similarities and differences in their descriptions of their friendships. There is controversy among researchers on whether or not activity centered behaviors should be included in the definition of intimacy. According to the present study, activity centered behaviors appear to be sufficiently different from emotionally centered behaviors to be included in the same definition of intimacy.



## United States and Indonesian Children's Reports of Intimacy in their Same-Sex Friendships: Gender, Developmental, and Cultural Differences

The degree of intimacy between two people is one of the primary factors that most clearly distinguishes close friends from distant friends and acquaintances (Ginsberg, Gottman, & Parker, 1986). Generally, intimacy refers to the extent in which the individuals in a relationship are prepared to reveal all aspects of themselves, experiential and emotional, to each other (Hinde, 1979). There is a general consensus that self-disclosure is a central component of intimacy in same-sex friendships. Beyond this broad definition, researchers have conceptualized intimacy in many different ways and have used these conceptualizations to explore several aspects of intimacy.

Several researchers have studied multiple factors that may influence the experience, quality, and intensity of intimacy in peer relationships. These factors include gender, developmental, and cultural differences. Gender differences in intimacy with same-sex friends has received the greatest amount of scrutiny. Previous research has been done regarding the different levels and behaviors of intimacy displayed by males and females. Intimacy research has also focused on developmental differences. There appear to be some developmental differences in the amount and type of intimate behaviors that are displayed by preadolescents and adolescents. There is very little research that explores cultural differences in intimacy. Some hypotheses have been made regarding the intimacy levels between same-sex friends from different cultures, but little empirical research has been done to support these hypotheses.

The present study explores gender, developmental, and cultural differences in same-sex friendships of preadolescents and adolescents from Indonesian and American cultures. This research has been guided by previous theories that have been developed regarding intimacy in

specific relationships. I am specifically interested in the magnitude and type of intimacy that is described in same-sex friendships of Indonesian and American children and adolescents. The present study uses open-ended interviews to gain insight into the quality and quantity of intimacy that is displayed in peer friendships. Each of the children and adolescents participated in an open-ended interview. The use of the open-ended interview allowed the participants to spontaneously mention intimate behaviors in their descriptions of their friends. The following literature review will address the general theories of intimacy that have been developed by previous researchers, components of intimate friendships, problems in the methodology of previous intimacy research, and the discussion of previous studies findings on gender, developmental, and cultural differences in intimate same-sex friendships.

### Theories of Intimacy

Sullivan (1953) is credited with first calling attention to the intimate and affectionate quality of friendships in childhood and adolescence. He claims that friendships are essential in development during the years just before and during adolescence. Sullivan states that true love and intimacy first appear in children's relationships with a friend or "chum," rather than in their relationship with their parents. Sullivan defends this assumption by stating that "a child begins to develop a real sensitivity to what matters to another person (pp. 245-246)" through the development of an intimate friendship. The child no longer thinks "what should I do to get what I want," but instead begins to think "what should I do to contribute to the happiness or to support the prestige and feeling of worthwhileness of my chum (p. 245)." When children begin to break away from their parents and develop relationships with peers, they begin to alter their thought patterns about the meaning of the relationship in order to include their friend's thoughts, feelings, and accomplishments. In Sullivan's opinion, this particular manifestation of the need

for interpersonal intimacy usually does not appear prior to eight and a half years of age. This change in thought and behavior processes is known as collaboration, which refers to the clearly formulated adjustment of one's behavior to the expressed needs of another person. The formation of an intimate relationship includes the move toward supplying each other with satisfactions and taking on each other's successes. Intimacy is viewed as a defining feature of true friendship between two people, and appears to contribute to the enhancement of self-esteem (Sullivan, 1953).

Sullivan claims that intimacy in friendships is most clearly seen through the act of self-disclosure, which he defines as the tendency of an individual to share personal or private thoughts and feelings with friends. Many other researchers strongly agree that self-disclosure is an important component to an intimate peer relationship (e.g., Ginsberg & Gottman, 1986; Savin-William & Berndt, 1990; Buhrmester & Furman, 1987). Although references to sharing intimate thoughts and feelings are apparent at all ages, Sullivan claims that the amount of self-disclosure between friends increases dramatically from middle childhood to adolescence. Through self-disclosure and by allowing the self to be vulnerable, adolescent friends share with each other their most personal thoughts and feelings, and become sensitive to each other's needs and desires. Through this process adolescents acquire a deep understanding of each other and the self. Sullivan argues that as children enter early adolescence they have an increased desire to depend on intimate friendships to address social needs.

Robert Weiss's (1974) theory of social provisions provides another conceptual framework for the study of intimacy. He hypothesized that individuals seek specific social provisions or types of social support through different relationships. Every individual has requirements for their well-being which can only be gained through relationships, therefore,

individuals maintain their relationships to attain these social provisions. Weiss claims that there are six basic provisions: attachment (intimacy), reliable alliance, enhancement of worth, social integration, guidance, and opportunity for nurturance. He believes that relationships are specialized in their functions, and different provisions are obtained from different relationships.

Weiss claims that attachment, or intimacy, is provided by relationships in which people gain a sense of security and belonging. Weiss believes several types of relationships have the capacity to provide these feelings of belonging and security, including same-sex friendships. He states that attachment comes primarily from marriage or other cross-sex committed relationships, but the provision can also be provided to some women through relationships with close friends, sisters, or mothers and to some men through relationships with “buddies.” The relationship that provides the largest sense of attachment or intimacy to an individual is often of central importance in the individual’s life organization. Weiss argued that individuals organize their lives around whatever relationship provides them with the highest degree of attachment and intimacy.

These theories provide support for the importance of intimacy in close friendships. These theories generally define and describe intimacy, but in order to empirically study intimacy it needs to be described in greater detail by using more specific behaviors. Several researchers have begun to develop more complete definitions of intimacy, based in part on the theories described above.

### Components of Intimate Friendships

Despite the consensus that intimacy is a central feature in the development of close friendships there is considerable controversy among researchers regarding what the construct of intimacy should include. Several researchers (e.g., Buhrmester & Furman, 1987; Buhrmester,

1990; Jones & Dembo, 1989) have narrowly focused their conceptualization of intimacy on the presence or absence of self-disclosure in a friendship. Other researchers (e.g., McNelles & Connolly, 1999; Camarena, Sarigiani, & Petersen, 1990) have expanded their conceptualizations of intimacy to include additional behaviors to self-disclosure; such as sharing, giving, trusting, conflict management, mindreading, affect, humor, similarities and differences, and companionship. They have argued that intimacy between friends seems to consist of many different behaviors, and not just the act of self-disclosure.

### Self-Disclosure

Self-disclosure and disclosure reciprocity are often considered the most important factors in building an intimate relationship (Ginsberg & Gottman, 1986). Mutual self-disclosure is often described as the process by which individuals gradually develop psychological closeness in friendships (Gottman, 1986). The act of self-disclosure refers to personal revelations about feelings, thoughts, opinions, and past behaviors that are shared with others (Parker, 1986). Since self-disclosure includes telling secrets about the self to another person, individuals must understand their own self in order to engage in self-disclosure with their peers (Gottman & Mettetal, 1986). The act of self-disclosure seems to aid in the process of self-exploration and the development of friendships.

According to the social penetration theory, individuals tend to engage in more self-disclosure as their peer relationships develop (Gottman, 1986). This implies that friends gradually disclose a greater amount of information about a larger number of topics, and the shared information becomes increasingly more intimate in content. Self-disclosure is expressed in various intimacy levels (Gottman, 1986). Low intimacy self-disclosure statements include

simple self-statements, superficial feelings, and personal opinions. High intimacy self-disclosure statements include personality revealing self-statements and the expression of intimate feelings.

Intimacy promotes self-disclosure and disclosure reciprocity because these behaviors create an interpersonal commitment between friends (Savin-Williams & Berndt, 1990). This commitment allows friends to be open and honest with each other and share their problems and secrets.

### Trust

Trust is an additional component that is often included in the broad definition of behaviors found in intimate friendships. The act of self-disclosure and self-exploration found in children's and adolescent's friendships includes a specific amount of trust that one will not breach confidence or talk behind the others' back (Buhrmester, 1996). The individual's ability to disclose and be transparent with another person requires some degree of trust and a feeling that they will not be penalized for their willingness to disclose personal information (Vondracek & Marshall, 1971).

### Emotional Support

The level of intimacy in a friendship is found to correspond to the level of affect that the individuals involved in the relationship display towards each other (Ginsberg & Gottman, 1986). Friends are able to display affect through empathetic listening of each other's self-disclosures and the revealing of themselves through disclosure reciprocity. Friends are also more willing to praise each other when the relationship is at a high level of intimacy (Ginsberg & Gottman, 1986). Close friends praise each other's abilities and accomplishments, while acquaintances merely acknowledge each other through brief conversation or looks.

### Mindreading

Mindreading occurs within a relationship when the two individuals are able to tell how the other is feeling or thinking before they are actually told (Gottman & Mettetal, 1986). Mindreading involves psychological interpretations of each other's behaviors or attributions of feelings or motives (Ginsberg & Gottman, 1986). This ability to know what someone is feeling or thinking without being told seems to be present within intimate friendships.

### Instrumental Aid

McNelles and Connolly (1999) suggest that instrumental aid should also be considered a component of intimate friendship. They argue that intimate friends seem to share instrumental guidance, as well as material objects. The willingness to share with peers seems to be high when there is a high level of intimacy between the children.

### Humor

The amount of humor demonstrated within a friendship relates to the level of closeness and intimacy found between the children involved in the friendship (Ginsberg & Gottman, 1986). Since close friends engage in self-disclosure, they know what topics they can joke about

with each other and which topics are sensitive and serious. Extended humor displayed between friends appears to convey a certain amount of familiarity and trust between the individuals. Friendships that display a high level of humor are often characterized as being more intimate and affectionate.

### Conflict Management

Conflicts occur within every relationship. Since intimate friendships contain such a high level of trust and self-disclosure, intimate friends often feel comfortable dealing with conflicts that occur between them by being open and honest. Conflict management and conflict resolution are assumed to reflect the level of intimacy between peers (Ginsberg & Gottman, 1986). Distant relationships display little negative evaluation and conflict because the individuals tend to avoid conflict as much as possible. On the other hand, close friendships are characterized by negative and positive affect. The friends often deal with conflicts between them in an appropriate and quick manner. General maintenance and repair of a relationship is needed in order to maintain a consistent and intimate friendship.

### Similarities and Differences

Individuals who are involved in intimate friendships tend to share several similarities and dissimilarities with their partners. Friends discover their similarities and differences through mutual self-exploration. Besides merely sharing interests and activities, intimate friendships allow the individuals to explore and learn about each other's differences (Ginsberg & Gottman, 1986). At first, people seem to be attracted to others who agree with their ideas, beliefs, and values, and tend to reject those who disagree with them (Gottman, 1986). However, there is some evidence that people prefer differences if they are assured of being liked by the individual (e.g., Gottman, 1986; Walster & Walster, 1963). Once people are sure of being liked, they tend



to explore differences among friends more freely (Gottman, 1986). Dissimilar peers can provide new information, and they are often considered to be unpredictable and exciting (Walster & Walster, 1963). Perceived similarities is important at all ages, but with an increase in age, children seem to attribute less importance to similarity and become more aware of how they differ from their friends (Ladd & Emerson, 1984).

### Companionship

Some researchers have also argued that there is a direct relationship between intimacy and time spent together inside and outside of school (Buhrmester & Crabery, 1992). Through this time spent together friends begin to open up and learn about each other through the act of self-disclosure. Intimate friends rely on each other for a high amount of companionship and engagement in enjoyable activities. Both friends seem to initiate contact outside the structured atmosphere of school or other institutions. Intimate friends enjoy spending time together as much as they can.

The above components define the range of behaviors that have been used by some researchers to define intimacy. The preceding list of components of intimate friendships is not exhaustive, it merely exemplifies the range of behaviors described within an intimate friendship. These components of intimate friendships include emotionally and activity centered categories of intimate behaviors. By including a broad range of behaviors when studying intimacy researchers will be more likely to determine whether or not there are gender, developmental, and cultural differences in the type and number of intimate behaviors that are demonstrated in close friendships. Each researcher defines and conceptualizes intimacy and the behaviors involved a little differently. This difference in conceptualizations seems to cause the results to vary among

studies because the researchers are each focusing on different behaviors. Also, researchers tend to use different research methods to gather the data for intimacy research.

### Conceptualization Problems in Past Intimacy Research

Past empirical research on intimacy has focused more on self-disclosure and not on the other components that may be involved in the development of an intimate friendship. Several of the intimacy definitions that have been used by previous researchers are restricted to the act of self-disclosure. Others have argued that a variety of behaviors are required in the conceptualization of intimacy in order to study close friendships to the fullest extent. There are many types of behaviors that are displayed in intimate same-sex friendships. Some intimate behaviors tend to be more emotionally centered, such as self-disclosure and emotional support, and others tend to be more activity centered, such as companionship and instrumental aid (McNelles & Connolly, 1999). Often, the activity centered behaviors are viewed as less intimate and of a lesser importance in studying intimacy, yet the two types of intimate behaviors may result in the same level and need for intimacy in same-sex friendships. When researchers merely focus on the emotional aspect of intimacy the results tend to show large differences among populations. On the other hand, when both emotionally and activity based aspects of intimacy are studied at the same time only the behavioral pathways to intimacy seem to differ among populations and not the level or desire for intimacy.

Past research results regarding intimacy in same-sex friendships seem to be determined in part by the researcher's operational definition of intimacy. If research focuses on self-disclosure, then developmental differences consistently emerge. This may be due in part to language and communication differences between preadolescents and adolescents. On the other hand, when researchers use a broader definition of intimacy that includes additional behaviors to self-

disclosure, the amount of intimate behaviors among ages doesn't seem to differ (e.g., Buhrmester, 1990).

A similar theme seems to occur when focusing on the differences of intimacy in male and female same-sex friendships. Males and females usually display intimacy through different behaviors, but still maintain an equal level and desire for intimate friendships. The qualitative differences of intimacy in male and female same-sex friendships can only be observed when the conceptualization of intimacy includes a wide array of behaviors (McNelles & Connelly, 1999).

A similar pattern of conceptualization problems of intimacy also seems to appear in cultural differences. There seems to be some universal intimate behaviors demonstrated among cultures, but cultures differ in other intimate behaviors that they encourage in same-sex friendships (Triandis, 1994). Different cultures may be attaining equal levels of intimate friendships, but through extremely different behavioral means. Researchers may need to take into account various different behavioral routes when they are conceptualizing intimacy, in order to get an accurate idea of intimacy in same-sex friendships.

### Gender Differences

Gender differences in intimacy of same-sex friendships has been studied extensively throughout the past decade by several different researchers. This research has created a controversy among researchers as to whether or not intimacy differences exist between male and female same-sex friendships. Quantitative differences of intimate behaviors emerge between genders when the conceptualization of intimacy focuses mainly on self-disclosure. On the other hand, when the conceptualization of intimacy is broadened to include a wider variety of behaviors the quantitative differences of intimacy between genders decreases and qualitative differences emerge.

### Differences in Self-Disclosure

Intimacy, when defined as self-disclosure, appears to occur more frequently in female same-sex friendships than in male same-sex friendships. Beginning in early adolescence, girls report more frequent interactions of an intimate and supportive nature with female friends than boys do with male friends (Buhrmester & Crabery, 1992). Since girls tend to report more self-disclosure and emotional support in friendships than boys do, this suggests that intimacy is especially important to girls' friendships. For instance, in a past study teenagers were asked to rate the extent of self-disclosure and emotional support that took place in their social events over a five-day period (Buhrmester & Crabery, 1992). Female participants reported substantially higher levels of self-disclosure and emotional support in their same-sex friendships than male participants, which implies that females are engaging in self-disclosure more often than males.

Other researchers have also narrowly defined intimacy as the act of self-disclosure, and their results support the hypothesis that girls rate self-disclosure as a more important characteristic in their friendships than boys. Several researchers found that girls commented on and rated self-disclosure as a more important and frequent aspect of their friendships than boys did (Buhrmester & Furman, 1987; Buhrmester, 1990; Berndt, Hawkins, & Hoyle, 1986). Dolgin and Kim (1994) also observed self-disclosure in male and female same-sex friendships and discovered that female same-sex best friendships were more self-revealing than any other friendship dyad they studied.

Jones and Dembo (1989) and Williams (1985) took the gender differences investigation of intimacy a step further by assigning masculinity and femininity scores to the participants involved in their studies. They hypothesized that sex-typed males were causing the gender differences in self-disclosure. They claimed that sex-typed males, not males in general, were

“responsible” for the apparent sex inequality that was found in the amount of intimacy displayed in friendships. They also claimed that androgynous males would score equally high with all females. Williams’ (1985) reported that masculinity is negatively related to the expression of intimacy through self-disclosure, and femininity is positively related to self-reported intimacy in same-sex friendships. Similar results were reported by Jones and Dembo (1989). They found that only sex-typed males were significantly lower in their reports of intimacy than androgynous males and females. Role expectations seem to be leading some males and females to interact with same-sex friends at different intimacy levels.

### Differences in Behavioral Routes

Females are consistently socialized to be more intimate in their relationships, whereas males are socialized to compete and maintain individuality at the expense of intimacy (Jones & Dembo, 1989). Several researchers have argued that gender differences in intimacy levels in preadolescent and adolescent same-sex friendships are largely indirect, and are based almost entirely on the gender-specific friendship patterns and networks that are taught and encouraged as early as the preschool years. During middle childhood both boys and girls spend considerable portions of their social play time in groups of their own sex, which leads them to learn fairly distinct styles of interaction (Maccoby, 1990). By the age of seven, girls seem to consistently interact in small groups of twos and threes, while boys seem to interact in larger groups, competitive team sports, and gangs (Reisman, 1990). Maccoby (1990) found that segregated play groups constitute powerful socialization environments in which children acquire varying social skills that are adapted to same-sex partners. Through same-sex peer interactions, girls are more likely to learn how to communicate their feelings and be nurturing towards each other, and boys are more likely to learn how to follow rules and get along with many kinds of people. Boys

tend to form extended friendship networks, while girls tend to cluster into exclusive friendship dyads. Girls seem to regard their friendships as intimate dyads and boys see theirs as collective. Adolescents usually continue to spend most of their time interacting with same-sex partners, and their interactive processes are extremely similar to those found in childhood and preadolescence.

Maccoby (1990) found that boys play is often oriented around mutual interests in activities. In male groups there is more concern with the issue of dominance. Boys are more likely to interrupt one another, use commands, threats, boasts of authority, refuse to comply with another child's demand, give information, heckle a speaker, tell jokes or suspenseful stories, and call another child names.

On the other hand, Maccoby (1990) discovered that girls tend to form close, intimate friendships with one or two other girls, and these friendships are marked by the sharing of confidences (Maccoby, 1990). Groups that consist of all females are more likely to express agreement with what another speaker has just said, pause to give another child a chance to speak, and when starting a speaking turn, acknowledge a point previously made by another speaker. Females may develop a feeling of closeness to one another through talks, and males may gain an equally intimate feeling through sharing activities. Even though females and males seem to display different behavioral routes to intimacy, they may be developing equally intimate friendships.

Several researchers argue that boys and girls may differ in their preferred behavioral routes to intimacy, yet their level of affective intimate involvement in their same-sex friendships is constant. Camarena, Sarigiani, and Petersen (1990) claim that the self-disclosure definitions of intimacy are only focusing on the process that can lead to the outcome of intimacy, but the definitions ignore the end state of intimate relationships. Intimate friendships can be developed

through behavioral or cognitive oriented pathways. Girls are expected to be more expressive towards their friends and boys are expected to be more instrumental towards their friends, but each set of behaviors may result in a similar outcome of intimate friendships (Camarena et al., 1990). Since male's and female's friendship patterns and expectations about friendship differ it is reasonable to assume that their experiences of intimate same-sex friendships may also be different. Males and females may both feel emotionally close to a friend, but the path they take to reach that feeling may differ. Intimacy conceptualizations that focus merely around the behavior of self-disclosure ignore the alternate paths that may be used to form an intimate friendship. Camarena et al. (1990) used a broad definition of intimacy in their study, and found the greatest gender difference in the act of self-disclosure. This demonstrates its significance in the exclusion or inclusion from definitions of intimacy in studies that are considering gender issues.

McNelles and Connolly (1999) performed a similar study using a broad definition of intimacy by observing the occurrence of activity centered behaviors, discussion of topics, and personal disclosure in adolescent same-sex friendships. Activity centered behaviors were defined as sharing an activity, engaging in fantasy or role play, and joke telling. A main effect for gender was obtained for activity centered behaviors, with boys receiving higher scores than girls. Discussion of topics was coded when the friends talked about topics or events, gossiped, or shared complaints. A main effect for gender was also found for this category, with girls receiving higher scores than boys. Personal disclosure was defined as talking about one's own experiences, expressing opinions, and making affective disclosures. This category also revealed a main effect for gender, with girls receiving higher scores than boys. These findings support the

notion that boys and girls do not differ in sustaining intimate affect in their friendships, although they do seem to use different behavioral routes to achieve intimacy and connectedness.

Although there is substantial evidence that girls engage in more self-disclosure than boys, there is less evidence on whether or not a gender difference in intimacy exists. The sex differences that occur in the discussion of intimacy in same-sex friendships may be occurring because interpersonal disclosure is not the means through which boys achieve intimacy in friendships. Research that allows for the diversity in the expression of intimacy may lead to a richer understanding of the stylistic preferences in interpersonal connectedness. Girls and boys appear to emphasize different behavioral pathways to emotional closeness, but they both seem to rely on and seek intimacy to the same extent.

### Developmental Differences

Previous researchers have studied developmental differences in intimacy between preadolescents and adolescents to a lesser extent than gender differences. A similar controversy seems to be occurring among researchers regarding the qualitative and quantitative differences of intimate behaviors displayed by preadolescents and adolescents. Preadolescents tend to exhibit less mature and less emotional forms of intimate behaviors in their same-sex friendships than adolescents. Again, the conceptualization of intimacy that is used in the study seems to determine the type of developmental differences that appear between adolescents and preadolescents.

### Development of Self-Disclosure

An emergence of the need for intimacy in same-sex friendships first appears during preadolescence. Throughout preadolescence there is a coalescence of several issues that achieve prominence at this point in every child's life, such as concerns about social definition and social



validation (Buhrmester & Prager, 1995). Children deal with these issues through private and self-revealing conversations with their peers, which often lead to the formation of intimate friendships (Buhrmester & Prager, 1995). The emergence of the need for intimate confidants appears to be linked to a number of factors occurring simultaneously during preadolescence. These factors include pubertal maturation, the growth of formal-operational cognitive abilities to reflect on oneself, and American cultural values that encourage individual identity exploration through conversations with peers (Buhrmester, 1996).

Young children develop friendships with peers, but they tend to emphasize the importance of concrete behaviors in their friendships, such as common activities and helping. Friendships among elementary school-aged children revolve primarily around playmate activities and group acceptance, whereas preadolescent and adolescent same-sex friendships gradually become more intimate in nature (Buhrmester, 1990).

As children grow older and reach adolescence they begin to stress the significance of more abstract characteristics of friendship, such as acceptance, understanding, and loyalty (Berndt, 1997). During early adolescence, children's friendships seem to become more intimate as indicated by more frequent companion exchanges, self-disclosure, and provision of emotional support (Buhrmester, 1990). Adolescents appear to have an increased desire for self-disclosure and self-exploration rooted in a need for validation of personal worth (Buhrmester, 1990).

The major change in friendship quality from preadolescence to adolescence is an increase in the depth and amount of self-disclosure that occurs between friends (Kerns, 1996). Intimacy and loyalty are the primary characteristics that distinguish adolescent same-sex friendships from any other previous friendship (Savin-William & Berndt, 1990). The relative importance of friends as confidants seems to reach its relative peak in adolescence (Buhrmester, 1996). Young

teens come to desire or need intimate confidants with whom they can share and explore their opinions about others and their concerns about themselves (Parker & Gottman, 1989). Through conversations of self-disclosure, friends can validate one another's opinions about peers and about themselves.

Same-sex friendships during adolescence seem to be more developed and critical to maturation than during preadolescence. Buhrmester (1990) discovered that eighth graders perceived their same-sex friends as the greatest source of companionship and intimacy. Companionship and intimate disclosure with parents tends to decrease as children reach adolescence, and the level of companionship and intimacy with same-sex peers appears to increase. Adolescent friends look to one another for help in getting over bad moods and solving problems about affect (Gottman & Mettetal, 1986). Adolescent friends also seem to be more willing and capable to confront one another, which demonstrates an intimate caring (Gottman & Mettetal, 1986). This type of action is often referred to as mindreading because the friends are able to tell how the other is feeling or thinking without directly being told.

Confrontation and honesty represent a communication of intimacy among adolescent friends (Gottman & Mettetal, 1986). One of the concerns in adolescent friendships is maintaining the intimacy of the friendship. Adolescent friends often maintain or increase the level of intimacy between them through communication and self-disclosure (Gottman & Mettetal, 1986). Developmental differences in the level of intimacy and self-disclosure in same-sex friendships seems to be related to cognitive development (Berndt, 1982). Adolescents often have greater cognitive ability than preadolescents, which allows them to have more intimate knowledge of their friends since they are better able to understand each others thoughts and feelings.

Other researchers studied the development of intimacy levels in same sex friendships among preadolescents and adolescents and also found significant developmental differences. Jones and Dembo (1989) discovered a significant main effect for age grouping. The intimacy means of the 11,12,13, and 14 year olds were significantly higher than the means for the 9 and 10 year olds, but the intimacy means remained steady among the 11, 12,13, and 14 year olds. The intimacy level in friendships seems to stabilize as individuals approach middle adolescence. The Furman and Buhrmester (1992) and Berndt, Hawkins, and Hoyle (1986) studies support these developmental differences in intimacy through self-disclosure. Intimacy scores of same-sex friendships of seventh, eighth, and tenth graders were significantly greater than the scores of fourth graders. The children's change in perception of a greater dependence on friends for emotional support may be a consequence of the gradual process of trying to develop autonomy from their parents. Many researchers claim there are developmental differences in intimacy when their research focuses on the act of self-disclosure.

### Pathways to Intimacy

In the research study conducted by Buhrmester (1990), adolescents did not rate their relationships with their close friends as more intimate than preadolescents. Yet, there was a difference in the types of intimate behaviors that were displayed by preadolescents and adolescents. Interpersonal competence was strongly related to intimacy during adolescence, but not during preadolescence. Preadolescent friendships typically do not demand the interpersonal competencies called for in more mature forms of close relationships. The difference in intimate behaviors between preadolescents and adolescents suggests that there is greater reciprocity in perceptions and feelings of closeness among adolescents than preadolescents.

Preadolescents and adolescents seem to use different behaviors to establish intimate friendships (Buhrmester, 1990). Preadolescents appear to engage in more activity-related behaviors, such as playing games and sharing jokes. Whereas, adolescents seem to engage in more emotional behaviors, including self-disclosure and trust. Some researchers believe that the different behaviors used to form intimate friendships results in different levels of intimacy between preadolescent and adolescent friendships. Adolescents appear to form more intimate bonds because their behaviors are considered more mature and emotional. On the contrary, other researchers claim that the only developmental difference in intimacy is the type of behaviors used during different ages to attain intimate friendships capable at the specific time of development.

### Cultural Differences

Researchers have only begun to touch on the exploration of cultural differences in intimacy in same-sex friendships. Many questions about the development and appearance of intimacy in various cultures remains unanswered. Triandis (1978) claims that intimacy is a universal social behavior that is demonstrated by people across cultures. Individuals from all cultures seem to understand the difference between intimate and formal behaviors, but demonstrate the behaviors to various degrees depending on the type of interaction. Intimacy includes such behaviors as self-disclosure, expressing emotions, and touching. Whereas, formal behaviors refer to doing what etiquette requires.

Several researchers have suggested that members of collectivist and individualist cultures seem to form intimate relationships with different people through different behavioral pathways. (Savin-Williams & Berndt, 1990). Societies are often characterized by the level of collectivism or individualism that their members display through their behaviors and values. Individualist

and collectivist societies encourage mutually exclusive values that usually remain stable over time (Cooper, 1999). Members of collectivist societies focus on the power of the group, and they believe that the group prevails over the interest of the individual (Hofstede, 1997). Collectivism is concerned with the generalized collectivity of the people and stresses the importance of taking the values and interests of the group into account before acting (Yum, 1988). When children are raised in collectivist societies they are taught to think of themselves as part of a “we” group, a relationship which is not voluntary but given by nature (Hofstede, 1997). The “we” group usually includes members of the individual’s extended family. The “we” group, also referred to as the in-group, is the major source of one’s identity in a collectivist society, and the only secure protection one has against the hardships of life. People from collectivist societies are integrated into strong, cohesive in-groups, which are meant to protect people in exchange for unquestioning loyalty.

Individualist societies differ from collectivist societies in that their members believe that the interest of the individual prevails over the interest of the group (Hofstede, 1997). Members of individualistic societies have a desire to define their self. When children grow up in individualist societies they are taught to think of themselves as “I,” and are not classified according to their group membership but for their individual characteristics. Individualism is also defined as an emotional independence of people from groups and organizations (Hofstede, 1997). Ties between individuals of individualist societies are generally fairly loose, and everyone is expected to look out for themselves and their immediate family.

Hofstede (1997) measured the degree of individualism in 50 countries and 3 regions based on the individuals ranking of their work goals. The United States was ranked number one in individualism, relative to the other societies included in the study. Individuals from the

United States ranked work goals that focused on independence from the work organization as the most important (personal time, freedom, challenge). On the other hand, Indonesia was ranked number 48 in the degree of individualism displayed by the members of the society. Indonesian respondents focused their work goals on the employee's dependence on the organization (training, physical conditions, use of skills).

### Differences in Self-Disclosure

Different cultures tend to demonstrate self-disclosure through different relationships. DeRosier and Kupersmidt (1991) used the Network of Relationships Inventory (NRI) to explore differences among fourth and sixth grade children from various social systems of Costa Rica, which is considered a collectivist society, and America, which is considered an individualist society. One of the major findings in the study was the difference in intimacy between the collectivist and individualist cultures. Intimacy was defined by the researchers as the act of opening up and disclosing to others. They discovered that Costa Rican children reported that their mothers and siblings provided them with the highest level of companionship and intimacy. In contrast, American children attributed these qualities to their best friends. On the other hand, Costa Rican children rated their best friends as providing them with more instrumental aid than American children's best friends. Family relationships were considered more prominent by children in Costa Rica than the United States. Costa Rican parents were perceived as the most important providers for all positive qualities examined by the NRI, but in the United States best friends were often viewed as more prominent than parents for many of these positive qualities. These results support the hypothesis that cultural ecology has an impact on the relative importance and functions of supportive individuals, including peers. Many collectivist cultures stress the importance of families and the families are considered the child's in-group. Members

of collectivist cultures tend to have distant relationships with anyone outside their in-group, which may cause their relationships with their peers to be less intimate than American children's friendships.

There are cultural differences in the social rules of collectivist and individualist societies that must be mastered by children in order for them to become socially competent (Schneider, 1993). Researchers are beginning to learn that self-disclosure and the appropriate use of it is viewed differently depending on what type of culture is involved. Wellenkamp (1995) discovered that members of the Indonesian culture value emotional-restraint and equanimity in their everyday life. Members of the Indonesian culture are not encouraged to open up emotionally to their peers, only their family members. This differs from what is typical members of Western cultures. Self-disclosure is accepted by individuals of Western societies, such as the United States, and children are encouraged to express their emotions freely. Individuals of Indonesian and American societies appear to be taught different views regarding the act of self-disclosure.

Previous research has shown differences in intimacy levels between the children and adolescents of Indonesia and the United States. French, Jansen, Fosco, Rianasari, Pidada, & Nelwan (2000) found that both countries showed that girls reported more self-disclosure in their friendships than boys, and the eighth graders reported more self-disclosure than the fifth graders. Although both countries showed developmental effects the effect was greater for the U.S. than Indonesian youth. French, Buhrmester, Rianasari, Pidada, & Nelwan (2000) found similar intimacy results when they assessed the two countries using the NRI. The U.S. youth reported that their friends provided them with the most social support, whereas Indonesian youth reported that their family members provided them with the most social support.

### Differences in Behavioral Routes

Collectivist and individualist cultures tend to encourage different behavioral routes to the attainment of intimate friendships. The United States encourages individuals to explore their identity through conversations with peers (Buhrmester, 1990). Members of the United States expect people to confide in their peers and go to one another for advice. Whereas, members of Indonesia encourage children to form intimate friendships through the act of helping, giving, and sharing material items, but not through the disclosure of feelings (Magnis-Suseno, 1997). Members of the Javanese society is expected to share their belongings with each other, as stated in the proverb: "When there is scarcity, it is shared; when there is abundance, it is also shared." The Javanese are expected to loan out practical objects as well as small amounts of cash. Members of the Javanese society are also expected to help their family and neighbors at all times. The people are dependent upon each other, therefore, it is important to maintain good relationships with others.

Triandis (1986) discovered that members of collectivist cultures draw sharper distinctions between members of in-groups and out-groups and perceive in-group relationships to be more intimate than members of individualistic cultures. Collectivist cultures often require that each member is affiliated with a relatively small and tightly knit group over a long period of time (Yum, 1988). Within the group, each member expects the others to reciprocate and depend on each other at some time. Members of collectivist cultures are found to disclose more information within their in-group and less within their out-groups (Triandis, 1994). People in the United States often do not distinguish as strongly between an in-group and out-group (Yum, 1988). Usually membership to a group is voluntary and mobile in individualist cultures. The loyalty to any particular group is limited and determined by the individual involved.



Indonesians tend to consider their in-group to be composed of their nuclear family. The Javanese are encouraged never to show their true feelings, regardless if they are positive or negative, in interpersonal relationships outside of their family. The members of the Javanese society are constantly under pressure to control their spontaneous impulses and emotions when they are with other people (Magnis-Suseno, 1997). The family is the only place within the Javanese society where individuals can be themselves and feel free and safe. People are required to inhibit their natural drives the least when they are with their nuclear family. Individuals are taught only to place their confidences in members of the nuclear family and sometimes second-degree relatives. Since Javanese individuals feel safe within the family circle, it is the only atmosphere where they can openly express their emotions. The child is taught not to show feelings in public because this could result in embarrassment, but one does not need to worry about embarrassment in the family circle because a child is always sure of parental support. The Javanese family is the only place within society that the individual can truly be and show their self.

#### Methodology Problems in Past Intimacy Research

Previous research that has studied intimacy in same-sex friendships has used several different methods in order to gather the data. A few studies measure intimacy through behavioral observation (e.g., McNelles & Connolly, 1999). For example, McNelles and Connolly (1999) observed various behaviors during ten minute interactions between mutually nominated friends by giving them specific tasks to perform. Although this is a valuable approach to studying intimacy, there are also some methodological problems with this approach. First, arranging interactions between pairs of friends and then coding the resulting conversation is often difficult and time consuming. Second, conducting observational data is extremely

expensive. Third, many times when children are put in structured situations or limited time frames they do not display intimate behaviors, but that does not necessarily mean that the friends do not engage in intimacy. Fourth, the data is limited to only observable behaviors. Conceptualizations of many variables include behaviors and items that are not observable, and therefore, the researchers cannot use some important behaviors and components of variables in their study, which could make the study incomplete.

Most researchers have used questionnaires in order to gather data regarding same-sex friendships (e.g., Furman & Buhrmester, 1985; Buhrmester & Furman, 1987; Buhrmester, 1990). The most common questionnaire that has been used in friendship studies is the Network of Relationships Inventory (NRI). Furman and Buhrmester (1985) developed this questionnaire in order to examine the similarities and differences among various personal relationships in children's social networks, such as parents, peers, grandparents, and teachers. This particular version of the NRI consists of 30 questions, which assess the following 10 relationship qualities: reliable alliance, enhancement of worth, instrumental help and guidance, companionship, affection, intimacy, relative power of child and other, conflict, satisfaction with the relationship, and importance of the relationship.

Other questionnaires have also been used to study intimacy in same-sex friendships. Buhrmester (1990) used parts of the NRI and the entire Adolescent Interpersonal Competence Questionnaire (AICQ), which assessed the competence of a friend in self-disclosure, emotional support, management of conflicts, negative assertions, and initiation of friendships. Jones and Dembo (1989) gathered intimacy data by using the Sharabany Intimate Friendship Scale, which is a 64-item Likert scaled questionnaire consisting of sentences that are descriptive of friendship. The questionnaire is shown to measure intimacy as a general factor and for each intimacy

component. Intimacy was broken down into eight separate scales: frankness & spontaneity, sensitivity & knowing, attachment, exclusiveness, giving & sharing, imposition, common activities, and trust & loyalty.

Questionnaires are useful in data collection, but they are limited. First, they lack predictive validity because the results may not be able to predict other children's behavior. Second, the methods cannot provide information about the day-to-day or minute-to-minute dynamics of the social exchanges that occur within the friendships (Gottman, 1986). A third limitation is that questionnaires only measure the children's perceptions of the characteristics of their friendships (Rottenberg, 1995). Questionnaires merely measure what the child perceives to experience in specific friendships. Further research is needed to determine the relation between children's perceptions of their friendships and the actual patterns of interaction that occur in the friendship. Fourth, self-report bias often occurs in the distribution of questionnaires, which means that participants are not good at describing individual differences in friendships and merely report their idealized relationships.

In order to fully understand and study intimacy in same-sex friendships another method is needed in correspondence with questionnaire data and behavioral observation. In the present study, an open-ended interview was used in order to gather data about the level and type of intimacy in preadolescent and adolescent same-sex friendships of American and Indonesian children. Researchers will then be able to measure whether or not children spontaneously mention intimate behaviors as an aspect of their friendships.

The interview methodology, however, presents a confound that is particularly important for interpretation of cultural differences (Weisz, Chaiyasit, Weiss, Eastman, & Jackson, 1995). Weisz and his colleagues did extensive research on the validity of cross-cultural differences, and

found that it is impossible to know whether or not the behaviors are mentioned in the interviews because of their frequency or saliency. The research done by Weisz et al. compared teacher's descriptions of their students with direct observation results that were done by the researchers. The results from the self-report and observation were extremely different. The teachers seemed to be reporting salient behaviors and the observers were recording the actual frequency of the behaviors. The participants in the present study may be mentioning the intimacy behaviors as aspects of their friendships because they occur frequently or they may be mentioning them because they are a salient aspect of their friendships.

The present study also uses a broad conceptualization of intimacy to code the resulting interviews. Relatively concrete behavioral routes (conflict management, companionship) to intimacy and more mature behavioral routes (emotional support, self-disclosure) to intimacy were assessed. The coding system does not only focus on self-disclosure as the main component of intimacy in same-sex friendships.

It was anticipated that the gender differences typically seen in self-disclosure would emerge in both the U.S. and the Indonesian samples. It was also expected that developmental differences would be found, and that the adolescents from both countries would display more self-disclosure with their friends than the younger children. It was also expected that U.S. participants, females, and older children would report more emotionally centered behaviors and self-disclosure when describing their friendships, whereas the Indonesian participants, males, and younger children would report more activity centered behaviors.

### Method

The data that were used in this study came from a study conducted by French, Jansen, Fosco, Riansari, Pidada, and Nelwan (2000), as part of a cross-cultural study of friendship

qualities. Secondary analyses were computed on the sample of participants that participated in the interview portion of the larger study. A new coding system was developed and different analyses were computed in order to explore the new subject of intimacy.

### Participants

The Indonesian sample included 60 fifth and 60 eighth grade students. There was an equal number of males and females in the fifth and eighth grade samples. Of the Indonesian participants, the fifth graders ranged in age from 9.75 to 11.75 ( $M=10.25$ ), and the eighth graders ranged in age from 12.75 to 16.10 ( $M=13.7$ ). The Indonesian sample was gathered from five elementary schools and two junior high schools.

The United States sample consisted of 50 fifth graders and 55 eighth graders. The fifth grade sample was composed of 25 males and 25 females, and the eighth grade sample consisted of 29 males and 26 females. The fifth grade students ranged in age from 10.58 to 11.92 ( $M=11.35$ ), and the eighth grade students ranged in age from 13.17 to 15.42 ( $M=14.21$ ). All of the participants from the United States were European-American, except for two whose ethnicity was unknown. The participants were drawn from four elementary schools and one junior high school.

All the Indonesian participants were recruited from public schools in Bandung. Bandung has a population of over two million and is the third largest city in Indonesia (Peacock, 1973). It is located on the Island of Java, approximately 160 km from Jakarta. Bandung is the home of several Universities, textile producers, and technological developers.

The United States participants were all recruited from the same area. The public schools were all in the same medium sized Midwestern community. The community is a center for university education, manufacturing, and insurance.

The Indonesian participants came from middle class families. The fathers of the participants were found to hold a wide array of occupations, including university lecturers, public school teachers, civil servants, physicians, army officers, and even tailors and drivers. The majority of the participant's mothers did not work outside of the home (70%). The mothers who did work possessed occupations similar to the fathers. The mother's and father's level of education ranged from high school to college. Thirteen percent of the mothers and 18% of the fathers had four or more years of college, 36% and 34% had a high school diploma, and 50% and 43% had less than a high school education. Seventy-eight percent of the participants were Sundanese, 14% identified themselves as Javanese, and the remaining 8% identified themselves as unspecified Indonesian ethnicity. All of the participants claimed they were Muslim.

The United States sample was also middle class and diverse in parental income. Seventeen percent of the participants reported that their household income was below \$40,000 a year and 51% reported that their income was above \$60,000 a year.

### Measures

Friendship Interview. An open-ended interview was conducted individually with each participant, in which the children and adolescents were asked to describe their liked and disliked peers. For the purpose of this study, only the participant's descriptions of their liked peers will be analyzed.

At the beginning of the interview, each participant was asked to name two same-sex peers they liked and two same-sex peers they disliked. Five open-ended questions were then asked about the first child the participant named. These five questions were repeated for the remaining three children the participant named at the beginning of the interview. The interview questions were a) Now I would like you to tell me about \_\_\_\_\_ (Insert the name of the liked or

disliked peer that is being discussed.). Tell me why you like (or dislike) this person. b) Is there anything about the way this child behaves with you that makes you like (or dislike) him/her? c) Is there anything about the way that this child behaves with other kids that makes you like (or dislike) him/her? d) Is there anything about the way this child looks or dresses that makes you like (or dislike) him/her? e) Is there anything about the way this child acts with adults (e.g., teachers or parents) that makes you like (or dislike) him/her? The results of each interview were transcribed verbatim and then coded from the transcriptions.

Coding system. The coding system consisted of three major categories that were used to code the transcripts of each of the participant's descriptions of their liked peers. The coding system focused on the behaviors associated with the formation and continuance of intimate friendships between same-sex children and adolescents. The coding system used in this study is based on the coding systems used by McNelles and Connolly (1999) and Camarena, Sarigiani, and Petersen (1990) in their previous research on intimacy in social interactions. The coding systems do not limit the exploration of intimate relationships to self-disclosure, but instead expand the components of intimate relationships to include activity centered behaviors, emotionally centered behaviors, and self-disclosure.

McNelles and Connolly (1999) and Camarena et al. (1990) both identified three similar dimensions of intimacy. McNelles and Connolly labeled their first dimension as activity centered behaviors. These included sharing an activity, engaging in play, and joke telling. Sharing an activity implies that the children were helping each other with something or spending time together. Children were recorded as engaging in play together if they spent time in fantasy or role play activities. Joke telling was coded when the children told jokes to each other.

Camarena et al. labeled their first dimension as shared experience, which included any time the friends spent together.

McNelles and Connolly's second dimension of intimacy is labeled discussion of topics, and includes the behaviors of talking about topics and events, gossip, and shared complaints. Camarena et al. labeled their second dimension emotional closeness, and it included any mention of acceptance, understanding, importance of the friendship, and satisfaction towards the friendship. These behaviors seem to imply such behaviors as loyalty, trust, and support within the friendship.

The final dimension of intimacy that McNelles and Connolly and Camarena et al. both agree on was self-disclosure. This category included sharing feelings and advice, talking about one's personal experiences, expressing individual opinions, and engaging in affective disclosures.

The coding system used in the present study is based on the two coding systems described above. Ten behaviors were included in the present coding system (see Appendix for the complete coding manual). The behaviors were extracted from the descriptions of the behaviors that were coded by McNelles and Connolly and Camarena et al. Self-disclosure is used in the present coding system since it seems to be so important in the exploration of intimacy.

A category of emotionally centered behaviors was also included in the present coding system. This category included the behaviors of loyalty, trust, emotional support, and mindreading. These behaviors are defined similarly to the behaviors coded by the other researchers. These are the behaviors that involve affective engagement between the peers and an extreme understanding of the friendship.



The final category in the present coding system was referred to as activity centered behaviors. This category includes instrumental aid, humor, similarities and differences, conflict management, and companionship. Again, these behaviors are similar ideas to those of the prior coding systems. Activity centered behaviors require children and adolescents to spend time together engaging in various concrete activities that lead them to learn about their friends and themselves.

### Procedure

The researchers gained permission from the government, public schools, and parents in order to conduct the Indonesian portion of the study. The students were assessed at their school by two undergraduate research assistants. The interviews were conducted individually with each participant.

The U.S. participants were recruited by the researchers by sending a letter to all the parents of the needed ages in three elementary and one junior high schools requesting participation. The students who returned a prepaid postcard (27%) and a parent permission form were then assessed individually by undergraduate research assistants during non-school hours at either their school or a University laboratory. The students were told they could choose not to answer a question or stop the interview session at any time. The interview lasted about 30 minutes for each participant. Students were given a small gift (\$5.00 or a University t-shirt or hat) for participating.

The participant's answers to the interviews were then independently coded by two undergraduate research assistants. They used the coding system that was described above and in the Appendix. After each person coded the interviews independently, all the interviews were

checked for reliability between the two coders. The two coders fixed the discrepancies by discussing each one and then choosing the most appropriate code.

### Hypotheses

The following results were expected to emerge from the statistical analyses. These will be segregated into main effects and interactions.

#### Gender Main Effect

It was hypothesized that females would report more instances of intimacy through self-disclosure and emotionally centered behaviors in their same-sex friendships than males. This hypothesis is consistent with the findings of Buhrmester and Crabery (1992) and Dolgin and Kim (1994).

Also, males were predicted to report more instances of activity centered behaviors in their friendships than females. This prediction is supported by the previous research done by Camarena, Sarigiani, and Petersen (1990) and McNelles and Connolly (1999), which claims that females and males use different behaviors in their intimate friendships.

#### Developmental Main Effects

It was hypothesized that fifth graders would describe their friendships as more activity centered than eighth graders, and eighth graders will report more self-disclosure and emotionally centered behaviors in their friendships than fifth graders. This developmental difference is consistent with the research that has been done by Buhrmester (1996) and Furman and Buhrmester (1986).

#### Cultural Main Effects

It was predicted that the U.S. participants would mention more emotionally centered behaviors than the Indonesian participants. On the other hand, the Indonesian participants are

were expected to mention activity centered behaviors more often than the U.S. participants. Previous research done by French, Jansen, Fosco, Rianasari, Pidada, and Nelwan (2000) has shown extremely strong country effects that are consistent with these hypotheses. U.S. youth seem to receive most of their social support from their friends, whereas, Indonesian children seem to rely on their families for social support.

#### Development by Gender Interaction Effects

A significant interaction effect between gender and development was also anticipated. It was predicted that the main development effect for self-disclosure and emotionally centered behaviors would be more prevalent in females. Maccoby (1990) supports this prediction because she claims that children's play patterns teach them how interact as adolescents. Since girls are more likely than boys to engage in small group and intimate play, they learn more intimate patterns of social interaction.

#### Country by Development Interaction Effects

It was predicted that a significant interaction effect between country and development would emerge. It was expected that the main development effect would be more pronounced in the United States sample. French, Riansari, Pidada, Nelwan, and Buhrmester (2000) supports this hypothesis because their research shows that the developmental effect more pronounced in the U.S. data than the Indonesian data. U.S. youth are more likely to show greater developmental increases in their formation of intimate friendships than Indonesian youth.

### Results

Percent agreement and Kappa were computed for each dependent variable as a function of grade and country. As shown in Table 1, the two coders showed very high reliability.

The data were analyzed using hierarchical logistic regression analyses. These analyses were used because the dependant and independent variables are dichotomous. The dependant variables were coded as either being mentioned or not mentioned by the participant during the interview. The frequency that each behavior was mentioned by the participants is reported in Table 2.

Gender, grade, and country main effects were entered in the first block. The second block included the Gender by Grade, Gender by Country, and Country by Grade two-way interactions, and the main effects. The final block included the main effects, two-way interactions, and added the three-way interaction of Country by Grade by Gender. Upon the entry of each block, a chi square statistic assessing the change in adequacy of the model was computed ( $\Delta X^2$ ).

Individual interaction terms were analyzed only if the addition of the block containing those terms produced a significant improvement in the fit of the model. An alpha of  $p < .01$  was used in determining whether or not each block produced significant improvement in the model. Each main effect and interaction effect within a significant contributing block were tested for significance using a  $z$  statistic and an alpha of  $p < .01$ . This alpha was used because of the large number of analyses performed.

Table 1

Percent Agreement (%) and Kappa (K) for Each Dependent Variable as a Function of Country and Grade

	United States				Indonesia			
	<u>Fifth Grade</u>		<u>Eighth Grade</u>		<u>Fifth Grade</u>		<u>Eighth Grade</u>	
	%	K	%	K	%	K	%	K
Self-disclosure	.9945	.8544	.9878	.8545	.9975	.8738	.9938	.9318
Trust	.9978	.9364	.9956	.9389	.9975	.9321	.9988	.9761
Loyalty	.9891	.9135	.9845	.8078	.9951	.9260	.9877	.7939
Emotional Support	.9912	.8664	.9845	.8645	.9963	.9072	.9877	.9266
Mindreading	1.0	*	1.0	*	1.0	*	1.0	*
Conflict Management	.9967	.9252	.9978	.9274	1.0	*	.9988	.9406
Instrumental Aid	.9923	.9051	.9967	.9251	.9839	.9464	.9877	.9508
Humor	1.0	*	.9989	.9926	.9963	.9435	1.0	*
Similarities and Differences	.9978	.9841	.9956	.9788	1.0	*	1.0	*
Companionship	.9945	.9639	.9645	.9557	.9951	.9781	.9914	.9489

*Note: Kappa cannot be computed when the percent agreement = 1.0; this is indicated by an asterisk.*

Table 2

Frequency of Each Behavior Reported in Percentages

	United States				Indonesia			
	<u>Fifth Grade</u>		<u>Eighth Grade</u>		<u>Fifth Grade</u>		<u>Eighth Grade</u>	
	Males	Females	Males	Females	Males	Females	Males	Females
Self-disclosure	8.0	26.0	12.1	50.0	5.0	10.0	6.7	40.0
Trust	6.0	18.0	12.1	46.2	16.7	8.3	8.3	20.0
Loyalty	48.0	38.0	15.5	40.4	10.0	26.7	16.7	18.3
Emotional Support	12.0	38.0	15.5	55.8	5.0	21.7	36.7	63.3
Mindreading	0.0	2.0	1.7	3.8	0.0	0.0	0.0	0.0
Conflict Management	6.0	30.0	10.3	17.3	1.7	8.3	3.3	11.7
Instrumental Aid	44.0	18.0	12.1	21.2	81.7	95.0	85.0	68.3
Humor	48.0	36.0	46.6	51.9	16.7	21.7	25.0	11.7
Similarities and Differences	56.0	40.0	67.2	61.5	1.7	0.0	0.0	5.0
Companionship	60.0	46.0	41.4	44.2	76.7	65.0	60.0	45.0

### Self-Disclosure

As seen in Table 3, only the first block produced a significant improvement in the model for self-disclosure. The anticipated gender and development main effects were found to be significant. Females were more likely than males, 30% versus 8%, to mention self-disclosure in their descriptions of their friendships. Eighth graders were more likely than fifth graders, 27% versus 12%, to mention self-disclosure.

### Emotionally-Centered Behaviors

Trust. As seen in Table 4, entry of the first two blocks produced significant improvements in the model for trust. Surprisingly, a significant country main effect was found in the analyses of trust. The U.S. participants were more likely than the Indonesian participants (21% vs. 13%) to mention trust in their descriptions of their friendships.

Loyalty. As shown in Table 5, blocks one and three produced a significant improvement in the model for loyalty. Although, gender and developmental effects were expected to be found in the loyalty analyses, they were not. Instead, a significant country main effect and Country by Gender by Development interaction emerged. The U.S. participants were more likely than the Indonesian participants (35% vs. 18%) to mention loyalty in their descriptions of their friendships.

Figure 1 is provided in order to help understand the Country by Gender by Development interaction. The loyalty data is broken down by country. The significant three-way interaction is explained in part by the country main effect, and the U.S. males distinct pattern of behavior. As shown in the Figure, the U.S. fifth grade males mentioned trust more than any other group of participants. Also, the U.S. males mentioned loyalty more in fifth compared to eighth grade, whereas, all the other groups of participants remained fairly stable.

Table 3

Hierarchical Logistic Regression Analysis of Self-Disclosure

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	-1.78	.29	-6.14**	.17	F>M
$X^2(3)=65.01^{**}$	Grade	-1.12	.27	-4.15**	.33	8>5
	Country	.63	.26	2.42	1.88	
Block 2						
$X^2(3)=3.40$						
Block 3						
$X^2(1)=.54$						

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



Table 4

Hierarchical Logistic Regression Analysis of Trust

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	-.90	.27	-3.33**	.41	F>M
$X^2(3)=21.68^{**}$	Grade	-.66	.27	-2.44*	.52	8>5
	Country	.54	.26	2.08	1.71	
Block 2	Gender	-.73	.48	-1.52	.48	
$X^2(3)=15.46^*$	Grade	-.73	.48	-1.52	.48	
	Country	1.40	.40	3.50**	4.05	US>IN
	GenderXGrade	1.23	.57	2.16	-----	
	CountryXGrade	-.82	.56	-1.46	-----	
	CountryXGender	-1.32	.56	-2.36	-----	
Block 3						
$X^2(1)=1.07$						

Note: \*  $p < .01$ , \*\*  $p < .001$ ; Odds ratios were not computed for interactions.

Table 5

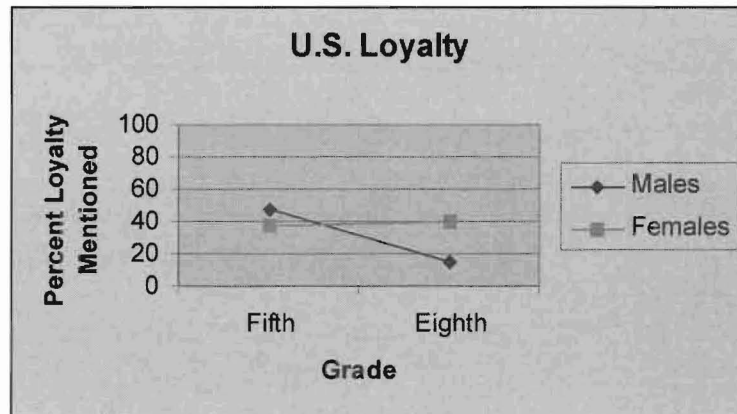
Hierarchical Logistic Regression Analysis of Loyalty

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	-.49	.22	-2.23	.62	
$X^2(3)=25.17^{**}$	Grade	.42	.22	1.91	1.52	
	Country	.93	.22	4.23**	2.53	US>IN
Block 2	Gender	-.91	.42	-2.16	.40	
$X^2(3)=3.70$	Grade	-.15	.38	-.39	.86	
	Country	.50	.37	1.35	1.65	
	GenderXGrade	.52	.45	1.16	-----	
	CountryXGrade	.59	.45	1.31	-----	
	CountryXGender	.25	.46	.54	-----	
Block 3	Gender	-.12	.48	.25	.89	
$X^2(3)=9.09^*$	Grade	.48	.44	1.09	1.62	
	Country	1.10	.44	2.50*	3.02	
	GenderXGrade	-1.07	.71	-1.51	-----	
	CountryXGrade	-.58	.60	-.97	-----	
	CountryXGender	-1.19	.67	-1.78	-----	
	CountryXGradeX Gender	2.78	.94	2.96*	-----	

Note: \*  $p < .01$ , \*\*  $p < .001$ ; Odds ratios were not computed for interactions.

## Figure Caption

Figure 1. Percent of loyalty mentioned by participants broken down by country, grade, and gender.



Emotional Support. As shown in Table 6, the entry of blocks one and two provided significant improvements in the model for emotional support. As anticipated, a significant gender main effect, development main effect, and Country by Development interaction were found through the analyses. Females were more likely than males (45% vs. 18%) to mention emotional support in their descriptions of their friendships. Eighth graders were more likely than fifth graders (43% vs. 19%) to mention emotional support. The Country by Development interaction resulted from the significant increase in Indonesian participants mention of emotional support from fifth to eighth grade, whereas the U.S. participants did not show a significant developmental increase in their mention of emotional support.

Mindreading. Table 7 shows that none of the blocks provided significant improvement to the model for mindreading. Mindreading was rarely mentioned by any of the participants in their descriptions of their friendships.

#### Activity Centered Behaviors

Conflict Management. As shown in Table 8, block one was the only block that provided significant improvement in the model for conflict management. Although males were expected to be higher in conflict management than females, the opposite effect emerged. Females were more likely than males (16% vs. 5%) to mention instances of conflict management in their descriptions of their friendships. An unexpected significant country main effect was also found. U.S. participants were more likely than Indonesian participants (16% vs. 6%) to mention conflict management.

Table 6

Hierarchical Logistic Regression Analysis of Emotional Support

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	-1.46	.23	-6.35**	.23	F>M
$X^2(3)=74.77^{**}$	Grade	-1.32	.23	-5.74**	.27	8>5
	Country	-.10	.22	-.45	.91	
Block 2	Gender	-1.23	.35	-3.51**	.29	
$X^2(3)=11.88^*$	Grade	-1.99	.38	-5.24**	.14	
	Country	-.46	.36	-1.28	.63	
	GenderXGrade	-.04	.51	-.08	-----	
	CountryXGrade	1.43	.48	2.98*	-----	
	CountryXGender	-.50	.48	-1.04	-----	
Block 3						
$X^2(1)=.93$						

Note: \*  $p < .01$ , \*\*  $p < .001$ ; Odds ratios were not computed for interactions.

Table 7

Hierarchical Logistic Regression Analysis of Mindreading

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio
Block 1					
$X^2(3)=8.26$					
Block 2					
$X^2(3)=.62$					
Block 3					
$X^2(1)=.99$					

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

Table 8

Hierarchical Logistic Regression Analysis of Conflict Management

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	-1.29	.35	-3.69**	.27	F>M
$X^2(3)=26.13^{**}$	Grade	.06	.32	.19	1.06	
	Country	1.08	.33	3.27**	2.95	US>IN
Block 2						
$X^2(3)=3.43$						
Block 3						
$X^2(3)=.34$						

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



Instrumental Aid. Table 9 shows that blocks one and three provided significant improvement in the model for instrumental aid. As anticipated, significant development and country main effects were found in the analyses for instrumental aid. Fifth graders were more likely than eighth graders (62% vs. 48%) to mention instrumental aid in their descriptions of their friendships. Indonesian participants were more likely than U.S. participants (83% vs. 23%) to mention instrumental aid in their descriptions of their friendships.

Surprisingly, a Gender by Development interaction, Country by Development interaction, and Country by Gender by Development interaction were all found to be significant for instrumental aid. The Gender by Development interaction is explained by the male participants showing a greater decrease in their mention of instrumental aid from fifth to eighth grade, compared to females. The Country by Development interaction resulted from the decrease in the U.S. participants mention of instrumental aid from fifth to eighth grade, whereas, the Indonesian participants mention of instrumental aid remained stable from fifth to eighth grade. The Country by Gender interaction occurred because the U.S. males mentioned instrumental aid significantly more than the U.S. females, but the Indonesian participants showed no significant differences between genders.

Figure 2 is provided in order to elucidate the Country by Gender by Development interaction. The three-way interaction is caused in part by the large country main effect and the different patterns that emerged for males and females in each country. In the U.S., fifth grade males mentioned instrumental aid in their descriptions of their friendships more than the eighth graders, but the fifth grade females mentioned it less than the eighth graders. In Indonesia, fifth grade males mentioned instrumental aid less than eighth graders, and fifth grade females mentioned it more than eighth graders.

Table 9

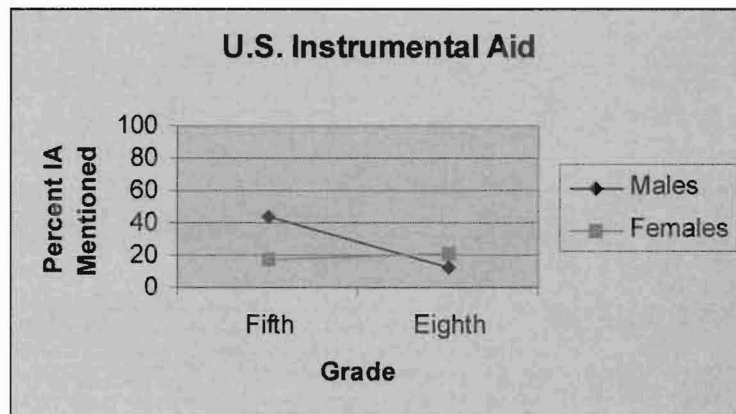
Hierarchical Logistic Regression Analysis of Instrumental Aid

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	.29	.24	1.21	1.33	
$X^2(3)=182.25^{**}$	Grade	.84	.25	3.36**	2.32	5>8
	Country	-2.84	.25	-11.36**	.06	IN>US
Block 2	Gender	.14	.39	.36	1.15	
$X^2(3)=.48$	Grade	.86	.43	2.00	2.37	
	Country	-3.02	.44	-6.86**	.05	
	GenderXGrade	-.06	.49	-.12	-----	
	CountryXGrade	.02	.49	.04	-----	
	CountryXGender	.34	.49	.47	-----	
Block 3	Gender	.97	.46	2.11	2.63	
$X^2(1)=18.04^{**}$	Grade	2.17	.65	3.34**	8.79	
	Country	-2.08	.44	-4.72**	.12	
	GenderXGrade	-2.41	.82	-2.94*	-----	
	CountryXGrade	-2.37	.82	-2.89*	-----	
	CountryXGender	-1.64	.70	-2.34	-----	
	CountryXGradeX Gender	4.36	1.08	4.04**	-----	

Note: \*  $p < .01$ , \*\*  $p < .001$ ; Odds ratios were not computed for interactions.

## Figure Caption

Figure 2. Percent of instrumental aid mentioned by participants broken down by country, grade, and gender.



Humor. As seen in Table 10, only block one provided significant improvement in the model for humor. Gender and development main effects were expected to be significant, but they were not. Instead, a country main effect was found to be significant in the analyses of humor. U.S. participants were more likely than Indonesian participants (46% vs. 19%) to refer to humor in their descriptions of their friendships.

Similarities and Differences. Table 11 displays that block one was the only block that showed significant improvement to the model for similarities and differences. Although fifth graders were expected to mention similarities and differences more often than eighth graders, the opposite effect emerged. Eighth graders were more likely than fifth graders (32% vs. 22%) to mention similarities and differences in their descriptions of their friendships. An unexpected country main effect also occurred. U.S. participants were more likely than Indonesian participants (57% vs. 2%) to mention similarities and differences.

Companionship. As shown in Table 12, the first block was the only one that provided significant improvement to the model for companionship. The expected development main effect was found in the analyses of companionship. Fifth graders were more likely than eighth graders (63% vs. 48%) to mention companionship in their descriptions of their friendships.

An unexpected country main effect was also found through the analyses of companionship. Indonesian participants were more likely than U.S. participants (62% vs. 48%) to mention companionship.

Table 10

Hierarchical Logistic Regression Analysis of Humor

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	.18	.21	.86	1.20	
$X^2(3)=39.57^{**}$	Grade	-.14	.21	-.67	.87	
	Country	1.29	.22	6.45 <sup>**</sup>	3.64	US>IN
Block 2						
$X^2(3)=.78$						
Block 3						
$X^2(1)=5.01$						

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

Table 11

Hierarchical Logistic Regression Analysis of Similarities and Differences

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	.34	.27	1.26	1.40	
$X^2(3)=208.15^{**}$	Grade	-.70	.27	-2.59*	.50	8>5
	Country	4.40	.53	8.30**	81.68	US>IN
Block 2						
$X^2(3)=3.36$						
Block 3						
$X^2(1)=3.83$						

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

Table 12

Hierarchical Logistic Regression Analysis of Companionship

Block and $\Delta X^2$	Predictor	B	S.E.	z-test	Odds Ratio	
Block 1	Gender	.41	.19	2.16	1.50	
$X^2(3)=23.21^{**}$	Grade	.62	.20	3.10*	1.85	5>8
	Country	-.58	.19	-3.05*	.56	IN>US
Block 2						
$X^2(3)=2.49$						
Block 3						
$X^2(1)=.84$						

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



Summary of Results. Several gender differences were found in emotionally and activity centered behaviors. Table 13 shows the percent of females and males that mentioned emotionally centered behaviors in their descriptions of their friends. Females mentioned self-disclosure, trust, and emotional support more often than males. Table 14 shows the percent of females and males that mentioned activity centered behaviors. As seen in the table, females mentioned conflict management more often than males. No other significant differences were found in the activity centered behaviors.

Many developmental differences were found in emotionally and activity centered behaviors. Table 15 shows that eighth graders reported more instances of self-disclosure, trust, and emotional support than fifth graders. Table 16 shows the differences found in activity centered behaviors. Eighth graders mentioned similarities and differences more often than fifth graders, but fifth graders mentioned instrumental aid and companionship more often than eighth graders.

Some cultural differences were also found in the emotionally and activity centered behaviors. Table 17 shows the differences found in the emotionally centered behaviors. The United States children mentioned trust and loyalty more often than the Indonesian children. Inconsistent country differences were found in activity centered behaviors. As shown in Table 18, the Indonesian children mentioned instrumental aid and companionship more often than the U.S. children, but the U.S. children mentioned conflict management, humor, and similarities and differences more often than the Indonesian children.

A few interactions were also found to be significant. The analyses done on emotional support produced a significant Country by Grade interaction, which is described in Table 19. The Country by Grade by Gender interaction was significant for loyalty. The frequencies of

Table 13

Gender Differences in Emotionally Centered Behaviors Reported as Percent Mentioned

Code	Males	Females	Significance
Self-disclosure	7.9	31.1	**
Trust	11.0	22.5	**
Loyalty	21.5	30.2	ns
Emotional support	17.5	44.6	**
Mindreading	0.40	1.40	ns

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

Table 14

Gender Differences in Activity Centered Behaviors Reported as Percent Mentioned

Code	Males	Females	Significance
Conflict management	5.3	16.2	**
Instrumental aid	56.6	53.2	ns
Humor	33.3	29.3	ns
Similarities & differences	29.8	24.8	ns
Companionship	59.6	50.5	ns

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

Table 15

Development Differences in Emotionally Centered Behaviors Reported as Percent Mentioned

Code	Fifth grade	Eighth grade	Significance
Self-disclosure	11.8	26.5	**
Trust	12.3	20.9	*
Loyalty	29.5	22.2	ns
Emotional support	18.6	42.6	**
Mindreading	0.50	1.3	ns

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

Table 16

Development Differences in Activity Centered Behaviors Reported as Percent Mentioned

Code	Fifth grade	Eighth grade	Significance
Conflict management	10.9	10.4	ns
Instrumental aid	62.3	47.8	**
Humor	29.5	33.0	ns
Similarities & differences	22.3	32.2	*
Companionship	62.7	47.8	*

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

Table 17

Country Differences in Emotionally Centered Behaviors Reported as Percent Mentioned

Code	United States	Indonesia	Significance
Self-disclosure	23.8	15.4	ns
Trust	20.5	13.3	**
Loyalty	34.8	17.9	*
Emotional support	30.0	31.7	ns
Mindreading	1.9	0.0	ns

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

Table 18

Country Differences in Activity Centered Behaviors Reported as Percent Mentioned

Code	United States	Indonesia	Significance
Conflict management	15.7	6.3	**
Instrumental aid	23.3	82.5	**
Humor	45.7	18.8	**
Similarities & differences	56.7	1.7	**
Companionship	47.6	61.7	*

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

Table 19

Country x Grade Interaction of Emotional Support Reported as Percent Mentioned

	Fifth grade	Eighth grade
United States	25.0	34.5
Indonesia	13.3	50.0



Table 20

Country x Grade x Gender Interaction of Loyalty Reported as Percent Mentioned

	Fifth grade Males	Eighth grade Males	Fifth grade Females	Eighth grade Females
United States	48.0	15.5	38.0	40.4
Indonesia	10.0	16.7	26.7	18.3

Table 21

Gender x Grade Interaction of Instrumental Aid Reported as Percent Mentioned

	Fifth grade	Eighth grade
Males	64.5	49.2
Females	60.0	46.4

Table 22

Country x Grade Interaction of Instrumental Aid Reported as Percent Mentioned

	Fifth grade	Eighth grade
United States	31.0	16.4
Indonesia	88.3	76.7

Table 23

Country x Grade x Gender Interaction of Instrumental Aid Reported as Percent Mentioned

	Fifth grade Males	Eighth grade Males	Fifth grade Females	Eighth grade Females
United States	44.0	12.1	18.0	21.2
Indonesia	81.7	85.0	95.0	68.3

loyalty are presented in Table 20. Three interactions were found to be significant in the analyses of instrumental aid. Table 21 shows the frequency the behavior was mentioned for the Gender by Grade interaction and Table 22 shows the frequency of the behavior for the Country by Grade interaction. The Country by Grade by Gender interaction was also found to be significant for instrumental aid. These frequencies are shown in Table 23.

### Discussion

The attainment of intimate friendships is an important aspect of development for many children and adolescents. Intimate behaviors appear to be an important component of children's same-sex friendships. Although, the open-ended interview used in this study allowed the children to describe any aspect of their friendship they thought to be important, many of the children spontaneously described behaviors associated with intimacy.

Although many of the children discussed intimate behaviors in the interview, the specific types of behaviors mentioned varied. Some children focused more on the activity centered behaviors involved in forming an intimate friendship, and others focused on the emotionally centered behaviors that are involved in intimate friendships.

### Gender Differences

Self-disclosure is a prototypical behavior that is included in all the definitions of intimacy. All researchers believe that self-disclosure is a very important aspect of intimacy. Some researchers (e.g., Buhrmester and Crabery, 1992; Dolgin & Kim, 1994) limited their definition of intimacy to include only the act of self-disclosure, and others (e.g., Camarena et al., 1990; McNelles & Connolly, 1999) expanded the definition to include a wider range of behaviors. As expected, females mentioned self-disclosure as an important aspect of their friendships more often than males. This result may be explained by Maccoby's (1990)

contention that boys and girls learn different styles of interaction with their same-sex peers. By engaging in same-sex peer interactions, girls learn how to communicate their feelings to their peers, and boys learn how to follow the rules and get along with all types of people. Girls' friendships are often distinguished from boys' friendships because they share confidences with one another (Maccoby, 1990).

Other aspects of intimacy were also assessed in the present study. As anticipated, a significant gender main effect was found in emotional support that showed that females mentioned this type of behavior more often than males. Maccoby (1990) claims that this gender difference occurs because of the different socialization patterns that males and females learn throughout childhood. Boys play seems to be oriented around mutual interest, whereas, girls friendships are marked by the mutual sharing of confidences. Males and females appear to learn distinct styles of interaction, which leads them to form intimate friendships through different behaviors. As shown in the previously cited results, females seem to engage in more self-disclosure and emotional support with their friends than males.

Surprisingly, gender main effects were not found for loyalty or trust. These behaviors were also considered emotionally centered behaviors, but no significant gender main effects emerged.

There has been a lot of controversy about whether or not activity centered behaviors should be included in the definition of intimacy. Some researchers (e.g., McNelles & Connolly, 1999; Camarena et al., 1990) believe that these behaviors are an important part of intimacy that are often overlooked and need to be explored in greater detail, whereas others (e.g., Buhrmester & Crabery, 1992; Buhrmester, 1990) exclude these behaviors from their definitions of intimacy. The present study included activity centered behaviors in the definition of intimacy.

Unexpectedly, none of the activity centered behaviors resulted in the anticipated significant gender main effects. This data does not support Maccoby's (1990) description of the different interaction patterns that males and females learn throughout childhood. Maccoby claims that boys are more likely than girls to use activity centered behavioral pathways to form intimate friendships, but the results in the present study do not seem to support this speculation. Both males and females reported activity centered behaviors in their descriptions of their friends.

One unexpected significant gender difference was found in activity centered behaviors. Females mentioned conflict management as a characteristic of their friendships more often than males. Since conflict management is considered an activity centered behavior, it was expected that males would mention this behavior more often than females. Other research, however, may explain the obtained effects. Females may have mentioned conflict management more often because disagreements tend to occur more often in female friendships than male friendships. Also, previous research shows that females are more likely than males to report that disagreements affect their friendships, and they are more likely to notice and deal with the conflicts that occur in their friendships (Hartup, 1992). Since females believe conflicts affect their friendships more than males, they are more likely to report conflict management as an important aspect of their friendships.

The gender main effect results do not appear to show that girls and boys differ in their preferred behavioral routes to intimacy. The question regarding whether or not males and females engage in different behaviors to form intimate friendships or if females actually engage in intimacy more often than males remains unanswered. The data from the present study does not support the dual behavioral pathway theory. Males and females both mentioned the use of activity and emotionally centered behaviors in their friendships, but females mentioned

emotionally centered behaviors more often than males. Therefore, the results seem to support that females may engage in more intimacy with their friends than males.

### Developmental Differences

There was an expected developmental increase in references to self-disclosure from fifth to eighth grade. This result supports Buhrmester's (1990) claims that adolescent friendships are more likely than preadolescent friendships to involve self-disclosure and self-exploration. Kerns (1996) also supports this developmental difference by stating that the major change in friendships from preadolescence to adolescence is an increase in the depth and amount of intimacy that occurs between the friends through the act of self-disclosure.

Other anticipated developmental differences were found in emotional support. Eighth graders were more likely than fifth graders to mention instances of emotional support in their descriptions of their friendships. Berndt (1982) claims that these developmental differences in emotionally centered behaviors may be related to the differences in cognitive development. Adolescents are at a more advanced cognitive level than preadolescents, which allows them to engage in more emotionally centered behaviors with their peers rather than focusing on activity centered behaviors within their friendships.

Expected developmental main effects were also found in activity centered behaviors. Fifth graders were more likely than eighth graders to mention instances of instrumental aid and companionship in their descriptions of their friends. These results also support Buhrmester's (1990) descriptions of preadolescent and adolescent friendships. The preadolescent's seem to focus their friendships more on concrete behaviors, such as engaging in common activities and helping each other. In contrast, adolescents base their friendships more on interpersonal interactions and behaviors.



A non hypothesized developmental main effect was found in the analyses of similarities and differences. Since the behavior was conceptualized as activity centered, fifth graders were expected to mention it more often than eighth graders. Instead, eighth graders mentioned the similarities and differences between themselves and their friends more than fifth graders. In hindsight, however, this result is easily interpreted from knowledge of social cognition and developmental stages. The cognitive abilities of preadolescents are not as developed as adolescents, which may cause them to have more trouble engaging in role taking and perspective taking (Shaffer, 1994). Children must engage in this type of abstract thinking in order to notice and discuss the similarities and differences between their self and their peers. Since preadolescents function at a less advanced cognitive level than adolescents, they may display difficulty perceiving themselves as objects, an ability that is required for children to compare and contrast themselves to others.

Since the present research included emotionally and activity centered components in its study of intimacy, the developmental differences were able to be explored to a greater extent than in some past research. Not all researchers agree that activity centered components should be included in the exploration of developmental differences in intimacy, but most researchers agree on the inclusion of emotionally centered behaviors. Based only on self-disclosure, eighth graders would be considered to engage in more intimacy with their peers than fifth graders. Fifth graders mentioned concrete behaviors, such as instrumental aid and companionship, more often than the eighth graders, whereas, the eighth graders seemed to base their friendships more on abstract behaviors, such as self-disclosure and emotional support. These developmental differences may imply that self-disclosure and emotionally centered behaviors operate in a very different way than activity centered behaviors. The two types of behaviors seem to be split

between the two age groups. This distinction seems to show that the two groups of behaviors are not comparable. Without the inclusion of activity centered behaviors, fifth graders appear to be showing minimal intimacy within their friendships. Yet, eighth graders show high levels of intimacy in their friendships because they seem to mention self-disclosure and emotional support consistently throughout the interviews.

### Cultural Differences

Although a significant country difference in self-disclosure was expected, this effect was not significant. Magnis-Suseno (1997) reported that members of the Indonesian society are encouraged to control their emotions and impulses when they are with anyone outside of their nuclear family. On the other hand, children in the U.S. are encouraged to engage in self-exploration through conversations with their peers (Wellenkamp, 1995). Since this difference in the use of self-disclosure is so different between countries the lack in cultural differences in the present study was surprising.

The U.S. participants mentioned behaviors associated with trust and loyalty more often than the Indonesian participants. These results are consistent with the previous research done by Magnis-Suseno (1997). In the U.S., children are expected to confide in their peers and to go to each other for advice. In contrast, Indonesian children are encouraged to engage in helping, giving, and sharing behaviors with their peers.

The analyses of the activity centered behaviors were not consistent between the two countries. Significant country differences were found in conflict management, humor, similarities and differences, companionship, and instrumental aid. The U.S. participants were more likely than the Indonesian participants to mention conflict management, humor, and similarities and differences. The Indonesian participants were more likely than the U.S.

participants to mention companionship and instrumental aid. Since there is not a lot of research that focuses on the differences in peer relationships between U.S. and Indonesian children it is difficult to speculate any further about these activity centered findings.

The instrumental aid and companionship results are consistent with the previous research done by French, Jansen, Fosco, Riansari, Pidada, and Nelwan (2000). Through questionnaires, French and his colleagues found that Indonesian children reported more helping giving in their friendships than U.S. children. According to French et al. (2000), these instrumental aid differences seem to be consistent with the two countries beliefs and teachings about interdependence and independence. Members of the Indonesian culture are taught interdependence, within the family and the community. The teachings of interdependence stress social harmony among all members of the community. Members of the U.S. culture are socialized to exhibit independence. This difference in interdependence and independence between the two countries may be contributing to the fact that the children mentioned different frequencies of instrumental aid in their descriptions of their friendships.

Intimacy in peer relationships of Indonesian and U.S. children has not been studied very extensively by researchers, so it is difficult to speculate about the results from the present study. The major elements that are consistently included in the definition of intimacy, such as self-disclosure and emotional support, were not found to differ between the members of each culture. Since the coding system in the present study included many different components of intimacy, the results provide a more in depth analyses of the similarities and differences in intimate friendships between the two cultures.

Indonesian and U.S. children seem to form intimate friendships through similar behavioral pathways. The Indonesian and U.S. participants both mentioned the use of activity

centered and emotionally centered behaviors in their descriptions of their friendships. The children from the two countries mentioned self-disclosure and emotional support at the same rate. The youth in the two countries both mentioned activity centered behaviors, but they differed in the specific behaviors that they mentioned. Since many researchers argue that activity centered behaviors should not be included as components of intimacy, this difference may not be as important as the similarities found in the emotionally centered behaviors. Most researchers believe that the exploration of intimacy should only include emotionally centered behaviors. In that case, the two countries appear to be very similar in their attainment of intimate friendships because they both mentioned self-disclosure and emotional support to the same extent in their descriptions of their friendships.

#### Future Directions and Implications

The present study included several different behaviors in the conceptualization of intimacy in peer friendships. The definition of intimacy used in the study included self-disclosure, emotionally centered behaviors, and activity centered behaviors. There has been much controversy among researchers regarding whether or not activity centered behaviors should be included in the definition and study of intimacy in same-sex peer friendships. In the present study, the inclusion of activity centered behaviors seems to confuse the results and definition of intimacy, rather than clarify the definition and development of intimate friendships.

The activity centered and emotionally centered behaviors seem to be too different from each other to be included in the same definition of intimacy. The developmental comparisons in the present research showed the distinct separation between the two categories of behaviors. The two categories of behaviors appear to refer to different developmental courses. Adolescents were more likely than preadolescents to engage in emotionally centered behaviors, whereas,

preadolescents were more likely to mention activity centered behaviors. This implies that the behaviors may be unrelated to each other.

The interview procedure used in this study appeared to be appropriate for cross-cultural research. Many of the previous research studies on cross-cultural research and peer friendships use questionnaires to gather their data. Through the interview technique, the participants were not given pre-existing categories. Instead, the children were forced to create their own categories throughout the interview. Children focused their descriptions of their friendships on several different qualities, but many of the transcripts included some reference to the intimacy that was a part of their friendships. Questionnaires also run the risk of translation problems. Children from two countries may interpret the questionnaires in different ways. Whereas, in the interviews the children were able to describe their friendships in anyway they would like without being given too much direction. The children's interview transcripts were translated and back translated to ensure that there would be no translation problems.

Although the interview procedure appears to be a helpful technique when conducting this type of research, it does contain a confound that needs to be addressed further. As described in more detail earlier in this paper, it was impossible to obtain whether or not the behaviors mentioned in the descriptions were frequent or merely salient (Weisz et al., 1995). The Thai-U.S. research that was done by Weisz and his colleagues (1995) showed that self-report methods may lead to an incomplete or distorted understanding of cross-cultural differences in children's behavior. In their research, the teacher's reports about the Thai and American children seemed to be effected by cultural values and expectations about how children should behave, rather than reflect accurate appraisal of how they behaved. It is not known whether the behaviors being reported by the children in the interviews are frequent or particularly noticeable and memorable.

Further research needs to be done to better understand the gender, developmental, and cultural differences of intimacy. Researchers need to create a universal definition of intimacy so that the study of intimacy becomes more consistent and comparable. Research on cultural comparisons of intimacy in peer friendships is especially lacking. It is particularly important that such research utilize multi-method and multi-agent procedures. The use of free descriptions, as in the present study, provides a useful complement to questionnaires and observational studies.

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## Appendix

### **\*Self-disclosure (SD)**

- \*Share personal thoughts, feelings, opinions, and past behaviors
- \*Telling secrets about the self
- \*Share information about a large number of topics, i.e. what they like
- \*Expression of intimate feelings
- \*Talking about personal experiences and expressing personal opinions and problems
- \*Disclosure reciprocity - tell each other things and share personal information
- \*Open

### Emotionally Centered Behaviors

#### **\*Trust (TR)**

- Friend will not breach confidence or talk behind the others' back
- Feeling that you will not be penalized for disclosing personal information--will not tell others what child discloses
- Keeps secrets and promises that they are told
- Honest

#### **\*Loyalty (LO)**

- Reliable alliance, such as always able to count on each other, defend each other, won't leave for another friend, never ignores child, always includes child, doesn't make fun of child, sticks up for child
- Can depend on friend
- Displays loyalty to the friendship
- Doesn't get mad at child—never mean to me

#### **\*Emotional Support (ES)**

- Display affect (negative or positive)
- Empathetic listening of each other's self-disclosure
- High amount of caring and affection
- Concerned about friend's well-being, i.e., comes to visit or cares when friend is sick
- Helps with problems
- Encourages child
- Willing to praise each other about accomplishments and abilities – gives compliments
- Gives advice
- Understanding

#### **\*Mindreading (MR)**

- Able to tell how the friend is feeling or thinking before being told
- Interpret each other's behavior, feelings, or motives
- Confront each other on any issues they see through mindreading

## Activity Centered Behaviors

### **\*Conflict Management (CM)**

- Feel comfortable dealing with the conflicts that occur between them by being open and honest
- Deal with conflicts in an appropriate and quick manner

### **\*Instrumental Aid (IA)**

- Shares material objects
- Gives things to child
- Loans things to child
- Helps child, i.e., schoolwork, chores, etc.

### **\*Humor (HU)**

- Know what topics they can joke about
- Know what topics are serious and sensitive

### **\*Similarities and Differences (SAD)**

- Share several similarities, such as interests and activities
- Explore and learn about each other's dissimilarities

### **\*Companionship (CO)**

- Spend time together inside and outside of school—hang out together
- Companionship and engagement in enjoyable activities, such as role-play, sporting activities, studying together