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Individual Differences in Trust in Friendships of Children and Adolescents with Their Best versus Other Friend

> A Thesis Presented to the Department of Psychology and the Faculty of the Graduate College University of Nebraska

In Partial Fulfillment of the Requirements for the Degree Master of Arts University of Nebraska at Omaha

> by M. Susan Flanagan Snyder December, 1990

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THESIS ACCEPTANCE

Acceptance for the faculty of the Graduate College, University of Nebraska, in partial fulfillment of the requirements for the degree Master of Arts, University of Nebraska at Omaha.

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Abstract

This study was concerned with the investigation of gender and psychological types (Extravert-Introvert, Sensation-Intuition, Thinking-Feeling, and Judging-Perceiving) in the application of trust of friendships of children and adolescents in reference to their 'best' and an 'other' friend.

The psychological types were determined by the Murphy-Meisgeier Type Indicator for Children (grades 4, 6, and 8) and the Myers-Briggs Type Indicator, Form <u>G</u> (grade 10). The two measures of trust were a modified version of Sharabany Intimacy Scale (Sharabany, 1974), which consisted of a questionnaire of descriptive sentences about friendship, and a measure based on the Prisoner's Dilemma, consisting of four scenarios which described conflict situations involving interpersonal issues regarding trust. The subjects responded to the questions in reference to their 'best' and an 'other' friend, who was rank-ordered sixth on their list of friends.

The analysis for sex differences showed that males and females gave higher trust ratings for 'best' friend than for 'other' friend. Females had higher trust scores than males when 'best' friend and 'other' friend were involved, but males made a more trusting choice in conflict situations concerning 'other' friend. Across the four psychological types examined, Extravert-Introvert, Sensation-Intuition,

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Thinking-Feeling, and Judging-Perceiving, higher trust ratings and more trusting choices in conflict situations were made for 'best' friend compared to 'other' friend. Furthermore, there was a difference in scenario order for all four psychological types for trusting choices in a conflict involving a 'best' friend. The order from highest to lowest mean was: 3-Secret, 4-Backstab, 1-Principal, and 2-Homework. The ordering from highest to lowest mean for an 'other' friend was: 3-Secret, 2-Homework, 1-Principal, and 4-Backstab.

Acknowledgments

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Chapter I

Introduction

It has been that said that "Friendship is the most ubiquitous of human relationships across the life span" (Tesch, 1983, p. 266). As such, friendships of children and adolescents have been studied in order to develop theoretical concepts by such theorists as Erikson, Piaget, and Sullivan and to investigate more specific aspects, for example: friendship expectations (Bigelow, 1977; Bigelow & LaGaipa, 1975), supportive relationships (Berndt & Perry, 1986), and intimacy (Buhrmester & Furman, 1987; Sharabany, 1974; Sharabany, Gershoni, & Hofman, 1981). Another more narrow topic of interest is that of trust in friendships of children and adolescents comparing a 'best' friend and an 'other' friend in light of individual differences such as sex and psychological type.

One encounters difficulty in attempting to draw inferences from a review of the literature for the area of trust in friendships of children and adolescents because the operational definition of trust varies from being unspecified and subjective with each child (Rotenberg, 1984), to being limited to a promise being kept or broken (Rotenberg, 1980, 1986), to being described as behavioral actions (Buzzelli, 1988), and to being considered in regard to violations of social expectations (Kahn & Turiel, 1988; Rawlins & Holl, 1987). In addition, the measures of trust included such diverse metrics as an essay written about a best friend (Bigelow, 1977; Bigelow & LaGaipa, 1975), individual interviews (Berndt, Hawkins, & Hoyle, 1986; Berndt & Hoyle, 1985; Berndt & Perry, 1986; Buzzelli, 1988), a push-button scale (Rotenberg, 1980), and questionnaires (Rotenberg, 1984, 1986).

In many of the studies, the focus was on developmental differences by age, and the findings were few and provided inconclusive evidence of sex differences (e.g., Berndt & Hoyle, 1985; Berndt & Perry, 1986; Bigelow & LaGaipa, 1975; Buhrmester & Furman, 1987). Rotenberg (1984, 1986) examined sex differences in trust with same-sex and opposite-sex peers and found a trust score interaction effect. No study looked for sex differences in trust and friendship of children and adolescents throughout the age range of 10 to 18 years.

No literature was found in which a specific aspect of individual differences in human personality, such as the eight dichotomous psychological types of Carl Jung as measured by the Myers-Briggs Type Indicator (Myers & McCaulley, 1989) and the Murphy-Meisgeier Type Indicator for Children (Murphy, 1986) was the target of investigation. That these differences in psychological type might have an

impact on trust in friendships of children and adolescents can be inferred from the application of the principles of type to facilitate acceptance of differences in interpersonal relationships between parent and child, spouses, and friend to friend (Keirsey & Bates, 1984). Furthermore, "trust is a basic variable in human interaction and relationships" (Corazzini, 1974, p. 1), and as such, may be vulnerable to the basic differences of psychological type.

Purpose of the Study

This study was concerned with the investigation of gender and psychological types in the application of trust in friendships of children and adolescents with reference to their 'best' friend and an 'other' friend. This focus was taken to assess gender differences over a wider range of ages than had been done in previous research (e.g., Berndt & Hoyle, 1985; Berndt & Perry, 1986; Bigelow & LaGaipa, 1975; Rotenberg, 1984, 1986) and to examine psychological type in an area in which no previous research had been found.

Review of the Literature

Sex Differences

Sex differences in trust in children were reported by Rotenberg (1984, 1986). Children in kindergarten, second, and fourth grades were asked to rate how much they trusted each of their classmates on a 5 point "trust" scale labeled from "not at all" to "very, very much" (Rotenberg, 1984). With this simple measure interaction effects between sex of the subject-perceiver and sex of the peer-target were found. The means on a 5 point scale were: girls trusting girls 3.90; boys trusting boys 3.61; girls trusting boys 3.32; and boys trusting girls 3.24. Although no significant main effect of sex of the subject-perceiver was reported, the difference between the means was .18 for girls ($\underline{M} = 3.61$) and for boys ($\underline{M} = 3.43$).

Rotenberg (1986) first asked fourth graders the number of secrets and promises which had been mutually made and kept over a two week period between them and their classmates. Secondly, the subjects were asked to rate how much they trusted each of their classmates on a 5 point scale from "do not trust at all" to "trust very, very much", and to evaluate the same classmates in regard to how good a friend they judged each classmate to be. An interaction of same-sex and mixed-sex pairs of subject and target was found across the measure of trust. The means for the measure of trust were: boy-boy 3.47, girl-girl 3.41, boy-girl 2.47, and girl-boy 2.43.

Other studies (Buzzelli, 1988; Rawlins & Holl, 1987; Rotenberg, 1980) have investigated trust in children and adolescents, but such varied operational definitions of trust have been used in these studies that comparisons of their findings are difficult. Rotenberg (1980) asked how

trustworthy subjects in kindergarten, second, and fourth grades judged the protagonists whose behaviors or promises varied in a series of stories. Second and fifth graders were asked to define trust and to describe how two students who trust each other act toward each other and then to rate their trust level of a target child in stories about two best friends (Buzzelli, 1988). Kahn and Turiel (1988) sought to evaluate children's conceptions of trust in the context of violations of social expectations using children in grades 1, 3, and 5. Rawlins and Holl (1987) interviewed eleventh graders about their friendships and found that these students judged trust to be germane to the level and maintenance of friendships. Trust in friendships was particularly vulnerable to violation by a friend's "revealing a secret" or "backstabbing". In addition to this variety of operational definitions of trust, sex differences were not addressed in any of these studies. The lack of concensus across studies regarding sex differences suggests further study of choices mades by males and females in situations involving trust.

The second area of individual differences addressed psychological type. Carl Jung developed the concept of psychological type to explain natural individual differences in human behavior. Inherent in Jung's theory is the assumption that these differences, which had been thought to

Psychological Type

be random, can be grouped into patterns. The Myer-Briggs Type Indicator (MBTI) is a self-report inventory developed by Katharine C. Briggs and Isabel Briggs Myers to measure the variables in Jung's personality typology (Myers & McCaulley, 1989). The four dichotomous scales are: Extraversion-Introversion (E-I), Sensation-Intuition (S-N), Thinking-Feeling (T-F), and Judgment-Perception (J-P). The instrument, MBTI, is predicated on the basis of Jung's theory, proposes that individuals have certain mental habits, or natural preferences likened to right- or left-handedness, regarding what they pay attention to, what they are interested in, and what information they use to process and make decisions.

The first dimension, Extravert-Introvert $(\underline{E}-\underline{I})$, defines a general attitude toward the world. The Extraverted types are oriented primarily and actively to the outer world of people and things. Those with this preference tend to be sociable and communicate easily. The Introverted types have a more inward orientation and focus their energy and attention on the inner world of concepts and ideas. Introverts need privacy and tend to work best either alone or with a few people.

The second dimension, Sensation-Intuition (S-N), describes how people receive information. Sensing types take in information directly through their five senses, notice

details and facts, and tend to be practical and realistic. Intuitive types receive information through a "sixth sense", rely on spontaneous hunches, focus on insight and possibilities in relationships as well as the future.

The third dimension, Thinking-Feeling (<u>T-F</u>), explains how people process the perceived information. Thinking types process objectively and rely on reasoning and logic in decision making; they are concerned with objective truth and justice. In contrast, Feeling types take a subjective view of the information and allow their personal values and the impact that the decision may have on people to influence their decision making. Feeling individuals have an understanding of people, a need for affiliation, and a desire for harmony.

The fourth dimension, Judging-Perceiving (<u>J-P</u>), interprets how people prefer to deal with the outer world. The Judging types desire a lifestyle that is decisive, planned, and orderly; they prefer closure with things decided and settled. The Perceiving types prefer a lifestyle that is flexible, adaptable, and spontaneous; they like to keep the options open so they will miss nothing.

Although references to the use of the Myers-Briggs Type Indicator occur in a wide array of professional journals, such as business, education, medically related, psychology, science, religious, and others (Willis, 1984), an extensive literature review found no instance in which this instrument was used in conjunction with trust for any age group. To look for and compare individual differences along the four dimensions is basic research which is "internally focused on possibilities and reliance on insight to understand" (Willis, 1984, p. 330).

One study was found from which inferences could be made to suggest the possibility that individual differences of psychological type may affect trust. To develop a topology of trust, Corazzini (1974) investigated the identification of basic dimensions of trust, the relationship between the trust factors and the Prisoner's Dilemma Game, and the relationship of each trust factor to personality using undergraduate and graduate students. Through a factor analysis of items from four trust measures -- Interpersonal Trust Scale, Personality/Attitude Schedule IV, Personality/Attitude Schedule VI, and Trust Test by O'Donovan -- Trust Factors I - IV were identified: Suspicion, Risk-taking, Gambling, and Cynical. Using the subjects' scores on the 16 Personality Factor, significant differences were found for subjects high on the trust factors in comparison to those who rated low. High scores approximated the non-trusting end of the dimension. A summary of these differences follows:

Trust Factor I - Suspicion

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High - feeling, shy, assertive, suspicious, tense

Low - emotionally stable, humble, venturesome, trusting, relaxed

Trust Factor II - Risk-taking (Personal)
High - assertive and tough-minded
Low - humble and tender-minded
Trust Factor III - Gambling (Financial risk-taking)
High - assertive and tough-minded
Low - humble and tender-minded and trusting
Trust Factor IV - Cynical (Expectancy and public
credibility)

High - self-sufficient

Low - group-dependent

There were two significant differences on 16PF scores of subjects who were grouped according to their scores on the PDG. Those with high PDG scores were cooperators and assertive and those with low PDG scores were non-cooperators and humble.

These four trust factors identified by Corazzini (1974) encompass the intrapersonal variables of a trusting choice: the person's own self and inner resources to make a choice, the exposure to danger by personal harm and/or loss of personal goods, and the person's attitude and perception of how society will respond. The following cue words from Keirsey and Bates (1984) provide a comparison of the

dichotomies of psychological type which could color trust between friends:

Extravert - sociability, breadth, interaction Introvert - territoriality, depth, concentration Sensation - experience, past, realistic Intuition - hunches, future, speculative Thinking - objective, principles, impersonal Feeling - subjective, values, personal Judging - settled, fixed, planned Perceiving - pending, flexible, open-ended

From this comparison it could be concluded that the nuances of these intrapersonal variables could be evaluated along the parameters of psychological type, and that said differences may impact trust in friendships of children and adolescents with a 'best' friend and an 'other' friend.

Given the limited scope of the Rotenberg (1984, 1986) studies, and the widely varied operational definitions of trust (Buzzelli, 1988; Kahn & Turiel, 1988; Rotenberg, 1980, 1984, 1986) as well as the narrow age range studied, the aim of this study was to investigate sex and psychological type differences in trust in children and adolescents across grades 4-12 using two instruments, a modification of the Sharabany Intimacy Scale (Sharabany, 1974), and a trust measure patterned after the Prisoner's Dilemma Game (Luce & Raiffa, 1957).

Hypotheses

Sex Differences

No sex differences in scores on the trust measures are expected when the peer involved is a 'best' friend. This prediction is inferred from the data reported by Rawlins and Holl (1987), which discusses the distinctions made across the continuum of friendship types (e.g., best, close, average, specialized, and proximate others).

Sex differences in scores on the trust measures are expected when the peer involved is an 'other' friend. In this case, females are expected to give higher trust ratings. This prediction follows from friendship and intimacy studies (Berndt, 1981; Buhrmester & Furman, 1987; Jones & Dembo, 1989) which report females having higher scores than males. Psychological Type

Based on the research of Corazzini (1974), which found a relationship between personality variables and trust factors, the following hypotheses about psychological type and trust ratings are advanced.

No difference in trust rating score is expected for Extravert and Introvert for 'best' friend. A higher trust rating score is expected for Extravert than for Introvert for 'other' friend.

No difference in trust rating score is expected for Sensation and Intuition for 'best' friend. A higher trust rating score is expected for Intuition than for Sensation for 'other' friend.

No difference in trust rating score is expected for Thinking and Feeling for 'best' friend. A higher trust rating score is expected for Feeling than for Thinking for 'other' friend.

No difference in trust rating score is expected for Judging and Perceiving for 'best' friend. A higher trust rating score is expected for Perceiving than for Judging for 'other' friend.

Chapter II

Method

Subjects

The 109 subjects were students in the fourth, sixth, eighth, and tenth grade classrooms selected by the principals of the elementary, junior high, and senior high schools in a metropolitan school district. The number of subjects chosen from each grade were: fourth (N = 27; \underline{M} = 10.18 years; SD = .45), sixth (N = 29; \underline{M} = 12.21 years; SD = .39), eighth (N = 25; M = 14.17 years; SD = .41), and tenth (N = 28; M = 16.24years; Sd = .34). There were 44 males and 63 females, the best possible gender distribution given the individual class populations. Although it had been planned to include approximately 25 students from 12th grade, this group had to be dropped from this study due to an insufficient number of participants. Because they were classmates in the same elementary, junior high or senior high school, it was assumed that the subjects knew one another. Further, established friendships should have been ensured because the study took place in the final month of the school year (Duck, 1975). The only restriction on intelligence for inclusion in the study was that the students could not currently be in special education classes. All students who met the criterion in the targeted grades were invited to participate by means of a

letter of explanation about the study sent to their parents. Informed consent forms were completed by the parents and the students and collected by the investigators to assure that permission had been granted for each participant before the study was run, and to ensure that the participating students were volunteers. The parent letter, parental consent form, and student assent form are found in Appendices <u>A</u> through <u>C</u>. A total of 109 subjects completed the study. There was no attrition of the students whose permission forms were signed.

As a matter of confidentiality, each student was assigned a code number found on their research packet. The students were asked to include their names on the forms to facilitate handing out the packets for completion when the sessions had to be carried over to the next day due to the time restriction of the class period length. Their names were subsequently clipped from the pages, and only the subject's code numbers were retained. In addition, the subjects were informed that only the two investigators would see their answers so that confidentiality was assured. <u>Materials</u>

A research packet containing the instruments, Sharabany Intimacy Scale, Modified (SISm), Prisoner's Dilemma (PD), and grade appropriate type inventory, along with an information sheet on which the students identified their 'best' friend,

(A), and their 'other' friend, (B), and wrote their personal definition of trust was provided for each student.

<u>Instruments</u>

Identification of Trust (SISm). This questionnaire was a modified version of Sharabany Intimacy Scale (1974) which was found to have a content validity of 88% and the reliability coefficients of total intimacy scores ranged from .90 to .94, based on item-total correlations. The clusters for Frankness and Spontaneity as well as Trust and Loyalty, which had the highest means in an analysis of variance of the original eight clusters, and Sensitivity and Knowing were selected as being most pertinent to this study of trust. A fourth cluster, Common Activities, was included for filler items. (See Appendix <u>D</u>).

Three clusters of items from the original Sharabany Intimacy Scale -- Trust & Loyalty, Frankness & Spontaneity, and Knowing and Sensitivity -- were used to rate each subject's trust in a 'best' friend and an 'other' friend. The items from Common Activities were used as fillers. The Trust and Loyalty cluster was described by Sharabany (1974) as "the degree to which '<u>A</u>' believes that the other person will not betray him, will keep promises and secrets but will also act in his best interest when he is not around" (p. 60). Frankness and Spontaneity referred to sharing the pleasant and unpleasant emotions, hopes, fears and plans about self

and others. Knowing and Sensitivity asked, "To what extent does 'B' know about 'A': facts, tastes, preferences, needs, emotions?" (p. 59). Common Activities indicated being together at work and play and enjoying the same. The Sharabany Intimacy Scale was shown to have validity and reliability (Sharabany, 1974), and was used subsequently in its entirety by Sharabany, Gershoni, & Hofman (1981), and in part by Jones & Dembo (1989).

Trust Measure (PD). The second instrument, to be designated as PD, was patterned after the Prisoner's Dilemma Game (PDG), which was used to measure trust through cooperative strategy with some sex differences found (Maccoby & Jacklin, 1974). The premise of such studies was that trust must be present for cooperative rather than competitive choices to be selected. The format of hypothetical real-life situations with the options of the subject's choices fitting the four outcomes (win-win, win-lose, lose-win, and loselose) of the PDG was selected to provide an instrument that permitted some experimental control within an environmental context for students. The four vignettes included a school scenario as it was adapted to the original PDG situation (Luce & Raiffa, 1957), a situation of trust and reliance (Furman & Bierman, 1984), and opportunities to reveal a secret or to backstab (Rawlins & Holl, 1987).

Four vignettes representative of hypothetical real-life events were patterned after the concept of violation of social expectations (Kahn & Turiel, 1988), with the forcedchoice format adapted from the PDG choices (Luce & Raiffa, 1957). It was decided to use four patterns of the PDG choices (win-win, win-lose, lose-win and lose-lose), taken from a table of random order, rather than keep them in one sequential order for all four vignettes. The scoring of the responses was weighted so that a higher score was indicative of a greater degree of trust. The specific points for each response choice were: Win-Win = 4, Win-Lose = 3, Lose-Win = 2, and Lose-Lose = 1. These vignettes provided some degree of ecological validity and served as a form of experimental control over the trust decision in a risk situation.added a quasi-experimental task to the study. (See Appendix E).

For both instruments, the subjects answered in relation to a 'best" friend and to an 'other' friend.

Type Inventory. The type inventory of each student was assessed along four bipolar scales: Extraversion-Introversion, Sensation-Intuition, Thinking-Feeling, and Judgment-Perception, using the Murphy-Meisgeier Type Inventory for Children (MMTIC) for students in grades 4, 6, and 8; the Myers-Briggs Type Indicator Form <u>G</u> (MBTI), for grade 10. For the MMTIC the split-half reliability estimates by scale for original and cross-validation range from .62 to

.75 (Meisgeier & Murphy, 1987). The overall content validity of the MMTIC has a mean of 4.1 on a 5-point Likert scale (Meisgeier & Murphy, 1987). For the MBTI the internal consistency reliability estimates derived from product-moment correlations of \underline{X} and \underline{Y} continuous scores with Spearman-Brown prophecy formula correction range from .75 to .87 for the traditional junior and senior high school student (Myers & McCaulley, 1989). Evidence for the content validity of the MBTI comes from the description of the construction of the instrument which includes the criteria used for choosing and scoring items. This information can be found in Myers and McCaulley, 1989, pp. 140-142. Carlyn (1977) and Willis (1984) summarized literature findings and reported that the MBTI has been studied and shown to be an adequately reliable self-report inventory and to have content and construct validity.

The percentages of the expected distributions for psychological type is summarized in Tables 1 and 2. Itshould be noted that the scoring of the Murphy-Meisgeier Type Indicator for Children includes a " \underline{U} " designation to indicate that "a preference was not sufficiently clear to justify assignment to one of the bipolar preferences" (Meisgeier & Murphy, 1987, p.9).

Table 1

Murphy-Meisgeier Type Indicator for Children Distributions of

Туре	N	Percent	٥
Extravert	828	55	
Undetermined	377	25	
Introvert	294	20	
Sensation	725	48	
Undetermined	327	22	
Intuition	447	30	
Thinking	241	16	
Undetermined	291	19	
Feeling	967	64	
Judging	419	28	
Undetermined	284	19	
Perceiving	796	53	

Preferences for Total Sample, Including the U-Band Cases

N = 1,499

Source: C. Meisgeier & E. Murphy, (1987). <u>Murphy-Meisgeier</u> <u>Type Indicator for Children Manual</u>. Palo Alto, Ca: Consulting Psychologists Press.

Table 2

Myers-Briggs Type Indicator Preferences for General

Population in the United States

Perc	<u>ent</u>	Per	cent	Perc	ent	P	ercent
Extravert	75	Sensation	75	Thinking	60	Judging	55-60
Introvert	25	Intuition	25	Feeling	40	Perceiving	45-40

Source: I. B. Myers & M. H. McCaulley, (1989). <u>Manual: A</u> <u>guide to the development and use of the Myers-Briggs Type</u> <u>Indicator</u>. Palo Alto, CA: Consulting Psychologists Press.

The distribution of psychological types by sex for the subjects in this present study is found in Table 3. The disparity of the <u>Ns</u> can be attributed to the distribution of students in the four classrooms selected by the principals to participate in the study. No a priori measures were taken to balance for sex or psychological type.

<u>Procedure</u>

The subjects participated in a group setting by grade level in their classrooms without their teacher present. Theprincipal investigators explained the nature of the study and provided instructions for each instrument found in the research packet. It was emphasized that none of the instruments was a test per se because there were no right or wrong answers to the questions. Along with the general

Table 3

	Se	ex	
	Male	Female	Percent
Туре	N = 46	N = 63	N = 109
Extravert	26	44	64
Undetermined	5	6	10
Introvert	15	13	26
Sensation	19	22	38
Undetermined	6	9	14
Intuition	21	32	49
Thinking	18	10	26
Undetermined	5	4	8
Feeling	23	49	66
Judging	6	10	15
Undetermined	3	3	6
Perceiving	37	50	80

Distribution of Psychological Types by Sex, (N = 109)

instructions, it was emphasized that no one other than the principal investigators would see any of the students' answers so that confidentiality was assured. The total administration time took 55-60 minutes.

Identification of 'best' and 'other' friends. The Information Sheet is found in Appendix <u>F</u>. The students were asked to turn to the back page of the booklet, the one that . was wider than all the rest, and to think of the names of their fellow students whom they considered to be friends. After they had filled in the general information (date, name of school, grade, their name, age and sex), they were instructed to write the names of six friends rank-ordered with the name of their 'best' friend written on line (\underline{A}). For the purposes of this study the friend whom they listed 6th was designated their 'other' friend, (\underline{B}). Next, they were asked to put an \underline{X} in the column beside the names of their friends, who were in that same class. Having done this, they marked in the box whether their 'best' friend was male or female and whether that person was a boyfriend/girlfriend or a really good friend. Last, they were referred to the far right side of the page and told to record the name of their 'best' friend on the line by (\underline{A}) and that of their 6th or 'other' friend on the line by (\underline{B}).

Identification of trust [SIS]. This questionnaire was a modified version of Sharabany Intimacy Scale (1974). The subjects were asked to rate each item twice, once for 'best' friend, (\underline{A}), and once for 'other' friend, (\underline{B}), on a Likert type scale from FITS (absolutely certain) to DOES NOT FIT (absolutely certain). The items were read aloud by an investigator to facilitate reading level differences and to keep the subjects together on the task for the fourth and sixth graders.

Trust measure [PD]. The subjects followed along as the investigator read aloud four vignettes patterned after the Prisoner's Dilemma Game. For each vignette the subjects were asked to decide in a forced choice format how they would respond to the hypothetical social dilemma described in each vignette. Their first answer would represent their response if they and their 'best' friend, (\underline{A}), were faced with that hypothetical situation; their second answer, they and their 'other' friend, (\underline{B}).

Type inventory. The type inventory of each student was assessed along four bipolar scales: Extraversion-Introversion, Sensation-Intuition, Thinking-Feeling, and Judgment-Perception. To do this the Murphy-Meisgeier Type Inventory for Children was administered to students in grades 4, 6, and 8; the Myers-Briggs Type Indicator Form <u>G</u>, in grade 10. The instruments were presented in strict accordance with the guidelines provided in the test instructions and booklets. It was stressed that there are no right or wrong answers. In addition, the MMTIC items were read aloud by the investigator to facilitate any slow readers.

Completion time for the questionnaires was approximately 50-60 minutes. The test measures were presented in random order to each group to control for any possible order effects.

At the completion of the questionnaires the students were given another opportunity to ask any questions they might have had and were debriefed. The scoring procedures for the instruments were not explained to the subjects

Table 6 continued

	SS	DF	MS	F	р
		PDB			
Between-Subjects					
EI	3.28	.2	1.64	2.19	.117
Sex	1.37	1	1.37	1.83	.179
EI by Sex	.92	2	.46	. 62	.541
lithin Cells	77.15	103	.75		
lithin-Subject					
Scenario	66.10	3	22.03	26.07	.000
EI by Scenario	2.63	6	.44	.52	.794
Sex by Scenario	14.13	3	4.71	5.57	.001
EI by Sex by Scenario	6.40	6	1.07	1.26	.275
Within Cells	261.16	309	.85		
Analysis of Variance Summary Table for Sensation-Intuition Scores

	SS	DF	MS	F	р
		SISm			
Between-Subjects					
SN	65.94	2	32.97	.53	.589
Sex	768.99	1	768.99	12.42	.001
SN by Sex	58.38	2	29.19	.47	.626
Within Cells	6379.38	103	61.94		
Within-Subject					
Friend	37049.38	1	37049.38	1068.64	.000
SN by Friend	.81	2	.40	.01	.988
Sex by Friend	.44	1	.44	.01	.910
SN by Sex by Friend	41.64	2	20.82	. 60	.550
Within Cells	3570.96	103	34.67		
	TOT	PDA-TOTPDE	}		
Rotwoon-Subjects					
Secween-Subjects	7 06	2	2 0 2	1 21	202
Sox	7.80	2	3.93	1.21	.302
SEA SAY	6.83	1		1 05	. 720
Within Cells	334 06	103	3 24	1.05	. 555
within othis	554.00	105	2.23		
Within-Subject					
Friend	363.02	1	363.02	159.34	.000
SN by Friend	.86	2	.43	.19	.829
Sex by Friend	13.52	1	13.52	5.93	.017
SN by Sex by Friend	4.48	2	2.24	.98	.377
Within Cells	280.61234.66	103	2.28		
<u></u>		PDA			
Between-Subjects					
SN	1.68	2	.84	1.40	.252
Sex	2.32	1	2.32	3.85	.053
SN by Sex	2.11	2	1.05	1.75	.179
Within Cells	61.99	103	.60		
Within-Subject					
Scenario	22.29	3	7.43	11.68	.000
SN by Scenario	3.70	6	.62	. 97	.446
Sex by Scenario	.5.81	3	1.94	3.04	.029
ŠN by Šex by Šcenario	2.21	6	. 37	.58	.746
Within Cells	196.61	309	. 64		

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Table 7 continued

	SS	DF	MS	F	p
		PDB			
Between-Subjects					
SN	.19	2	.25	.32	.728
Sex	1.16	1	1.16	1.49	.225
SN by Sex	.72	2	.36	.46	.630
Within Cells	80.19	103	.78		
Within-Subject					
Scenario	73.63	3	24.54	29.13	.000
SN by Scenario	4.32	6	.72	.86	.528
Sex by Scenario	9.75	3	3.25	3.86	.010
SN by Sex by Scenario	6.16	6	1.03	1.22	.296
Within Cells	260.30	309	.84		

	55	DF	MS	ſ	۴
		SISm			
Between-Subjects					
TF	312.78	2	156.39	2.61	.078
Sex	447.52	1	447.52	7.47	.007
TF by Sex	62.69	2	31.35	. 52	.594
Nithin Cells	6167.58	103	59.88		
Vithin-Subject					
Friend	23336.24	1	23336.24	716.24	.000
TF by Friend	250.04	2	125.02	3.84	.025
Sex by Friend	.31	1	.31	.01	. 92 3
TF by Sex by Friend	15.87	2	7.94	.24	.784
Within Cells	3355.90	103	32.58		
	Tot.I	PDA-TOTPDB	,		
setween-Subjects	12 27	2	c. c.)	2 1 6	101
	13.27	2	6.63	2.16	. 121
Jex .	J.II 10 72	1	5.11	1.66	.200
IF by Sex	18.72	∠ 103	9.30	3.05	.052
	510.50	105	5.01		
Vithin-Subject					
Friend	245.60	1	245.60	106.63	.000
TF by Friend	.21	2	.10	.05	.956
Sex by Friend	1.13	1	1.13	.49	.486
TF by Sex by Friend	2.53	2	1.26	.55	.579
Vithin Cells	237.24	103	2.30		
		PDA			
Between-Subjects					
TF	1.99	2	. 99	1.64	.198
Sex	1.38	1	1.38	2.28	.134
TF by Sex	1.10	2	.55	.91	.407
ithin Cells	62.33	103	.61		
lithin-Subject					
Scenario	4.42	3	1.47	2.42	.066
TF by Scenario	11.34	6	1.89	3.11	.006
Sex by Scenario	1.96	3.	.65	1.07	.360
TF by Sex by Scenario	2.85	6	.48	.78	.584
Vithin Cells	187.65	309	.61		

Analysis of Variance Summary Table for Thinking-Feeling Scores

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Table 8 continued

C

	SS	DF	MS	F	þ
		PDB			
Between-Subjects					
TF	1.38	Ž	.69	. 93	. 396
Sex	.18	1	.18	.24	.623
TF by Sex	4.21	2	2.11	2.85	.062
lithin Cells	76.08	103	.74		
lithin-Subject					
Scenario	46.13	3	13.58	18.16	.000
TF by Scenario	6.70	6	1.12	1.32	.248
Sex by Scenario	4.86	3	1.62	1.91	.127
TF by Sex by Scenario	1.79	6	.30	.35	.908
Vithin Cells	261.57	309	.85		

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Analysis of Variance Summary Table for Judging-Perceiving Scores

······································					
	SS	DF	MS	F	р
		SISm			
Between-Subjects					
JP	74.50	2	37.25	. 60	.550
Sex	201.65	1	201.65	3.25	.074
JP by Sex	50.00	2	25.00	.40	.669
Within Cells	6389.88	103	62.04		
Within-Subject					,
Friend	14491.79	1	14491.79	444.26	.000
JP by Friend	242.61	2	121.30	3.72	.028
Sex by Friend	.57	1	.57	.02	.895
JP by Sex by Friend	15.29	2	7.65	.23	.791
Within Cells	3359.84	103	32.62		
	тот				
Between-Subjects					
JP	9.56	2	4.78	1.48	.232
Sex	.23	1	.23	.07	.791
JP by Sex	3.44	2	1.72	.53	.588
Within Cells	332.14	103	3.22		
Within-Subject					
Friend	168.84	1.	.168.84	74.02	.000
JP by Friend	3.29	2	1.65	.72	.488
S ex by Friend	5.69	1	5.69	2.49	.117
JP by Sex by Friend	2.44	2	1.22	.53	.588
Within Cells	234.93	103	2.28		
		PDA			
Between-Subjects					
JP	.90	2	.45	.74	.481
Sex	1.02	1	1.02	1.68	.198
JP by Sex	1.46	2	.73	1.19	.307
Within Cells	62.91	103	.61		
Within-Subject					
Scenario	12.07	3	4.02	6.76	.000
JP by Scenario	7.18	6	1.20	2.01	.064
Sex by Scenario	5.45	3	1.82	3.05	.029
JP by Sex by Scenario	10.47	6	1.75	2.93	.009
Within Cells	217.59	309	.70	• •	

Table 9 continued

	SS	DF	MS	- F	р
		PDB			
Between-Subjects					
JP	2.31	2	1.16	1.51	.326
Sex	.45	1	.45	.59	.443
JP by Sex	.01	2	.01	.01	.993
Within Cells	78.85	103	.77		
Within-Subject					
Scenario	48.95	3	16.32	19.35	.000
JP by Scenario	3.66	6	.61	.72	.630
Sex by Scenario	3.50	3	1.17	1.38	.248
JP by Sex by Scenario	5.32	6	.89	1.05	.392
Within Cells	260.54	309	.84		

SISm Means and Standard Deviations for Psychological Type by Sex for

		· · · · · · · · · · · · · · · · · · ·			
	Best	Friend	Other	Friend	
	Mean	SD	Mean	SD	
		<u>E-I</u>			
E-Male Female U-Male	62.77 66.89 61.60	7.85 5.27 6.11	32.42 36.68 31.20	7.76 6.52 7.19	
Female I-Male Female	60.00 60.67 66.15	8.94 6.49 5.51	34.50 30.07 31.85	6.98 7.78 7.48	
		<u>S-N</u>			
S-Male Female U-Male Female N-Male Female	62.37 66.41 62.67 67.44 61.38 64.34	6.31 5.33 3.78 5.62 8.72 6.54 <u>T-F</u>	32.84 34.50 31.00 37.89 30.48 35.47	7.52 8.25 8.65 6.39 7.63 6.10	
T-Male Female U-Male Female F-Male Female	59.50 60.90 60.20 68.00 64.26 66.98	8.27 8.79 8.93 2.45 5.20 4.94	31.56 34.60 32.40 37.75 31.30 35.47	7.07 7.66 10.38 2.06 7.75 7.09	
		J-P			
J-Male Female U-Male Female P-Male Female	61.83 66.10 61.00 63.00 62.05 66.26	6.24 7.17 7.55 7.21 7.47 5.73	29.33 35.70 40.67 39.67 31.14 35.18	4.46 6.93 1.53 4.62 7.86 7.07	

Best and Other Friend

Legend:

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E-I = Extravert-Undetermined-Introvert

S-N = Sensation-Undetermined-Intuition

T-F = Thinking-Undetermined-Feeling

J-P = Judging-Undetermined-Perceiving

PD Means and Standard Deviations for Psychological Type by Sex for Best and Other Friend

	Best F	riend	Other F	riend
	Mean	SD	Mean	SD
		<u>E-I</u>		······
E-Male Female U-Male Female I-Male Female	13.89 14.49 15.00 14.50 14.33 14.15	1.71 1.50 1.23 1.98 1.29 1.73	11.81 11.07 12.40 11.33 10.73 10.77	1.60 1.69 1.82 2.07 2.15 1.36
		<u>S-N</u>		
S-Male Female U-Male Female N-Male Female	14.58 14.64 13.00 14.79 14.10 14.31	1.50 1.50 2.10 1.99 1.30 1.53	11.84 10.96 11.17 10.78 11.33 11.16	1.98 1.81 1.84 1.92 1.83 1.48
		<u>T-F</u>		
T-Male Female U-Male Female F-Male Female	13.72 14.30 14.40 15.75 14.44 14.43	1.84 1.64 1.67 0.50 1.24 1.59	11.28 10.90 11.00 13.00 11.83 10.90	1.99 1.97 11.87 0.82 1.80 1.54
		J-P		
J-Male Female U-Male Female P-Male Female	14.33 14.00 12.67 14.67 14.24 14.58	1.63 1.83 1.53 1.16 1.52 1.55	10.83 10.30 11.33 11.00 11.65 11.18	1.84 1.42 1.16 1.00 1.93 1.70

Legend:

E-I = Extravert-Undetermined-Introvert

S-N = Sensation-Undetermined-Intuition

T-F = Thinking-Undetermined-Feeling

J-P = Judging-Undetermined-Perceiving

Means and Standard Deviations for the Four Scenarios in PD for Psychological Type by Sex and Best and Other Friend

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								Scenari	SO							
		Princi	pal			Нотемс	ork		1	Secre	t			Backst	cab	
Friend	Best		Oth€	er	Bes	44	· other	L	Bes	L L	Othe	5.4	Best		Other	2
	ΣΙ	<u>SD</u>	স্থ	<u>SD</u>	Σ	SD	Σ	SD	স	SD	ঘ	SD	হা	SD	হা	<u>SD</u>
E-M	3.15	1.05	2.65	1.16	3.39	0.98	3.50	0.86	3.54	66.0	3.5	0.86	3.81	0.69	2.15	0.61
ես	3.86	0.35	2.34	0.96	3.21	1.03	3.07	1.11	3.84	0.53	3.41	0.82	3.68	0.83	2.25	0.65
M-U	3.60	0.55	3.00	1.00	3.40	1.34	4.00	0.00	4.00	0.00	3.20	1.30	4.00	0.00	2.20	0.45
Ĺ	3.67	0.62	2.50	1.23	3.67	0.82	2.50	1.23	3.67	0.82	3.83	0.41	3.50	1.23	2.50	0.84
W-1	3.73	0.46	2.40	1.18	2.80	1.01	3.13	1.13	3.87	0.52	3.13	1.19	3.93	0.26	2.07	0.70
ſĿı	3.54	0.E8	2.07	0.64	2.77	1.01	2.69	1.11	4.00	0.65	3.92	0.28	3.85	0.56	2.08	0.49
S-M	3.42	96.0	2.63	1.07	3.37	0.96	3.68	0.75	3.79	0.63	3.37	0.96	4.00	0.00	2.16	0.50
նո	3.73	0.10	2.09	0.87	3.18	1.01	2.81	1.26	3.82	0.59	3.64	0.49	3.91	0.43	2.41	0.67
. W-0	2.67	1.37	2.33	1.03	2.83	1.33	3.67	0.82	3.50	1.23	2.83	1.47	4.00	0.00	2.33	0.82
Ĺц	3.89	0.33	2.44	1.01	3.22	1.20	2.67	1.00	3.89	0.33	3.33	1.00	3.78	0.67	2.33	0.71
M-N	3.57	0.51	2.67	1.28	3.14	1.06	3.11	1.06	3.67	0.86	3.48	0.93	3.71	0.79	2.05	0.67
Ĺæ.,	3.78	0.49	2.41	0.95	3.13	1.01	3.09	1.06	3.88	0.49	3.56	0.80	3.53	1.02	2.19	0.59
T – M	3.11	1.08	2.83	1.15	32.8	1.07	3.17	1.10	3.50	0.99	3.33	0.97	3.83	0.71	1.94	0.64
[x.,	3.60	0.52	2.60	1.08	3.60	0.84	2.60	1.27	3.60	0.84	3.30	0.95	3.50	1.08	2.40	0.52
M-U	3.80	0.45	2.20	1.10	3.60	0.89	3.60	0.89	3.00	1.41	3.00	1.23	4.00	00.00	2.20	0.45
Ĺц	3.75	0.50	3.00	1.16	4.00	0.00	3.50	1.00	4.00	0.00	3.75	0.50	4.00	00.00	2.75	0.96
£- М	3.52	0.73	2.52	1.16	3.04	1.07	3.61	0.78	4.00	0.00	3.44	0.71	3.87	0.46	2.25	0.62
ĹĿı	3.82	0.57	2.18	0.86	3.00	1.04	3.96	. 1.10	3,90	0.42	3.59	0.87	3.71	0.79	2.15	0.62
M−D	3.83	0.41	2.50	1.05	2.83	1.33	3.50	1.23	3.67	0.82	2.83	1.47	4.00	0.00	C0.2	0.63
٤	3.60	0.97	2.10	0.74	2.60	0.97	2.20	1.03	4,00	0.00	3.60	0.52	3.80	0.63	2.43	0.70
M-U	2.00	1.73	2.00	00.00	2.67	1.16	3.33	1.16	4.00	0.00	4.00	0.00	4.00	0.00	2.00	00.00
Ĺ٣4	4.00	0.00	2.00	0.00	4.00	0.00	3.33	1.16	2.67	1.16	3.67	0.58	4.00	0.00	2.00	00.00
P−M	3.43	0.77	2.68	1.20	3.30	1.00	3.43	06.0	3.68	0.85	3.38	0.95	3.84	0.60	2.16	0.65
ſщ	3.80	0.45	2.36	66.0	3.22	1.02	3.06	1.10	3.90	0.42	3.54	0.79	3.66	0.87	2.22	0.65
Le	gend:															
	E-U-I	= Extr	avert-	Undete	rmined-	-Introv	ert									
	S-U-N	= Sens	ation-	Undete	rmined-	-Intuit	ion									
	T-U-F	= Thir	uking-U	Indeter	mined-F	reling										
	J-U-D	= Judz	ri ng-Un	determ	ined-Pe	rceivi	ng									

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Scenario 3 - Secret and Scenario 4 - Backstab as compared to Scenario 2 - Homework . A second simple effects analysis revealed significant differences across psychological type for PDA2 - Homework, E(2,309) = 4.59, p < .05.

Trust Choice - Other Friend (PDB). There were no significant between-subjects effects. The within-subject analysis revealed a significant effect for Scenario, and a significant interaction for Sex by Scenario. The simple effects analysis of sex across scenarios indicated differences for males, E(1, 309) = 24.67, p<.05, and for females, E(1, 309) = 28.33, p<.05. The Tukey HSD analysis within scenario indicated that males made choices indicating greater trust for PDB1 - Principal and PDB2 -Homework, compared to females PDB1 - Principal and PDB2 - Homework; but, that for PDB3 - Secret females made more trusting choices than males.

Sensation-Intuition

The hypotheses for Sensation-Intuition predicted no difference in trust rating score for 'best' friend, but a higher trust rating score was expected for Intuition than for Sensation for 'other' friend. (See Tables 7, 10, and 11.)

SISM. The between-subjects analysis showed a significant effect for sex. The trust score for females was significantly greater than the trust score for males. For the within-subject analysis, friend was a significant effect. Higher ratings were given for 'best' friend than for 'other' friend.

PD. There were no significant between-subjects effects for TotPDA-TotPDB. The within-subject analysis revealed a significant effect of Friend. A significant interaction effect was found for Sex and Friend. Simple effects analysis showed an effect of Sex, E(4.103) = 5.64, p < .05, for 'best' friend, TPDA, and an effect of Friend was found for for males, E(1,103), = 70.50, p < .05, and females, E(1,103) =155.18, p < .05. Comparison by Tukey HSD analysis showed higher means for 'best' friend total score (TPDA) compared to 'other' friend total score (TPDB) for males, and females. For TPDA, 'best' friend trust choice scores for females were higher than those given by males.

Trust Choice - Best Friend (PDA). The between-subject analysis showed a marginally significant effect for Sex, with females assigning higher trust choice scores than males. The within-subject analysis revealed a significant main effect of Scenario and a significant interaction of Sex and Scenario. Simple effects analysis indicated both males, F(3,309) = 11.35, p < .05, and females, F(3,309) = 8.17, p < .05, discriminated in their ratings across scenarios. Simple effects analysis indicated in PDA1 - Principal, F(3.309) = 13.97, p < .05, that females gave higher trust ratings than males. Tukey HSD analysis showed this order of

means across scenarios: 3-Secret, 4-Backstab, 1-Principal, and 2-Homework, with Scenario 3, Scenario 4, and Scenario 1 significantly different from Scenario 2.

Trust Choice - Other Friend PDB. The analysis found no significant between-subjects effects. The within-subject analysis showed a significant main effect for scenario. Tukey HSD analysis indicated that the order of means across scenarios was: 3-Secret, 2-Homework, 1-Principal and 4-Backstab, with Scenario 3 significantly different from Scenarios 4, 1, and 2, and Scenarios 2 significantly different from Scenarios 1 and 4. The interaction for Sex by Scenario was also significant. Further analysis, using simple effects, showed both males, F(3, 309) = 23.81, p < .05, and females, F(3,309) = 21.47, p < .05, to select different choices across scenarios. Tukey HSD comparisons revealed that the trust choices of males for PDB2 - Homework were significantly higher than for PDB4 - Backstab and PDB1 -Principal, and that females' trust choices for PDB3 - Secret were significantly higher than for PDB4 - Backstab, PDB2 -Homework, and PDB1 - Principal.

Thinking-Feeling

The hypotheses for Thinking-Feeling predicted no difference in trust rating score for 'best' friend, but a higher trust rating score was expected for Feeling than for Thinking for 'other' friend. (See Tables 8, 10, and 11.)

SISM. The between-subjects analysis showed the main effect of sex and a marginally significant effect of Thinking-Feeling. Mean scores comparison showed that the trust score for females was higher than that for males.

The within-subject analysis showed a significant effect for Friend, and for TF by Friend. 'Best' friends were given higher trust scores than the 'other' friend . Analysis by simple effects indicated an effect for Friend for Thinking, E(1.103) - 55.04, p < .05; Undetermined, E(1,103) = 62.99, p = <.05; and Feeling, E(1,103) = 77.68, p < .05. 'Best' friend received higher trust score ratings compared to 'other' friend for all three psychological types.

<u>PD</u>. The analysis of Total PDA-Total PDB (TPDA-TPDB) showed a between-subjects effect for TF by Sex. Analysis by simple effects indicated an effect for Sex, E(2,103) = 5.30, p < .05, across psychological type, and an effect of Psychological Type, E(1,103) = 6.74, p < .05. Analysis by Tukey HSD revealed that for Undetermined females had higher trust rating scores than males .

A significant within-subject effect was found for Friend. The trust choice score was higher for 'best' friend compared to 'other' friend.

<u>Trust Choice - Best Friend (PDA)</u>. No significant between-subjects effects were found. The within-subject analysis showed a marginally significant effect of Scenario

and a significant interaction for Thinking-Feeling and Scenario. Tukey HSD indicated the order of the differences across scenarios was: 3- Secret, 4-Backstab, Principal, and 2-Homework, with Scenarios 3 and 4 significantly higher than Scenarios 2 and 1. Analysis by simple effects showed that Feeling, E(3,309) = 4.48, p < .05, was significant across scenarios. Tukey HSD comparison showed that PDA3 - Secret was significantly higher than PDA2 - Homework .

Trust Choice - Other Friend (PDB). A marginally significant effect was found for Thinking-Feeling by Sex. Analysis by simple effects showed an effect for Undetermined, E(1,103) = 3.87, p < .05. Tukey HSD indicated that females gave higher trust choice ratings than males.

The within-subject analysis showed an effect of scenario. The Tukey HSD revealed that the order of scenarios was: 3-Secret, 2-Homework, 1-Principal, and 4-Backstab, with Scenario 3 significantly higher than Scenarios 4, 1, and 2, and Scenarios 2 significantly higher than Scenario 4 and 1. Judging-Perceiving

The hypotheses for Judging-Perceiving predicted no difference in trust rating score for 'best' friend, but a higher trust rating score was expected for Perceiving than for Judging for 'other' friend. (See Tables 9, 10, and 11.)

SISM. The between-subjects analysis showed a marginal effect for Sex with females higher compared to males. The

within-subject analysis showed a significant effect for Friend and Judging-Perceiving by Friend. Analysis by simple effects indicated and effect of Friend for Judging, E(1,103)= 71.42, p <.05; Undetermined, E(1,103) = 34.41, p <.05; and Perceiving, E(1,103) = 68.62, p <.05. Higher trust score ratings were given to 'best' friend, TBest, than to 'other', friend, TOther.

PD. The repeated measures analysis of Total PDA-Total PDB (TPDA-TPDB) indicated no significant between-subjects effects. The only significant within-subject factor was Friend. Higher trust score ratings were given to 'best' friend, TBest, than to 'other' friend, TOther.

<u>Trust Choice - Best Friend (PDA)</u>. The between-subjects analysis showed no significant effects. The within-subject analysis revealed a significant effect for Scenario; for Sex by Scenario; and for Judging-Perceiving by Sex by Scenario; and a marginally significant effect for Judging-Perceiving by Scenario. The order of the means for the main effect of scenarios was 3-Secret, 4-Backstab, 1-Principal, and 2-Homework, with Scenarios 3, 4, and 1 significantly higher than Scenarios 2. Two significant interactions were found: Sex by Scenario and Judging-Perceiving by Sex by Scenario. Simple effects analysis showed significance across scenarios for Judging, males, F(3, 309) = 2.71, p < .05, and females, F(3.309) = 3.88, p < .05; and for Undetermined, males,

E(3,309) = 10.02, p < .05, and females, E(3.309) = 4.44, p<.05. Further analysis by Tukey HSD indicated that for Judging males rated Scenario 4 - Backstab significantly higher than Scenario 2 - Homework and females rated Scenario 3 - Secret and Scenario 4 significantly higher than Scenario 2 - Homework. In addition, for Undetermined males rated Scenario 4 - Backstab and Scenario 3 - Secret significantly higher than Scenario 1 - Principal and Scenario 2 - Homework and females rated Scenario 4 - Backstab, Scenario 2-Homework, and Scenario 1 - Principal significantly higher than Scenario 3 - Secret.

Trust Choice - Other Friend (PDB). No significant between-subjects effects were found. The within-subject analysis indicated a main effect of Scenario. Tukey HSD revealed the following order across scenarios: 3-Secret, 2-Homework 1-Principal, and 4-Backstab, with Scenario 3 and Scenario 2 significantly higher than Scenarios 4 and 1.

Reliability Analysis

The reliability of the Sharabany Intimacy Scale, Modified, the Murphy-Meisgeier Type Indicator for Children, and the Myers-Briggs Type Indicator were examined with Coefficient Alpha. The resulting values appear in Tables 13 and 14.

Reliability Analysis of Sharabany Intimacy Scale, Modified Trust Scale*

		·	
Total SISm	0.84		
Best Friend (SISmA)		Other Friend (SISmB)	
Total	0.73	Total	0.84
Frankness	0.61	Frankness	0.62
Sense	0.39	Sense	0.66
Trust	0.34	Trust	0.69
Total Frankness	0.69		
Total Sense	0.62		
Total Trust	0.66		

*Coefficient Alpha Values

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Reliability Analysis of Murphy-Meisgeier Type Indicator for Children and Myers-Briggs Type Indicator*

MMTIC

Personality Type

Extravert-Undetermined-Introvert (EUI)	.71
Sensation-Undetermined-Intuition (SUN)	.69
Thinking-Undetermined-Feeling (TUF)	.79
Judging-Undetermined-Perceiving (JUP)	.74

MBTI

Personality Type	
Extravert-Introvert (EI)	.82
Sensation-Perception (SN)	.83
Thinking-Feeling (TF)	.74
Judging-Perceiving (JP)	.84

*Coefficient Alpha Values

Correlational Analysis of Trust Score Measures

A Pearson Product Correlational analysis was used to examine the relationship among the SISm and PD measures of peer trust. Tables 15 and 16 show the matrix of correlations for the two scales and their components.

SISm Pearson Correlation Coefficients for Total Scale, Total Clusters, and Clusters by Friend

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	0.41**	0.57**	0.26**	0.68**	0.24*	0.92**	0.56**	0.58**	0.86**	0.36**	0.80**	TRUSTB
0.41**		0.15	0.41**	0.29**	0.45**	0.74**	0.30**	0.44**	0.32**	0.74**	0.58**	TRUSTA
0.57**	0.15		0.30**	0.64**	0.41	0.48**	0.91**	0.45**	0.85**	0.18	0.72**	SENSEB
0.26**	0.41**	0.30**		0.27**	0.52**	0.37**	0.67**	0.46**	0.32**	0.78**	0.59**	SENSEA
0.68**	0.29**	0.64**	0.27**		0.37**	0.63**	0.61**	0.87**	**68.0	**6€.0	0.84**	FRANKB
0.24**	0.45**	0.04	0.52**	0.37**		0.37**	0.26**	0.78**	0.25**	0.87**	0.58**	FRANKA
0.92**	0.74 * *	0.49**	0.37**	0.63**	0.37**		0.54**	0.62**	0.78**	0.59**	0.84**	TTRUST
0.56**	0.30**	0.91**	0.67**	0.61**	0.26**	0.54**		0.55**	0.80**	0.48**	0.81**	TSENSE
0.58**	0.44**	0.45**	0.46**	0.87**	0.78**	0.62**	0.55**		0.74**	0.73**	0.87**	TFRANK
0.86**	0.32**	0.85**	0.32**	.89**	0.25**	0.78**	0.80**	0.73**		0.36**	••16.0	TOTHER
0.32**	0.74**	0.18	0.78**	0.39**	0.87**	0.59**	0.48**	0.73**	0.36**		0.72**	TBEST
0.80**	0.58**	0.72**	0.59**	0.84**	0.58**	0.84**	0.81**	0.87**	C.91**	0.72**		TSCALE
TRUSTB	TRUSTA	SENSEB	SENSEA	FRANKB	FRANKA	TTRUST	TSENSE	TFRANK	TOTHER	TBEST	TSCALE	
										-		

* p < .05

** <u>a</u> < 01

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Table 16 PD Pearson Correlation Coefficients for Total Scale, Total Scale by Friend, and Scenarios ty Friend

	PDA1	PDA2	PDA3	PDA4	PDB1	PDB2	PDB3	PDB4	1 L L	TPDA	TPDB
PDA1		0.14	0.09	0.13	-0.29**	-0.04	-0.06	0.02	0.38**	0.65**	-0.16
PDA2	0.14		0.08	10.01	×60.0-	-0.23*	-0.09	-0.30**	C.23	5.66*×	-0.36**
PDA3	60.0	0.08		0.03	0.01	-0.01	-0.31**	-0.05	0.15	0.41**	-0.20
PDA4	0.30	0.01	0.03		0.15	0.16	0.03	60.0-	0,48**	0.47**	0.11
PDB1	-0.29**	*60.0-	0.01	0.15		0.02	-0.36**	0.02	60.0	-0.14*	0.23*
PDB2	-0.04	-0.23*	-0.01	0.16	0.02		0.13	0.04	• 44 * * 0	-0.09	0.58**
PDB3	-0.06	-0.09	-0.31**	0.03	-0.36**	0.13		0.17	0.36**	-3.16	0.56**
PDB4 .	0.02	-0.31**	-0.05	-0.09	0,02	0.04	0.17		0.36**	-2.21*	0.62**
TPD	0.38*	0.23*	0.15	0.48**	60.0	0.44**	0.36**	0.37**		J.55**	0.63**
TPDA	0.65	0.66	0.41**	0.48**	-0.14	-0.08	-0.16	-0.21*	0.55**		-0.30**
TPDB	-0.16	-0.36	-0.20	0.11	0.23**	0.58**	0.56**	0.62**	0.63**	-3.30**	

č0. > g *

** p < .01

Chapter IV

Discussion

Sex Differences

The hypothesis that no significant differences would be found between males and females for the trust rating for 'best' friend in the Sharabany Intimacy Scale, Modified (SISm) and the Prisoner's Dilemma (PD) measure was not confirmed. No significant differences were found between males and females for the trusting choice for 'best' friend in the four conflict scenarios, but females had higher trust rating scores on the Sharabany Intimacy Scale, Modified. The hypothesis that females would have a higher trust score rating for 'other' friend in the Sharabany Intimacy Scale, Modified, was confirmed, while the hypothesis that females would make more trusting choices for 'other' friend in the Prisoner's Dilemma was not confirmed. Males made marginally more trusting choices than females for 'other' friend in the four conflict scenarios.

It was expected that the trust level for 'best' friend would not differ for males and females because there were no restrictions imposed on the qualitative judgments the subjects made within themselves about who their 'best' friend was (i.e. same or opposite sex friend or reciprocity). It was assumed that the student would trust his/her 'very best friend' (the term used in the study for the student's friend listed in the first position in the rank-ordered list) whether the subject was male or female, and that no sex differences would be revealed for 'best' friend. This hypothesized result was confirmed. The expected higher trust rating score for females as compared to males for 'other' friend was generated from friendship and intimacy studies (Berndt, 1981; Buhrmester & Furman, 1987; Jones & Dembo, 1989), which report females as having higher scores on these dimensions along with data that indicates girls interact in dyads and small groups compared to boys who interact with groups. Taken together, these findings suggest that higher friendship and intimacy scores should be extended to 'other' friend for girls, whereas boys would be less likely to show a similar trust level in their 'other' friend who was just "one of the gang". Females, on the other hand, would be able to determine from their interaction with a smaller group whether or not the 'other' friend fit the general parameters of friendship expectations, "those beliefs, attitudes and values that a person expresses as being important characteristics in a best friend" (Bigelow, 1977, p. 24). This anticipated difference was not found for Sharabany Intimacy Scale, Modified, and, contrary to expectations, malcs had higher trust rating scores in conflict choice situations than

females. Although the vignettes were patterned after the Prisoner's Dilemma Game payoff matrix, it appears that they were not perceived of as opportunities for game strategy competition by the males, which would have resulted in their receiving lower scores than females. The findings of Coady (1986), in which the Prisoner's Dilemma Game was used, that females were more trusting than males and males more competitive than females did not carry over to this study. Psychological Type

The hypotheses that no differences in trust rating score would be found for Extravert-Introvert, Sensation-Intuition, Thinking-Feeling, and Judging-Perceiving with 'best' friend was confirmed by analysis of the Sharabany Intimacy Scale, Modified (SISm). The hypotheses that the trust ratings would be higher for Extravert compared to Introvert, for Intuition compared to Sensation, for Feeling compared to Thinking, and for Perceiving compared to Judging for 'other' friend were not confirmed. Analysis of the Sharabany Intimacy Scale, Modified showed no significant differences for psychological type for 'other' friend.

The analysis of scores on the conflict scenarios for 'best' and 'other' friend also found no significant differences between the pairs of Extravert-Introvert, Sensation-Intuition, Thinking-Feeling, and Judging-Perceiving. This finding confirmed the hypothesis of no

differences for 'best' friend but failed to confirm the hypothesis that there would be significant differences between Extravert-Introvert, Sensation-Intuition, Thinking-Feeling, and Judging-Perceiving for 'other' friend.

The hypotheses regarding psychological type were quite speculative. Corazzini (1974) assessed the relationship of underlying dimensions of a trusting choice with 16 personality variables. Corazzini identified four dimensions: Suspicion, the inner resources a person has with which to make a choice; Risk-Taking, the exposure to danger of personal harm, Gambling, the possible loss of personal goods, and Cynicism, the subject's attitude and perception of how society will respond. For Suspicion those high in trust were emotionally stable, humble, and venturesome; those low in trust were feeling, shy, assertive, suspicious, and tense. For Risk-taking and Gambling those high in trust were humble and tender-minded; those low in trust were assertive and tough-minded. For Cynicism those high in trust were groupdependent; those low in trust were self-sufficient. In the present study the descriptions of Corazzini were linked to the terminology of psychological type to arrive at the hypothesized differences between the pairs of psychological type: Extraverts-Introvert, Sensation-Intuition, Thinking-Feeling, and Judging-Perceiving.

Contrary to the predictions, no differences between psychological type and friend, either 'best' or 'other', were Therefore, the individual differences of found. psychological type generated from the Murphy-Meisgeier Type Indicator for Children and the Myers-Briggs Type Indicator do not seem to have an impact on trust. It might be suggested that this is because psychological type transcends these differences. Trust can be viewed as a basic element necessary in interpersonal relationships; and the "degree of trust is a central determinant of the level of friendship' (Rawlins & Holl, 1987, pg. 353). As such, it is sensitive to the vagaries of the day by day interactions of friendships which influence trust. Nonetheless, these resultant changes in trust can be repaired, and friendship restored between friends, whether 'best' or 'other', except when trust has been so violated that the friendship is irrevocably ruptured. If different psychological types trusted dissimilarly, trust in friendships might be impaired substantially for some types or know no bounds for other types.

Limitations of the Study

Although it was proposed that twelfth graders would be included in this study, this group of subjects had to be dropped after an inadequate number were available so late in the school year. This problem could have been avoided by scheduling the testing within the third quarter of the school

year and still have allowed for friendships to have been established as suggested by Duck (1975).

That there were unequal Ns for sex and psychological type was due to the relatively small number of subjects available for the study. A significantly larger sample size would have been desirable to offset this. Under ideal research conditions the subjects would have been chosen randomly. In addition, consecutive grades 4-12 could have been included to provide a more balanced number of students who took the Murphy-Meisgeier Type Indicator for Children, grades 4-8, and the Myers-Briggs Type Indicator, Form <u>G</u>, grades 9-12.

There was low reliability for the Prisoner's Dilemma measure. Since the vignettes addressed different hypothetical real-life events, a test for internal consistency was not appropriate. Using a test-retest format would examine stability over time. Another way to increase reliability of the measure would be to expand the number of vignettes beyond the four used in the present study.

Suggestions for Future Research

The data collected for this study provides suggestions for future research. The analysis of Scenario as a second within-subject factor revealed a different order effect between 'best' and 'other' friends in the conflict resolution scenarios. On the Information Sheet the subjects indicated

whether their 'best' friend was the same or opposite sex and whether he/she was a 'best' friend or a "boy/girl friend". Also recorded were their answers to the basic question, "What does it mean to trust a friend?". As trust is studied across grades for children and adolescents, these different dyad designations should be considered and these definitions of trust should analyzed be for categorization.

<u>Conclusions</u>

The objective of this study was to examine psychological type and sex differences in trust ratings of children and adolescents when 'best' versus 'other' friend was considered. Psychological type was not a significant factor in the children's trust choices. Higher trust scores were given to 'best' friend for both trust measures. Sex differences in trust scores were found for 'best' friend on the modified Sharabany scale; and a marginal difference was found for the conflict scenarios. As Maccoby (1990) said, "When it comes to (gender) attributes in the personality-social domain, results are particularly sparse and inconsistent" (p.513). She continued:

"Social behavior...is never a function of the individual alone. It is a function of the interaction between two or more persons. Individuals behave differently with different partners. There are certain important ways in which gender is implicated in social behavior--ways that may be obscured or missed altogether when behavior is summed across all categories of social partners. (p. 513)

To follow Maccoby's line of thought, it appears that individual differences in trust are an enigma; unlike a sentence, they are not readily broken "down into (their) component parts of speech with an explanation of the form, function and syntactical relationship of each part" (Morris, 1981, p. 995).

The findings from this study do not negate the need to continue studying individual differences in trusting relationships. Psychological type may influence trusting relationships. Keirsey and Bates (1984) state, "If they are of radically different temperaments, two children doing precisely the same thing will have radically different experiences" (p. 97). For example, given that the extraverted child usually has a number of relationships while the introverted child may develop only a few relationships, the introverted child could be affected differently from a break in a trusting relationship than would the extraverted child (Keirsey & Bates, 1984). Findings from studies of individual differences in trusting relationships may provide information which caring people can use in their interactions with others, who have experienced the effects of broken trust.

References

Berndt, T. J. (1981). Effects of friendship on prosocial

intentions and behavior. <u>Child Development</u>, <u>52</u>, 636-643.

- Berndt, T. J., Hawkins, J. A., & Hoyle, S. G. (1986). Changes in friendship during a school year: effects on children's and adolescents' impressions of friendship and sharing with friends. <u>Child Development</u>, <u>57</u>, 1284-1297.
- Berndt, T. J., & Hoyle, S. G. (1985). Stability and change in childhood and adolescent friendships. <u>Developmental</u> <u>Psychology</u>, <u>21(6)</u>, 1007-1015.
- Berndt, T. J., & Perry, T. B. (1986). Children's perceptions of friendships as supportive relationships. <u>Developmental</u> <u>Psychology</u>, 22, 640-648.
- Bigelow, B. J. (1977). Children's friendship expectations: A cognitive developmental study. <u>Child Development</u>, <u>48</u>, 246-253.
- Bigelow, B. J., & LaGaipa, J. J. (1975). Children's written descriptions of friendship: A multidimensional analysis. <u>Developmental Psychology</u>, <u>11</u>(6), 857-858.
- Buhrmester, D., & Furman, W. (1987). The development of companionship and intimacy. <u>Child Development</u>, <u>58</u>, 1101-1113.

- Buzzelli, C. A. (1988). The development of trust in children's relations with peers. <u>Child Study Journal</u>, <u>18(1)</u>, 33-46.
- Carlyn, M. (1977). An assessment of the Myers-Briggs Type Indicator. <u>Journal of Personality Assessment</u>, <u>41</u>(5), 461-473.
- Coady, H. (1986). Behavioral correlates of moral judgement. Journal of Psychology, <u>120</u>(2), 191-198.
- Corazzini, J. G. (1974). A topology of trust (Doctoral dissertation, University of Notre Dame, 1974). Dissertation Abstracts International, 34, 7038-A.
- Duck, S. W. (1975). Personality similarity and friendship choices by adolescents. <u>European Journal Social Psychology</u>, <u>5(3)</u>, 351-365.
- Furman, W., & Bierman, K. L. (1984). Children's conceptions of friendships: A multimethod study of developmental changes. <u>Developmental Psychology</u>, <u>20</u>(5), 925-931.
- Jones, G. P., & Dembo, M. H. (1989). Age and sex role differences in intimate friendships during childhood and adolescence. <u>Merrill-Palmer Quarterly</u>, <u>35</u>(4), 445-462.
- Kahn, R. H., & Turiel, E. (1988). Children's conceptions of trust in the context of social expectations. <u>Merrill-Palmer</u> <u>Quarterly</u>, <u>34</u>(4), 403-419.

Keirsey, D., & Bates, M. (1984). <u>Please understand me -</u> <u>character and temperament types</u>. Del Mar, CA: Prometheus Nemesis Book Company.

Luce, R. D., & Raiffa, H. (1957). <u>Games and decisions:</u> <u>Introduction and critical survey</u>. London: Wiley.

- Maccoby, E. E. (1990). Gender and relationships a developmental account. <u>American Psychologist</u>, <u>45(4)</u>, 513-520.
- Maccoby, E. E., & Jacklin, C. N. (1974). <u>The psychology of</u> <u>sex differences</u>. Stanford, CA: Stanford University Press. Meisgeier, C., & Murphy, E. (1987). <u>Murphy-Meisgeier Type</u> <u>Indicator for Children Manual</u>. Palo Alto, CA: Consulting Psychologists Press.
- Morris, W. (Ed.). (1981). <u>The American Heritage Dictionary of</u> <u>the English Language</u>. Boston: Houghton Mifflin.
- Murphy, E. A. (1986). Estimates of reliability and validity for the Murphy-Meisgeier Type Indicator for Children (University of Houston, 1986). <u>Dissertation Abstracts</u> <u>International</u>, <u>47</u>, 2091-A.
- Myers, I. B., & McCaulley, M. (1989). <u>Manual: A guide to the</u> <u>development and use of the Myers-Briggs Type Indicator</u>.

Palo Alto, CA: Consulting Psychologists Press.

Rawlins, W. K., & Holl, M. (1987). The communicative achievement of friendship during adolescence: Predicaments of trust and violation. <u>Western Journal of Speech</u>

<u>Communication</u>, <u>51</u>, 345-363.

- --Rotenberg, K. J. (1980). "A promise kept, a promise broken": Developmental bases of trust. <u>Child Development</u>, <u>51</u>, 614-617.
- Rotenberg, K. J. (1984). Sex differences in children's trust in peers. <u>Sex Roles</u>, <u>11</u>(9-10), 953-957.
- Rotenberg, K. J. (1986). Same-sex patterns and sex differences in the trust-value basis of children's friendships. <u>Sex Roles</u>, <u>15(11-12)</u>, 613-626.
- Sharabany, R. (1974). Intimate friendship among kibbutz and city children and its measurement. (Doctoral dissertation, Cornell University, 1974). <u>Dissertation Abstracts</u> <u>International</u>, <u>35</u>, 1028B-1029B.
 - Sharabany, R., Gershoni, R., & Hofman, J. E. (1981).
 Girlfriend, boyfriend: Age and sex differences in intimate
 friendship. Developmental Psychology, 17(6), 800-808.
 - Tesch, S. A. (1983). Review of friendship development across the life span. <u>Human Development</u>, <u>26</u>, 266-267.
 - Willis, C. G. (1984). Myers-Briggs type Indicator. In D. J. Keyser, & R. C. Sweetland (Eds.), <u>Test Critiques</u> <u>Compendium</u>. Kansas, Missouri: Westport Pub. Inc.

Appendix A

Parental Consent Letter

Dear Parents:

Your child has been identified as meeting the selection criteria for participation in a research project on trust and friendship in school-age youths. The selection criteria are that you child must be in grades four through twelve, and must be an average student or higher in terms of academic performance. This research project will be conducted by Eileen M. Molzen and M. Susan Snyder, Department of Psychology, University of Nebraska at Omaha. It has been approved by the Institutional Review Board of the University of Nebraska. The research project has been reviewed and approved by the Coordinators of Elementary and Secondary Education for Council Bluffs Public Schools and the principal of the school your child or adolescent attends.

The study in which your child is invited to participate is concerned with examining trust in school-age and high school friendships. To assist us in this project, each of the students involved will complete a brief series of rating scales and questionnaires. These instruments measure a child's or adolescent's trust, peer relations, and personal characteristics. In addition, your child may be one of those randomly selected to participate in an interview process. Each of the rating scales/questionnaires will be completed by your child during a free period in the school day, so that participation in this study will not interfere with your child's classroom learning. All of the information collected will be kept confidential with the principal investigators.

The data collected in this study will be used to examine a measure of trust. The findings from this study may be published later in a professional journal.

Insofar as we can determine, there are no risks involved in this study. Your child will be answering a series of questions, but none of the questions ask for confidential personal information. All of the questions asked have been reviewed by the authorities previously mentioned. Your cooperation in permitting your child to participate in this study is very important. We need all of the identified students to take part in this study to maintain the representativeness of the sample. Please complete the attached permission form as soon as possible and send it to school within the next 2 days with your child to be turned in to his/her teacher. In order to ascertain that all parents have received this request, we would appreciate receiving a even if you do not want your child to reply by April participate.

If you have any questions regarding this research project, please call Eileen Molzen at 558-2092 or Susan Snyder at 402-253-2029. Thank you very much.

Sincerely,

Eileen M. MolzenJoseph C. LaVoie, Ph.D.Principal InvestigatorResearch SupervisorOffice - 554-2398

M. Susan Snyder Principal Investigator School Principal

Appendix B

Parental Consent Form

Invitation to Participate

Your child is invited to participate in a study of friendships in fourth- to twelfth-grade students. Your child was selected for this study because he/she is in grade four to twelve and is an average student or above in classroom work.

Purpose of the Study

The purpose of this study is to learn more about the development of trust in friendships in school-age youths.

Explanation of Procedures

Each child will be asked to complete a series of brief rating scales/questionnaires. In addition, some students will be randomly selected to participate in an interview process. These activities will be done during a free period for the student.

Potential Risks and Discomforts

There are no risks or discomforts associated with this study.

Assurance of Confidentiality

The information collected in this study will not be associated with any individual child because stringent confidentiality practices will be utilized.

Withdrawal from the Study

Participation in the study is voluntary. Your decision whether or not to allow your child to participate will not affect your present or future relationship with the University of Nebraska at Omaha. If you decide to permit your child to participate, you are free to withdraw your consent and discontinue his/her participation at any time.

Offer to Answer Ouestions

If you have any questions about this study, please contact Eileen M. Molzen at 558-2092 or M. Susan Snyder at 402-253-2029.

YOU ARE MAKING A DECISION WHETHER OR NOT TO ALLOW YOUR CHILD TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT, HAVING READ THE INFORMATION PROVIDED ABOVE, YOU HAVE DECIDED TO PERMIT YOUR CHILD TO PARTICIPATE. YOU WILL BE GIVEN A COPY OF THIS CONSENT FORM TO KEEP. Parents who permit their child to participate will receive a report on the findings of the study.

Signature of Parent/Guardian

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Eileen M. Molzen Principal Investigator Home - 558-2092

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M. Susan Snyder Principal Investigator Home - 402-253-2029
Appendix C

Student Assent Form

Because your are a student in grades four, six, eight, ten or twelve, you are invited to participate in a research project on trust and friendship in school-age youths. In this project you will be asked to answer some questions about your relationship with friends. The total time to answer these questions will be about 50-55 minutes. The questions that you answer will not embarrass you in any way, and none of the questions will ask about personal matters that you would not want to answer. All of your answers will remain confidential. The information that you give will not be shared with anyone by the principal investigators. The school will receive some summary information about this study, but the school will not receive any information on how individual students answered any of the questions.

Please feel free to discuss your participation in this research project with your parents.

Participation in this project is voluntary. Your decision whether or not to participate will not affect your relationship with the school you attend or the University of Nebraska at Omaha. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time.

If you have any questions about this study or this form, please ask them now, or you may contact Dr. Joseph C. LaVoie, at 554-2398, University of Nebraska at Omaha. When you have completed the questionnaires, you will be given an explanation of this research project and what it means. You may ask additional questions at that time.

YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT, HAVING READ THE INFORMATION PROVIDED ABOVE, YOU HAVE DECIDED TO PARTICIPATE. YOU WILL BE GIVEN A COPY OF THIS CONSENT FORM TO KEEP.

Eileen M. Molzen Principal Investigator Home - 558-2092 Date Your Name

M. Susan Snyder Principal Investigator Home - 402-253-2029 Joseph C. LaVoie, Ph.D. Research Supervisor Office - 554-2398 Appendix D

SISm

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EXAMPLE OUESTIONS

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1. I TELL HIM/HER WHAT I DO IN MY FREE TIME.

			A		
DOES NOT FIT					FITS
absolutely certain	fairly certain	I guess so	I guess so	f air ly certain	absolutely certain

		I	3		
DOES NOT FIT					FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

2. HE/SHE STAYS WITH ME WHEN I WANT TO DO SOMETHING THAT OTHER KIDS DO NOT WANT TO DO.

		i	A		
DOES NOT FIT					FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

DOES	NOT	FIT							FITS
absolu certa	utely utely	y fairly certain	I	guess so	I	guess so	 fairly certain	al	osolutely certain

Α

DOES NOT FI	Т				
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolute] certain
DOES NOT FI	Т		в		FITŜ
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolute certain
WHENEVER Y AROUND.	OU SEE 1	ME YOU	CAN BE S	URE HE/SHE	E IS ALSO
WHENEVER Y AROUND.	YOU SEE M	ME YOU	CAN BE S B	URE HE/SHE	E IS ALSO FITS
WHENEVER Y AROUND. DOES NOT FI absolutely certain	T fairly certain	ME YOU I guess so	CAN BE S B . I guess so	URE HE/SHE fairly certain	FITS FITS absolute: certain
WHENEVER Y AROUND. DOES NOT FI absolutely certain DOES NOT FI	T fairly certain	ME YOU I guess so	CAN BE S B .I guess so A	URE HE/SHE	FITS FITS absolute certain FITS

2.

		в		
DOES NOT FI	Т			FITS
absolutely certain	fairly I guess certain so	I guess so	fairly certain	absolutely certain
DOES NOT FI	Т	А		FITS
absolutely certain	fairly I guess certain so	s I guess so	fairly certain	absolutely certain

4. I KNOW HOW HE/SHE FEELS ABOUT THE GIRL/BOY HE/SHE LIKES.

			Α		
DOES NOT FI	T 				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain
DOES NOT FI	T		В		FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

5. I TELL HIM/HER WHEN I HAVE DONE SOMETHING THAT OTHER PEOPLE WOULD NOT APPROVE OF.

			В		
DOES NOT FI	Т				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain
			A		57.50
DOES NOT FI	T 				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

6. I SPEAK UP TO DEFEND HIM/HER WHEN OTHER KIDS SAY BAD THINGS ABOUT HIM/HER.

			в		
DOES NOT FI	T			<u></u> .	FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain
			A		
DOES NOT FI	T				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

7.	I CAN	TELI	WHEN	HE/	SHE I	S W	ORRIED	ABOU	тs	OME	THING	3 .
	DOES NOI	r FIT	2			в					FIT	S
	absolutel certain	-У	fairly certain	. I	guess so	I	guess so	fair cert	ly aın	ab: c	solut ertai	ely n
	DOES NOT	r FI1	ſ			A					FIT	'S
	absolutel certain	.У	fairly certain	I	guess so	I	guess so	fair cert	ly ain	ab c	solut ertai	ely .n
8.	I TALK FUTURE.	WIT	н нім/І	HER	ABOUT	МҮ	HOPES	AND	PLA	NS	FOR	THE
	DOES NOI	C FIT	c 			A					FIT	.s
	absolutel certain	-У	fairly certain	I	guess so	I	guess so	fairl certa	y in	abs ce	olute rtair	ely n
	DOES NOT	S FIJ	C			в					FII	S
	absolutel certain	-y	fairly certain	I	guess so	I	guess so	fair cert	ly ain	ab C	solut ertai	ely In
9.	I WORK	WII	н нім/	HER	ON S	OME	OF HI	S/HER	но	BBII	ZS.	
	DOES NOI	FI1	C			в					FITS	5
	absolutel certain	-У	fairly certain	I	guess so	I	guess so	fair cert	ly ain	ab c	solut ertai	ely In
						A						
	DOES NOT	FI1	C								FITS	3

absolutely	fairly	Ι	guess	I guess	fairly	absolutely
certain	certain		so	so	certain	certain

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10. I WILL NOT AGREE TO COOPERATE IN ANYTHING AGAINST HIM/HER.

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utely
TS
utely
1

11. I KNOW HOW HE/SHE FEELS ABOUT THINGS WITHOUT HIS/HER TELLING ME.

		L.	2		
DOES NOT FI	T				FITS
absolutely certain	fairly I certain	guess so	I guess so	fairly certain	absolutely certain

			A		
DOES NOT FI	[T 				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

12. I TELL PEOPLE NICE THINGS ABOUT HIM/HER.

			в		
DOES NOT FI	T				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain
			A		
DOES NOT FI	Т				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

13. I FEEL FREE TO TO TALK TO HIM/HER ABOUT ALMOST EVERYTHING.

DOES NOT FI	T				FITS
absolutely certain	fairly certain	I guess కర	I guess	fairly Certain	absolutely certain
			в		
DOES NOT FI	Т				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

14. I WORK WITH HIM/HER ON SOME OF HIS/HER SCHOOL WORK.

			A		
DOES NOT FI	Т				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain
			В		
DOES NOT FI	Т				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

15. I KNOW WHICH KINDS OF BOOKS, GAMES, AND ACTIVITIES HE/SHE LIKES.

			A		
DOES NOT FI	Т				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain
DOES NOT FI	Т		В		FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

16. I LIKE DOING THINGS WITH HIM/HER.

			В		
DOES NOT FI	Т				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain
			A		
DOES NOT FI	T 				FITS
absolutely certain	fairly certain	I guess so	I guess so	fairly certain	absolutely certain

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Appendix E

ΡD

Here are some stories about situations which you might run in to with your friends. Fill in the names of the friends you wrote on the first page beside **A** and **B** in the blanks beside **A** and **B** below for each of the four stories. Please follow along as I read each story aloud.

Now read the story to yourself two times:

1. The first time think of your best friend **A** as you read. After you have given it some careful thought, please circle the number beside the sentence that you feel would best fit how you and your best friend **A** would treat each other if this situation were really to happen to you two.

2. Now read the story again. The second time please circle the number beside the sentence you feel would best fit how you and your other friend \mathbf{B} would treat each other if this situation were really to happen to you two.

Story 1

One day, at school, you and your friend are asked to go to the principal's office. The principal has you come in one at a time. He tells you that the janitor saw two students taking something out of another student's locker during study hall time. The janitor was not very close to the two students, but he thinks it was you and your friend. The principal then tells you that your name and your friend's name are on the list of students who missed study hall during that time. You know that you and your friend did it. The principal tells you and your friend that you have only two choices: to say you did do it or to say you did not do it.

Story 1

А

- If you say you did it and your friend does not, then you will have two days of detention and nothing on your school record, while your friend will get a week of detention and have the event put in his/her school record.
- If you both say that you did not do it, then both of you will have two days of detention for being out of study hall and the matter will be dropped.
- 3. If you do not say you did it and your friend does say that he/she did it, then you will get a week of detention and have the event put in your school record, while your friend will get two days of detention and nothing will be put on his/her school record.
- If you both say that you did it, then you both will receive one week of detention, and the principal will not put it on your school record.

- If you say you did it, and your friend does not, then you will have two days of detention and nothing on your school record, while your friend will get a week of detention and have the event put in his/her school record.
- 2. If you do not say you did it and your friend does say that he/she did it, then you will get a week of detention and have the event put in your school record, while your friend will get two days of detention and nothing will be put on his/her school record.
- If you both say that you did it, then you both will receive one week of detention, and the principal will not put it on your school record.
- If you both say that you did not do it, then both of you will have two days of detention for being out of study hall and the matter will be dropped.

Storv 2

You and your friend need and trust each other a lot. One day last week your friend was sick and missed school. He/She asked you to bring his/her homework to him/her so he/she could get ready for the big test. He/She was depending on you to bring it so he/she could be ready. A bunch of your friends were planning to get together after school that afternoon to do something fun. You have to decide if you will take the homework to your sick friend or if you will meet your other friends after school.

Α

- If you take the homework to your friend, he/she will be able to study for the big test and you may still have time to join your friends.
- 2. If you meet your other friends instead, your friend will not get the homework and will probably fail the big test.
- 3. If you take the homework to your friend and explain it to him/her, you probably will not have the time to join your other friends.
- 4. If you do not take the homework to your friend, he/she probably will not pass the big test and will be mad at you.

- If you take the homework to your friend and explain it to him/her, you probably will not have the time to join your other friends.
- If you do not take the homework to your friend, he/she probably will not pass the big test and will be mad at you.
- 3. If you take the homework to your friend, he/she will be able to study for the big test and you may still have time to join your friends.
- 4. If you meet your other friends instead, your friend will not get the homework and will probably fail the big test.

Storv 3

When you are friends, you share thoughts and feelings with your friend that you do not want other people to know. You want your friend to keep them a secret. One day you and your friend told each other something secret that you and he/she did not want anyone else to know. Later, at lunch, a bunch of your friends were talking about your friend. They hinted that they knew the secret your friend had told you. You must decide if you will keep the secret or tell the other friends.

A_____

- If you do not tell your friend's secret but find out that he/she has told your secret, you will probably be mad at and not speak to him/her the next time you see each other.
- If you both tell each other's secret, you both will be mad at each other and know it will be a long time before you can be good friends again.
- If you do not tell your friend's secret, the two of you will still be good friends.
- 4. If you tell your friend's secret, he/she will probably be mad at you and not speak to you the next time you see each other.

- If you do not tell your friend's secret, the two of you will still be good friends.
- If you tell your friend's secret, he/she will probably be mad at you and not speak to you the next time you see each other.
- 3. If you do not tell your friend's secret but find out that he/she has told your secret, you will probably be mad at and not speak to him/her the next time you see each other.
- 4. If you both tell each other's secret, you both will be mad at each other and know it will be a long time before you can be good friends again.

Story 4

You and your friend have known each other for a long time. Two months ago a new student joined your class. After awhile, you found that you and the new student like to do things together in your free time. Lately you noticed that your friend and the new student seem to share many thing they like and they are always together. This makes you teel kind of sad and left out. This week is Spring Break. Your friend is going out of town with his/her family. This means you and the new student will have time to get together. You must decide if you will just get together with the new student and have fun, or if you will tell the new student things about your friend that may change how the new student feels about your friend.

Α

- You decide to backstab and feel left out because your friend and the new student always seem to be together.
- You decide not to backstab and you and the new student find yourselves spending a lot of time together. When your friend returns from Spring Break, he/she feels left out.
- 3. You decide to backstab and lose your friend.
- 4. You decide not to backstab and you and your friend remain friends.
- в
- You decide to backstab and feel left out because your friend and the new student always seem to be together.
- 2. You decide not to backstab so you and your friend remain friends.
- 3. You decide not to backstab and you and the new student find yourselves spending a lot of time together. When your friend returns from Spring Break, he/she feels left out.
- 4. You decide to backstab and lose your friend.

	Appendix F	
	Information Sheet	
Dat	Date Name of School Grade	
Nar	Name: FirstLast	
Agı	Age: YearsMonthsSex: MaleFemale	
The	The first and last names of my 6 best friends are:	
A	A My very best friend	A :
	My 2nd friend	
	My 3rd friend	
	My 4th friend	
	My 5th friend	
Ø	B My 6th friend	B:
H	1. Please write in the name of (A) your best friend on the A line and	σ
	the name of (B) your 6th friend on the ${f B}$ line in the right margin	
	of this paper.	
2.	2. Look at the column with an X at the top of it. Please mark an X in	ц
	the space beside the name of each of your friends who is also in	
	your grade.	
э.	3. Please put an X by the correct answer:	
	a) The person I listed as my best friend is: Male Female	
	b) The person I listed as my best friend is:	
	Boy friend/girl friend Really good friend	
4.	4. In your cwn words describe: What does it mean to trust a friend?	

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