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Comparing and Contrasting Lonely and Nonlonely People
by Examining Attachment Patterns and Measuring
Ratings of Rules and Goals

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Running head: EXAMINING LONELINESS

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Abstract

The present study sought to explore the nature of loneliness and distinguish differences between lonely and nonlonely individuals with respect to attachment styles and various goals and rules in five separate social situations. The validity of one loneliness measure is questioned, and the subscale of another loneliness measure that was intended for use with adults was found to have possible applications with a younger population. A total of 114 subjects (75 males and 39 females) completed six questionnaires: three loneliness, two attachment, and one goals and rules in social situations which was developed by the author. Results indicated that lonely and nonlonely subjects rate the importance of goals and rules in social situations differently and that attachment style has an influence on reported loneliness. Implications for future research are discussed.

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In recent years, research on loneliness has appeared in the literature with more frequency than ever before. One reason for this increased interest is the development of a number of scales that can reliably and validly measure loneliness. For example, the University of California at Los Angeles (UCLA) Loneliness Scales (Russell, Peplau, & Cutrona, 1980; Russell, Peplau, & Ferguson, 1978) are not only the most commonly used, but also target loneliness in terms of social isolation. The Differential Loneliness Scale (DLS) (Schmidt & Sermat, 1983) and the Loneliness Rating Scale (Scalise, Ginter, & Gerstein, 1984) are also recent developments. Researchers in our modern age have recognized the serious implications of loneliness by identifying how common and widespread the problem is, and this insight has encouraged greater emphasis on learning more about the problem so that solutions can be found.

Again, heightened attention is due to the realization that loneliness is a prevalent problem in today's society. West, Kellner, and Moore-West (1986), in a review of the literature, cite three studies showing how widespread this problem really is. The first, a national survey by Rubenstein, Shaver, and Peplau (1979), indicated that fifteen percent of the people who responded felt lonely a great deal of the time. While only six percent of the respondents indicated they never felt lonely, all those remaining said

they sometimes felt lonely. A second study (Bradburn, 1969) showed that twenty-six percent of the respondents said they felt "very lonely or remote from other people" during the few weeks prior to the survey. Finally, between 10% and 30% of the people in Sermat's (1980) study said they experience recurrent feelings of loneliness throughout their lives. As shown by these researchers, most people admit to having experienced periods of loneliness.

In addition, loneliness has been linked to a wide variety of serious problems such as suicide (Wenz, 1977), alcoholism (Bell, 1956), and physical illness (Lynch, 1977). Loneliness has been studied in relation to divorce, old age, and anxiety (Peplau & Perlman, 1982) as well as bereavement, depression, and child abuse (West et al., 1986).

To measure loneliness, one must have a clear idea of what it means to be lonely, and loneliness has been defined many different ways. Weiss (1973) stated, "Loneliness is caused not by being alone, but by being without some definite needed relationship or set of relationships" (p.17). Sullivan (1953) defined loneliness as "the exceedingly unpleasant and driving experience connected with inadequate discharge of the need for human intimacy, for interpersonal intimacy" (p.290). Peplau and Perlman (1982) defined it as "the unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively" (p.4). In other words, lonely people are thought to experience fewer close relationships than desired.

The researcher's next task is to organize the literature on loneliness in some comprehensive way. For example, one can examine loneliness in terms of some major branches of psychology. Thus, researchers have examined personality characteristics, behavior, cognitive processes, environmental factors, and developmental issues to identify lonely and nonlonely people.

A wide variety of personality characteristics have been linked to loneliness. One such trait is shyness, defined as the unpleasant feelings of not being at ease with other people in social situations. Shy people have reported feeling especially nervous around strangers and in new situations (Zimbardo, 1977). In one study, college students were given a shyness and loneliness designation at the beginning of a school semester which was considered a novel social situation (Cheek & Busch, 1981). The loneliness measure was administered again at the end of the semester. Shy students were found to be significantly lonelier than the outgoing students at both measures, although both groups did show a decline in loneliness over the semester probably because of habituation. These results suggest that both personality characteristics such as shyness and social situations such as a new semester at school interact to produce greater loneliness.

In another study, Ishiyama (1984) also compared shy and non-shy students and found that the shy group reported significantly more loneliness. The study targeted a group of high school students, and they reported that their shyness

interfered with the establishment of friendships as well as academic success, and they believed their peers were aware of this shyness.

In a different type of study, Vaux (1988) looked at personal characteristics in relation to loneliness. These factors were hypothesized to interfere with either social interaction or the development of relationships for the two types of loneliness -- social and emotional -- proposed by Weiss (1973). He found that having a negative network orientation, or belief that it is potentially dangerous or useless to use resources from a support network, predicted loneliness. In addition, having a low self esteem and feeling uncomfortable in social situations were characteristic of lonely people. However, their association with loneliness was not mediated by social network factors.

Loneliness has also been significantly correlated with paranoia, external locus of control, potential suicide, depression, hopelessness, alienation, and aggression (Diamant & Windholz, 1981); satisfaction with sex life, friends, family and self, social anxiety, and drinking-related locus of control (Hays & DiMatteo, 1987); extraversion and neuroticism (Saklofske, Yackulic, & Kelly, 1986). Loneliness has been negatively correlated with femininity, masculinity (Wittenberg & Reis, 1986), and assertion (Diamant & Windholz, 1981). This means that assertive and androgynous individuals are not as likely to manifest feelings of loneliness.

Another way to examine the differences between lonely and nonlonely people has been to compare their behavior. Behavioral manifestations of loneliness can be seen in that lonely individuals may be more self-focused, having either inappropriately high or low levels of self disclosure, and they may be less assertive, as suggested in reports of shyness and low risk taking, compared to nonlonely individuals. Although there has not been an overabundance of research looking at actual social behavior in relation to loneliness, some studies have found that lonely and nonlonely people behave differently in social situations.

Jones, Hobbs, and Hockenberry (1982) reported that lonely students were more self-focused and less responsive when having a conversation with a stranger of the opposite sex. They seemed to pay less attention, asked fewer questions, made fewer statements that focused on their acquaintance, changed the discussion topic more often, and responded more slowly to previous statements. Also, Bell (1985) found that lonely subjects had lower rates of talkativeness, interruptions, and attention, and they were perceived as less involved and less interpersonally attractive than nonlonely subjects. This implies that if lonely people are less responsive to others, they may fail to pick up on their cues or give less reinforcement and attention to others, therefore interfering with the development of relationships.

In addition, Solano, Batten, and Parish (1982) studied the relationship between actual self-disclosure and loneliness. Lonely and nonlonely subjects were paired with

nonlonely partners in a structured acquaintanceship activity. After the exercise, subjects rated how well they knew their partner. Results show that lonely subjects had significantly different patterns of disclosure. For example, the first topic chosen by lonely subjects was generally of high intimacy for same-sex partners and low intimacy for opposite-sex partners while nonlonely subjects had the opposite pattern. Also, lonely subjects were less effective than nonlonely subjects in making themselves known. This implies that the lonely person's style of self-disclosure interferes with the development of normal relationships.

Other behavioral research supports the idea that lonely people have abnormal patterns of communication. Sloan and Solano (1984) had their subjects converse with a stranger of the same sex and then with their own roommate. They reported that lonely subjects were more socially inhibited because they talked less with both partners and were less intimate with their roommates compared to nonlonely subjects. Essentially, the conversational styles of lonely people were more withdrawn.

Some behavioral cues indicating loneliness may include low levels of social contact, being alone too often, or unusual patterns of social interaction. Some researchers have used self-report studies where retrospective measures are employed. For example, Rubenstein et al. (1979) conducted a newspaper survey in three cities in the U.S. He found significant correlations between loneliness and the amount of time spent socializing per week, the number of

organizations and groups subjects were involved in, the frequency of seeing close friends, and the perceived number of close friends.

In another study, Russell et al. (1980) asked questions about social behavior in the last two weeks as well as dating or marital status and the number of close friends subjects thought they had. Loneliness was determined by the amount of time spent alone each day, the number of times dinner was eaten alone, the number of close friends one had, and the number of weekend evenings spent alone. People who reported they were not dating also reported higher overall levels of loneliness compared to people who were dating.

To overcome the problem of using retrospective measures, Wheeler, Reis, and Nezlek (1983) had college seniors maintain the Rochester Interaction Record that provided information on every social contact of 10 minutes or more during the preceding two weeks. A significant relationship between loneliness and time spent without females was reported for both males and females. In addition, loneliness was negatively related to meaningfulness of interaction, but meaningfulness was more important for males. This again points to the fact that lonely people have fewer close relationships.

Much of the research has approached the problem of loneliness as people who experience social skills deficits. Looking at college and high school students, Goswick and Jones (1982) suggested that loneliness develops as a result

of disruptions in relationships with important people. In other words, inadequate social skills, such as inappropriate self disclosure, can be used to predict loneliness.

Prisbell (1988) looked at the relationship between loneliness and dating competence in undergraduates. People who scored low on loneliness reported significantly more satisfaction in and frequency of dating along with greater skills in dating compared to those who scored high. In another study, Wittenberg and Reis (1986) found loneliness was significantly and negatively correlated with seven social skills variables including reactions to social situations, dating skills, and assertiveness. This implies that loneliness is the result of a variety of social skills deficits, rather than the absence of any one skill.

For the most part, though, behavioral differences are difficult to interpret. Deficits in performance could be due to a variety of reasons. It could be that lonely people do not know how to respond appropriately (according to the rules of society), or it could be that they know how but cannot transform that information into effective action in various social situations.

Another useful way to view loneliness is in terms of cognitive processes including perceptions, thoughts, mental abilities, and attributions. Solano et al. (1982) examined the hypothesis that self-perceived lack of self-disclosure to others is related to feelings of loneliness. Subjects were undergraduates who completed the UCLA Loneliness Scale and the Jourard Self-Disclosure Questionnaire. Results show that

a self-perceived lack of intimate disclosure to opposite-sex friends was significantly related to loneliness for males and females while this belief for same-sex friends was significant only for females. Again, it appears that in addition to opposite-sex interactions, both sexes crave intimacy with a female (see Wheeler, et al., 1983).

Further, Jones et al. (1981) suggest that negative perceptions of self and others may be more noticeable among lonely people than are social skills deficits. Following brief interactions with strangers of the opposite sex, lonely subjects rated their partners behavior and personality more negatively and were less attracted to them. Jones, Sansone, and Helm (1983) used a similar experimental design and reported that subjects with higher loneliness scores rated themselves more negatively and expected their partners to evaluate them in the same way. They were also perceived to be more likely to rate themselves negatively. Men who scored high on loneliness rated their partners more negatively and were rated more negatively than men who scored low, but these effects were not found for women.

Hanley-Dunn, Maxwell, and Santos (1985) looked at the relationship between cognitions of other people in interpersonal interactions and loneliness. They found that subjects who had recently experienced loneliness were likely to interpret the actions and intentions of other people negatively when interacting with a neighbor, family member, or authority figure. In a later study, Wittenberg and Reis

(1986) reported that lonely subjects rated their roommates negatively. Thus, negative perceptions can go beyond general attitudes to feelings about well-known people.

Loneliness is not only related to social skills deficits, but also to anxiety over such deficits, which plays an important role in predicting loneliness. Solano and Koester (1989) examined anxiety related specifically to communication over a variety of relationships (friends, family, romantic, and group or community). A significant relationship was found between loneliness and communication anxiety for males across all four relationships, but for females it was only significant for community and friend relationships. In addition, a second study showed these two factors were independently related to loneliness, with anxiety having a more direct link to loneliness than social skills deficits.

Berger and Bell (1988) looked at how cognitive planning influences behavior by examining the effects of loneliness and shyness on one's ability to make plans. Subjects were asked to describe how they would ask someone for a date and how they might ingratiate themselves to a new roommate. The plans were judged for their likelihood of success. The effectiveness of plans inversely related to loneliness and shyness for males in the date-asking situation. This relationship was found for both males and females in the roommate situation. In a separate study, Horowitz, French, and Anderson (1982) gave subjects an example of a social situation, finding a way to meet people in a new situation, and told them to come up with as many solutions to the

hypothetical problem as possible. Lonely people generated fewer and less effective solutions than those developed by the rest of the participants.

Other researchers have examined school factors that may be related to loneliness. For example, Dobson, Campbell, and Dobson (1987) found that high school juniors who reported higher levels of loneliness also reported lower satisfaction with school, and these same students had lower grade point averages than nonlonely students. In an earlier study by Booth (1983), there was a negative correlation between loneliness and GPA for both males and females. Also, Booth (1985) found different abstraction levels in lonely versus nonlonely students.

Researchers have also examined the deficits in the network of relationships lonely people have with others. Vaux (1988) found that loneliness was inversely related to provisions of social relationships and appraisals of support, and with both qualitative aspects (closeness, reciprocity, complexity) and quantitative aspects (size, frequency) of social support networks. In another study, Jones and Moore (1987) tested students during the first week of classes and again eight weeks later. Results show several aspects of social support (satisfaction, density, network, and reciprocity) were modestly or strongly related to loneliness during both assessments. They argue, however, that loneliness scores are relatively stable over time despite changes in social support networks.

Finally, another useful way to look at loneliness has been to examine it in relation to developmental issues. A good starting point is to explore the never ending question in psychological research of whether or not gender differences exist. Most researchers have looked to see if there are differences in how males and females experience loneliness. Unfortunately, they have not all agreed, and much of the research that has looked at sex differences appears to be contradictory.

Some researchers have reported males to be lonelier than females (Hays & DiMatteo, 1987; Russell et al., 1980), and some say females are lonelier than males (Sundberg, 1988; West et al., 1986). This last study also reported that white people were significantly more lonely than black people. Still, many researchers report no significant differences simply because of gender (Cheek & Bush, 1981; Jones et al., 1981; Kalliopuska & Laitinen, 1987; Lamm & Stephan, 1987; Revenson & Johnson, 1984; Russell et al., 1980; Solano et al., 1982; Solano & Koester, 1989).

In addition, loneliness has been reported in most age groups. One study (Revenson & Johnson, 1984) reported an inverse relationship between loneliness and adult age, meaning that the older respondents reported feeling less lonely than the younger ones, but West et al. (1986) cite a few studies where the very elderly were significantly lonelier than younger people. Although loneliness occurs throughout the life-span, Brennan (1982) reported that teenagers are especially at risk because between 10% and 15%

of the adolescents surveyed in ten U.S. cities reported being seriously lonely. Fifty-four percent said they feel lonely often, and 45% said they experience recurrent but less severe feelings of loneliness. In fact, some researchers claim that loneliness is reported most frequently among adolescents and young adults (Cutrona, 1982)

For a better understanding, some researchers have looked at attachment patterns in relation to loneliness. Hecht and Baum (1984) investigated how early attachment patterns could affect later feelings of loneliness in a sample of college students. The Attachment History Questionnaire was used to measure attachment patterns, and it measures separations from attachment figures as well as the quality of attachment relationships. The Revised UCLA Loneliness Scale was used to measure feelings of isolation. Results indicate a moderate to strong relationship between early disrupted attachment and feeling lonely. In another study, Hojat (1982) found evidence to support the idea that subjects who said they were unable to establish a meaningful relationship with their parents and again with their peers during childhood were more likely to experience loneliness to a greater degree when adults.

Weiss (1973) has proposed that two different kinds of loneliness exist. Emotional loneliness is said to be a result of not having a close and intimate relationship with another person, and social loneliness is said to result from deficits in the network of social relationships. Being part of a group of friends and sharing common interests and

activities with them can help alleviate the latter type of loneliness by providing an opportunity for social integration while forming an attachment with another person can alleviate emotional loneliness.

In trying to answer the question of why young adults feel lonely, Weiss (1973) suggested that the main developmental task of adolescence is to give up parental attachments in favor of forming new attachments with peers, and that interfering with the process leads to feelings of isolation. Bowlby (1982) has similarly argued that early bonding patterns influence later psychological development. According to Bowlby, attachment is a critical process whereby a mutual relationship develops between the infant and the primary caretaker, usually the mother, during the first few months. Bowlby (1982) believes that healthy attachments early in life will lead to successful relationships with other people later in life. Consequently, unsuccessful bonding leads to adult frustration and anxiety in interpersonal relationships.

Ainsworth (1979) developed a way to classify young children's attachment patterns based on observations during the "strange situation" paradigm. Initially, toddlers are placed in a room with a stranger. Later, the mother returns, and depending on how the child reacts to her, the child is assessed in behaviors associated with the secure, avoidant, or anxious-ambivalent attachment styles. How the child reacts is believed to indicate what kind of relationship exists with the mother. Hazan and Shaver (1987, 1989)

hypothesized that these early attachment patterns serve as a foundation for later attachment styles in romantic relationships. They have devised and administered two separate scales to measure attachment behaviors and have found evidence to support the idea that attachment styles may influence romantic relationships.

One perspective that can be used to integrate the various approaches in studying loneliness is to look at how people function in particular social situations, which can include specific goals or motives, behavior, priorities, and cognitions. Cognitive functioning is especially related to loneliness. For example, what lonely people expect of themselves and others may lead them to adopt certain rules and goals that serve to direct their behavior in social situations. Rules and goals are important because lonely and nonlonely people may have different and conflicting priorities because experiences may lead them to interpret things differently. For example, people may be anxious because they don't want to make a fool of themselves and this may interfere with the development of normal relationships which can lead to loneliness.

Argyle, Furnham, and Graham (1981) describe an approach to analyzing social situations by examining goals and rules among other features. Situations are thought to provide an opportunity for people to achieve goals and are invented and persist for this reason. In fact, it is believed that people enter certain situations for the main purpose of achieving certain goals. Goals can be considered needs, wants, or

desires that people bring with them to situations and that direct social behavior. Therefore, it is important to understand goals.

Rules can be defined as beliefs that are shared by many people which prescribe which behavior is allowed, not allowed, or necessary in given social situations. They are created in social situations to regulate behavior so that people can attain goals. A rule is thought to exist if most people disapprove of it being broken.

Argyle et al. (1981) have attempted to find out why certain situations are difficult for people. As a result, people can be trained to deal with the anxiety that accompanies stressful situations by being taught certain skills. It is useful to find out what the sources of conflict are and if the the goals of the situation are known; and if the goals and rules are known, are they appropriate, too strict, or too vague?

An example of their procedure is shown in one experiment where they investigated which of 18 goals people thought were most important. They had various groups of people rate whether or not particular goals applied to a variety of situations. By statistical analysis they were able to extract the most important goals, and these conclusions and ideas are the basis upon which the present research will be partly conducted.

Few studies have looked at the influence of particular social situations in relation to loneliness. To investigate the relationship between communication anxiety and

loneliness, Solano and Koester (1989) had subjects write down responses to difficult social situations. They used such situations as meeting a stranger of the opposite sex at a party and dealing with a depressed date. The responses were rated on a seven-point scale on whether or not they were appropriate and facilitated interaction. Past research on social skills deficits has sometimes looked at objective ratings of how people interact with others. Instead, the researchers in this study had subjects respond to difficult situations, but they did not look specifically at rules and goals.

The purpose of the present study is to compare attachment styles and ratings of rules and goals in various social situations between lonely and nonlonely individuals.

METHOD

Participants and Procedure

Data was collected from 114 college students (75 males and 39 females) with a median age of 18 years. Subjects participated in the present study for partial course credit as members of an introductory psychology course at a large Midwestern university. All subjects were given the following measures in small groups.

Loneliness MeasuresRevised UCLA Loneliness Scale (Russell et al., 1980).

This is a 20-item instrument that measures a person's feelings of being alone and socially isolated. The items are statements describing circumstances of isolation from other people (e.g., "There is no one I can talk to"). Subjects were asked to respond with four possible answers indicating how often each statement is true: often (4 points), sometimes (3 points), seldom (2 points), or never (1 point). The maximum score is 80 points, with higher scores indicating greater feelings of loneliness. The revised scale has positively and negatively worded statements to overcome response bias that may have been experienced with the original scale.

Several researchers have reported reliability data on this measure. Russell et al. (1980) reported high internal consistency with alpha coefficients of .94 in two different studies. Perlman and Peplau (1981) and Vaux (1988) also reported internal consistency alpha coefficients greater than

.90. In addition, Perlman and Peplau reported stability coefficients of greater than .70 using a 2-month time interval.

Differential Loneliness Scale (DLS) (Schmidt & Sermat, 1983). This is a multidimensional measure consisting of 60 statements concerning feelings of loneliness experienced in family, friend, love, and group relationships (e.g., "I have at least one real friend" or "My family is quite critical of me"). It measures the quantity and quality of an individual's social interactions as well as their satisfaction vs. dissatisfaction with existing relationships. The Friendship and Romantic subscales of this instrument were used in the present study. Again, the scale consists of positive and negative items, but the items describe specific relationships with other people. Subjects were asked to respond to each statement with either a "yes" or "no" answer for a total maximum score of 60. The higher scores again represented greater degrees of loneliness. The adult version of this instrument was used.

Russell Loneliness Scale (Russell, Cutrona, Rose, & Yurko 1984). This instrument consists of two paragraphs describing social and emotional loneliness based on Weiss' (1973) definitions. Subjects were asked to rate on a five-point scale how strongly they had experienced each type of loneliness during the past few weeks. Some evidence of validity is given by Russell et al. (1984) as shown by these self-ratings being differentially associated from measures of

affect and loneliness, as well as aspects of social relationships and provisions. (Appendices A through C show the three loneliness measures.)

Attachment Measures

Current Attachment Item (Hazan & Shaver, 1987). This item consists of three paragraphs describing romantic relations, and it is designed to allow the classification of subjects into the secure, avoidant, or anxious/ambivalent attachment styles. This instrument measures adult romantic attachment style, and it is completed by indicating the paragraph which best describes the subject's current feelings in romantic relationships.

Offspring Attachment Scale (OAS) (Wallace, 1990). Early attachment relations with the primary caretaker was measured in the present study. This 15-item questionnaire assesses parental attachment behaviors of the subjects by having them retrospectively rate how their parents interacted with them when they were young (aged 0-6). Subjects rated their primary caretaker in terms of attachment parenting styles using a four-point agree/disagree format. The scale is based on common traits and interaction styles between parents and their children extracted from the literature dealing with infant attachment styles. Wallace reports an internal consistency coefficient of .88 and a stability coefficient of .67 using a four-week interval with college students. The present study obtained an internal consistency coefficient of .85. (Appendices D and E show the two attachment measures.)

Goals and Rules Questionnaire (GRQ). The GRQ, developed by the author, instructs subjects to imagine themselves in five particular social situations, each of which is followed by a list of goals. Subjects rate the importance of each goal on a likert-type scale. A total of five social situations are presented, three romantic and two friendship, indicating two different intensities. To examine how subjects rate rules, the same situations are presented in inverse order, and each one is followed by the rules to be rated in the same manner. Reliability analyses were computed for the five social situations for both goals and rules which resulted in the following Cronbach alpha coefficients where for each situation the goal alpha precedes the rule alpha: unfriendly party, .71, .83; depressed friend, .73, .79; embarrassing photo, .76, .57; broken date, .73, .81; and upsetting friend, .39, .82. (Appendix F displays the GRQ.)

Analyses

The alpha level for all analyses was set at the .05 value. The UCLA Loneliness Scale and the romance and friendship subscales of the DLS served as the dependent measures. As independent variables, items from the GRQ and classification of attachment styles from the current attachment item were used. The Russell Loneliness Scale and the OAS were used in determining the validity of the other measures.

Items from the UCLA Loneliness Scale and the DLS subscales were examined in relation to one another, the GRQ, and the current attachment item.

The GRQ was used to examine relationships between specific social situation goals and rules and the three measures of loneliness. It was expected that lonely people would rate the importance of goals and rules differently than nonlonely people in various social situations. Specifically, lonely people will rate goals and rules that focus on themselves as more important than goals and rules that focus on other people.

Early attachment patterns with parents will be compared with later attachment styles in romantic relationships using Pearson correlation coefficients. It was hypothesized that disruptions in attachments with the primary caretaker early in life will be associated with disruptions in romantic relationships later in life, as well as with loneliness.

A oneway analysis of variance (ANOVA) with planned comparisons was used to examine the mean differences in loneliness as measured by the UCLA Loneliness Scale and the Friendship and Romantic subscales of the DLS as a function of attachment style. Specifically, it was expected that secure subjects would be less lonely than both the avoidant and anxious/ambivalent subjects.

Results

Convergent Validity of the Loneliness Instruments

In order to establish the degree to which the loneliness instruments were measuring the same construct, Pearson correlation coefficients were computed. The results of these analyses are displayed in Table 1. The only unexpected correlations observed were pertaining to the Russell Loneliness Scale and the Romantic subscale of the DLS.

Goals and Rules

To establish the difference in how lonely and nonlonely subjects rate the importance of various goals and rules in social situations, items from the GRQ were correlated with loneliness scores from the UCLA Loneliness Scale and the Romantic and Friendship subscales of the DLS. With positive correlations indicating more importance for lonely subjects, descriptions of each social situation and results of the correlations that were computed are displayed in Tables 2 through 6. Consistently in each situation, goals tended to be rated as more important by nonlonely subjects, whereas rules tended to be rated as more important by lonely subjects.

Relationship of Attachment Style to Loneliness

Table 7 displays correlations between early and current attachment style measures and the loneliness measures used in this study. Because high scores on the attachment measures indicate the positive end of the continuum (i.e., secure attachment style) and high scores on the loneliness measures indicate the negative extreme of loneliness, negative

correlations were expected. Again, correlations with the Russell Loneliness Scale were observed in the opposite direction of what would be expected. The correlation between early attachment style and current attachment style did not approach significance, it is therefore not included.

Loneliness and Attachment

Tables 8 through 10 show the ANOVA summary tables and planned comparisons with the UCLA Loneliness Scale and the Romantic and Friendship subscales of the DLS. With each measure, except for the Friendship subscale, the hypotheses concerning the three attachment styles were confirmed. Only with the Friendship subscale, the secure and avoidant attachment styles were not observed to differ significantly. In none of the analyses did the avoidant and anxious/ambivalent attachment styles differ significantly. Table 11 displays the comparisons of attachment style classifications across infant studies (Campos, et al., 1983) and adult studies (Brennan, Hazan, & Shaver, 1989; Hazan & Shaver, 1987; Wallace, 1990). The major discrepancy in these percentages is that the anxious/ambivalent classification is disproportionately large in relation to the other studies.

Discussion

Convergent Validity of the Loneliness Measures

As was previously mentioned, we observed correlations with both subscales of the Russell Loneliness Scale and the Romantic subscale of the DLS in the opposite direction than would be expected. To explain these findings, each measure will be addressed separately.

Russell Loneliness Scale. When relating the subscales of the Russell Loneliness Scale with other independent loneliness measures, unexpected correlations were observed. Casual observation of the data tends to suggest that the independent scales measured opposing constructs. Upon further examination of the individual items, a rather significant distinction can be made between the Russell Loneliness Scale and the other independent measures of loneliness. In the Russell Loneliness Scale, subjects are asked to rate the extent to which they have felt lonely within the past few weeks. The word, loneliness, is explicitly stated in the measure. Additionally, each subscale is composed of one item only. On the other hand, the other loneliness instruments are multi-item scales which do not specifically permit the subject to know that loneliness is being measured. The above limitations to the Russell Loneliness Scale may also apply to the unexpected directions of the correlations with the attachment measures.

Given that loneliness, particularly in college-aged subjects, is an undesirable trait to possess, the fact that negative correlations were observed between the independent

loneliness scales can be easily interpreted. College-aged subjects may not be willing to admit experiencing a type of loneliness as described by the Russell Loneliness Scale when those descriptions are explicitly labeled as types of loneliness. However, when the object of measurement is disguised from the subjects, and the construct is broken down into various facets, as in the UCLA Loneliness Scale and the DLS, subjects may be more likely to report loneliness.

Romantic Subscale of the DLS. Granted that the present study used college-aged subjects with the adult version of the DLS, some measurement error was likely considering the diverse orientations between the two populations. Vaux, Burda, and Stewart (1986) found no significant difference between college-aged subjects and adult subjects in the manner in which they view their social support networks. If the members of an individual's social support network can be equated to the individual's friends, then the fact that the UCLA Loneliness Scale and the Friendship subscale of the DLS were positively correlated may indicate that the Friendship subscale is applicable to both populations.

The primary discrepancy found in the data, namely the inverse correlation between the UCLA Loneliness Scale and the Romantic subscale of the DLS, should not be surprising. Because the DLS was targeted towards an adult population, and a younger population was used, it is conceivable to expect that the two populations would differ in how they experience romantic aspects of life. An additional support to this notion is the observation that the Romantic subscale only

occasionally correlated significantly with the goals and rules stated in the GRQ. Furthermore, when these correlations were significant, they were always extremely close to the .05 rejection level. Therefore, these observations could be attributed more to Type I error rather than actual significance.

Loneliness in Terms of Goals and Rules in Romantic Social Situations

The GRQ describes five separate social situations: three romantic and two friendship. In order to discuss the findings more logically, they will be addressed first by the romantic theme, and then by the friendship theme.

Social Situation Goals. Because of the potentially invalid nature of the Romantic subscale of the DLS with this population, the findings will be discussed mostly in terms of the Friendship subscale of the DLS and the UCLA Loneliness Scale.

In terms of goals, most of the observed significant correlations involved the nonlonely subjects. These goals were predominantly concerned with the other person. Lonely subjects, on the other hand, were less concerned with goals in the romantic situations. In all three romantic situations, nonlonely subjects desired to be in control of the situation. This goal can be seen as thinking of the other person because control implies that there are other people with whom an individual has to be concerned.

In all the other goals that were correlated, the nonlonely subjects were considering the other person except in the embarrassing photograph situation. Here, moderately strong correlations were observed for nonlonely subjects where reducing their own anxiety was rated as more important. According to Solano and Koester (1989), lonely subjects had more communication anxiety in various relationships compared to nonlonely subjects. The fact that nonlonely subjects are able to realize the potential anxiety-provoking situation and take measure to reduce this anxiety, they rate this goal as more important than lonely subjects. It may well be that lonely subjects are unable to perceive an anxiety provoking situation and inadvertently permit this anxiety to disable themselves in social relationships.

Social Situation Rules. In terms of rules, most of the observed significant correlations involved the lonely subjects. Again, rules important to lonely subjects involved themselves. According to the Jones, et al. (1982), lonely subjects were more self-focused when talking with a stranger of the opposite sex. Bell (1985) found lonely subjects to be less involved because they talked less, made fewer interruptions, and paid less attention to their partners. These studies support the notion that lonely subjects focus on themselves more than their partners. There were rules observed for lonely subjects implying they consider the other person. Among these are "Should not embarrass the other person," "Should be polite," and "Should make it a pleasant

encounter." The central theme in each of these rules is that there are certain concessions that must be made if continued interaction is to be maintained.

Loneliness in terms of Goals and Rules in Friendship Social Situations

Social Situation Goals. The significant observed correlations again involved nonlonely subjects rating goals more important than rules as compared to lonely subjects. Again, being in control of the situation was rated more important for nonlonely subjects, but only in one of the friendship situations. Rather than being an actual difference between nonlonely and lonely subjects in friendship situations, being in control of the situation may be more specific to romantic situations. This may be due to the fact that the depressed friend situation was presented to the subjects directly following a romantic situation. The depressed friend situation permits the subject to interpret whether the friend was of the opposite sex or not; therefore, random order effects may be contributing to the significant findings.

Social Situation Rules. The significant observed correlations again involved lonely subjects rating rules more important than goals as compared to nonlonely subjects. In the depressed friend situation, however, nonlonely subjects rated not telling the other person what to do as more important. Again this is considering the other person rather than trying to advocate own personal beliefs about what should be done.

Nonlonely subjects also rated avoiding heavy topics in the upsetting friend situation as more important. According to Solano et al. (1982), lonely subjects had significantly different patterns of self-disclosure because they chose higher intimacy topics as the first topic of conversation for same-sex partners and lower intimacy topics for opposite-sex partners as opposed to nonlonely subjects. Therefore, lonely subjects were unable to let their partners know them as well as nonlonely subjects.

Sloan and Solano (1984) reported that lonely subjects were more socially inhibited because they talked less and were less intimate with their roommates compared to nonlonely subjects. These studies can be associated with the importance of avoiding heavy topics in the present study. Presumably, addressing heavy topics would mean a heightened degree of self-disclosure for the lonely subject in an unpleasant social situation.

Loneliness in Terms of Attachment Style

Globally, it does appear that current attachment styles do influence loneliness. However, when analyzed by romantic and friendship dimensions, a dissimilarity does appear. Given the shortcomings already mentioned of the Romantic subscale of the DLS, all mean differences were observed in the predicted direction. Romantically, then, secure individuals report being less lonely than the insecure individuals. With the friendship subscale of the DLS, there was no distinction between the reported levels of loneliness

between the secure and avoidant subjects. It may be that avoidant subjects are uninterested in friendship relationships and therefore do not perceive themselves as lonely.

One implication that can be drawn from the present study involves different counseling theories. Lonely subjects may benefit more from a Rational Emotive Therapy approach that focuses on the rules of should, ought, and must rather than behavior therapy which focuses on goals. Other implications include seeing that the attachment styles have been found to influence romantic relations, social support orientation, and now loneliness, other aspects of adulthood should be investigated in terms of attachment style. In addition, findings of the GRQ should be replicated in terms of loneliness and aspects of social support.

REFERENCES

- Ainsworth, M. D. S. (1979). Infant-mother attachment. American Psychologist, 34, 932-937.
- Argyle, M., Furnham, A., & Graham, J. A. (1981). Social Situations. New York: Cambridge University Press.
- Bell, R. G. (1956). Alcoholism and loneliness. Journal of Social Therapy, 2, 171-181.
- Berger, C. R., & Bell, R. A. (1988). Plans and the initiation of social relationships. Human Communication Research, 15, 217-235.
- Booth, R. (1983). An examination of college GPA, composite ACT scores, IQs, and gender in relation to loneliness of college students. Psychological Reports, 53, 347-352.
- Bowlby, J. (1969). Attachment and loss: Attachment (Vol. 1). New York: Basic.
- Brennan, K. A., Hazan, C., & Shaver, P. R. (1989). Multi-item measure of adult attachment style. Paper presented at Eastern Psychological Association, Boston, MA.
- Brennan, T. (1982). Loneliness at adolescence. In L. A. Peplau & D. Perlman (Eds.), Loneliness: A sourcebook of current theory, research, and therapy (pp.269-290). New York: Wiley-Interscience.
- Campos, J. J., Barrett, K. C., Lamb, M. E., Goldsmith, H. H., & Stenberg, C. (1983). Socioemotional development. In M. M. Haith & J. J. Campos (Eds.), Handbook of child psychology: Infancy and psychobiology (Vol. 2) (pp. 783-915). New York: Wiley.

- Cheek, J. M., & Busch, C. M. (1981). The influence of shyness on loneliness in a new situation. Personality and Social Psychology Bulletin, 7, 572-577.
- Cutrona, C. E. (1982). Transition to college: Loneliness and the process of social adjustment. In L. A. Peplau & D. Perlman (Eds.), Loneliness: A sourcebook of current theory, research, and therapy (pp.291-309). New York: Wiley-Interscience.
- Diamant, L., & Windholz, G. (1981). Loneliness in college students: Some therapeutic considerations. Journal of College Student Personnel, 22, 515-522.
- Dobson, J. E., Campbell, N. J., & Dobson, R. (1987). Relationships among loneliness, perceptions of school, and grade point averages of high school juniors. School Counselor, 35, 143-148.
- Goswick, R. A., & Jones, W. H. (1981). Loneliness, self-concept, and adjustment. Journal of Psychology, 107, 237-240.
- Hanley-Dunn, P., Maxwell, S. F., & Santos, J. F. (1985). Interpretation of interpersonal interactions: The influence of loneliness. Personality and Social Psychology Bulletin, 11, 445-456.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511-524.
- Hays, R. D., & DiMatteo, M. R. (1987). A short-form measure of loneliness. Journal of Personality Assessment, 51, 69-81.

- Hecht, D. T., & Baum, S. K. (1984). Loneliness and attachment patterns in young adults. Journal of Clinical Psychology, 40, 193-196.
- Hojat, M. (1982). Loneliness as a function of parent-child and peer relations. Journal of Psychology, 112, 129-133.
- Horowitz, L. M., French, R. de S., & Anderson, C. A. (1982). The prototype of a lonely person. In L. A. Peplau & D. Perlman (Eds.), Loneliness: A sourcebook of current theory, research & therapy (pp.183-205). New York: Wiley-Interscience.
- Jones, W. H., Freemon, J. A., & Goswick, R. A. (1981). The persistence of loneliness: Self and other determinants. Journal of Personality, 49, 27-48.
- Jones, W. H., Hobbs, S. A., & Hockenberry, D. (1982). Loneliness and social skill deficits. Journal of Personality and Social Psychology, 42, 682-689.
- Jones, W. H., & Moore, T. L. (1987). Loneliness and social support. Special Issue: Loneliness: Theory, research and applications. Journal of Social Behavior and Personality, 2, 145-156.
- Jones, W. H., Sansone, C. & Helm, B. (1983). Loneliness and interpersonal judgments. Personality and Social Psychology Bulletin, 9, 437-441.
- Kalliopuska, M., & Laitinen, M. (1987). Testing loneliness on the Differential Loneliness Scale. Psychological Reports, 60, 15-18.

- Lamm, H., & Stephan, E. (1987). Loneliness among German university students: Some correlates. Social Behavior and Personality, 15, 161-164.
- Lynch, J. J. (1977). The broken heart: The medical consequences of loneliness. New York: Basic.
- Peplau, L. A., & Perlman, D. (1982). Loneliness: A sourcebook of current theory, research & therapy. New York: Wiley-Interscience.
- Prisbell, M. (1988). Dating competence as related to levels of loneliness. Communication Reports, 2, 54-59.
- Revenson, T. A., & Johnson, J. L. (1984). Social and demographic correlates of loneliness in late life. American Journal of Community Psychology, 12, 71-85.
- Rubenstein, C., Shaver, P., & Peplau, L. A. (1979). Loneliness. Human Nature, 2, 59-65.
- Russell, D., Cutrona, D., Rose, J., & Yurko, K. (1984). Social and emotional loneliness: An examination of Weiss' typology of loneliness. Journal of Personality and Social Psychology, 46, 1313-1321.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale: Concurrent and discriminating validity evidence. Journal of Personality and Social Psychology, 39, 472-480.
- Russell, D., Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. Journal of Personality Assessment, 42, 290-294.

- Saklofske, D. H., Yackulic, R. A., & Kelly, I. W. (1986). Personality and loneliness. Personality and Individual Differences, 7, 899-901.
- Scalise, J. J., Ginter, E. J., & Gerstein, L. H. (1984). A multidimensional loneliness measure: The loneliness rating scale (LRS). Journal of Personality Assessment, 48, 525-530.
- Schmidt, N., & Sermat, V. (1983). Measuring loneliness in different relationships. Journal of Personality and Social Psychology, 44, 1038-1047.
- Sloan, W. W., & Solano, C. H. (1984). The conversational styles of lonely males with strangers and roommates. Personality and Social Psychology Bulletin, 10, 293-301.
- Solano, C. H., Batten, P. G., & Parish, E. A. (1982). Loneliness and patterns of self-disclosure. Journal of Personality and Social Psychology, 43, 524-531.
- Solano, C. H., & Koester, N. H. (1989). Loneliness and communication problems: Subjective anxiety or objective skills? Personality and Social Psychology Bulletin, 15, 126-133.
- Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: Norton.
- Sundberg, C. P. (1988). Loneliness: Sexual and racial differences in college freshmen. Journal of College Student Development, 29, 298-305.
- Vaux, A. (1988). Social and emotional loneliness: The role of social and personal characteristics. Personality and Social Psychology Bulletin, 14, 722-734.

- Vaux, A., Burda, P., & Stewart, D. (1986). Orientation toward utilization of support resources. Journal of Community Psychology, 14, 159-170.
- Wallace, J. L. (1990). Attachment style as an influence on social support network orientation. Master's Thesis, Southern Illinois University.
- Weiss, R. S. (1973). Loneliness: The experience of emotional and social isolation. Cambridge: MIT.
- Wenz, F. V. (1977). Seasonal suicide attempts and forms of loneliness. Psychological Reports, 40, 807-810.
- West, D. A., Kellner, R., & Moore-West, M. (1986). Effects of loneliness: A review of the literature. Comprehensive Psychiatry, 27, 351-363.
- Wheeler, L., Reis, H., & Nezlek, J. (1983). Loneliness, social interaction, and sex roles. Journal of Personality and Social Psychology, 45, 943-953.
- Wittenberg, M. T., & Reis, H. T. (1986). Loneliness, social skills, and social perception. Personality and Social Psychology Bulletin, 12, 121-130.
- Zimbardo, P. G. (1977). Shyness. Reading, MA: Addison-Wesley.

Table 1

Correlation Matrix of Loneliness Measures

| | Differential | | | | |
|-----------------------|--------------|-------------------|-------------------|-------------------|-----------------|
| | <u>UCLA</u> | <u>Loneliness</u> | | <u>Russell</u> | |
| | | <u>Romantic</u> | <u>Friendship</u> | <u>Friendship</u> | <u>Romantic</u> |
| UCLA | 1.00 | -.21a | +.72b | -.50b | -.21a |
| DLS Romantic | | 1.00 | +.20a | ----- | -.58b |
| DLS Friendship | | | 1.00 | -.52b | -.18a |
| Russell Friendship | | | | 1.00 | +.17a |
| Russell Romantic | | | | | 1.00 |

Note: a = $p < .05$; b = $p < .001$.

Table 2

Correlation Matrix of Loneliness Measures and Specific Items from the GRQ in Romantic Situation 1.

SITUATION

You are at a party where you do not know very many people and some of them do not seem especially friendly. You see a person of the opposite sex who looks very interesting that you have never talked to before, and this person turns to you and says "hi."

| <u>Goal</u> | <u>LONELINESS</u> | | |
|---|-------------------|----------------|-------------------|
| | <u>UCLA</u> | <u>Romance</u> | <u>Friendship</u> |
| Being in control of the situation..... | -.18a | | -.24b |
| Having fun, enjoying yourself..... | +.24b | | |
| Intimacy through sexual activity..... | -.18a | | -.27b |
| Making a favorable impression..... | -.19a | | |
| <u>Rule</u> | | | |
| Should be polite..... | +.17a | | |
| Should answer questions about yourself..... | +.17a | | +.16a |

Note: a = $p < .05$; b = $p < .01$.

Table 3

Correlation Matrix of Loneliness Measures and Specific Items from the GRQ in Romantic Situation 2.

SITUATION

You have been going out with someone that you really like and they feel the same way about you. You have tentative plans for a date on Friday night, but your friends ask you to do something very exciting that you agree to do instead. Now you are talking on the phone and have to tell your date that you can't go out.

LONELINESSDifferential Loneliness

| <u>Goal</u> | <u>UCLA</u> | <u>Romance</u> | <u>Friendship</u> |
|--|-------------|----------------|-------------------|
| Maintaining a satisfactory level of self-esteem/respect..... | | | + .22b |
| Being in control of the situation..... | | -.19a | |
| Being honest in your relationship..... | | +.17a | |
| <u>Rule</u> | | | |
| Should not embarrass the other person..... | | | + .16 |

Note: a = $p < .05$; b = $p < .01$.

Table 4

Correlation Matrix of Loneliness Measures and Specific Items from the GRQ in Romantic Situation 3.

SITUATION

You have been dating someone for almost a year and have talked about many personal things together. You are going through old photographs together and come across something potentially embarrassing that you haven't told this person about. You think to yourself -- how am I going to handle this situation?

LONELINESSDifferential Loneliness

| <u>Goal</u> | <u>UCLA</u> | <u>Romance</u> | <u>Friendship</u> |
|--|-------------|----------------|-------------------|
| Being in control of the situation..... | -.20a | | -.23b |
| Having fun, enjoying yourself..... | | +.16a | |
| Reducing your own anxiety. | -.21a | | -.23b |
| <u>Rule</u> | | | |
| Should be polite..... | +.30c | | +.16a |
| Should try and make it a pleasant encounter..... | | | +.23b |
| Should not trust people you're close to..... | -.16a | -.19a | -.19a |
| Should be honest..... | | +.17a | |

Note: a = $p < .05$; b = $p < .01$; c = $p < .001$.

Table 5

Correlation Matrix of Loneliness Measures and Specific Items from the GRQ in Friendship Situation 1.

SITUATION

You have known someone a few weeks when he or she approaches you and appears very depressed. When you ask if something is wrong, he/she says, "No, I'm okay." But, you can tell by the way they say this that they're pretty upset.

| | <u>LONELINESS</u> | | |
|--|--------------------------------|----------------|-------------------|
| | <u>Differential Loneliness</u> | | |
| <u>Goal</u> | <u>UCLA</u> | <u>Romance</u> | <u>Friendship</u> |
| Making a favorable impression..... | | -.19a | |
| Being in control of the situation..... | | | -.17a |
| <u>Rule</u> | | | |
| Should be friendly..... | | | +.23b |
| Should try and make it a pleasant encounter..... | +.19a | | +.22b |
| Should not embarrass the other person..... | | | +.24b |
| Should not tell the other person what to do..... | | | -.16a |
| Should express support.... | | | +.16a |

Note: a = $p < .05$; b = $p < .01$.

Table 6

Correlation Matrix of Loneliness Measures and Specific Items from the GRQ in Friendship Situation 2.

SITUATION

A good friend of yours has done something to really upset you. You haven't seen him/her for a week when they sit down in the cafeteria with a cup of coffee and begin a conversation with you.

| <u>Goal</u> | <u>LONELINESS</u> | | |
|---|--------------------------------|----------------|-------------------|
| | <u>Differential Loneliness</u> | | |
| | <u>UCLA</u> | <u>Romance</u> | <u>Friendship</u> |
| Telling this person how you feel..... | | + .16a | + .20a |
| Eating, drinking..... | | | - .17a |
| Avoiding conflict..... | | | - .17a |
| | | | |
| <u>Rule</u> | | | |
| Should avoid heavy topics. | - .20a | | - .31c |
| Should listen to the other person's point of view.. | + .22b | + .16a | |

Note: a = $p < .05$; b = $p < .01$; c = $p < .001$.

Table 7

Correlation Matrix of Both Early and Current Attachment Style, and Loneliness Measures.

| | Differential | | | | |
|-------------------------------------|--------------|-------------------|-------------------|-------------------|-----------------|
| | UCLA | <u>Loneliness</u> | | <u>Russell</u> | |
| | | <u>Romantic</u> | <u>Friendship</u> | <u>Friendship</u> | <u>Romantic</u> |
| Early Attach- ment Style.. | -.32b | -.21a | -.39b | +.19a | ---- |
| Current Attachment Style..... | -.25b | -.28b | -.29c | +.21a | +.18a |

Note: a = $p < .05$; b = $p < .01$; c = $p < .001$.

Early attachment style was measured by the OAS. Current attachment style was measured by the Hazan and Shaver (1987) three-paragraph item.

Table 8

ANOVA Summary Table and Planned Comparisons with UCLA Loneliness Scale as Dependent Variable and Current Attachment Style as Independent Variable.

| <u>Source</u> | <u>df</u> | <u>Sums of Squares</u> | <u>Mean Squares</u> | <u>F-obs</u> |
|---------------|-----------|------------------------|---------------------|--------------|
| Attachment | 2 | 984.86 | 492.43 | 6.07 p < .01 |
| Error | 109 | 8839.56 | 81.10 | |
| Total | 111 | 9824.42 | | |

Planned Comparisons

| <u>Contrast</u> | <u>t-value</u> |
|------------------------------------|----------------|
| Secure vs. Avoidant..... | -2.05 p < .05 |
| Secure vs. Anxious/Ambivalent..... | -3.32 p < .001 |
| Secure vs. Insecure..... | -3.40 p < .001 |

Table 9

ANOVA Summary Table and Planned Comparisons with Romantic Subscale of the Differential Loneliness Scale as Dependent Variable and Current Attachment Style as Independent Variable.

| <u>Source</u> | <u>df</u> | <u>Sums of Squares</u> | <u>Mean Squares</u> | <u>F-obs</u> |
|---------------|-----------|------------------------|---------------------|--------------|
| Attachment | 2 | 135.18 | 67.59 | 4.95 p < .01 |
| Error | 109 | 1488.38 | 13.65 | |
| Total | 111 | 1623.56 | | |

Planned Comparisons

| <u>Contrast</u> | <u>t-value</u> |
|------------------------------------|----------------|
| Secure vs. Avoidant..... | -2.79 p < .01 |
| Secure vs. Anxious/Ambivalent..... | -2.26 p < .05 |
| Secure vs. Insecure..... | -3.06 p < .01 |

Table 10

ANOVA Summary Table and Planned Comparisons with Friendship Subscale of the Differential Loneliness Scale as Dependent Variable and Current Attachment Style as Independent Variable.

| <u>Source</u> | <u>df</u> | <u>Sums of Squares</u> | <u>Mean Squares</u> | <u>F-obs</u> |
|---------------|-----------|------------------------|---------------------|--------------|
| Attachment | 2 | 127.91 | 63.96 | 5.24 p < .01 |
| Error | 108 | 1317.51 | 12.20 | |
| Total | 110 | 1445.42 | | |

Planned Comparisons

| <u>Contrast</u> | <u>t-value</u> |
|------------------------------------|----------------|
| Secure vs. Anxious/Ambivalent..... | -3.18 p < .01 |
| Secure vs. Insecure..... | -3.05 p < .01 |

Table 11

Percentages of Reported Attachment Styles Across Studies

| <u>Study</u> | <u>Attachment Styles</u> | | |
|---------------------------|--------------------------|-----------------|--------------------------------|
| | <u>Secure</u> | <u>Avoidant</u> | <u>Anxious/ Ambivalent</u> |
| Campos et al. 1983..... | 62% | 23% | 15% |
| Hazan & Shaver, 1987..... | 56% | 25% | 19% |
| Brennan et al., 1989 | | | |
| Study #1..... | 58% | 22% | 20% |
| Brennan et al., 1989 | | | |
| Study #2..... | 52% | 21% | 27% |
| Wallace, 1990..... | 54% | 32% | 14% |
| Present Study..... | 50% | 16% | 34% |

Appendix A

The UCLA Loneliness Scale

Please indicate how often you feel the way described in each of the following statements. Use the scale below and mark your answer corresponding to each statement.

- 1 NEVER
- 2 RARELY
- 3 SOMETIMES
- 4 OFTEN

1. I feel in tune with the people around me.
2. I lack companionship.
3. There is no one I can talk to.
4. I do not feel alone.
5. I feel part of a group of friends.
6. I have a lot in common with the people around me.
7. I am no longer close to anyone.
8. My interests and ideas are not shared by those around me.
9. I am an outgoing person.
10. There are people I feel close to.
11. I feel left out.
12. My social relationships are superficial.
13. No one really knows me well.
14. I feel isolated from others.
15. I can find companionship when I need it.
16. There are people who really understand me.
17. I am unhappy being so withdrawn
18. People are around me but not with me.
19. There are people I can talk to.
20. There are people I can turn to.

Appendix B

The Romantic and Friendship Subscales of the
Differential Loneliness Scale

For each statement, decide whether it describes you or your situation or not. If it does seem to describe you or your situation, mark it TRUE. If not, mark it FALSE. If an item is not applicable to you because you are currently not involved in the situation it depicts, e.g., a current romantic or marital relationship, then score it false. Use the scale below and mark your answer corresponding to each statement.

- 1 TRUE
2 FALSE

1. I usually wait for a friend to call me up and invite me out before making plans to go anywhere.
2. Most of my friends understand my motives and reasoning.
3. At this time, I do not have a romantic relationship that means a great deal to me.
4. I have at least one good friend of the same sex.
5. I am now involved in a romantic or marital relationship where both of us make a genuine effort at cooperation.
6. Some of my friends will stand by me in almost any difficulty.
7. My trying to have friends and to be liked seldom succeeds the way I would like it to.
8. I find it difficult to tell anyone that I love him or her.
9. I don't have many friends in the city where I live.
10. I am an important part of the emotional and physical well-being of my lover or spouse.
11. I don't feel that I can turn to my friends living around me for help when I need it.
12. I have a lover or spouse who fulfills many of my emotional needs.
13. My friends are generally interested in what I am doing, although not to the point of being nosy.
14. Members of my family enjoy meeting my friends.
15. I allow myself to become close to my friends.

Appendix B Continued

16. Few of my friends understand me the way I want to be understood.
17. Right now, I don't have true compatibility in a romantic or marital relationship.
18. A lot of my friendships ultimately turn out to be pretty disappointing.
19. My romantic or marital partner gives me much support and encouragement.
20. I often feel resentful about certain actions of my friends.
21. People who say they are in love with me are usually only trying to rationalize using me for their own purposes.
22. In my relationships, I am generally able to express both positive and negative feelings.
23. I get plenty of help and support from friends.
24. I don't have any one special love relationship in which I feel really understood.
25. I have few friends with whom I can talk openly.
26. I have an active love life.
27. I have few friends that I can depend on to fulfill their end of mutual commitments.
28. I have at least one real friend.
29. I have moved around so much that I find it difficult to maintain lasting friendships.
30. I tend to get along well with partners in romantic relationships.
31. I find it difficult to invite a friend to do something with me.
32. My friends don't seem to stay interested in me for long.
33. I seldom get the emotional security I need from a romantic or sexual relationship.
34. Most of my friends are genuinely concerned about my welfare.

Appendix C

The Russell Loneliness Scale

Below are two statements describing forms of loneliness that people sometimes experience. Please indicate how intensely you have experienced each form of loneliness during the past few weeks. Use the scale below and mark your answer corresponding to each paragraph.

- 1 NOT AT ALL
- 2 A LITTLE BIT
- 3 MODERATELY
- 4 QUITE A BIT
- 5 VERY INTENSELY

1. A possible type of loneliness involves not belonging to a group or social network. While this may be a set of friends who engage in social activities together, it can be any group that provides a feeling of belonging based on shared concerns, work, or other activities.
2. A possible type of loneliness is the lack of intense, relatively enduring relationship with one other person. While this relationship is often romantic, it can be any one-to-one relationship that provides feelings of affection and security.

Appendix D

Romantic Attachment Style

1. Please carefully read each of the paragraphs below and decide which one best describes how you CURRENTLY feel about romantic relationships. Then mark your answer (a, b, or c) of the paragraph that best describes your feelings. Please mark only one.
 - a. I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.
 - b. I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to get very close to my partner, and this sometimes scares people away.
 - c. I find it relatively easy to get close to others and am comfortable depending on them. I don't often worry about being abandoned or about someone getting too close to me.

Appendix E

Offspring Attachment Style

We would like for you to think back to when you were a young child -- before age 6. Obviously, this may be difficult, but please try your best.

Now, below is a list of statements that describe how young children might view their mothers. Please indicate the extent to which you agree or disagree with each statement as a description of your mother when you were a young child. (If someone other than your mother was the person that primarily looked after you, complete the survey with respect to that person.) Use the scale below and mark your answer corresponding to each statement.

- 1 STRONGLY AGREE
- 2 AGREE
- 3 DISAGREE
- 4 STRONGLY DISAGREE

1. She was normally too involved in your activities
2. She did not often express emotion to you
3. She generally did not seem to understand you when you wanted something
4. She was usually available to you
5. Normally, she was sensitive to your needs
6. She seemed as though she was often angry
7. She tended to discourage your attempts at becoming independent (e.g., tied your shoes even when you could do it yourself)
8. When she responded to you, it was often already too late
9. She did not hug or kiss you very often
10. You normally got help from her when you needed it
11. She discouraged you from being dependent upon her (e.g., often said "Do it yourself!")
12. Sometimes you felt rejected by her
13. You were actively encouraged to learn by her
14. She could get somewhat hostile at times
15. Often, it was hard to know how she would react to you

Appendix F

Goals and Rules Questionnaire

Everyday we enter many social situations. Examples might be talking with a friend, buying something at the store, or going to the doctor's office. In all of these situations we have goals. For example, while shopping in a store your goals might be to buy nice clothing, to pay as little as possible, or to have fun with a friend. A goal that might not be important in this situation is to keep healthy.

In this section we describe a number of social situations and list goals that might be important to you in these situations. In each case, try to imagine yourself in the situation. Then using the following scale, rate how important you think each goal would be to you in that particular situation.

You are at a party where you do not know very many people and some of them do not seem especially friendly. You see a person of the opposite sex who looks very interesting that you have never talked to before, and this person turns to you and says, "hi."

Okay, using the scale below, rate how important each goal is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

1. being accepted by this person
2. telling this person about yourself
3. being in control of the situation
4. having fun, enjoying yourself
5. reducing your own anxiety
6. intimacy through sexual activity
7. making a favorable impression
8. making a new friend

Appendix F Continued

You have known someone a few weeks when he or she approaches you and appears very depressed. When you ask if something is wrong, he/she says, "No, I'm okay." But, you can tell by the way they say this that they're pretty upset.

Okay, using the scale below, rate how important each goal is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

9. getting to know this person better
10. keeping to cheerful topics
11. trying to learn more about what is bothering this person
12. making a favorable impression
13. helping look after the other person
14. being in control of the situation
15. being accepted by this person

Appendix F Continued

You have been dating someone for almost a year and have talked about many personal things together. You are going through old photographs together and come across something potentially embarrassing that you haven't told this person about. You think to yourself -- how am I going to handle this situation?

Okay, using the scale below, rate how important each goal is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

16. being accepted by this person
17. telling this person more about yourself
18. being in control of the situation
19. having fun, enjoying yourself
20. reducing your own anxiety
21. maintaining a satisfactory level of self-esteem/respect
22. making a favorable impression
23. seeking reassurance

Appendix F Continued

You have been going out with someone that you really like and they feel the same way about you. You have tentative plans for a date on Friday night, but your friends ask you to do something very exciting that you agree to do instead. Now you are talking on the phone and have to tell your date that you can't go out.

Okay, using the scale below, rate how important each goal is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

24. making a favorable impression
25. maintaining a satisfactory level of self-esteem/respect
26. reducing your own anxiety
27. being in control of the situation
28. helping look after this person
29. being honest in your relationships
30. being accepted by this person

Appendix F Continued

A good friend of yours has done something to really upset you. You haven't seen him/her for a week when they sit down in the cafeteria with a cup of coffee and begin a conversation with you.

Okay, using the scale below, rate how important each goal is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

31. being accepted by this person
32. telling this person how you feel
33. having fun, enjoying yourself
34. being in control of the situation
35. eating, drinking
36. reducing your own anger
37. not upsetting the other person
38. avoiding conflict

Appendix F Continued

Social situations also have rules that help us guide our behavior. For example, while shopping in a clothing store, some important rules might be that you should not damage the merchandise, that you should undress only in the changing rooms, that sales assistants can ask you about your clothing preference and size, but not about your personal life. On the other hand, when visiting the doctor, important rules might include answering personal questions, undressing when the doctor requests it, and following the doctor's instructions. Rules that might be unimportant in these situations might be that you should display affection, that you should express your feelings, or that you should not monopolize the conversation.

In this section, we list rules that might be important to you in a variety of situations. In each case, try to imagine yourself in the situation. Then using the following scale, rate how important you think each rule would be to you in that particular situation.

A good friend of yours has done something to really upset you. You haven't seen him/her for a week when they sit down in the cafeteria with a cup of coffee and begin a conversation with you.

Okay, using the scale below, rate how important each rule is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

39. Should be friendly
40. Should be polite
41. Should try and make it a pleasant encounter
42. Should not embarrass your friends
43. Should avoid heavy topics
44. Should listen to the other person's point of view
45. Should display positive affection
46. Should be genuine and express your feelings

Appendix F Continued

You have been going out with someone that you really like and they feel the same way about you. You have tentative plans for a date on Friday night, but your friends ask you to do something very exciting that you agree to do instead. Now you are talking on the phone and have to tell your date that you can't go out.

Okay, using the scale below, rate how important each rule is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

47. Should be friendly
48. Should not try to make the other person feel small
49. Should be polite
50. Should try and make it a pleasant encounter
51. Should not embarrass others
52. Should answer questions
53. Should display positive affection
54. Should not lie

Appendix F Continued

You have been dating someone for almost a year and have talked about many personal things together. You are going through old photographs together and come across something potentially embarrassing that you haven't told this person about. You think to yourself -- how am I going to handle this situation?

Okay, using the scale below, rate how important each rule is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

55. Should be friendly
56. Should not dismiss the other person's curiosity
57. Should be polite
58. Should try and make it a pleasant encounter
59. Should not trust people you're close to
60. Should keep to cheerful topics
61. Should be honest

Appendix F Continued

You have known someone a few weeks when he or she approaches you and appears very depressed. When you ask if something is wrong, he/she says, "No, I'm okay." But, you can tell by the way they say this that they're pretty upset.

Okay, using the scale below, rate how important each rule is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

62. Should be friendly
63. Should not try to make the other person feel small
64. Should be polite
65. Should try and make it a pleasant encounter
66. Should not embarrass the other person
67. Should not tell the other person what to do
68. Should respect the other person's wishes
69. Should keep to cheerful topics
70. Should express support
71. Should encourage the other person to talk about the problem

Appendix F Continued

You are at a party where you do not know very many people and some of them do not seem especially friendly. You see a person of the opposite sex who looks very interesting that you have never talked to before, and this person turns to you and says, "hi."

Okay, using the scale below, rate how important each rule is to you in this situation.

- 1 NOT AT ALL IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 IMPORTANT
- 4 EXTREMELY IMPORTANT

72. Should be friendly
73. Should not try to make the other person feel small
74. Should be polite
75. Should try and make it a pleasant encounter
76. Should not embarrass others
77. Should tell the person about yourself
78. Should not monopolize the conversation
79. Should answer questions about yourself
80. Should keep to topics of common interest