1989

Loneliness: A study in cognitive discrepancy

Michelle Marie Garber

Follow this and additional works at: https://scholarworks.lib.csusb.edu/etd-project

Part of the Psychology Commons

Recommended Citation

https://scholarworks.lib.csusb.edu/etd-project/455

This Thesis is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.
LONELINESS: A STUDY IN COGNITIVE DISCREPANCY

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

by
Michelle Marie Garber
August 1989

Approved by:

Laura Landrine, Chair, Psychology 8-28-89

Hope Landrine

Gloria Cowan
ABSTRACT

The purpose of this study was to identify the ways in which individuals' level of loneliness relates to cognitive models they hold regarding the types of relationships they need, the qualities such relationships should possess, and the degree to which existing relationships conform to these cognitive models. Sixty male and 60 female college undergraduates ranging in age from 17 to 51 years completed a questionnaire consisting of the UCLA Loneliness Scale, 32 items assessing level of importance of eight ideal relationship qualities in eight relationship types, and 32 items assessing the extent to which the eight qualities were perceived to exist in eight actual relationship types. Preliminary findings indicated that the cognitive models of lonely subjects differed significantly from less lonely subjects. Lonelier people held significantly lower or more restrictive expectations regarding relations with parents, siblings, best friends, and same-sex friends. Lonelier subjects also rated emotional expression, self-disclosure, and tangible support as less important compared to non-lonely subjects, with understanding and commonality (i.e., similar demographic traits) showing similar trends. Pearson correlations revealed a significant correlation between low levels of loneliness and high expectations in relationships with parents, romantic partners, best
friends, and opposite-sex friends, and high expectations regarding the importance of emotional expression and support. Low levels of loneliness were also found to correlate with each of the eight relationship qualities (when they were perceived to exist in high frequency across all existing relationships), and with seven of the relationship types (when they were perceived to possess high levels of all relationship qualities). The data also suggested that when one's expectations exceed what is perceived to exist in actual relationships, the more lonely one will be. A multiple regression revealed that the greatest predictors of loneliness were when one's desired sense of belonging and being understood exceeded the degree to which these qualities existed in their actual relationships.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Theories of Causes of Loneliness</td>
<td>1</td>
</tr>
<tr>
<td>Summary and Purpose of Study</td>
<td>8</td>
</tr>
<tr>
<td>METHOD</td>
<td>10</td>
</tr>
<tr>
<td>Subjects</td>
<td>10</td>
</tr>
<tr>
<td>Materials</td>
<td>10</td>
</tr>
<tr>
<td>Procedure</td>
<td>13</td>
</tr>
<tr>
<td>RESULTS</td>
<td>15</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>29</td>
</tr>
<tr>
<td>Summary and Conclusion</td>
<td>37</td>
</tr>
<tr>
<td>APPENDIX, Instruments of Measurement</td>
<td>38</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>46</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lonely and Non-lonely Group Means and T Values for Ideal Relationship Types and Existing Relationship Types</td>
</tr>
<tr>
<td>2</td>
<td>Lonely and Non-lonely Group Means and T Values for Ideal Relationship Qualities and Existing Relationship Qualities</td>
</tr>
<tr>
<td>3</td>
<td>Correlations Between Loneliness and Expectations About Ideal Relationship Types</td>
</tr>
<tr>
<td>4</td>
<td>Correlations Between Loneliness and Expectations About Relationship Qualities</td>
</tr>
<tr>
<td>5</td>
<td>Correlations Between Loneliness and Perceptions of Existing Relationship Types</td>
</tr>
<tr>
<td>6</td>
<td>Correlations Between Loneliness and Perceptions of Qualities in Existing Relationships</td>
</tr>
<tr>
<td>7</td>
<td>Correlations Between Loneliness and Levels of Discrepancy between Ideal and Existing Relationship Types and Qualities</td>
</tr>
<tr>
<td>8</td>
<td>Multiple Regression Predicting Loneliness from Discrepancy Scores for Qualities in Relationships</td>
</tr>
</tbody>
</table>
LONELINESS: A STUDY IN COGNITIVE DISCREPANCY

Loneliness has been defined as a state of emotional distress experienced when a relationship conceptualized as important and necessary is absent. Loneliness appears to be a common experience and does not appear to be accounted for by simply being alone. Thus, Weiss (1973) found that most people report the experience of some form of loneliness at some time in their lives. Approximately 26% of the adults in his study reported that they recently had experienced feeling lonely, and of these individuals 16% were married. How might we account for the frequent occurrence of loneliness among those who are not alone? How do human beings come to know and make decisions about the kinds of relationships they need? What standards do people employ to conclude that a deficit exists in their relationships with others? What cognitive rules do people use for attributing loneliness to themselves? These issues were the focus of the present study.

Theories of Causes of Loneliness

Several theories have been advanced to account for the experience of loneliness. These include attachment theory (Bowlby, 1960), behavior deficits theory (Jones, 1982), cognitive theory (Curtona, 1982), and social constructionism (Keifer, 1980). In the following overview, the main tenets of these theories and empirical studies
will be presented in order to demonstrate the contributions of each theory to the understanding of loneliness. This overview will also serve as a point of departure for the present study.

Attachment theory. According to Bowlby (1960), we have an innate proximity-promoting drive, referred to as the need for attachment, that developed or was maintained in the course of human evolution because it increased the safety and thereby the survival of those who developed attachments. Thus, Bowlby (1960) argues that the experience of loneliness is an innate response to the absence of attachments that are functional for human survival, and that behavior engaged in to reduce loneliness can be explained in simple drive-reduction terms. This model, however, does not shed light upon the questions of how our attachment needs will be met, nor does it explain how and when we will experience attachment-need frustration.

Behavioral deficits theory. A number of studies have attempted to identify behaviors that distinguish lonely from non-lonely people (e.g., Jones, 1982). Jones (1982) argues that certain types of relationships are necessary for emotional well-being, and that the absence of said relationships results in loneliness. It is hypothesized that the absence of these needed relationships is a result of failure to develop them because the individual lacks
the requisite behaviors in his/her repertoire. The two behaviors examined by researchers included social skills (i.e., the ability to initiate conversations and maintain these contacts until they develop into relationships) and communication style. Jones (1982) has demonstrated empirically that lonely adult subjects have deficits in social skills and that self-reported loneliness decreased among subjects after they underwent a social skills training program designed to increase assertiveness and use of self-disclosure. Moore and Schultz (1983) obtained similar findings in their replication of Jones' (1982) study with a sample of adolescents.

Berg and Peplau (1982) argued that loneliness is not caused by the absence of relationships per se, but rather by the absence of intimacy in one's relationships. Hypothesizing that intimacy is a product of self-disclosure, the researchers found the predicted negative correlation between history of past self-disclosure and willingness to self-disclose, and loneliness.

Other researchers have demonstrated that a communication style characterized by a lack of self-disclosure is likely to result in an increase in loneliness. Sloan and Solano (1984) likewise found that the communication style of lonely college students was significantly more inhibited, and involved fewer confirming or acknowledging responses.
than that of non-lonely subjects. Similarly, Bell (1985) found that lonely subjects were less talkative, used fewer "vocal back channels" (i.e., acknowledging responses without words), and demonstrated less partner attention (i.e., use of eye contact) than non-lonely subjects.

Although these studies provide support for Jones' (1982) behavioral deficits theory, alternative interpretations of these data have been offered. Borys and Perlman (1985), for example, noted that labeling oneself as lonely involves social stigma. They suggested that the emotional experience of loneliness, coupled with awareness of the social stigma associated with that label might lead lonely people to become inhibited. Thus, the verbal inhibition found among the lonely subjects in these studies might be an effect of labeling themselves as lonely, rather than a cause or correlate of loneliness. In addition, albeit Berg and Peplau (1982) found a negative correlation between loneliness and self-reported self-disclosure, Sloan and Solano (1984) and Bell (1985) found no differences between lonely and non-lonely subjects in the amount of self-disclosure they engaged in. Finally, it is possible that loneliness may be more related to self-perception and self-attribution than to behavior. Although Jones (1982) concluded that loneliness is caused by a lack of social skills,
his data indicated that lonely individuals have as many interactions and of the same duration as non-lonely people. This implies that the difference between lonely and non-lonely simply may be a label that then acts as a self-fulfilling prophecy. Likewise, Williams and Solano (1983) found that lonely women list as many friends as non-lonely women. The apparent inconsistencies in these findings might be accounted for by the hypothesis that loneliness is a label we attribute to ourselves when relationships of a specific quality are missing (as opposed to relationships per se), where this attribution itself is contingent upon our perceptions and expectations of our relationships, as well as our concepts of what we need from them.

Cognitive process theories. Adherents of the cognitive perspective argue that our perceptions of the importance of certain types of relationships and our self-perceptions may be variables that mediate the experience of loneliness. Curtona's (1982) report of the results of the UCLA New Student Survey provide support for this view. This study followed 345 new undergraduates for a period of seven months. After the first two weeks of class attendance, 75% of the sample reported that they were lonely. At the end of the study, some subjects were no longer lonely, while others had remained lonely. No differences in behavior strategy employed to reduce loneliness were found between the two
groups. The students who remained lonely reported the same frequency of joining clubs, going to parties, participation in sports, and initiating conversations with strangers as did the students who overcame their loneliness. The only significant difference found was that those who remained lonely, as opposed to those who did not, believed that only by finding a romantic partner would they overcome their loneliness.

Others have suggested that, in addition to values and beliefs, self-perceptions may mediate loneliness. Self-perception hypotheses suggest that the lonely individual has thoughts that prevent him or her from forming satisfying relationships. Jones (1982), for example, found that loneliness correlated positively with cynical social attitudes, expectations of rejection, external locus of control, negative attitudes toward the viability of marriage, and labeling oneself as a failure. Similarly, Wilbert (1986) obtained positive correlations between loneliness and doubts of one's desirability, and between loneliness and feelings of displeasure over the absence of romantic relationships. Likewise, Horowitz, deSales-French, and Andersen (1982) found that lonely individuals were highly self-critical (insofar as they attributed interpersonal failure to their personal shortcomings) and coped with interpersonal stress by withdrawing. Thus, Horowitz
et al. (1982) suggested that lonely people may have negative self-perceptions that create a self-fulfilling prophecy.

A related cognitive-process theory of loneliness is cognitive discrepancy theory (Peplau, Miceli, & Morasch, 1982), wherein it is argued that our perceptions of our relationships is mediated by a cognitive "internal yardstick" that details our beliefs about the nature and number of relationships we need and consider ideal. Although interesting and inherently testable, the cognitive discrepancy theory has yet to be tested.

Social constructionism. Finally, social constructionism stems from the anthropological and sociological literatures. This theoretical perspective argues that loneliness (as well as other emotions) is a product of sociocultural expectations and values, and of social practices. In a field study on loneliness in the Japanese culture, Keifer (1980), for example, argued that culture affects our beliefs about and behavior in relationships by limiting the range of emotions deemed appropriate for one to feel, as well as when and how to express them. Cultures define relationships as permissible or legitimate, and define the kinds of information that might be exchanged in an encounter. Therefore, while all of us may indeed have an innate need for attachment, the way this need is
defined (constructed) and fulfilled appears to be the product of social and cultural norms.

Summary and Purpose of Study

An examination of the aforementioned theories reveals that many questions regarding the experience and attribution of loneliness remain unanswered. Attachment theory argues that we have an inherent need for relationships, but fails to define the types of relationships we need or describe the qualities that these relationships must possess. In the previously cited research on behavioral deficits, data was reported showing that lonely people have as many interactions (Jones, 1982) and list as many friends (Williams & Solano, 1983) as non-lonely people. Thus, while behavior deficits theory argues that lonely people lack behaviors necessary for meeting interpersonal needs, it never explains exactly what it is lonely people need and yet are unable to attain. Further, findings on the importance of self-disclosure in relationships (Berg & Peplau, 1982; Sloan & Solano, 1984) seem to conflict. This indicates a need for further exploration. Likewise, cognitive-process models of loneliness (e.g., Curtona, 1982; Horowitz et al., 1982; Peplau et al., 1982) argue for the important role played by beliefs and expectations about relationships in loneliness, but the theorists have yet to identify the internal cognitive standards by which
we conclude that deficits in our relationships exist. In addition, no one has examined the relationship between these standards and the relative level of loneliness the individual attributes to him/herself.

In general, the purpose of this study was to identify the factors that contribute to describing oneself as lonely. More specifically, it was expected that the level of loneliness was related to a set of expectations and beliefs about the types of relationships (e.g., parents) one "should" have and the qualities these relationships must possess in order not to be lonely. Based on the cognitive discrepancy model proposed by Peplau et al. (1982) it was expected that lonely people would have higher or more unrealistic expectations than less lonely people. The second objective was to identify which relationship types (e.g., friends) and which qualities (e.g., self-disclosure) are most related to level of loneliness when perceived to be present or absent. The third task was to test the cognitive discrepancy model proposed by Peplau et al. (1982), wherein the greater the discrepancy between what individuals believe they should have and what they actually have in their relationships, the more they will tend to be lonely. A final task was to identify which factors (among the types and qualities of relationships) were most predictive of the level of loneliness.
METHOD

Subjects

The subjects were 123 18- to 51-year-old undergraduates (62 males and 61 females, mean age = 28.7 years) from two college campuses in a suburban community in southern California. The subjects were solicited from introductory psychology, business, and English courses, and they received extra course credit for their participation. Two males and one female were excluded from the study because they returned incomplete questionnaires. The majority of subjects were from middle-class homes, with 63% reporting an annual family income of $25,000 or more. Forty-four percent of the subjects were married or living with someone; 45% were single, and 11% were divorced. The sample consisted of individuals with the following ethnic backgrounds: 62% Caucasian, 17% Hispanic, 8% Black, and 13% other backgrounds.

Materials

The subjects were administered a questionnaire that consisted of the following instruments (see Appendix).

Loneliness. To assess the degree of loneliness, the UCLA Loneliness Scale (Russel, Peplau, & Ferguson, 1978) was used. Subjects responded to a 20-item Likert scale in terms of how often the statements were descriptive of themselves (1 = often, 4 = never). A single loneliness score was derived by summing the subjects answers.
High scores indicated less loneliness. Research on the reliability of the scale has shown coefficient alpha to be .96, with validity at .79 ($p < .001$) (see Russel et al, 1978).

**Ideal relationships.** In order to assess what subjects believed they "should" have in order not to be lonely, 32 items were developed to reflect different "types" and "qualities" of relationships. The items were generated from the literature on friendship (Pogrebin, 1987), loneliness (Youn3, 1982), and other questionnaires (Schmidt & Vello, 1983). Eight "qualities" were formulated to reflect desired or expected qualities relationships might possess: i.e., Emotional Expression (i.e., anger, sadness, love, physical affection), Self-Disclosure (i.e., aspiration, fears, sexual/romantic concerns), tangible Support (i.e., being cared for if ill), Understanding (i.e., accepting faults and weaknesses), Commonality (i.e., having similar demographic traits), Leisure (i.e., engaging in activities together), Belonging (i.e., feeling a sense of connectedness), and Attraction (i.e., feeling physical attraction). Items were phrased in terms of what subjects believed they "ought" to have in a relationship (e.g., "It would be most ideal to be open and honest about myself with...").

Each of the items measuring these eight qualities was followed by a list of eight relationship "types". These
included: Parents, Siblings, Extended Family, Partner/Spouse, Best Friend, Same-Sex Friends, Opposite-Sex Friends, and Social Group. The subjects were instructed to rate how important they believed each quality was for each of these eight relationship types in order for the subjects to not feel lonely. A five-point Likert scale was used (5= "an essential quality", 1= "not a needed quality").

Perceptions of existing relationships. The third part of the questionnaire was developed to assess the extent to which the eight relationship qualities (described above) were perceived to exist in subjects' present relationships. This was done by re-phrasing the 32 items described above into a format that reflected current relationship qualities (i.e., "I can be open and honest about myself with..."). A list of the same eight relationship "types" was presented following each rephrased item. Subjects were instructed to use a five-point scale to rate the extent to which each quality existed in each of the eight relationship "types". The purpose of this scale was not only to assess the extent to which these qualities were believed to exist in relationships, but also to determine which "types" and which qualities when perceived to be absent were related to the level of loneliness of an individual. It was also used as a means by which to calculate discrepancies between "ideal" relationships and existing or perceived relationships (and
the consequent relation with loneliness).

**Demographic items.** In addition to the above scales, subjects were asked to provide information regarding their age, gender, marital status, and income level.

**Procedure**

Subjects were administered the questionnaire either in small groups or they took it home to complete. The entire questionnaire took approximately one hour to complete.

**Scoring the data.** The data for each subject was scored in two ways: by relationship "qualities" and by "type". The scores for each of the eight qualities (Emotional Expression, Self-Disclosure, Support, Understanding, Commonality, Leisure, Belonging, and Attraction) were summed across all relationship types, for both ideal and existing relationship qualities. A "difference" score was calculated by subtracting the existing relationship score from the ideal score for the eight qualities, yeilding eight difference scores. Second, scores were summed by relationship type (Parents, Siblings, Extended Family, Partner/Spouse, Best Friend, Same-Sex Friends, Opposite-Sex Friends, Social Group) across all qualities for both ideal and existing types. The existing relationship score was then subtracted from the ideal relationship score for each of the eight "types", producing eight relationship type "difference" scores. Thus, each subject had 48 variables which included: 8 ideal qualities, 8 existing qualities, 8 quality dif-
ference scores, 8 ideal relationship types, 8 existing relationship types, 8 relationship type difference scores, and the Loneliness score, which were then used in the following statistical analyses.
RESULTS

Descriptive Statistics

In order to determine whether lonely and non-lonely subjects differed significantly in their responses to the questionnaire, subjects were divided into two groups, based on their loneliness score. The mean loneliness score for the 120 subjects was $\bar{x} = 57.8$. Subjects scoring 58 or below were designated "lonely" (n = 55) and subjects scoring 59 or above were designated as "non-lonely" (n = 65). Group means were obtained and t-tests were conducted for the eight ideal relationship types, eight existing relationship types, eight ideal relationship qualities, and eight existing relationship qualities.

Table 1 shows the group means and t-values for ideal and existing relationship types. The two groups differed significantly in the level of expectations of two of the eight relationship types: parents and siblings. Same-sex friends and best friend approached significance. Lonely subjects expected significantly less from these relationship types than did non-lonely subjects. In terms of their existing relationship types, Table 1 shows that the two groups differed significantly in seven of the eight types of relationships. In other words, lonely subjects reported that they received less from their current relationships with their parents, siblings, extended family, partner/spouse, best friend, opposite-sex friends and same-sex
Table 1

Lonely and Non-lonely Group Means and T-Values for Ideal Relationship Types and Existing Relationship Types

<table>
<thead>
<tr>
<th>Ideal Relationships</th>
<th>Lonely Mean</th>
<th>Non-Lonely Mean</th>
<th>T Value</th>
<th>2-tailed Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>105.6</td>
<td>121.0</td>
<td>-2.68</td>
<td>.009</td>
</tr>
<tr>
<td>Siblings</td>
<td>86.1</td>
<td>102.1</td>
<td>-2.11</td>
<td>.037</td>
</tr>
<tr>
<td>Extended Family</td>
<td>75.7</td>
<td>84.4</td>
<td>-1.39</td>
<td>.168</td>
</tr>
<tr>
<td>Partner/Spouse</td>
<td>126.2</td>
<td>136.6</td>
<td>-1.39</td>
<td>.169</td>
</tr>
<tr>
<td>Best Friend</td>
<td>110.1</td>
<td>119.6</td>
<td>-1.79</td>
<td>.077</td>
</tr>
<tr>
<td>Same-Sex Friends</td>
<td>83.1</td>
<td>92.9</td>
<td>-1.93</td>
<td>.057</td>
</tr>
<tr>
<td>Opposite-Sex Friends</td>
<td>81.0</td>
<td>85.9</td>
<td>-1.90</td>
<td>.370</td>
</tr>
<tr>
<td>Social Group</td>
<td>66.4</td>
<td>63.6</td>
<td>.49</td>
<td>.624</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing Relationships</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>96.8</td>
<td>117.8</td>
<td>-3.47</td>
<td>.001</td>
</tr>
<tr>
<td>Siblings</td>
<td>78.3</td>
<td>98.5</td>
<td>-2.69</td>
<td>.008</td>
</tr>
<tr>
<td>Extended Family</td>
<td>65.8</td>
<td>90.8</td>
<td>-3.02</td>
<td>.003</td>
</tr>
<tr>
<td>Partner/Spouse</td>
<td>108.0</td>
<td>133.2</td>
<td>-2.64</td>
<td>.009</td>
</tr>
<tr>
<td>Best Friend</td>
<td>100.4</td>
<td>117.7</td>
<td>-2.21</td>
<td>.029</td>
</tr>
<tr>
<td>Same-Sex Friends</td>
<td>77.6</td>
<td>93.1</td>
<td>-2.68</td>
<td>.008</td>
</tr>
<tr>
<td>Opposite-Sex Friends</td>
<td>74.2</td>
<td>91.1</td>
<td>-1.70</td>
<td>.020</td>
</tr>
<tr>
<td>Social Group</td>
<td>55.9</td>
<td>70.1</td>
<td>-1.15</td>
<td>.25</td>
</tr>
</tbody>
</table>

aLonely indicates subjects with Loneliness Scores 58 and below (n=55), Non-lonely indicates subjects with scores above 58 (n=65).
friends than non-lonely subjects did.

Table 2 presents the group means and t-values for ideal and existing relationship qualities. Lonely and non-lonely subjects differed in their expectations of three of the eight ideal relationship qualities: emotional expression, self-disclosure, and support. Commonality approached significance \((p<.059)\). Thus, lonelier individuals had significantly lower levels of expectations than the non-lonely group with regard to these relationship qualities across all relationships. For the eight qualities in existing relationships, group means differed significantly for all eight qualities. Lonely subjects perceived they had less of the eight qualities across all existing relationships than non-lonely subjects.

In summary, the descriptive data show that lonely individuals expect less than non-lonely in their relationships with parents, siblings, same-sex friends and best friends. They also believe that emotional expression, self-disclosure, support, and commonality are less important across all relationships than do non-lonely individuals. Further, lonely subjects perceive they receive less from seven of the eight relationship types than less lonely subjects do, and across all their actual relationships lonely individuals perceive they have less of the eight qualities than non-lonely individuals.
Table 2

Lonely and Non-lonely Group Means and T-Values for Ideal Relationship Qualities and Existing Relationship Qualities

<table>
<thead>
<tr>
<th></th>
<th>Lonely&lt;sup&gt;a&lt;/sup&gt; Mean (x)</th>
<th>Non-Lonely Mean (x)</th>
<th>T Value</th>
<th>2-tailed Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideal Relationships</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Expression</td>
<td>89.3</td>
<td>100.4</td>
<td>-2.49</td>
<td>.014</td>
</tr>
<tr>
<td>Self-Disclosure</td>
<td>93.3</td>
<td>102.6</td>
<td>-2.31</td>
<td>.022</td>
</tr>
<tr>
<td>Support</td>
<td>96.1</td>
<td>109.0</td>
<td>-3.08</td>
<td>.003</td>
</tr>
<tr>
<td>Understanding</td>
<td>104.4</td>
<td>112.6</td>
<td>-1.81</td>
<td>.073</td>
</tr>
<tr>
<td>Commonality</td>
<td>79.4</td>
<td>87.9</td>
<td>-1.91</td>
<td>.059</td>
</tr>
<tr>
<td>Leisure</td>
<td>94.3</td>
<td>102.2</td>
<td>-1.81</td>
<td>.073</td>
</tr>
<tr>
<td>Belonging</td>
<td>98.9</td>
<td>104.7</td>
<td>-1.23</td>
<td>.222</td>
</tr>
<tr>
<td>Attraction</td>
<td>81.1</td>
<td>86.6</td>
<td>-1.29</td>
<td>.198</td>
</tr>
<tr>
<td><strong>Existing Relationships</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Expression</td>
<td>72.8</td>
<td>86.8</td>
<td>-3.64</td>
<td>.000</td>
</tr>
<tr>
<td>Self-Disclosure</td>
<td>82.0</td>
<td>97.9</td>
<td>-4.04</td>
<td>.000</td>
</tr>
<tr>
<td>Support</td>
<td>86.0</td>
<td>103.9</td>
<td>-3.96</td>
<td>.000</td>
</tr>
<tr>
<td>Understanding</td>
<td>89.1</td>
<td>110.5</td>
<td>-3.86</td>
<td>.000</td>
</tr>
<tr>
<td>Commonality</td>
<td>81.9</td>
<td>95.1</td>
<td>-2.91</td>
<td>.004</td>
</tr>
<tr>
<td>Leisure</td>
<td>83.1</td>
<td>99.2</td>
<td>-3.40</td>
<td>.001</td>
</tr>
<tr>
<td>Belonging</td>
<td>85.6</td>
<td>105.1</td>
<td>-3.99</td>
<td>.000</td>
</tr>
<tr>
<td>Attraction</td>
<td>73.8</td>
<td>84.2</td>
<td>-2.10</td>
<td>.030</td>
</tr>
</tbody>
</table>

<sup>a</sup>Lonely indicates subjects with Loneliness Scores 58 and Below (n=55), Non-lonely indicates subjects with scores above 58 (n= 65).
Loneliness and Ideal Relationships

The next analysis examined the relation between the level of loneliness and subjects' expectations and beliefs about the importance of specific types of relationships and the qualities such relationships should ideally possess. It was hypothesized that expectations of relationships would correlate positively with loneliness scores. To accomplish this, bivariate correlations between the loneliness score and the eight scores which measured level of expectations about desired types of relationships (across all qualities) and the eight scores which measured level of expectations about desired qualities (across all relationship types) were obtained. Results are presented in Tables 3 and 4.

As shown in Table 3, level of loneliness correlated significantly with expectations regarding four relationship types: parents, partner/spouse, best friend, and opposite sex friends. Expectations regarding parents accounted for 13% of the variance, with 12% accounted for by expectations of best friend. Opposite-sex friends accounted for 8% of the variance, and 7% was accounted for by expectations about ideal relationships with partner/spouse. Thus, these results indicated that where the level of importance of these four relationship types was higher, the level of loneliness was lower.
Table 3

Correlations Between Loneliness and Expectations About Ideal Relationship Types

<table>
<thead>
<tr>
<th>Relationship Types</th>
<th>$r^2$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>.13</td>
<td>.36***</td>
</tr>
<tr>
<td>Siblings</td>
<td>.01</td>
<td>.12NSa</td>
</tr>
<tr>
<td>Extended Family</td>
<td>.03</td>
<td>.19NS</td>
</tr>
<tr>
<td>Partner/Spouse</td>
<td>.07</td>
<td>.27***</td>
</tr>
<tr>
<td>Best Friend</td>
<td>.12</td>
<td>.34***</td>
</tr>
<tr>
<td>Same-Sex Friends</td>
<td>.03</td>
<td>.18NS</td>
</tr>
<tr>
<td>Opposite-Sex Friends</td>
<td>.08</td>
<td>.29***</td>
</tr>
<tr>
<td>Social Group</td>
<td>.02</td>
<td>.14NS</td>
</tr>
</tbody>
</table>

Note. Higher scores on the Loneliness scale indicates that a subject is not lonely.

aNS= Not Significant

***$p<.001$

The results of the analysis presented in Table 4 indicated that level of loneliness was significantly and positively correlated with expectations about two relationship qualities: emotional expression and support. Each accounted for 5% of the total variance. These results indicate that as the level of importance of these two qualities increases, the level of loneliness decreases. Thus, these results show that the more lonely one is,
the less one expects from parents, best friends, opposite
sex friends, and romantic partners, and the less one values emotional expression and support across all relationship
types.

Table 4

Correlations Between Loneliness and Expectations About Relationship Qualities

<table>
<thead>
<tr>
<th>Ideal Relationship Qualities</th>
<th>$r^2$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Expression</td>
<td>.05</td>
<td>.22**</td>
</tr>
<tr>
<td>Self-Disclosure</td>
<td>.02</td>
<td>.15NS</td>
</tr>
<tr>
<td>Support</td>
<td>.05</td>
<td>.23**</td>
</tr>
<tr>
<td>Understanding</td>
<td>.03</td>
<td>.17NS</td>
</tr>
<tr>
<td>Commonality</td>
<td>.03</td>
<td>.18NS</td>
</tr>
<tr>
<td>Leisure</td>
<td>.04</td>
<td>.20NS</td>
</tr>
<tr>
<td>Belonging</td>
<td>.02</td>
<td>.15NS</td>
</tr>
<tr>
<td>Attraction</td>
<td>.01</td>
<td>.10NS</td>
</tr>
</tbody>
</table>

Note. Higher scores on the LOneliness scale indicated that a subject is not lonely.

aNS = Not Significant

**p < .01

Loneliness and Perceptions of Existing Relationships

The second objective of this study was to identify which relationship types and qualities (when perceived to be present or absent) correlated with the level of
loneliness. To examine this question, Pearson correlations were obtained for the Loneliness score and the eight scores that measured the eight existing relationship types when summed across all qualities, and the eight scores measuring the extent to which each of the eight relationship qualities were perceived to exist across all relationship types. The results of these analyses are presented in Tables 5 and 6.

Table 5 indicates that the level of loneliness correlated with seven of the relationship types. Thus, the lower the level of loneliness, the more these seven relationship types were perceived to possess more of the qualities. The more lonely the subject, the lower the number and amount of all qualities perceived to exist in the seven relationship types. Existing relationships with parents and extended family each accounted for 16% of the total variance. Same-sex friendships accounted for 14%, romantic partner accounted for 8%, best friend 8%, 6% was accounted for by sibling relations, and 5% for social group. Thus, Table 5 indicates that non-lonely people perceive that their relationships with parents, extended family, same-sex friends, best friends, partners, siblings, and social group possess more of all the eight qualities than lonelier people.
### Table 5

**Correlations Between Loneliness and Perceptions of Existing Relationship Types**

<table>
<thead>
<tr>
<th>Relationship Types</th>
<th>$r^2$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>.16</td>
<td>.40***</td>
</tr>
<tr>
<td>Siblings</td>
<td>.06</td>
<td>.25**</td>
</tr>
<tr>
<td>Extended Family</td>
<td>.16</td>
<td>.41***</td>
</tr>
<tr>
<td>Partner/Spouse</td>
<td>.08</td>
<td>.28***</td>
</tr>
<tr>
<td>Best Friend</td>
<td>.08</td>
<td>.29***</td>
</tr>
<tr>
<td>Same-Sex Friends</td>
<td>.14</td>
<td>.37***</td>
</tr>
<tr>
<td>Opposite-Sex Friends</td>
<td>.01</td>
<td>.12NSa</td>
</tr>
<tr>
<td>Social Group</td>
<td>.05</td>
<td>.22***</td>
</tr>
</tbody>
</table>

*NS = Not Significant

**$p < .01$**

**$p < .001$**

Table 6 shows that the level of loneliness also correlated with all eight relationship qualities. This indicates that the more each quality is perceived to exist across all relationship types, the lower the level of loneliness. Leisure accounted for the greatest amount of the total variance with 17%, belonging accounted for 16%. Self-disclosure, support, understanding, and commonality each accounted for 12% of the variance. Emotional expression accounted for 9% and attraction 6%.
Table 6
Correlations Between Loneliness and Perceptions of Qualities in Existing Relationships

<table>
<thead>
<tr>
<th>Relationship Qualities</th>
<th>( r^2 )</th>
<th>( r )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Expression</td>
<td>0.09</td>
<td>0.30***</td>
</tr>
<tr>
<td>Self-Disclosure</td>
<td>0.12</td>
<td>0.36***</td>
</tr>
<tr>
<td>Support</td>
<td>0.12</td>
<td>0.34***</td>
</tr>
<tr>
<td>Understanding</td>
<td>0.12</td>
<td>0.36***</td>
</tr>
<tr>
<td>Commonality</td>
<td>0.12</td>
<td>0.36***</td>
</tr>
<tr>
<td>Leisure</td>
<td>0.17</td>
<td>0.41***</td>
</tr>
<tr>
<td>Belonging</td>
<td>0.16</td>
<td>0.40***</td>
</tr>
<tr>
<td>Attraction</td>
<td>0.06</td>
<td>0.24***</td>
</tr>
</tbody>
</table>

***\( p < 0.001 \)

Loneliness and the discrepancy between ideal and existing relationships

The third analysis was undertaken to test the cognitive discrepancy model proposed by Peplau et al. (1982), wherein the greater the discrepancy that exists between what people believe they should have and what they perceive they actually have in their relationships, the more lonely they are likely to be. It was expected that the lower the level of loneliness a person experiences, the smaller the difference between ideal and existing relationships. To examine this question, Pearson correlations were obtained.
between the Loneliness score and the eight scores which measured the difference between ideal relationship types and existing types. Also, correlations were obtained between the Loneliness score and the eight scores which measured the difference between expectations about relationship qualities and perceived level of these qualities in existing relationships. The results of this third test are presented in Table 7.

The results indicated that the level of loneliness was positively correlated with the level of discrepancy for four relationship types: siblings (accounting for 6% of the variance), best friend (accounting for 6%), and opposite-sex friends (accounting for 4%). Extended family was negatively correlated with the level of loneliness (11% of the total variance). In other words, contrary to expectations, the lower the level of loneliness, the greater the discrepancy between expected and existing relationships with siblings, best friends, and opposite-sex friends. For extended family, however, the lower the level of loneliness, the lower the level of discrepancy between ideal and existing relations.

The results of this analysis also indicated that level of loneliness was negatively correlated (as hypothesized) with level of discrepancy of seven of the eight relationship qualities: self-disclosure, understanding, commonality,
Table 7

Correlations Between Loneliness and Levels of Discrepancy Between Ideal and Existing Relationship Types and Qualities

<table>
<thead>
<tr>
<th>Difference Scores(^a)</th>
<th>(r^2)</th>
<th>(r)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationship Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>.003</td>
<td>.05NS(^b)</td>
</tr>
<tr>
<td>Siblings</td>
<td>.06</td>
<td>.25**</td>
</tr>
<tr>
<td>Extended Family</td>
<td>.11</td>
<td>-.33***</td>
</tr>
<tr>
<td>Partner/Spouse</td>
<td>.01</td>
<td>.11NS</td>
</tr>
<tr>
<td>Best Friend</td>
<td>.06</td>
<td>.25**</td>
</tr>
<tr>
<td>Same-Sex Friends</td>
<td>.003</td>
<td>-.06NS</td>
</tr>
<tr>
<td>Opposite-Sex Friends</td>
<td>.04</td>
<td>.19**</td>
</tr>
<tr>
<td>Social Group</td>
<td>.02</td>
<td>-.15NS</td>
</tr>
<tr>
<td><strong>Relationship Qualities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Expression</td>
<td>.05</td>
<td>-.22**</td>
</tr>
<tr>
<td>Self-Disclosure</td>
<td>.09</td>
<td>-.30***</td>
</tr>
<tr>
<td>Support</td>
<td>.03</td>
<td>-.17NS</td>
</tr>
<tr>
<td>Understanding</td>
<td>.16</td>
<td>-.40***</td>
</tr>
<tr>
<td>Commonality</td>
<td>.06</td>
<td>-.24***</td>
</tr>
<tr>
<td>Leisure</td>
<td>.13</td>
<td>-.36***</td>
</tr>
<tr>
<td>Belonging</td>
<td>.18</td>
<td>-.43***</td>
</tr>
<tr>
<td>Attraction</td>
<td>.05</td>
<td>-.22**</td>
</tr>
</tbody>
</table>

\(^a\)Difference scores were derived by subtracting scores of existing types and qualities from ideal scores of types and qualities

\(^b\)NS= Not Significant

**\(p< .01\)**

***\(p< .001\)**
leisure, belonging, emotional expression, and attraction. The greatest amount of the total variance was accounted for by discrepancy in belonging with 18%. Understanding accounted for 16% and leisure 13%. The other discrepancy variables each accounted for less than 10% of the variance. These results indicated that the lower the level of loneliness, the smaller the difference between one's desire for belonging, understanding, leisure activities, self-disclosure, commonality, emotional expression and attraction and the actual presence of these qualities across all types of relationships. Thus, the more lonely one is, the more expectations about these qualities exceed what currently is perceived to exist in actual relationships.

Factors Predicting Loneliness

The final task was to identify which factors among the variables were most predictive of loneliness. To accomplish this, the discrepancy variables for relationship qualities were entered in a step-wise multiple regression. (The discrepancy scores for relationship types were excluded because they were not interpretable or useful in addressing the hypothesis). The regression results are presented in Table 8, showing that the variable measuring the discrepancy between ideal and existing belonging entered the equation first, accounting for 18% of the variance. It was
followed by the variable which measured the difference between ideal and existing understanding. Together these two variables accounted for 24% of the total variance. The other variables exceeded the p < .05 level. These results indicated that from among all of the eight qualities, when one's expectations for belonging and being understood across all relationship types exceed what one perceives one has in current relationships, one is most likely to attribute loneliness to oneself.

Table 8
Multiple Regression Predicting Loneliness from Discrepancy Scores for Qualities in Relationships

<table>
<thead>
<tr>
<th>Order of Entry</th>
<th>r</th>
<th>r²</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discrepancy in Belonging</td>
<td>.42</td>
<td>.18</td>
<td>25.83</td>
<td>.0009</td>
</tr>
<tr>
<td>2. Discrepancy in Understanding</td>
<td>.49</td>
<td>.24</td>
<td>18.39</td>
<td>.003</td>
</tr>
</tbody>
</table>
DISCUSSION

In general, the main purpose of this study was to identify the factors which contribute to labeling oneself as lonely, by exploring the relation between people's level of loneliness and the cognitive models they hold regarding the types of relationships they believe are needed, the qualities they value in such relationships, and the degree to which their existing relationships conform to their ideals. More specifically then, the first task was to ascertain if loneliness was related to a set of expectations and beliefs about relationship types one should have and the qualities relationships must possess. The results presented in the descriptive data and the first analysis demonstrate that a set of expectations associated with loneliness did emerge. Lonely people seem to hold a different model of what is needed in relationships than people who are less lonely. Lonely people expect less from parents and siblings than non-lonely people, and expectations of same-sex friends and best friend show similar tendencies. Also, lonelier people do not seem to value emotional expression and self-disclosure, nor expect support as highly in all their relationships as do non-lonely people. We may conclude, therefore, that people who are not lonely believe that their relational needs should be met by
a larger variety of sources (relationship types) than lonely people. Thus, by holding a model of overly specific expectations regarding whom one can express emotions with, self-disclose, and receive tangible support from, and with limited expectations regarding parents, siblings, best friends, and same-sex friends, lonely people may be more vulnerable to loss. They may be more likely to perceive a deficit in their lives when the handful of relationships they have placed all the emphasis on is lacking in some way, because they believe there are fewer sources from which to obtain need satisfaction. They do not seem to be able to compensate for deficits in their relationships in the way non-lonely people do.

It is important to note that these findings contradict the first hypothesis in one aspect. When the study was first constructed, it was hypothesized that lonely people would have higher or more unrealistic expectations of their relationships than non-lonely people. This hypothesis was based on Peplau's et al. (1982) model of cognitive discrepancy, which postulated that the more lonely the person, the greater the discrepancy between what they hold as ideal and what they actually have. Further, Jones (1982) reported that lonely people have as many social interactions as non-lonely, and they list as many friends (see Williams & Solano, 1983) as
non-lonely people. Thus, from previous research, a picture is presented in which actual relationships of lonely and non-lonely do not differ highly, but expectations and beliefs seem to differ and play a role. However, the picture is not nearly so simple. The results of this present study have demonstrated that people who have a tendency to be lonely have significantly lower expectations in several specific areas, namely relations with parents and siblings, best friends and same-sex friends. They also view emotional expression, self-disclosure and support as important only in a few relationships. On the other hand, these findings seem to support and expand upon the findings of Curtona (1982) which showed that lonely college students believed that only by having a sweetheart could they overcome their loneliness, and they overlooked the potential of obtaining desired qualities from friendships and other relationships. The results also agree with the findings of Berg and Peplau (1982) who reported that willingness to self-disclose negatively correlated with loneliness.

These findings about expectations have implications for psychotherapeutic treatment of lonely people. Rook (1982) suggested that treatment include a re-evaluation of clients expectations of relationships. Further, Jones (1982) reported a reduction in self-reported loneliness among
clients who underwent a social skills training program designed to increase emotional expression and self-disclosure. It may be inferred that not only did the training program alter behavior of lonely subjects, but may have altered their expectations of relationships by increasing the perceived value of these two qualities in particular types of relationships and/or increased clients' awareness that such qualities are desirable and obtainable from a variety of sources. Thus, in applying these findings in developing psychotherapeutic interventions, lonely clients should be encouraged to broaden the limits of the set of expectations about the qualities needed in particular relationship types (i.e., parents, siblings, same-sex friends) and to increase the value attributed to desired qualities across all types of relationships (i.e., emotional expression, etc.).

The second objective of this study was exploratory in nature. The task was to identify which particular types of relationships and which qualities (when perceived to be present or absent) correlated with the level of loneliness. A positive correlation was found between level of loneliness and seven of the eight relationship types (see Table 5). This indicates that the more these particular types are perceived to possess many of the eight qualities, and at high levels, the less lonely one
was likely to be. The results also showed that level of loneliness positively correlated with all eight relationship qualities (see Table 6). Thus, the less lonely the individual, the more all eight relationship qualities were perceived to exist across all relationship types. These findings are consistent with the conclusion drawn by Sadler and Johnson (1980), which was that the larger the number of areas in relationships in which a deficit is experienced, the greater the loneliness. Hojat's (1982) study reported that loneliness was positively correlated with a perceived absence of particular qualities. These included not being understood by others, not being able to turn to others for support or assistance, and feeling others did not show an interest in one's ideas and feelings. Hojat's findings are confirmed by these present findings, wherein the perceived absence of these qualities is also related to level of loneliness.

It is clear from the evidence of the second analysis that non-lonely people actually have more of what they believe they need. It can be argued that the cause of loneliness is more related to what one has rather than to what one expects or considers ideal. However, the direction of causality is not clear. Surely one's prior experience with relationships colors one perceptions and expectations of present relationships. But one's
current expectations and beliefs play an important role in motivating and determining behavior, and perhaps in maintaining loneliness. As was previously shown, changes in expectations may mediate future loneliness. Therefore, while non-lonely people perceive a higher degree of fulfillment from their relationships than lonely people, these less-lonely people also have higher and broader expectations of what is possible. Lonely people have overly specific concepts about relationships which restrict satisfaction of needs by limiting the sources conceived to be available. We may infer, therefore, as does Gordon (1976), that lonely people grieve the absence of a concept, a phantom possibility, when in fact, the satisfaction of needs may be attainable.

The results of the third analysis provided support for the hypothesis which predicted that the greater the discrepancy between what one believes one needs and what one perceives one has, the more lonely one is likely to be. Seven of the eight variables which measured the difference between individual's ideal and existing relationship qualities were negatively correlated with the level of loneliness. This indicates that lonelier subjects had expectations that exceeded what they perceived they had in existing relationships. Less lonely subjects' expectations were more equal to existing qualities.
in relationships. These data suggest that for qualities in relationships, non-lonely people may be characterized as having high expectations and perceiving high levels of these qualities across their existing relationships. In contrast, lonelier people have lower expectations, but at the same time, what they expect exceeds what they perceive they have. This finding seems to support the idea that lonely people have a more limited view of possibilities for satisfaction, and this, in turn, leads to less actualization of those possibilities.

A positive correlation was found between the level of loneliness and three of the variables which measured the discrepancy between ideal and existing types of relationships. These were siblings, best friend, and opposite-sex friends. However, the amount of total variance accounted for by these three variables combined was small (16%). It is unclear what the finding actually contributes. Further, the extended family variable was negatively correlated, accounting for 11% of the variance. This means that the less lonely one is, the more likely it is that ideal and existing relations with extended family are equal. However, this finding is not very useful or relevant.

In summary, it can be argued, in agreement with Peplau et al. (1982), that people's expectations and
values, their "internal yardstick" will determine how satisfied they are with their relationships. When one's relationships fail to measure up to one's internal standard, one appears to attribute loneliness to oneself.

Finally, the results of the step-wise multiple regression indicated that two factors were most predictive of loneliness. The discrepancy variables for belonging and understanding accounted for the largest portion of the variance. This suggests that when one perceives that one's relationships do not meet one's expectations for belonging, and being understood and accepted, one is most likely to attribute loneliness to oneself. Although this finding may appear to be significant, it must be interpreted cautiously. It is possible to account for this finding by the nature of the instrument used to measure loneliness. In examining the UCLA Loneliness Scale (Russel, Peplau, & Ferguson, 1978) (see Appendix), it should be noted that seven of the twenty items reflect these two specific qualities. Thus, it is possible that the results were confounded by the content of the scale. Future research in this area may need to consider a different measure of loneliness.
Summary and Conclusion

This study has demonstrated that the degree to which people identify themselves as lonely is related to a number of factors. First, it was found that people hold a set of expectations or a model of the types of relationships they should have and the qualities their relationships ought to possess. Lonelier people seem to have lower or more overly specific concepts of what they should have than people who are less lonely. Second, this study found that the level of loneliness is related to the extent to which individuals perceive their existing relationships to possess the ideal qualities; i.e., lonelier people perceived they had less of all the qualities in their relationships. The data also suggested that when one's expectations about ideal qualities exceed what is perceived to exist in actual relationships, one is likely to be more lonely. The expectations of non-lonely are more equal to their actual relationships. Finally, the greatest predictors of loneliness were when one's desired sense of belonging and being understood exceeded the degree to which these qualities were present in existing relationships.
APPENDIX

Instruments of Measurement

Indicate how often each of the statements below is descriptive of you. Check one box for each statement.

<table>
<thead>
<tr>
<th></th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I am unhappy doing so many things alone.
2. I have nobody to talk to.
3. I cannot tolerate being alone.
4. I lack companionship
5. I feel as if nobody really understands me.
6. I find myself waiting for people to call or write.
7. There is no one I can turn to.
8. I am no longer close to anyone.
9. My interests and ideas are not shared by those around me.
10. I feel left out.
11. I feel completely alone.
12. I am unable to reach out and communicate with others.
13. My social relationships seem superficial.
15. No one really knows me well.
16. I feel isolated from others.
17. I am unhappy being so withdrawn.
18. It is difficult for me to make friends.
19. I feel shut out and excluded by others.
20. People are around me, but not with me.
In each sentence below, a quality is described -- followed by a list of different relationships. Rate how important each quality is to you in each relationship, on a scale of 1 to 5. You may use the same rating for more than one relationship. If a particular relationship is non-existent or impossible, write "0" in the space.

5 = an essential quality
4 = very important
3 = somewhat or sometimes
2 = of little importance
1 = not a needed quality

1. It should be possible for me to express anger and frustration to
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

2. With whom should it be possible to express physical affection?
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

3. If I were sad and needed to cry, I should be able to turn to...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

4. With whom should it be possible to say and be told "I love you"?
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

5. It should be possible for me to be open and honest about myself with...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

6. It should be possible to confide my fears of success or failure in...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

7. It should be possible for me to discuss sexual and romantic matters with...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

8. It should be possible for me to discuss aspirations and goals with...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

9. In an emergency, I should be able to turn to...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

10. If I needed help in the middle of the night, I should be able to call...
    Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
    Same Sex Friends  Opposite Sex Friends  Social Group

11. If I became ill or hospitalized, I should be able to count on...
    Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
    Same Sex Friends  Opposite Sex Friends  Social Group
5 = an essential quality
4 = very important
3 = somewhat or sometimes
2 = of little importance
1 = not a needed quality
0 = does not apply

12. From whom should it be possible to borrow money or things?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

13. In which relationship should I expect to be respected?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

14. Who should understand my motives and reasoning?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

15. Who should be accepting of my faults and weaknesses?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

16. Who should I be able to trust and look out for my best interest?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

17. Who should have similar ideals and values as mine?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

18. In which relationship should I have the same status or position in life?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

19. With whom should I share a common background or heritage?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

20. Who should engage in the same activities or have the same interests as mine?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

21. It should be possible to share leisure activities, sports, concerts, etc. with...
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group

22. With whom should current events, stock market, fashion, etc. be topics of discussion?
   - Parents
   - Siblings
   - Extended Family
   - Partner/Spouse
   - Best Friend
   - Same Sex Friends
   - Opposite Sex Friends
   - Social Group
5 = an essential quality
4 = very important
3 = somewhat or sometimes
2 = of little importance
1 = not a needed quality
0 = does not apply

23. Who should be able to share humor, play pranks, or be teased?
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

24. With whom should it be possible to take a trip?
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

25. It should be possible for me to gain a sense of connectedness or belonging with...
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

26. It should be possible to celebrate birthdays and holidays with...
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

27. It should be possible for me to feel needed and appreciated by...
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

28. Who should I seek out when I'm alone or bored?
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

29. In which relationship should I feel physically attracted?
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

30. Who should I admire?
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

31. In which relationship should I be intellectually stimulated?
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group

32. About whom should I feel intense longing and yearning?
   __Parents  __Siblings  __Extended Family  __Partner/Spouse  __Best Friend
   __Same Sex Friends  __Opposite Sex Friends  __Social Group
What qualities do you actually have in your present relationships? Indicate how much or how often each quality is found in each relationship, on a scale from 1 to 5.

5 = Always, Most
4 = Usually, Often
3 = Sometimes, Somewhat
2 = Rarely, Little
1 = Never, None
0 = Does not apply

<table>
<thead>
<tr>
<th></th>
<th>Parents</th>
<th>Siblings</th>
<th>Extended Family</th>
<th>Partner/Spouse</th>
<th>Best Friend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I express anger and frustration to...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I am physically affectionate with...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I express sadness and cry with...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I am told and say &quot;I love you&quot; with...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I am open and honest about myself with...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I confide my fears about success and failure in...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I discuss romance and sexual matters with...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I discuss my aspirations and goals with...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>In an emergency, I turn to, or would turn to...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>If I need help in the middle of the night I call, or would call</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

42
11. If I became ill or hospitalized I would count on...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

12. If I need to, I can borrow money or things from...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

13. I feel respected by...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

14. My motives and reasoning are understood by...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

15. Despite my faults and weaknesses, I feel accepted by...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

16. I trust this person and know they look out for my best interest.
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends

17. I have similar ideals and values as...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

18. I have the same status or position in life as...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

19. I have the same background and heritage as...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

20. I share the same interests and activities with...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

21. For leisure activities, sports, etc. I seek out...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

22. I discuss current events, stock market, fashion, etc. with...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group

23. I share humor, play pranks, or tease...
   Parents  Siblings  Extended Family  Partner/Spouse  Best Friend
   Same Sex Friends  Opposite Sex Friends  Social Group
24. I take trips with...
   - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
   - Same Sex Friends   - Opposite Sex Friends   - Social Group

25. I feel a sense of connectedness and belonging with
   - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
   - Same Sex Friends   - Opposite Sex Friends   - Social Group

26. I celebrate holidays and birthdays with...
   - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
   - Same Sex Friends   - Opposite Sex Friends   - Social Group

27. I feel needed and appreciated by...
   - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
   - Same Sex Friends   - Opposite Sex Friends   - Social Group

28. When I am alone and bored, I seek out...
   - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
   - Same Sex Friends   - Opposite Sex Friends   - Social Group

29. I feel physical attraction to...
   - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
   - Same Sex Friends   - Opposite Sex Friends   - Social Group

30. I admire...
    - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
    - Same Sex Friends   - Opposite Sex Friends   - Social Group

31. I am intellectually stimulated by...
    - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
    - Same Sex Friends   - Opposite Sex Friends   - Social Group

32. I feel intense longing and yearning for...
    - Parents   - Siblings   - Extended Family   - Partner/Spouse   - Best Friend
    - Same Sex Friends   - Opposite Sex Friends   - Social Group
Demographic Information

1. Your age: ________
2. Your sex (circle one) Male  female
3. Your current marital status (check one) ______ single
                                           ______ married
                                           ______ separated/divorced
                                           ______ widowed
                                           ______ other (__________)
4. What is your ethnic background? (check one)
                                           ______ Asian
                                           ______ Black
                                           ______ Hispanic
                                           ______ Caucasian
                                           ______ Other (__________)
5. What is your current approximate annual household income? (check one) ______ less than $10,000
                                           ______ $10,000 - $25,000
                                           ______ $25,000 - $35,000
                                           ______ $35,000 - $50,000
                                           ______ over $75,000
6. If your parents were separated or divorced, how old were you when this occurred?
7. Your parents current marital status (circle one for each parent)
       Mother: married  separated/divorced  widowed  other
       Father: married  separated/divorced  widowed  other
8. When you were growing up, what was your mother's occupation? ________________
9. When you were growing up, what was your father's occupation? ________________
10. What is the highest grade in school your mother completed? ________________
11. What was the highest grade in school your father completed? ________________
REFERENCES


