
Measurement of communal strength

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Abstract

Communal strength refers to a person's degree of motivation to respond to a communal partner's needs. The development and testing of a questionnaire measure of communal strength is described. Study 1 involved item selection. Studies 2 and 3 found that the 10-item communal strength measure taps a construct distinct from behavioral interdependence as measured by the Relationship Closeness Inventory of Berscheid, Snyder, and Omoto (1989) and distinct from liking for the partner. As expected, the measure correlated highly with Rubin's (1970) Love Scale. Studies 4 and 5 found the measure predicted allocation of benefits to peers and reports of giving help to, and receiving help from, friends. Study 6 found that, when answered in relation to the respondent's spouse, the measure predicted the spouse's marital satisfaction, after controlling for the respondent's communal orientation and own marital satisfaction.

This paper describes the development and testing of a measure of the strength of specific communal relationships. The construct of communal strength refers to the degree of responsibility a person feels for a particular communal partner's welfare, and the measure was designed to tap that construct. As such, it is distinct from Clark, Ouellette, Powell, and Milberg's (1987) measure of individual differences in communal orientation. This latter measure taps differences between people in their general tendency to follow communal rules in relationships with others.

Communal relationships are relationships in which members feel a responsibility for meeting the needs of communal partners and in which benefits are given noncontingently in response to partners' needs (Clark & Mills, 1979; Mills & Clark, 1982). Communal relationships can be contrasted with exchange relationships in which benefits are given in response to comparable benefits received in the past or expected in the future. They may also be contrasted with exploitative relationships in which the person is solely motivated to gain benefits for the self without any regard for the other's interests.

Past work on the communal/exchange distinction has focused on the qualitative difference between the two relationship types (Clark, 1981, 1984, 1986; Clark, Dubash, & Mills, 1998; Clark & Mills, 1979; Clark, Mills, & Corcoran, 1989; Clark, Mills, & Powell, 1986; Clark et al., 1987; Clark & Taraban, 1991; Clark & Waddell, 1985; Pataki, Shapiro, & Clark, 1994; Williamson & Clark, 1989, 1992). However, early on Mills and Clark (1982; see also Clark & Mills, 1993) noted that there are also quantitative aspects

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of communal relationships. A very important quantitative way in which communal relationships vary from one relationship to another is in the degree of responsibility the person feels for the welfare of the communal partner. Within the array of any one person's communal relationships, that person's motivation to noncontingently respond to partners' needs differs for different partners. For example, most parents have greater motivation to meet the needs of their child than to meet the needs of a friend, even though parent-child relationships and friendships are both normally communal relationships. We would say that the communal relationship with the child is stronger than the communal relationship with the friend. There are a number of ways of describing the concept of communal strength. One is in terms of the costs the person is willing to incur to benefit the other. The greater the communal strength toward the other, the greater the costs or sacrifices the person will be willing to incur to benefit the other when the other has a need. Many parents are willing to spend thousands of dollars to send their child to college but would not be willing to do the same for a friend. Because the size of benefits given is usually related to the cost of the benefits, people normally provide larger benefits in stronger communal relationships.

Another way of describing the concept of communal strength is in terms of how much distress a person would feel if he or she were unable to meet a communal partner's needs or how much guilt would be felt if he or she neglected the communal partner's needs. The greater the communal strength toward the partner, the more distress or guilt should be felt. Communal relationships with spouses are ordinarily stronger than relationships with cousins, and forgetting one's spouse's birthday is likely to generate more distress and guilt than forgetting one's cousin's birthday. As communal strength increases, so too should the positive feelings a person experiences when the communal partner has been successfully helped or has had some positive experience. For instance, a person normally would feel more joy if his

or her child receives an award than if a friend receives the same award.

Yet another way of describing communal strength is in terms of a hierarchy of communal relationships. People generally have communal relationships with many others. A few of these are very strong communal relationships (typically those with a spouse or romantic partner, children, parents, and sometimes siblings) in which many costly benefits are given noncontingently. A larger number of relationships are moderately strong communal ones (often those with other relatives and with close friends), and a still larger number are weak communal relationships (often those with casual acquaintances and even with strangers). In very weak communal relationships, very-low-cost benefits are given noncontingently to meet the other's needs. For example, most people will tell a stranger the time of day without expecting any kind of repayment.

Within the hierarchy of communal relationships, communal strength predicts which partner's needs will take precedence. When two or more communal partners have needs of equivalent size at the same time, and both needs cannot be met, the need of the partner with whom the person has the stronger communal relationship will take precedence. For instance, a person will attend his or her child's graduation rather than a niece's graduation occurring on the same day.

The concept of communal strength can be summarized by saying that the greater the motivation to be responsive to the communal partner's needs, the greater the communal strength toward that partner. We believe having a good measure of the strength of communal relationships is important because it allows predictions to be made about behavior that results from different degrees of communal strength. Knowing the strength of a person's array of communal relationships enables predictions about how much help that person will give to each partner, how much that person will monitor each partner's needs, how much emotion will be expressed to each partner, and how much help the person is willing to request or accept from each partner.

Moreover, there are benefits to knowing partners' communal strength toward one another within mutual communal relationships. For marital and romantic relationships, there is a cultural norm that calls for communal strength to be equal. In such relationships, the greater the disparity in communal strength, the greater should be the friction in the relationship. If A's communal strength toward B is very strong and B's communal strength toward A is less strong, B may be disturbed by A's seemingly excessive concern about B's needs and may resent pressure from A to respond to A's needs. Simultaneously, A may resent B's apparent inattention to A's needs. These feelings may lead to a demand-withdrawal-demand pattern, and may create enough dissatisfaction to lead to deterioration of the mutual communal relationship.

The deterioration of close relationships can be understood in terms of the operation of factors that diminish communal strength toward the partner. Similarly, the maintenance and enhancement of such relationships can be understood in terms of factors that preserve and augment communal strength toward the partner (Mills & Clark, 2001). The availability of a good measure of communal strength should facilitate research on factors determining increases and decreases in communal strength.

The present paper reports on six studies devoted to the development and validation of a measure of communal strength. In the first study, questionnaire items were selected for inclusion in the measure, and correlations between the measure and subjective closeness, communal orientation, and other measures were examined. In the second study, the 10-item measure was administered to another group of participants to explore its correlation with the Relationship Closeness Inventory (Berscheid, Snyder, & Omoto, 1989) and Rubin's (1970) Love Scale. A third study was designed to differentiate the construct of communal strength toward a partner from the construct of liking for the partner. A fourth study tested the ability of the communal strength measure to predict the allocation of benefits to peers. In a fifth

study, the measure was used to predict reports of giving and receiving various kinds of help in ongoing friendships. In the sixth study, the measure answered in relation to the respondent's spouse was used to predict the spouse's marital satisfaction, controlling for the respondent's general communal orientation and own marital satisfaction.

Study 1: Measure Development

To select items for the communal strength measure, a set of potential questionnaire items was administered to a group of participants who answered them about four communal partners: a member of their immediate family, a distant relative, a best friend, and an acquaintance. We assumed that communal strength toward a member of one's immediate family would be greater than communal strength toward a distant relative and that communal strength toward a best friend would be greater than communal strength toward an acquaintance. Participants also responded to items about subjective closeness with the other and the other's responsiveness to their needs, and completed scales measuring their general communal orientation and their general exchange orientation.

Method

Participants

The participants were 239 college students (139 females, 100 males) in an introductory psychology course.

Procedure

Using the definition of communal strength as the degree of motivation to benefit a specific communal partner in response to the partner's needs, 17 potential questionnaire items were formulated by the first two authors based on their theorizing about communal strength. An example of an item is: "How happy do you feel when doing something that helps—?" The participants were instructed to answer each

of the 17 items four times: once about a member of their immediate family, once about a distant relative, once about a best friend, and once about an acquaintance. To balance whether answers about strong or weak communal relationships came first and whether answers about family or non-family relationships came first, the instructions designating the relationship category to be used when answering the 17 items were presented in eight different orders.

Each time the items were answered, the participant filled in the initials of the specific other selected from the relationship category designated and wrote the relationship with the other at the top of the form. The participant filled in the initials of the specific other in blank spaces in each of the items, which were answered by circling a number from 0 = *not at all* to 10 = *extremely*. If the type of relationship written at the top of the form did not fit the instructions (e.g., the respondent wrote "sister" when instructed to select an acquaintance), data from that respondent were excluded. In all, data from 24 persons were excluded for that reason. For all but 2 of them, the instruction to select an acquaintance came first.

In addition to answering the 17 items about the specific person selected from the category designated, the participant answered four other items about the specific person selected. The four items asked about how responsive to their needs they expected the other to be, how much it would bother them if the other neglected their needs, the closeness of the relationship with the other, and the intimacy of the relationship. The four items were answered on scales from 0 = *not at all* to 10 = *extremely*. Finally, the participant completed a 14-item communal orientation scale and a 9-item exchange orientation scale, with the items from the two scales intermixed. Participants answered on a 5-point scale ranging from 1 = *extremely uncharacteristic* to 5 = *extremely characteristic*. The communal orientation scale, which was developed and validated by Clark et al. (1987), measures respondents' general tendency to follow communal norms in relationships with others. The exchange orientation scale, described in

Mills and Clark (1994), measures respondents' general tendency to follow exchange norms in relationships with others. We assumed that communal strength toward a specific other would be somewhat positively related to having a general communal orientation and would be unrelated to having a general exchange orientation.

Results

Item selection

If the items designed to measure communal strength do so, scores for each of the items should be higher (when reverse scored if appropriate) when the item is answered about a member of one's immediate family than when answered about a distant relative, and they should be higher when answered about a best friend than when answered about an acquaintance. That was the case for every item, for both female and male respondents. Analyses of variance revealed that for every item the differences between the means for member of immediate family and the means for distant relative were significant at the .05 level, for both females and males. That was also true for the differences between the means for best friend and the means for acquaintance, for both females and males. Thus, all 17 items met the criterion that they should yield differences when differences in communal strength can be assumed to exist.

Another criterion for selecting items intended to measure the same concept is the degree to which they correlate with a total score based on other such items. If items are tapping the same construct, such item-total correlations typically will be high. Correlations of each item with a total score excluding that item were calculated for answers regarding each of the four types of relationships, separately for females and males. On the basis of the item-total correlations from those eight analyses, 10 items were selected for the measure of communal strength (see Table 1). A total score on the communal strength measure is calculated by summing answers to the

Table 1. *The 10-item communal strength measure*

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1. How far would you be willing to go to visit —?
 2. How happy do you feel when doing something that helps —?
 3. How large a benefit would you be likely to give —?
 4. How large a cost would you incur to meet a need of —?
 5. How readily can you put the needs of — out of your thoughts?
 6. How high a priority for you is meeting the needs of —?
 7. How reluctant would you be to sacrifice for —?
 8. How much would you be willing to give up to benefit —?
 9. How far would you go out of your way to do something for —?
 10. How easily could you accept not helping —?
-
-

Note. Items 5, 7, and 10 are reverse scored. The instructions given are as follows: Keeping in mind the specific person, answer the following questions. As you answer each question, fill in the person's initials in the blank. Circle one answer for each question on the scale from 0 = *not at all* to 10 = *extremely* before going on to the next question. Your answers will remain confidential.

10 items, after reverse scoring items 5, 7, and 10.

Alpha coefficients

The alpha coefficients for the 10-item communal strength measure when answered about different others by females were .85 for member of immediate family, .92 for distant relative, .83 for best friend, and .94 for acquaintance. For males they were .91 for member of immediate family, .94 for distant relative, .91 for best friend, and .95 for acquaintance. Although the results within each sex for the four types of relationships are not independent, they provide some evidence of the reliability of the communal strength measure with respect to specific others with whom the communal relationship is strong or weak, family or nonfamily.

Correlations of communal strength with closeness ratings. Ratings of the closeness of the relationship with the specific other were correlated with scores on the communal strength measure for each of the four types of relationships, separately for females and males. The correlations were substantial, the average of the 8 correlations being .73. Each of the 8 correlations was at least .70, except for a correlation of .52 for

females answering about a best friend. All were significant at the .001 level. Correlations between the communal strength measure and the ratings of intimacy were somewhat lower, with the average of the 8 correlations being .47. All were significant at the .01 level.

Correlations with ratings of the other's responsiveness. Responses to the two items dealing with the other's responsiveness to the person's needs (which had an average correlation of .58) were summed and the resulting index of the other's responsiveness was correlated with the communal strength measure. The average of the 8 correlations was .66, with the lowest correlation being .50 for females answering about a best friend. All were significant at the .001 level.

Correlations with communal orientation. Participants' scores on the communal orientation scale were correlated with the scores on the communal strength measure answered in relation to each of the four types of relationships for females and for males. Correlations were approximately the same for the four types of relationships for both females and males, averaging .26 across the 8 correlations. All were statistically significant at the .05 level, except for a

correlation of .13 for females answering about an acquaintance.

Correlations with exchange orientation. The correlations between the exchange orientation scale and the communal strength measure were generally negative but small. Of the 8 correlations, only a correlation of $-.24$ for females answering about a distant relative and a correlation of $-.23$ for females answering about a best friend were significant at the .05 level.

Discussion

The purpose of the new communal strength measure is to tap the strength of a specific communal relationship, as opposed to the general communal orientation of the respondent. Thus it was important to show that scores on the communal strength measure answered about a specific communal partner were distinct from the respondent's score on the communal orientation scale of Clark et al. (1987). We predicted that communal orientation would be positively, but only moderately, correlated with the communal strength measure answered about a specific communal relationship. That prediction was confirmed.

We did not predict a correlation between the exchange orientation scale and the communal strength measure answered about a specific communal relationship. The correlations between exchange orientation and the communal strength measure answered about a specific communal relationship were, in general, negative, with two of those negative correlations large enough to reach statistical significance.

We assumed that being highly motivated to respond to a partner's needs constitutes much of what people mean when they report being close to a partner. Fitting well with this assumption is the finding that the correlations between the new measure of communal strength and ratings of subjective closeness were positive and high. Moreover, on the assumption that most adult communal relationships are regarded as

mutual, in that the degree of obligation to meet a partner's needs is accompanied by the expectation that the partner will respond similarly to one's own needs, we expected that the measure of the other's responsiveness to the person's needs would be positively correlated with the communal strength measure answered about the partner. The results were in line with that expectation.

In summary, the 10-item measure of communal strength developed in this study had satisfactory reliability, in terms of internal consistency, when answered by both females and males about both strong and weak communal relationships and about both family and nonfamily relationships. The results also provided a preliminary demonstration of the scale's validity. The following studies were designed to provide further, independent evidence of the reliability and validity of the communal strength measure.

Study 2: Correlations of Communal Strength with the RCI and Rubin's Love Scale

The aim of Study 2 was to further investigate the communal strength measure by exploring its relationship with two other relationship measures—specifically, Berscheid et al.'s (1989) Relationship Closeness Inventory (RCI), and Rubin's (1970) Love Scale.

RCI. We expected that the RCI and the communal strength measure would not be highly correlated. Berscheid et al.'s measure conceptualizes relationship closeness in terms of degree of interdependence, whereas our conceptualization of communal strength refers to the motivation to respond to a specific partner's needs. Even so, some degree of correlation between the RCI and the communal strength measure was expected because motivation to respond to a partner's needs should lead to interaction with the partner, and as a result, to some degree of interdependence with the partner. Another reason for expecting some correlation was that the communal strength measure was correlated in Study 1 with reports

of the partner's responsiveness, and the Strength subscale of the RCI measures the partner's impact on the person in diverse life domains.

Rubin's Love Scale. Although participants in the current study were asked to answer the various relationship measures about their closest friend of the same sex and also about an acquaintance of the same sex, we expected that the communal strength measure would be highly correlated with Rubin's Love Scale. The Love Scale was designed to measure romantic love in opposite sex couples; however, one component of the Love Scale, called *Predisposition to help* by Rubin (1970) and *Care* by Steck, Levitan, McLane, and Kelley (1982), is conceptually similar to communal strength. An example of a Care item is: "One of my primary concerns is——'s welfare."

Method

Participants

The participants were 131 college students (70 females, 61 males) in psychology courses at two universities different from the university in Study 1.

Procedure

The instructions began by asking the participant either to think of their closest same-sex friend in their community (i.e., on the

campus or in the immediate surrounding area) or to think of a same-sex acquaintance whom they see regularly but who is not a good friend, family member, or enemy. The 10-item communal strength measure, the RCI, and the Rubin Love Scale were answered about the specific person selected. Then the participant was given the instructions for selecting the other type of person and answered the same measures about that person. Half of the time the closest friend instructions came first, and half the time the acquaintance instructions came first. The communal strength measure, the RCI, and the Rubin scale were presented in six counterbalanced orders.

Results

The communal strength measure was scored in the same way as in Study 1. The RCI was scored according to the procedures of Berscheid et al. (1989). In addition to a total score for the RCI, scores were calculated for each of the three subscales: Frequency, Diversity, and Strength. The Rubin Love Scale was scored according to the procedures of Rubin (1970) except that the item in the Love Scale "When I am with—— I spend a good deal of time just looking at him or her" was not scored, because that item was deemed less meaningful for same-sex communal relationships.

The correlations between the communal strength measure and the RCI and Rubin's Love Scale for both sexes combined are presented in Table 2. As can be seen from

Table 2. Correlations of communal strength with the RCI and Rubin's Love Scale in Study 2

| Other measure | Communal strength measure | |
|------------------------|---------------------------|--------------|
| | Closest friend | Acquaintance |
| RCI total | .36 | .38 |
| RCI frequency subscale | .17 | .23 |
| RCI diversity subscale | .29 | .31 |
| RCI strength subscale | .46 | .39 |
| Rubin Love Scale | .75 | .75 |

Note. The .05 level of significance for r when $N = 131$ is .18.

the table, the correlations for answers about the closest friend were similar to the correlations for answers about the acquaintance.

Correlations with the RCI and with the Rubin Love Scale. As expected, the communal strength measure was more highly correlated with the Love Scale than with the RCI. For the closest friend, the correlation with the Love Scale (.75) was significantly greater than the correlation with the RCI total (.36), $p < .001$. (Significance of differences between correlations was determined by Hotelling's t test for differences between correlations based on the same sample.) For the acquaintance, the correlation with the Love Scale (.75) was also significantly greater than the correlation with the RCI total (.38), $p < .001$.

Discussion

The results of Study 2 are consistent with our expectation that the communal strength measure would be moderately, but not highly, correlated with the RCI of Berscheid, et al. (1989). The communal strength measure assesses the degree to which a person is motivated to be responsive to a communal partner's needs, whereas the RCI assesses a distinct concept, the degree to which two persons are interdependent. The results are also consistent with our expectation that the communal strength measure would be highly correlated with the Rubin (1970) Love Scale, even though we asked about same-sex relationships rather than the opposite-sex romantic relationships for which the Love Scale was designed.

Study 3: Distinguishing Communal Strength From Liking

It might be thought that the communal strength measure is simply a measure of interpersonal attraction. In our view, communal strength can be distinguished from interpersonal attraction or liking. Although liking for another can influence communal strength toward that other (such that

greater liking leads to greater motivation to meet the other's needs), it is also the case that other factors can influence communal strength. For instance, a sense of obligation or duty to another person can influence communal strength. People normally feel obligated to respond to the needs of a relative, even though they may not particularly like that specific relative. We assume that communal strength toward a relative is usually strong, whereas liking for a relative can run the gamut from high to low. In contrast, we assume that communal strength toward a new friend is usually not strong, whereas liking for a new friend is usually high. Based on these assumptions, we hypothesized that communal strength toward a relative would be greater than communal strength toward a new friend, whereas liking for the new friend would be greater than liking for the relative. These hypotheses were tested in Study 3. A pattern of results supporting these hypotheses would provide evidence that the communal strength measure is measuring something distinct from liking.

Method

Participants

The participants were 553 college students (280 females, 273 males) in an introductory psychology course at the same university as in Study 1. They responded to the study materials during class sessions in which a large number of different questionnaires were distributed.

Procedure

The instructions began by asking the respondent to think of a same-sex relative about your age or to think of a very new same-sex friend about your age. The 10-item communal strength measure was answered about the specific person selected. Respondents also answered a 3-item liking measure consisting of the following items: "How much do you personally like—?" "How annoying do you find—?" "How

positive is your general evaluation of——?” As with the communal strength items, the specific person’s initials were filled in the blanks by the respondent, and the items were answered on a scale from 0 = *not at all* to 10 = *extremely*.

After completing both the communal strength measure and the liking measure about the relative or completing both measures about the new friend, the participant was given the instruction for selecting the other type of person and answered the same items about that specific person. For half of the participants the relative instructions came first, for the other half the new friend instructions came first. Also, in half of the questionnaires the 10 communal strength items came before the 3 liking items, and in the other half the 3 liking items came first.

When the instruction was to “think of a relative of about your age,” there was a request to write in the relationship in a blank at the top of the page. If what was written in did not fit the instructions, data from the respondent were excluded. In all, data from 44 persons were excluded, 8 who wrote in mother, 11 who wrote in father, and 25 who wrote in friend, when asked to think of a relative of about your age.

Results

The 10-item measure of communal strength was scored in the same way as in Study 1. The liking measure was scored by summing the answers to the 3 liking items, after reverse scoring the item “How annoying do you find ——?” To make the range of possible scores on the two measures comparable, the score for communal strength was divided by 10 and the score for liking was divided by 3.

Alpha coefficients. The alpha coefficients for the 10-item communal strength measure were .89 for females answering about a relative, .90 for females answering about a new friend, .86 for males answering about a relative, and .88 for males answering about a new friend. The alpha coefficients for the

3-item liking measure were .83 for females answering about a relative, .72 for females answering about a new friend, .70 for males answering about a relative, and .67 for males answering about a new friend.

Correlations between communal strength and liking. We expected that communal strength toward another person would be positively correlated with liking for that person. The measure of communal strength toward the relative was substantially correlated with the measure of liking for the relative ($r = .60, p < .001$). Also, the measure of communal strength toward the new friend was substantially correlated with the measure of liking for the new friend ($r = .53, p < .001$). The correlations were similar for females and males.

There was a small but significant correlation between communal strength toward the relative and communal strength toward the new friend ($r = .11, p < .01$). There was also a small but significant correlation between liking for the relative and liking for the new friend ($r = .16, p < .001$). The correlations between communal strength toward the relative and liking for the new friend ($r = .07$) and between communal strength toward the new friend and liking for the relative ($r = .05$) were not significant.

Communal strength toward relative and friend versus liking for friend and relative. We predicted that scores on the measure of communal strength would be greater for the relative than for the new friend, whereas scores on the measure of liking would be greater for the new friend than for the relative. The mean of the communal strength measure answered about the relative was 6.51, and the mean of the communal strength measure answered about the new friend was 6.12. The difference was in the expected direction and was significant, paired $t(552) = 3.72, p < .001$. The mean of the liking measure for the new friend was 7.69, and the mean of the liking measure for the relative was 7.21. The difference was in the expected direction and was significant, paired

$t(552) = 4.74, p < .001$. The results were not significantly different for females and males.

Discussion

The results of Study 3 provide evidence that the measure of communal strength is measuring something different than liking. Although, as expected, communal strength toward the relative was correlated with liking for the relative and communal strength toward the new friend was correlated with liking for the new friend, the two measures yielded different results when communal strength toward the relative was compared with communal strength toward the new friend and liking for the relative was compared with liking for the new friend. Communal strength toward the relative was greater than communal strength toward the new friend, whereas liking for the new friend was greater than liking for the relative. Thus, the results of Study 3 demonstrate that the measure of communal strength is not simply a measure of liking.

Study 4: Predicting the Allocation of Benefits From Communal Strength

To provide evidence for the predictive validity of the measure of communal strength, Study 4 tested whether the communal strength measure could predict the allocation of benefits. We assumed that when people are faced with a choice of nominating other persons for activities differing in attractiveness, they will tend to nominate the other with whom they have the stronger communal relationship for the more attractive activity.

Method

Participants

The participants were 58 college students (44 females, 14 males) in an introductory social psychology course at the same university as in Studies 1 and 3.

Procedure

During small discussion sessions of the course, students filled out the 10-item communal strength measure about six other students who were the same sex as themselves and not enrolled in that social psychology course, identifying each by first name and last initial.

The nomination phase was conducted one month later. It took place in the lecture period of the course, and it was administered by a researcher who was not present when the communal strength measures were answered the month before. The month interval, the different setting, and the different researcher were all employed to prevent suspicion about a connection between the nomination phase and the communal strength measures. The nomination phase was introduced as a project on consumer attitudes being done in collaboration with a shoe company. The project was described as consisting of two different studies. One study involving testing reactions to an all-purpose athletic type shoe by having students wear it whenever appropriate for two weeks and then having them answer questions about it. For those in the shoe testing study, the shoes would be specifically fitted to the individual, who would get to keep them after the test was completed. The second study involved having students fill out a comprehensive questionnaire about shoe preferences and usage. Students in the class were asked to nominate two students not in that class of the same sex as themselves, one for the shoe testing study and one for the shoe questionnaire study. They were asked not to tell the persons nominated about the nominations, with the reason that if people learned they were nominated for one study rather than the other that could affect their reactions and possibly bias the data.

When the nominations were complete, the participants indicated on their nomination form whether the shoe testing or the shoe questionnaire was the more interesting and attractive task. After the nomination forms were collected, the true purpose of the nominations was explained.

Results

To determine whether the communal strength measure could predict the nominations, it had to be available for both of the two persons nominated. To avoid suspicion, in the nomination phase there was no mention of the communal strength measures that had been answered a month previously. Thus, the nominations could not be restricted to the six persons about whom the communal strength measure had been answered the month before. For 58 students who filled out the nomination form, the communal strength measure was available for both of the two persons nominated. The communal strength measure was scored in the same way as in Study 1. We predicted that the nomination for the more attractive activity of the two studies would be given to the other associated with the higher communal strength score. For 4 of the 58 participants, the scores on the communal strength measure associated with the two persons nominated were identical, so no prediction was possible. Of the 54 participants for whom a prediction was possible, 36 (67%) nominated the other associated with the higher communal strength score for the study the participant indicated was the more attractive. This result is significantly different from what would be expected by chance at the .05 level by a sign test. The results were similar for females and males.

Because the shoe testing involved the other receiving free shoes, we expected that it would be considered more attractive than the shoe questionnaire. Of the 58 participants, 52 (90%) indicated the shoe testing was the more attractive activity. Of those 52, a prediction could be made for 48, and of those 48, 32 (67%) nominated the person associated with the higher communal strength score for the shoe testing. Of the 6 participants who indicated the shoe questionnaire was the more attractive activity, 4 (67%) nominated the person associated with the higher communal strength score for the shoe questionnaire.

Discussion

The results of Study 4 provide evidence of the validity of the communal strength measure by demonstrating that it can predict the allocation of benefits. The other person associated with the higher score on the communal strength measure answered a month earlier was nominated for the more attractive activity twice as often as the other associated with the lower score on the communal strength measure answered a month earlier. Although the communal strength measure was generally successful in predicting the nominations, not all participants nominated the other associated with the higher score on the communal strength measure for the more attractive activity. Two factors could have reduced the accuracy of prediction of the nominations from the communal strength scores. First, the communal strength toward the two others could have changed during the month between answering the communal strength measures and the nominations, so that the relative strength toward the two others was reversed. Second, the accuracy of prediction could have been reduced because the needs of the two others may not have been considered as equal when the nominations were made. Some of the participants might have thought that the other with whom they had the weaker communal relationship had a greater need for the more attractive activity (typically the free shoes) than did the other with whom they had the stronger communal relationship.

Study 5: Predicting Help Given and Help Received

To provide further evidence for the validity of the communal strength measure, a study of help given and help received was conducted. We assumed that the greater the communal strength toward the other, the more often the person would provide help to the other. On the assumption that the relationships investigated were mutual communal relationships, we also expected that

the stronger the communal relationship toward the other, the more often the person would receive help from the other.

Method

Participants

The participants were 18 college students in an introductory social psychology course at one of the universities in Study 2; 7 were females, 7 were males, and 4 did not indicate their sex on their forms.

Procedure

Early in the semester, members of the class were asked to answer the communal strength measure about four friends at the university. Along with four forms containing the 10-item communal strength measure, they were given a form requesting their sex and a personal identification number. The instructions asked them to think either of four friends they knew very well or of four they were just getting to know. They answered the communal strength measure about each of the four friends, one friend at a time, identifying the particular friend by putting that friend's initials on the form.

Approximately 2 months later, 8 days after students had come back to campus following the Thanksgiving break, the researcher returned to the class. She mentioned her earlier visit and said she would like to ask some more questions about their friends. She called out the personal identification numbers of those in the class who had answered the communal strength measures at the beginning of the semester, so she could distribute individually prepared forms to each of them.

Those who had previously answered the communal strength measures were given two forms. On one form were the initials of the participant's friend associated with the highest score on the communal strength measure (scored in the same way as in Study 1). On the other form were the initials of the participant's friend associated with the

lowest communal strength score of any of the participant's four friends.

The two forms were identical, except for the initials. Each contained the following questions. In the past 8 days (i.e., since you returned from Thanksgiving break): How many times has this person provided each of the following types of help to you? Emotional support? Tangible or physical help? Information or advice? How many times have you provided each of the following types of help to this person? Emotional support? Tangible or physical help? Information or advice?

If a participant indicated an inability to recall the friend from the initials on the form, the researcher provided the initials of another one of the four friends about whom that participant had answered the communal strength measure earlier in the semester. All but one of the 18 participants was able to recall the friend associated with the highest communal strength score. One participant indicated an inability to recall anyone from the initials given and did not complete the forms, thus not providing any usable data. Of the remaining 17 participants, 4 were unable to recall the friend associated with the lowest communal strength score. They were given the initials of the friend associated with the next lowest communal strength score. Of those, 2 were not able to recall that friend either, and they were given the initials of the friend associated with the third lowest (second highest) communal strength score. After the forms were completed, the purpose of the study was explained.

Results

Measures of help given to the friend associated with the highest communal strength score and of help given to the friend associated with the lower communal strength score were calculated by summing the number of times the participant reported giving each of the three types of help in the last 8 days to each of those friends. Similarly, measures of help received from the friend associated with the highest communal

strength score and of help received from the friend associated with the lower communal strength score were calculated by summing the number of times the participant reported receiving the three types of help from each of those friends. One participant wrote “everyday” for the friend associated with the highest communal strength score for each of the three types of help given and each of the three types of help received, and wrote “none” for the friend associated with the lower communal strength score for each of the three types of help given and the three types of help received. On the assumption that “everyday” meant at least once on each of the 8 days, that participant was given a score of 24 both for help given and for help received for the friend associated with the highest communal strength score and a score of 0 for both measures for the friend associated with the lower communal strength score.

Help given. The mean for the measure of help given to the friend associated with the highest communal strength score was 11.2. The mean for help given to the friend associated with the lower communal strength score was 3.6. The difference between those means is significant, paired $t(16) = 2.95$, $p < .01$.

Help received. The mean for the measure of help received from the friend associated with the highest communal strength score was 9.7. The mean for help received from the friend associated with the lower communal strength score was 4.9. The difference between those means is significant, paired $t(16) = 2.23$, $p < .05$.

Discussion

The results of Study 5 provide additional evidence of the validity of the communal strength measure. The measure is designed to tap an individual’s motivation to respond to the needs of a communal partner, and, as predicted, higher scores on the communal strength measure answered 2 months earlier

were associated with reports of giving more help of the various types to that friend within the past 8 days. Because friendships are ordinarily mutual communal relationships, we predicted that receiving benefits from the other would be greater, the stronger the communal relationship. Fitting with that prediction, higher scores on the communal strength measure answered 2 months earlier were associated with reports of receiving more help from that friend in the previous 8 days.

Study 6: Correlations With Spouse’s Marital Satisfaction

A sixth study, involving married couples, examined the correlation between the communal strength measure which respondents answered about their spouse and a measure of the spouse’s marital satisfaction answered by the spouse. The greater the strength of the communal relationship of a person with his or her spouse, the greater should be the spouse’s marital satisfaction. That should occur because motivation to be responsive to the needs of one’s spouse should result in the person being responsive to the spouse’s needs, which in turn, should promote the spouse’s satisfaction with the relationship.

Method

Participants

The participants were 123 husbands and 123 wives who participated as married couples. They were recruited through newspaper ads, peer nominations, and community and workplace functions, for a study examining how attitudes influence marital satisfaction. To be eligible, they had to have been married for a least one year and had to be 24 to 65 years of age; both members of the married couple had to participate. As inducement to participate, they were offered entry in a raffle for dinner at a local restaurant or in a raffle for attendance at a relationship enhancement workshop. Only 17%

of the participants requested entry in one of the raffles, typically the dinner raffle.

The ages of the participants ranged from 24 to 65, with a mean for husbands of 41.2 and a mean for wives of 40.4. The couples had been married an average of 13.9 years, with a range from 2 years to 47 years. Seventeen percent of the 123 husbands had been married previously, and 19% of the 123 wives had been married previously. The percentage with children was 80% for husbands and 77% for wives. Ninety-one percent of the husbands were working full or part time, and 83% of the wives were working full or part time.

Procedure

Couples who met the eligibility criteria received a packet containing two copies of a questionnaire along with two postage-paid envelopes for returning the questionnaire, together with two copies of a letter introducing the study. The letter noted that all possible steps were being taken to ensure confidentiality of responses and, to ensure anonymity, no identifying marks should be placed on the questionnaire. The instructions stated that couples should not consult each other as they completed the questionnaire, but should respond independently. In addition to the 10-item communal strength measure and the 14-item communal orientation scale, the questionnaire included a common measure of marital satisfaction, the 32-item Dyadic Adjustment Scale (Spanier, 1976).

Results

A total score on the measure of marital satisfaction was obtained for each spouse following the procedure of Spanier (1976). The communal strength measure answered about the spouse was scored as in Study 1. In a change from Study 1, the scoring of the communal orientation scale excluded the four items dealing with the responsiveness of others to the person's needs (items 1, 7, 11, and 14 in the scale of Clark et al. 1987).

Alpha coefficients. The alpha coefficient for the marital satisfaction measure was .92. The alpha coefficient for the communal strength measure was .86. The alpha coefficient for the 10-item communal orientation scale was .76.

Correlations between measures. Table 3 presents correlations between the wife's communal strength toward the husband, the husband's marital satisfaction, the wife's communal orientation, the husband's communal strength toward the wife, the wife's marital satisfaction, and the husband's communal orientation. As can be seen from Table 3, the correlation between the wife's communal strength toward the husband and the husband's marital satisfaction was .50, which is significant at the .001 level. The correlation between the husband's communal strength toward the wife and the wife's marital satisfaction was .45, which is also significant at the .001 level.

Table 3. *Correlations between the measures in Study 6*

| Measure | 1 | 2 | 3 | 4 | 5 |
|--|-----|-----|------|-----|-----|
| 1. Wife's communal strength toward husband | – | | | | |
| 2. Husband's marital satisfaction | .50 | – | | | |
| 3. Wife's communal orientation | .13 | .16 | – | | |
| 4. Husband's communal strength toward wife | .44 | .44 | –.01 | – | |
| 5. Wife's marital satisfaction | .53 | .76 | .15 | .45 | – |
| 6. Husband's communal orientation | .11 | .30 | .12 | .44 | .21 |

Note. The .05 level of significance for r when $N = 123$ is .18.

The correlation between the wife's communal orientation and the husband's marital satisfaction was .16, which is marginally significant ($p = .08$). The correlation between the husband's communal orientation and the wife's marital satisfaction was .21, which is significant at the .05 level. As might be expected for a variety of reasons, the husband's marital satisfaction was highly correlated with the wife's marital satisfaction ($r = .76, p < .001$).

Other significant correlations involving the measure of communal strength were a positive correlation between the husband's marital satisfaction and the husband's communal strength toward the wife ($r = .44, p < .001$), a positive correlation between the wife's marital satisfaction and the wife's communal strength toward the husband ($r = .53, p < .001$), and a positive correlation between the husband's communal strength toward the wife and the wife's communal strength toward the husband ($r = .44, p < .001$).

Multiple regression analyses. To determine whether knowing the score on the measure of communal strength answered about the respondent's spouse increases the prediction of the spouse's marital satisfaction beyond that which could be predicted from the respondent's communal orientation and own marital satisfaction, two simultaneous multiple regression analyses were conducted. One analysis employed as predictors the wife's communal strength toward the husband, the wife's communal orientation, and the wife's marital satisfaction, with the husband's marital satisfaction as the outcome variable. The other analysis employed as predictors the husband's communal strength toward the wife, the husband's communal orientation, and the husband's marital satisfaction, with the wife's marital satisfaction as the outcome variable.

Predicting husband's marital satisfaction. The regression analysis with the husband's marital satisfaction as the outcome variable found that, in addition

to a significant beta for the wife's marital satisfaction ($\beta = .69, t = 10.12, p < .001$), there was also a nearly significant beta for the wife's communal strength toward the husband ($\beta = .13, t = 1.95, p = .054$). The beta for the wife's communal orientation ($\beta = .04$) was nonsignificant. The partial correlation between the wife's communal strength toward the husband and the husband's marital satisfaction, controlling for the wife's communal orientation and the wife's marital satisfaction, was .18.

Predicting wife's marital satisfaction. The regression analysis with the wife's marital satisfaction as the outcome variable found that, in addition to a significant beta for the husband's marital satisfaction ($\beta = .71, t = 11.03, p < .001$), there was also a significant beta for the husband's communal strength toward the wife ($\beta = .17, t = 2.48, p < .02$). The beta for the husband's communal orientation ($\beta = -.08$) was nonsignificant. The partial correlation between the husband's communal strength toward the wife and the wife's marital satisfaction, controlling for the husband's communal orientation and the husband's marital satisfaction, was .22.

Discussion

The results of Study 6 provide further evidence of the validity of the communal strength measure. For both husbands and wives, scores on the communal strength measure answered about the respondent's spouse were positively correlated with the spouse's marital satisfaction. Moreover, for both husbands and wives, the communal strength measure answered about the respondent's spouse was correlated with the spouse's marital satisfaction when controlling for the respondent's own communal orientation and own marital satisfaction.

From our theoretical perspective, the person's communal strength toward his or her spouse should be positively correlated with the spouse's marital satisfaction because the motivation to be responsive to

the needs of the spouse should lead to responsiveness to the spouse's needs, which, in turn, should heighten the spouse's satisfaction with the relationship. This heightened satisfaction is then likely, we believe, to increase the spouse's communal strength toward the person and, hence, the spouse's responsiveness to the person's needs, which will increase the person's satisfaction with the relationship. Such a virtuous circle could be among the factors responsible for the positive correlation of the marital satisfaction of spouses.

General Discussion

A new measure of communal strength was developed to permit the assessment of a quantitative aspect of communal relationships (Clark & Mills, 1979; Mills & Clark, 1982)—that is, the degree of motivation to be responsive to a specific communal partner's needs. In contrast to previous work on the communal/exchange distinction, which focused on obtaining evidence for the qualitative difference between the two relationship types, the present research focused on establishing the reliability and validity of the new measure of strength of a specific communal relationship.

The communal strength measure developed in Study 1 was shown to have satisfactory internal consistency when answered by both females and males about both strong and weak communal relationships and about both family and nonfamily communal relationships. It correlated highly with subjective closeness, and it was only moderately correlated with communal orientation. Study 2 found, as expected, that the communal strength measure was not highly correlated with the Relationship Closeness Inventory of Berscheid et al. (1989), but was highly correlated with Rubin's (1970) Love Scale. In addition, Study 3 showed that the communal strength measure, although correlated with a measure of liking for the other person, is distinct from liking.

Evidence for the validity of the communal strength measure was provided in Studies 4, 5, and 6. In Study 4 the measure

successfully predicted allocation of benefits to peers one month later. In Study 5, two months after it was administered, it predicted reports of giving help to, and of receiving help from, friends. In Study 6, involving married couples, scores on the communal strength measure answered about the respondent's spouse were found to be positively correlated with the spouse's marital satisfaction. The communal strength scores increased the prediction of the spouse's marital satisfaction beyond that which could be predicted from the respondent's communal orientation and own marital satisfaction.

The communal strength measure is designed to assess, from the standpoint of a person having a communal relationship with another person, the degree of strength of the communal relationship with that specific partner. Unlike the Rubin Love Scale, which was designed to measure romantic love between unmarried opposite-sex peers, the communal strength measure does not assume the existence of a mutual communal relationship. Although the construct which the communal strength measure assesses is more specific than what is assessed by the Rubin Love Scale, which has more than one component, the communal strength measure is more broadly applicable. It can be used with respect to one-sided communal relationships, such as the relationship of a parent with a young child, as well as mutual communal relationships, such as the relationships with friends, acquaintances, relatives, and spouses investigated in the present studies.

A questionnaire measure such as the 10-item communal strength measure is easily administered and scored. However, as a self-report measure, it has the same limitations as other self-report measures of relationships. It assumes the respondent is able to accurately describe the relationship and is motivated to do so. Thus, care should be taken when administering the communal strength scale. The presence of a motivation other than the motivation to describe the relationship accurately, such as the motivation to give the appearance of having a strong communal relationship with the

other, would obviously reduce the accuracy of the communal strength measure. It should be noted that, similar to other self-report relationship measures, scores on the communal strength measure do not provide more than an ordinal measure of the underlying variable it is intended to measure. Although the scores are, of course, numbers which can be added, subtracted, multiplied, and divided, differences in the numerical results of such operations cannot be assumed to correspond to actual differences in the degree of the underlying variable. Care should be taken not to interpret scores on the communal strength measure in absolute terms.

Assuming the cautions about the use of self report measures of relationships are observed, we believe that the communal strength measure could be a valuable tool for relationship researchers. In our view, the relationships that are most important to people and those that they typically refer to as “close” are those in which they care about their partner’s welfare and their part-

ner cares about their welfare. Supporting that view are the high correlations reported in Study 1 between scores on the communal strength measure and ratings of subjective closeness.

Knowing levels of concern for another’s welfare ought to be useful in many ways. It may be used to predict levels of helping, help seeking, self-disclosure, willingness to express emotion, felt security when in the other’s presence, and other important relationship phenomena. Used over time, it can provide an index of relationship development or deterioration. Knowing levels of a person’s caring for a whole network of people could allow still more predictions—for instance, about whose needs would take precedence over whose. Knowledge of levels of a person’s caring for the welfare of others requires a measure of that variable, which is what led us to develop the communal strength measure. We hope that it will prove useful for researchers interested in exploring the structure and dynamics of communal relationships.

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