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NETWORK OVERLAP AND MARITAL SATISFACTION

By

Traci Lyn Engelkes

A THESIS

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ABSTRACT

NETWORK OVERLAP AND MARITAL SATISFACTION

By

Traci Lyn Engelkes

The effects of network overlap and communication apprehension on marital satisfaction were examined. Network overlap was determined by comparing the names each spouse had independently generated of the people to whom they felt closest. The results indicated that the greater the amount of overlap in a couple's social network, the greater the satisfaction they had with their marriage. In addition, it was proven that the higher the level of communication apprehension, the smaller the size of one's personal social network. It was also found that the higher the level of communication apprehension of one or both partners, the less satisfied they were with their marriage.

ACKNOWLEDGMENTS

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Most of all, I would like to give a special thanks to my wonderful family, without whom I could not have come this far. It is with their unwavering love and support that I have accomplished everything in my life. Thanks, Mom, Dad and Ross. This is for you.

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

Researchers have long tried to explain the rise in the divorce rate. Consensus has not been reached, but it is known that the divorce rate has increased since 1970, the present rate being 50% (Census Bureau, 1988). Moreover, there are no signs of a downturn. Even the middle class, thought to be the most maritally stable element in society, has been affected (Pickett, 1975).

Before the increase in the divorce rate, divorce was attributed to individual deficiencies. Explanations commonly asserted that individuals seeking divorce suffered from mental problems (Overall, 1971). But with the increase in the divorce rate, scholars began emphasizing societal-level explanations. Reasons ranged from the movement toward sexual equality and individualism (Goetting, 1982) to the effects of the Vietnam war and inflation (Glick, 1975). When these explanations were shown to be inadequate (i.e., McCarthy, 1978; Norton & Glick, 1976), scholars began examaining institutional and demographic factors, such as age, education, religion, and birth order. For example, one is more likely to divorce if married before age 20 (McCarthy, 1978), and if one has less than a high

1

school education (Norton & Glick, 1976).

Expanding on these ideas, researchers began viewing relational growth and decline transactionally, and the discrepancy between persons' traits was used to predict marital discord. Evidence showed, for instance, that age and religious similarity are strong predictors of marital stability (Dean & Gurak, 1978).

From this transactional approach came explanations grounded in interpersonal theory. Social exchange theory, the notion that people are reward-maximizers or punishment-minimizers has been invoked frequently. Thus, for example, Thibaut and Kelley (1959) proposed that persons are attracted to individuals with whom they perceive they can achieve relational rewards higher than those expected in alternative relationships (CLalt). Social exchange theory benefits from the recognition that persons outside the marital dyad can influence the growth or decay of a relationship. Put differently, marriages are affected not only by what happens between wives and husbands but also by interaction with members of their social networks (Blau, 1964). Studies of relational or romantic development report similar results (Parks & Adelman, 1983; Parks, Stan & Eggert, 1983). As Parks and Adelman conclude, "relationships do not spring from a void, but are embedded in the ongoing social context created by the partner's communication networks" (1983, p. 56). Thus, an understanding of the strength of a

marriage is, "facilitated by understanding the social networks within which the partnership is initiated, maintained and, in some cases, terminated" (Ridley & Avery, 1979, p. 223).

A social network has been defined as those individuals with whom a particular person interacts directly (Boissevain, 1974). Network size is one of the most important structural characteristics. It represents the number of persons included in one's network, and varies due to individual differences.

Communication apprehension may be one such difference that could affect the size of a network. Communication apprehension (CA) is defined as a person's "social anxiety or fear aroused by real or anticipated communication with another person or persons" (McCroskey, 1977, p. 80). One may decide to either approach or avoid interaction. The fear of social discomfort can be overwhelming to someone with high CA, causing them to avoid social settings that require or expect them to communicate with others. People with low CA, on the other hand, have no fear of social discomfort and enter into social intercourse fairly easily.

Persons with high CA are likely to enter marriage with relatively small social networks. Research indicates that these individuals have significantly fewer friends (less than one-half) than their less apprehensive counterparts (Jones & Russell, 1982; McCroskey &

Richmond, 1985). In social gatherings high CAs avoid communication and seem to others to be anxious, aloof, or unfriendly, behaviors that do not encourage social contact. Hence, interaction is infrequent, the interactions that occur are likely to be terminated quickly, and the network that develops from such an interaction style is likely to be small.

As relationships escalate, individual networks shrink (Huston & Burgess, 1979; Huston & Levinger, 1978; Levinger, 1977; Milardo, 1982). Johnson and Leslie's (1982) withdrawal hypothesis explains this result by arguing that societal norms exert pressure to increase relational involvement, while constraining involvement with others. Consequently, there is a tendency to decrease interaction with alternative members, regardless of their romantic potential. Time and energy constraints, rather than societal norms, are alternative pressures that may lead to the same result (Boissevain, 1974; Johnson & Leslie, 1982; Milardo, Johnson & Huston, 1983). Investments of time and energy in a romantic or marital partner reduce the time and energy available to interact with others.

As the size of individual networks is decreasing, the relational or joint network is expanding (Huston & Burgess, 1979; Huston & Levinger, 1978; Levinger, 1977; Milardo, 1982). Network overlap is defined as "the degree to which members of a relational partner's (A's)

network are linked to members of his or her partner's (B's) network" (Kim, 1989, p. 9). So, Milardo et al. (1983) report that in the early stages of a relationship there are more frequent interactions for longer periods of time with close personal friends, intermediate friends and acquaintances. Conversely, as relationships develop, the frequency and duration of partners' interactions with their individual network decrease, while the frequency and duration of interaction in the overlapping network increases (Milardo et al., 1983). Consistent with these claims, Kim (1989) found that relational development was correlated positively with increasing involvement in the other partner's social network or overlapping network.

Network overlap can be expected to exert a substantial effect on relational satisfaction because it promotes behavioral interdependence. "Interdependence refers to the effects interacting persons have on each other" (Kelley, 1979, p. 13). The degree of behavioral interdependence in romantic or married couples is indicated by the attitudes and thoughts they have for each other, the way the two view their social world, and how they interact in that world. Interdependent couples feel that practical and emotional aspects of their relationship depend upon the other partner. In addition, they see their friends and general social life to be something they choose and take part in together. Through interdependence, a couple establishes their social

identity as a pair and seeks out events and people that
are consistent with this joint identity. In other words:

> as pairs become mutually involved, they develop
> a jointly-held orientation toward themselves, a
> jointly-held orientation to their social
> environment, and a jointly-held network of
> relations and a jointly-held network of relations
> that reflect the pair's interdependence with
> one another and their social enviornment
> (Milardo, 1982, p. 164).

Thus, an increase in relational interdependence produces
an increase in network overlap.

Network overlap also promotes relational
satisfaction by fostering the perception of common
friends as a relational reward and the loss of common
friends as a relational cost.

> As relational partners become aware that emotional,
> social and instrumental needs of each other and the
> network members are dependent upon their
> relationship, they will find it increasingly harder
> to break their relationship (Forgas, 1985, p. 112).

The possible loss of the overlapping network can become
so aversive that the anticipation of its loss, due to a
divorce or break up, can loom as a barrier to
dissolution.

Marital satisfaction is an important predictor of
marital stability. High marital satisfaction is
associated with a stable marriage, and low marital
satisfaction is associated with an unstable marriage
(Hudson & Glisson, 1976). Overlapping networks can add
to the satisfaction of a marriage by reducing uncertainty
and promoting interdependence, and these forces may
increase one's commitment to a significant other in times

of relational crisis (Parks & Adelman, 1983).
Conversely, if a dyad does not have a strong overlapping
network, the members may seek relational disengagement
more readily when problems arise. Although the divorce
literature has not examined this possibility in depth, a
strong overlapping social network may provide the
necessary insurance for a stable marriage, and may
decrease the risk of divorce or increase the level of
marital satisfaction or both:

> Hypothesis One: As the size of a
> couple's overlapping network increases,
> their level of marital satisfaction
> increases.

The second hypothesis of this study stems from the
link between communication apprehension and social
networks. This link and its subsequent link to divorce
have yet to be examined empirically, but because an
increase in CA has been found to increase avoidance in
social settings, the size of a social network should be
negatively affected. Thus:

> Hypothesis Two: As communication apprehension
> increases, the size of one's
> personal social network decreases.

In turn, if high CA yields a smaller and weaker
individual social network, then network overlap of a
marital dyad should decrease as well. As this network
overlap decreases, marital satisfaction should decrease
as well. Thus:

Hypothesis Three: The higher the communication
apprehension of one or both partners of a marital
dyad, the lower their marital satisfaction.

CHAPTER TWO

METHOD

Respondents

The respondents for this study were 100 married couples living in student housing at a large midwestern university. Potential volunteers were recruited through random digit dialing. Persons were asked if they and their spouses would complete a questionnaire; anonymity was guaranteed. If they agreed, two scales and a questionnaire were sent to them. If they declined, they were thanked for their time and contact was terminated.

Instrumentation

In order to test the three hypotheses, four different items were measured: (1) communication apprehension (2) marital satisfaction (3) network size and (4) network overlap.

(1) *Communication Apprehension*. The Personal Report of Communication Apprehension (PRCA-24) was used (McCroskey, 1982). The scale was designed to test trait CA in four communication contexts: dyadic, group, meeting and public speaking. Thus, it consists of four subscales, which can be combined to measure the global CA construct.

The instrument consistently has yielded reliability

9

estimates above .90. In addition, the construct has consistently been shown to exhibit construct validity. For example, McCroskey, Daly and Sorenson (1976) found that CA is positively correlated with general anxiety and negatively correlated with tolerance for ambiguity, self-control, adventurousness, surgency and emotional maturity. Significant correlations were also found between CA and dogmatism, external control orientation, trustfulness and Machiavellianism (positive relationships) and dominance, confidence and need to achieve (negative relationships). No relationships were observed between CA and intelligence, sophistication, self-sufficiency and sensitivity.

(2) *Marital Satisfaction and Commitment.* The Index of Marital Satisfaction (IMS) (Hudson & Glisson, 1976) is a 25-item scale that purports to measure the feelings of the respondents about attitudes, behaviors, and events occurring within their marital relationship, and thus, characterizes the degree of discord or dissatisfaction in the marital relationship.

IMS split-half reliabilities were found to be .96 (Hudson & Glisson, 1976). In addition, the construct has consistently been shown to exhibit construct validity. Hudson and Glisson (1976) found that marital dissatisfaction is positively associated with depression and marital discord and negatively associated with self-esteem, sexual satisfaction and marital adjustment.

(3) *Network Size and Overlap.* Similar to Parks & Adelman (1983), Milardo (1982) and Johnson & Leslie (1982), individiuals were asked to list as many non-kin people as they could to whom they felt closest. Both marital partners generated their own personal lists, and after completion the lists were scored for the amount of network overlap between the couple and the size of each individual network. The former was measured by counting the number of people listed on both partners' lists. The latter was measured by counting how many people each individual had on their personal list.

Analysis

What is expected to be found is as follows:

Hypothesis One: The more overlapping members in a couple's networks, the higher their marital dissatisfaction scores (IMS scale). Thus, these variables should correlate positively and substantially.

Hypothesis Two: The higher an individual scores on the PRCA-24 scale, the smaller should be his or her personal social network. Thus, these two variables are expected to correlate negatively and substantially.

Hypothesis Three: The higher the CA of one or both members of the dyad, the greater their marital dissatisfaction. Thus, these variables are expected to correlate positively and substantially.

CHAPTER THREE

RESULTS

Communication apprehension was distributed normally with a mean of 63.98 and a standard deviation of 17.32. The reliability of this measure was estimated by Cronbach's alpha, and found to be .95.

The distribution of marital satisfaction was skewed negatively and leptokurtic. The mean score was 104.77, and the standard deviation was 15.41. Coefficient alpha was .94.

The mean number of friends listed as comprising one's social network was 3.74 with a standard deviation of 2.72. The distribution of this variable was both skewed postively and leptokurtic.

The mean number of friends listed by both members of a couple, the network overlap measure, was 1.10, and the standard deviation of this measure was 1.47. This measure was also skewed positively and leptokurtic.

To examine the first hypothesis, marital satisfaction was regressed onto network overlap. Inspection of the resulting scatterplot indicated no evidence of nonlinearity. Consistent with the first hypothesis, a statistically significant and substantial correlation of .33 between these variables was obtained

(t=4.85; df=188; p < .01; one-tailed test).

To test the second hypothesis, individual network size was regressed onto communication apprehension. Inspecting the scatterplot of the relationship between these variables showed no evidence of nonlinearity. Consistent with the second hypohtesis, a statistically significant correlation between these variables was found (r=-.13; t=-1.81; df=188 p < .05; one-tailed test).

To assess the third hypothesis, marital satisfaction was regressed onto communication apprehension. Again, inspection of the relevant scatterplot indicated no evidence of nonlinearity. A statistically significant correlation between these two variables was obtained (r=-.25; t=-3.58; df=198; p < .01; one-tailed test); thus, the data are consistent with this hypothesis as well.

Because both network overlap and communication apprehension were important predictors of marital satisfaction, it is necessary to assess whether or not each effect remains when controlling for the other predictor, and if so, to measure their combined impact on marital satisfaction. To this end, a multiple regression analysis was performed in which marital satisfaction was regressed onto both network overlap and communication apprehension. The results of this analysis indicated that network overlap remained an important predictor of marital satisfaction when controlling for the impact of

communication apprehension (B=.34; t=5.06; df=187; p <
.01; one-tailed test), communication apprehension
remained an important predictor of marital satisfaction
when controlling for network overlap (B=-.20; t=-2.90;
df=187; p < .01; one-tailed test), and both independent
variables combined to have a substantial effect on
marital satisfaction (R=.39; F=16.42; df=2 & 187; p <
.01).

CHAPTER FOUR

DISCUSSION

The first hypothesis asserted that the greater the amount of network overlap between a couple's personal social networks, the greater their level of marital satisfaction, and the data are consistent with this hypothesis, a correlation of .33 being obtained between these two variables. This result indicates that the greater the overlap between a couple's personal social networks, the greater their marital satisfaction. It is possible that a couple sharing friends also share similar values, interests and goals, variables that are known to be strong predictors of attraction.

It is also possible that by sharing friends a couple is able to spend more time together. Time spent engaging in pleasant activities withrewarding others is likely to increase the quantity of positive interactions with one's spouse, and thereby, enhance marital satisfaction.

The second hypothesis posited that as the level of communication apprehension increases, the size of one's personal social network decreases, and the data are consistent with it. A correlation of -.13 was obtained between these two variables, indicating that one has fewer friends if one's level of communication

apprehension is high than if it is low. It appears that persons apprehensive about communicating find it more difficult not only to intiate, but also to maintain a friendship. Because the development and maintenance of a personal social network requires and demands communication, people uncomfortable speaking with others have a smaller network. Conversely, people who are not fearful of communicating find it less challenging to seek out and develop a friendship, thereby creating a relatively larger social network.

The third hypothesis asserted that the higher the level of communication apprehension of one or both partners, the less satisfaction a couple would experience in their marriage, and the data are consistent with it. A correlation of -.25 was obtained between these two variables indicating that the higher the level of communication apprehension of one or both spouses, the less satisfied they are with their marital relationship. Consistent with the findings from the second hypothesis, one possible explanation is that persons with high levels of communication apprehension have smaller personal social networks, leading to two conditions that may result in decreased marital satisfaction. First, with smaller personal social networks marital partners have few people other than their spouse with whom to interact. Such a couple experiences an unnatural amount of dependence on each other. Not only would the partners

rely on each other for the love and intimacy exclusive to marriage, but they would depend on each other for everything that friendships usually can satisfy. This inordinate amount of dependence on one person can produce role strain (Goode, 1960), and dissatisfaction within the marriage would be the expected result.

Second, if persons with high levels of communication apprehension have smaller personal social networks, then they have less of a pool to overlap with their spouse's network. As shown previously, a couple's overlapping network contributes significantly to the satisfaction they experience within their marriage. If one or both partners have an extremely small personal social network, then there can be little overlap.

Another explanation for the finding that high levels of communication apprehension are associated with less marital satisfaction is that these individuals may experience discomfort communicating with their mate in addition to communicating with others. If marital partners find it difficult to communicate with their spouse, then it is possible that marital conflict is not managed effectively. The lack of conflict-managing communication may lead to a reduction in satisfaction.

These are the basic findings of the study, but should be judged with knowledge of the limitations that may exist. First, the sample for the study was taken from a large, midwestern university's student housing village. Due to

the size of the university, among other factors, the population of international students is high. Because different cultures have different communication styles and patterns, the role communication apprehension played may have been affected. For instance, Asians may be more reticent to communicate with others, including their spouse, because of their cultural norms, rather than because they do not have the desire or the capacity to communicate. In addition, familiarity with the English language may be limited, and higher levels of communication apprehension may be present due to their uneasiness with the English language and the lack of people available to converse with in their native language. Future research may be well served by replicating the study with other samples composed of more homogeneous subjects.

Second, many variables have been associated with marital satisfaction. As mentioned in the literature review, homogeneity in religion, age, and birth order are among only a few of the factors documented to affect marital satisfaction. Communication apprehension, the size of one's personal network and the amount of a couple's network overlap do influence marital satisfaction, but additional factors may continue to influence this relationship. Future research could profit by selecting variables with proven relationships to marital satisfaction, such as those listed above, and

controlling for them. By controlling for these variables
the impact of such things as communication apprehension,
size of one's personal social network and amount of
network overlap can be assessed with greater accuracy.

Third, the study was based on correlational data. Due
to the nature of such data, cause and effect is difficult
to determine. Future research may benefit from
replicating the study longitudinally. By looking at the
impact of such variables over time, it is easier to make
strong causal inferences.

In addition, future research may want to examine an
individual's and a couple's unique communication styles
and patterns, in order to assess what part they may play
in the proposed relationships. For instance, a couple
whose communication style does not include voicing
conflict may show the same level of marital satisfaction
as a couple that encourages sharing differing opinions,
due to the type of style they have deemed appropriate and
acceptable. Were this information available, more
insight into their level of communication apprehension,
their marital satisfaction, and network overlap would
result.

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